LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 23

2021

Bate Stamp Numbers
01047463 – 01049436

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2021

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

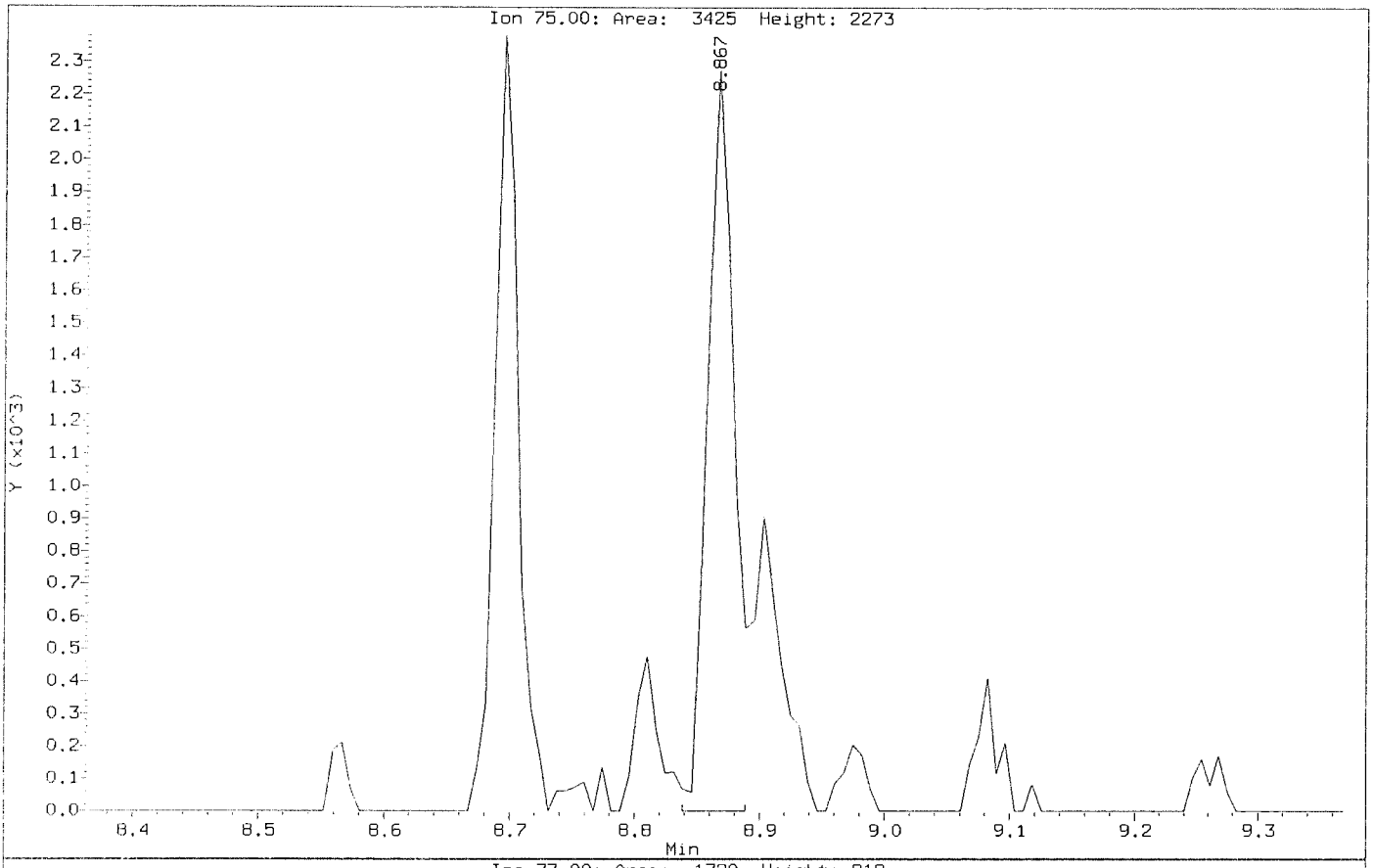
VOLUME 23

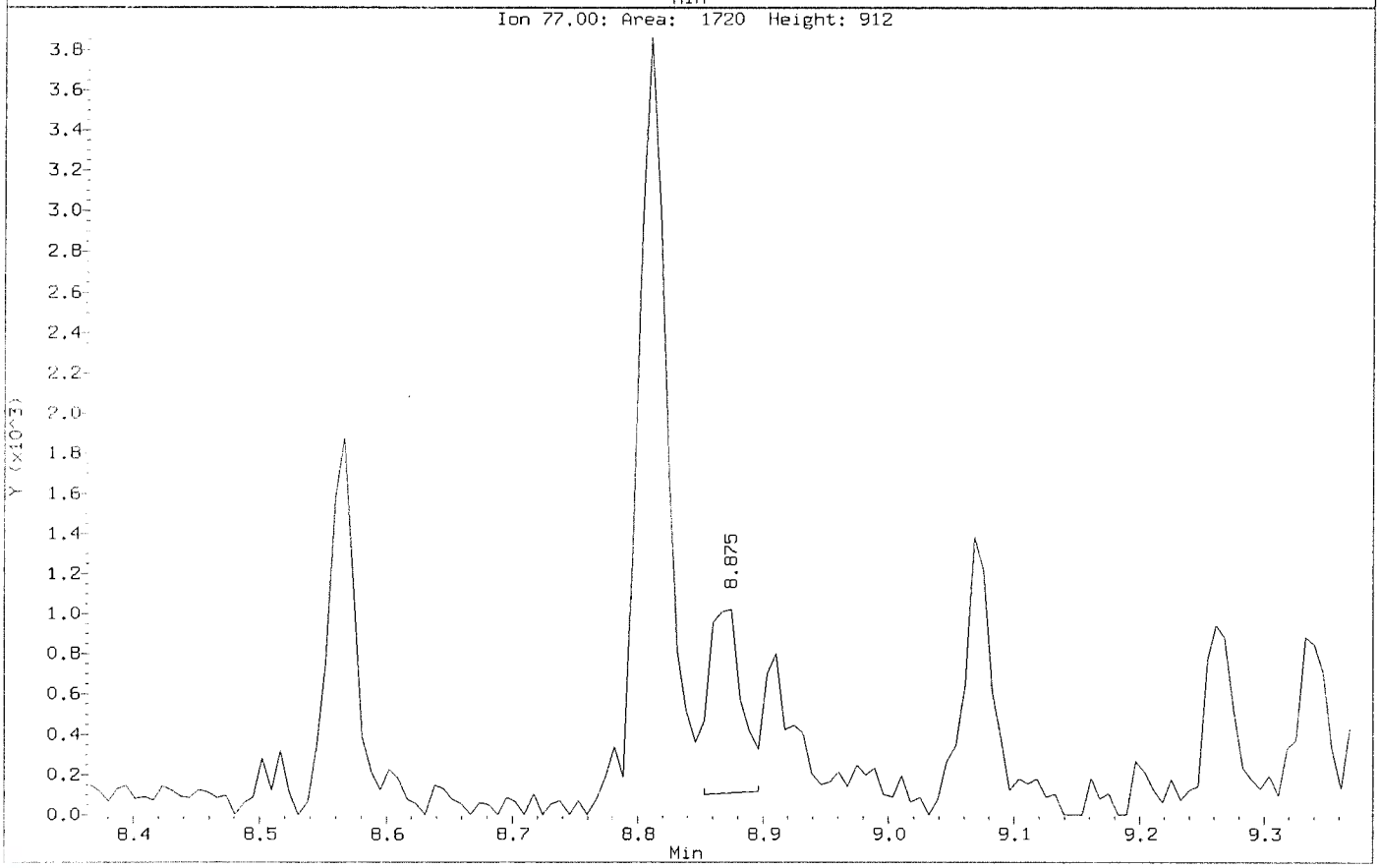
2021

A. Title: (Cont.) Report – Appendix C Level IV Labs to Quarterly Evaluation Report, 2nd Quarter (April–June) 2021, Groundwater Treatment Plant, Longhorn Army Ammunition Plant, Karnack, Texas, September 2021
Author(s): Bhate Environmental Associates, Inc.
Recipient: U.S. Army Corps of Engineers
Date: September 21, 2021
Bate Stamp: 01047463 – 01049436

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052604.D
Injection Date: 26-MAY-2021 13:37
Instrument: voa6.i
Client Sample ID: VSTD001

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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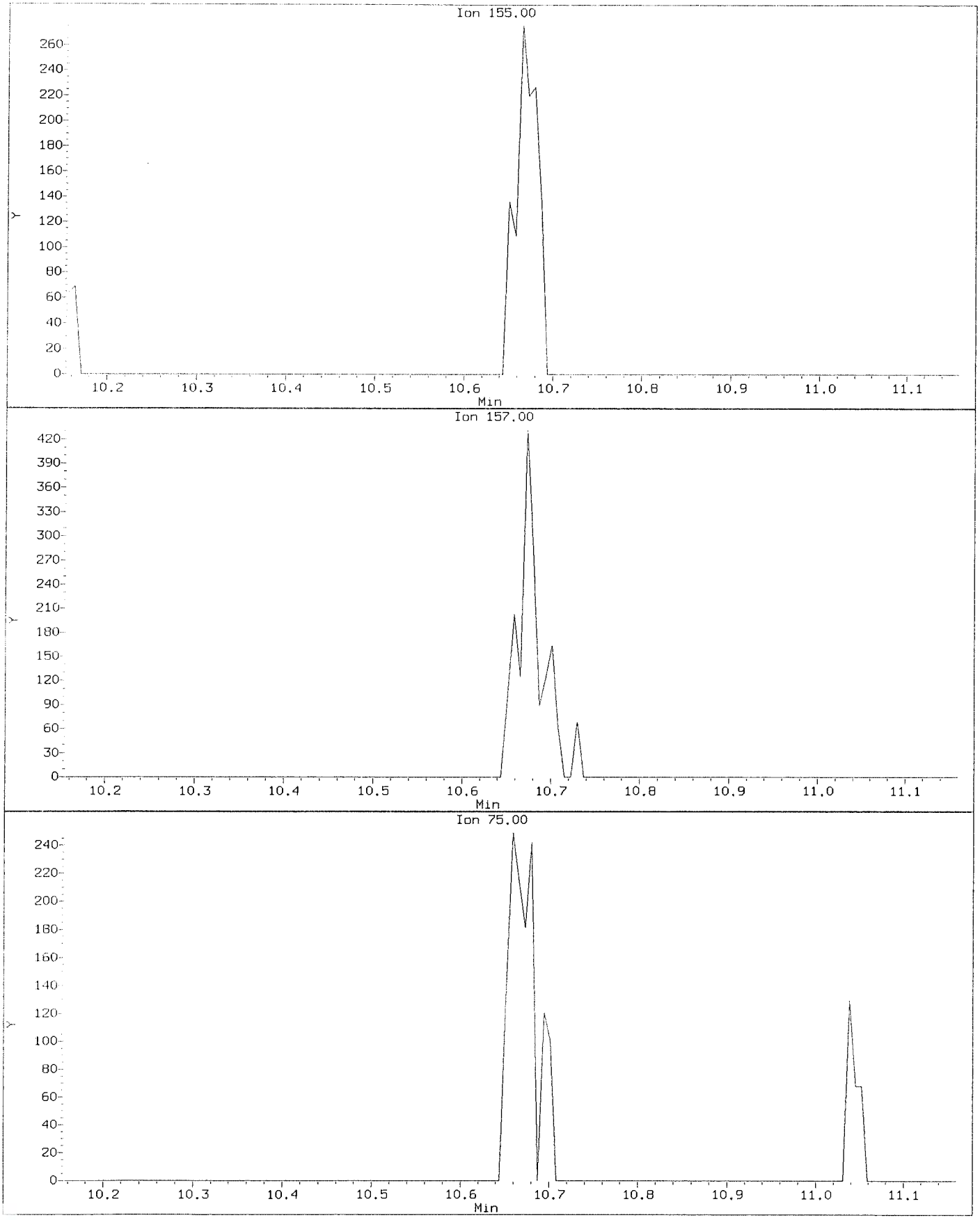
Client Sample ID: VSTD001

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8



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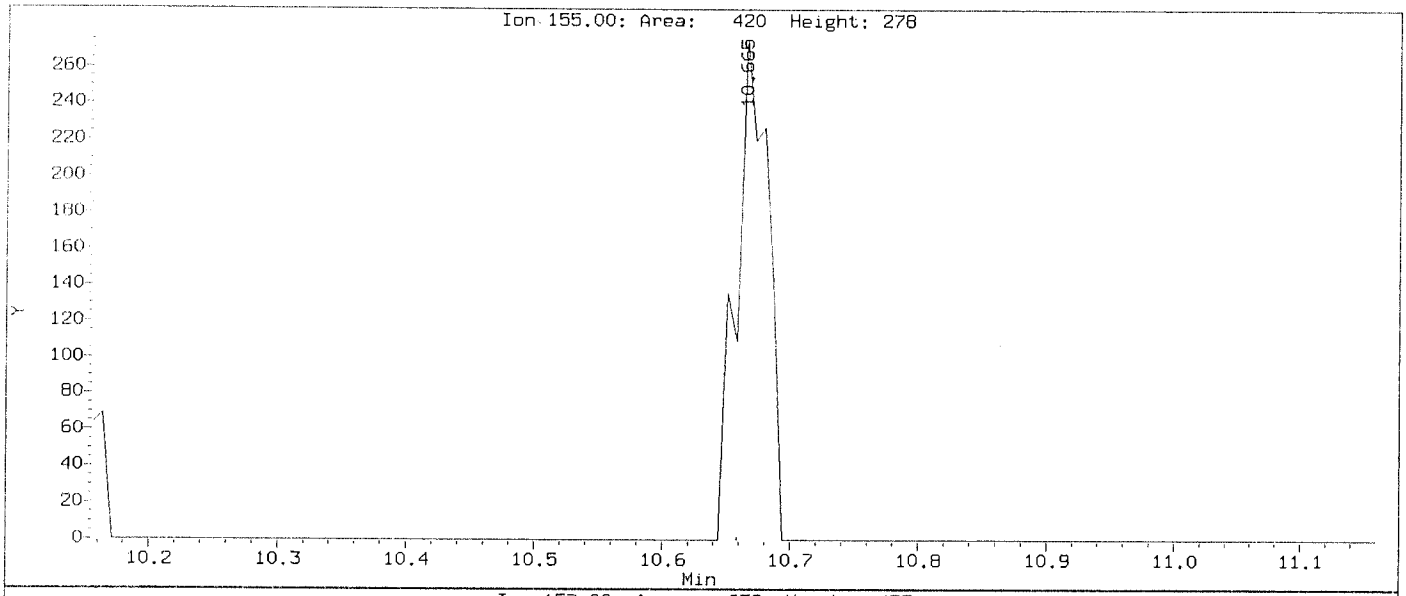
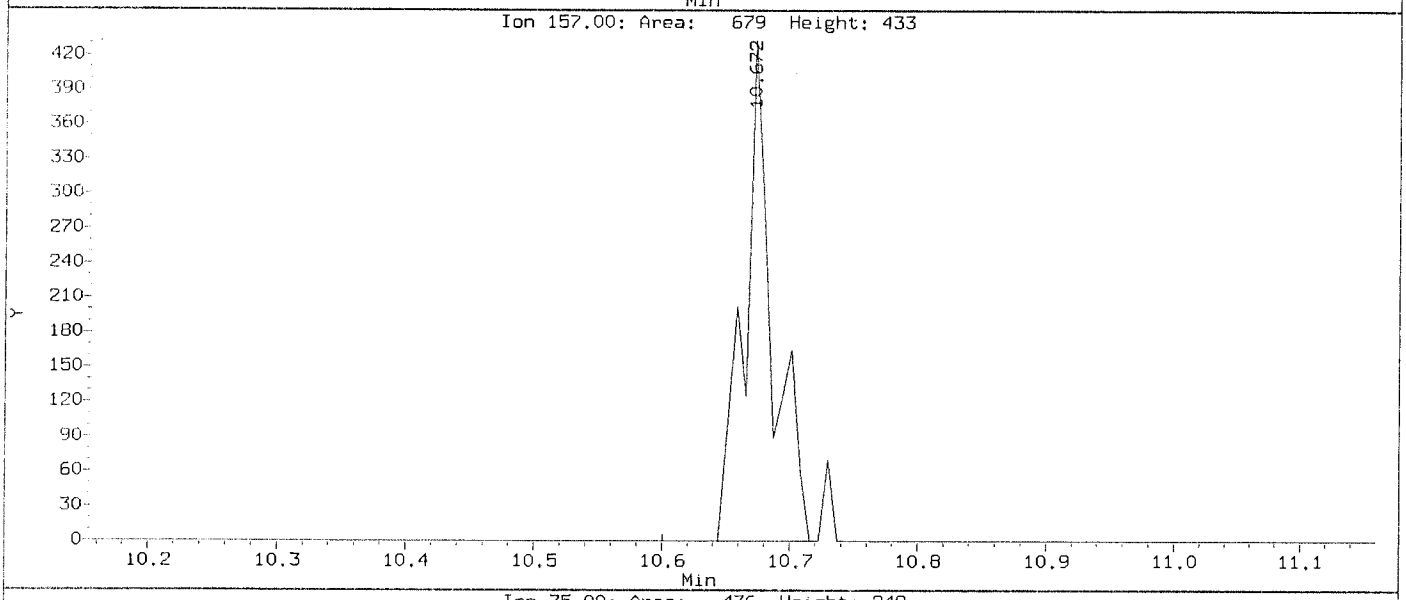
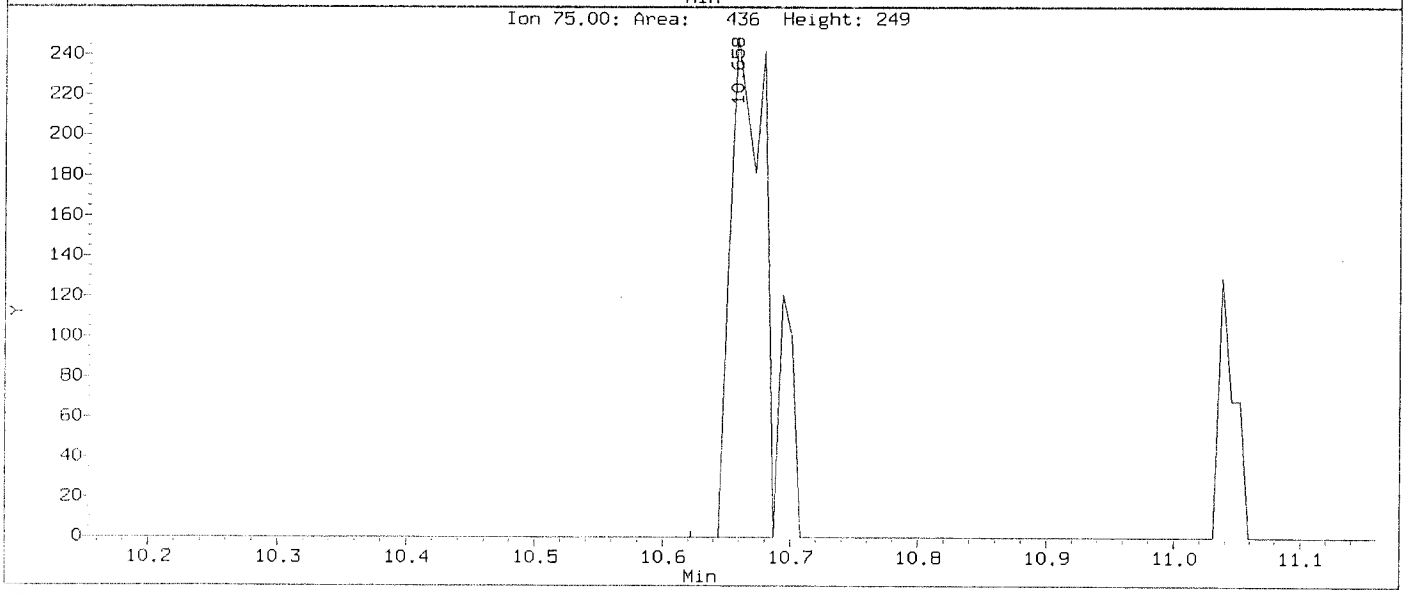
Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8







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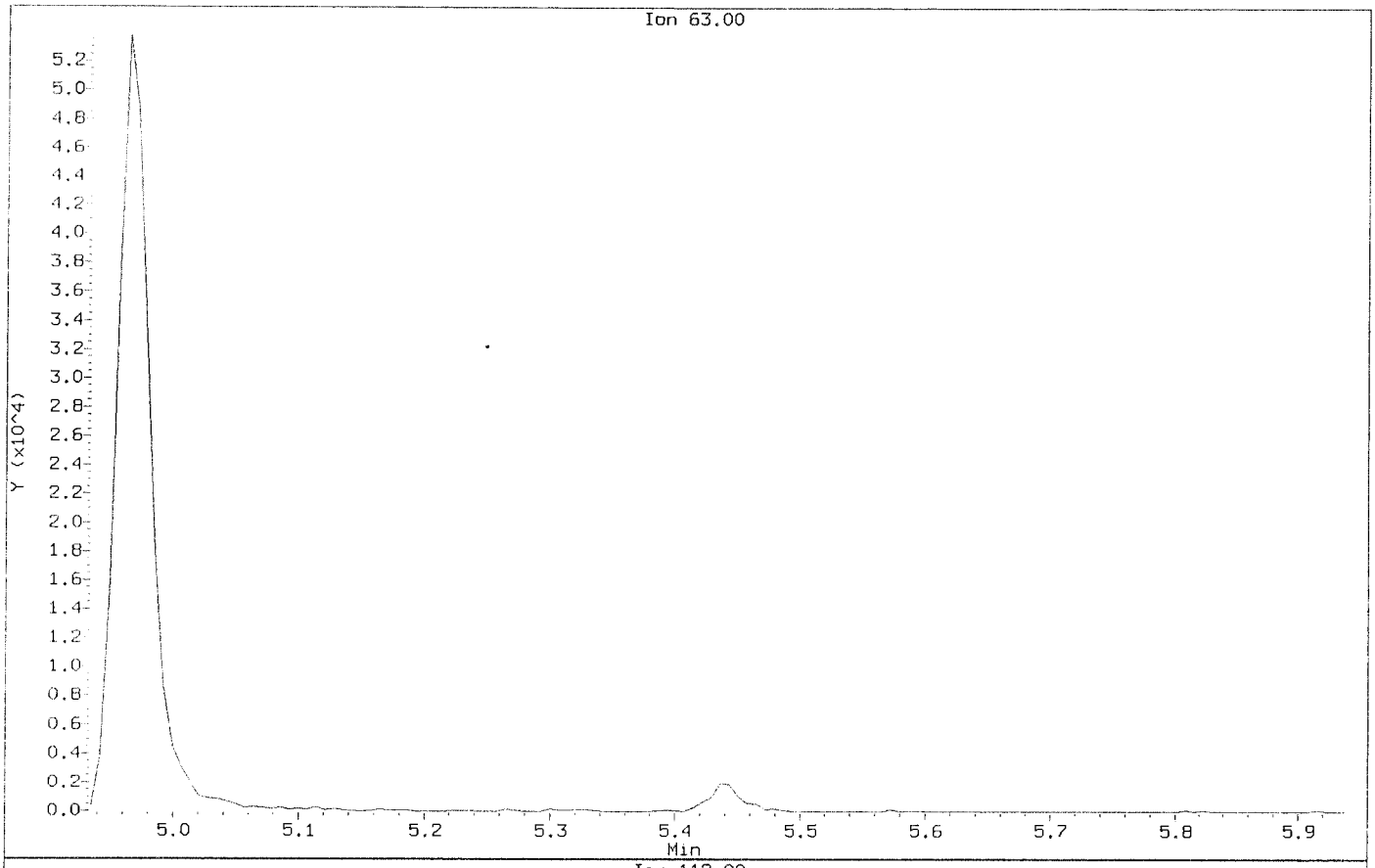
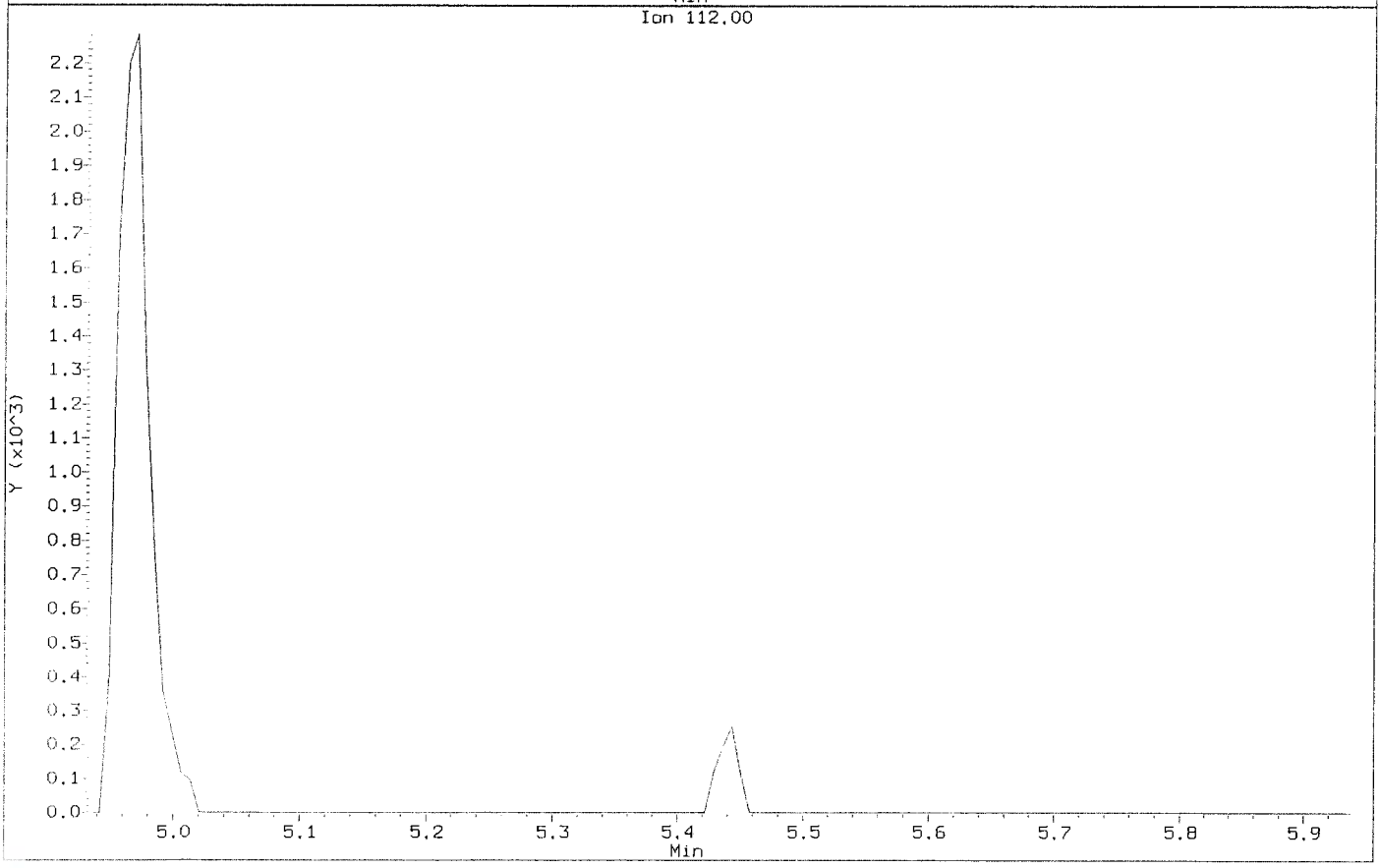
Instrument: voa6.i
Client Sample ID: VSTD001

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5





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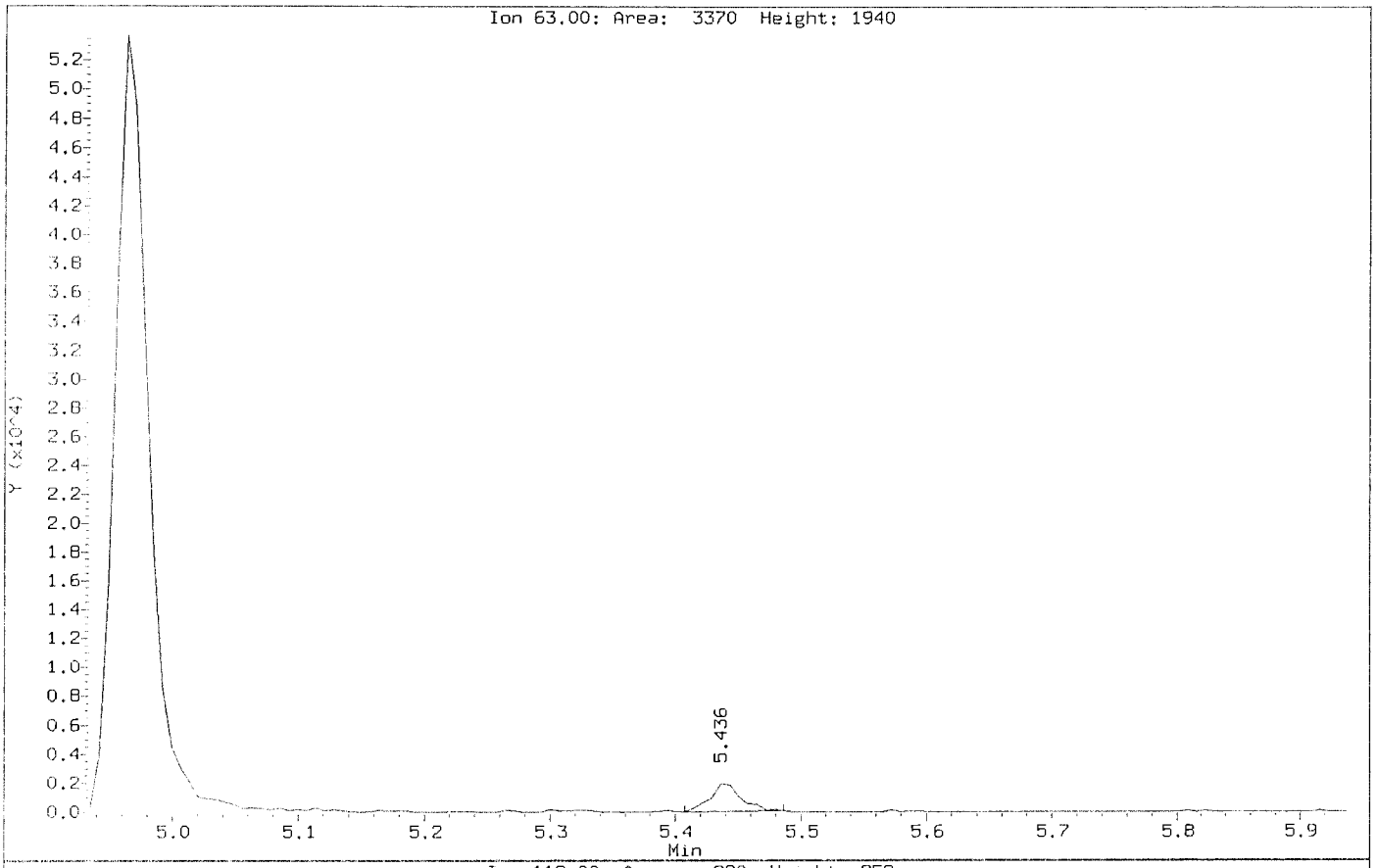
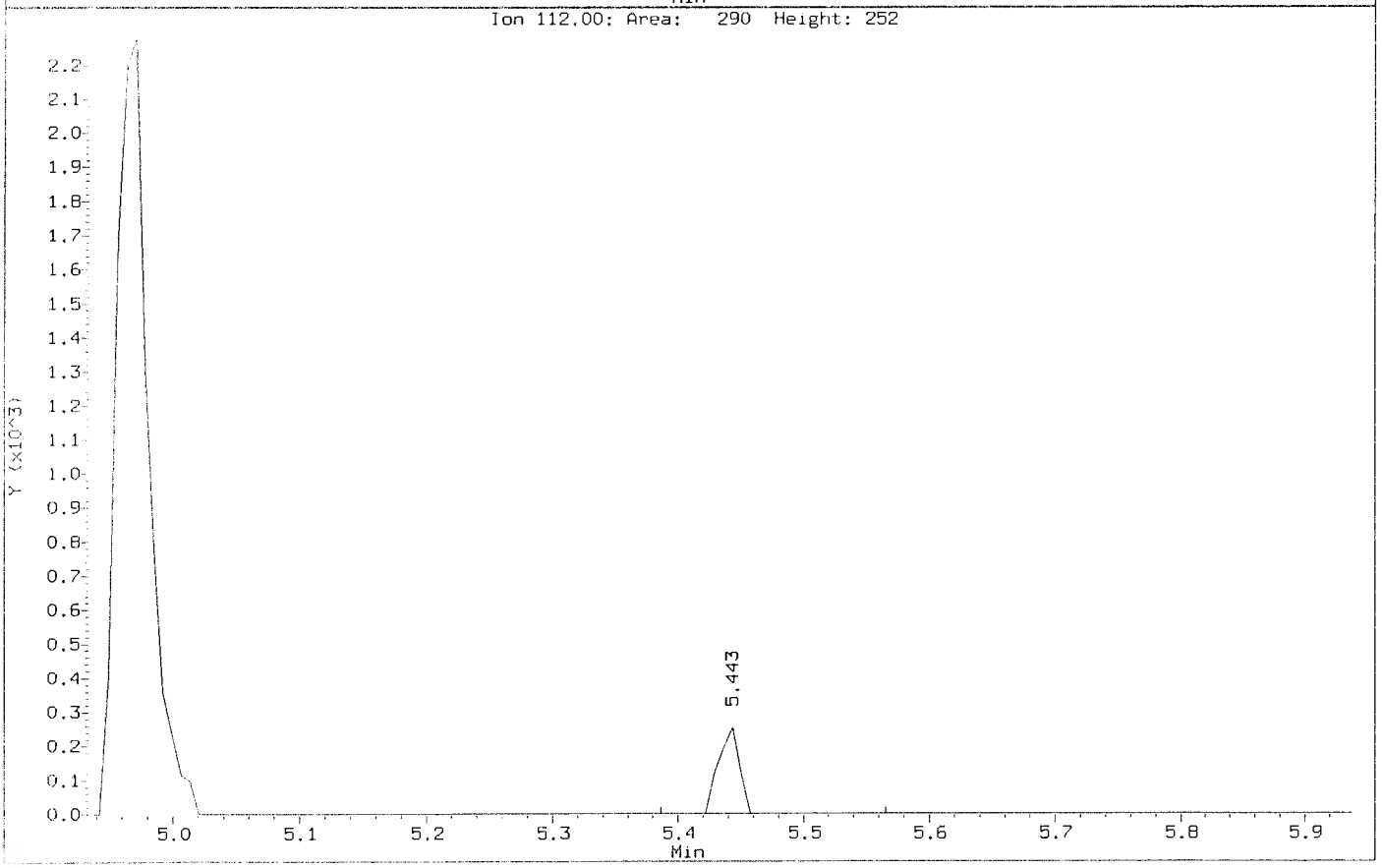
Compound: 1,2-Dichloropropane
CAS Number: 78-87-5





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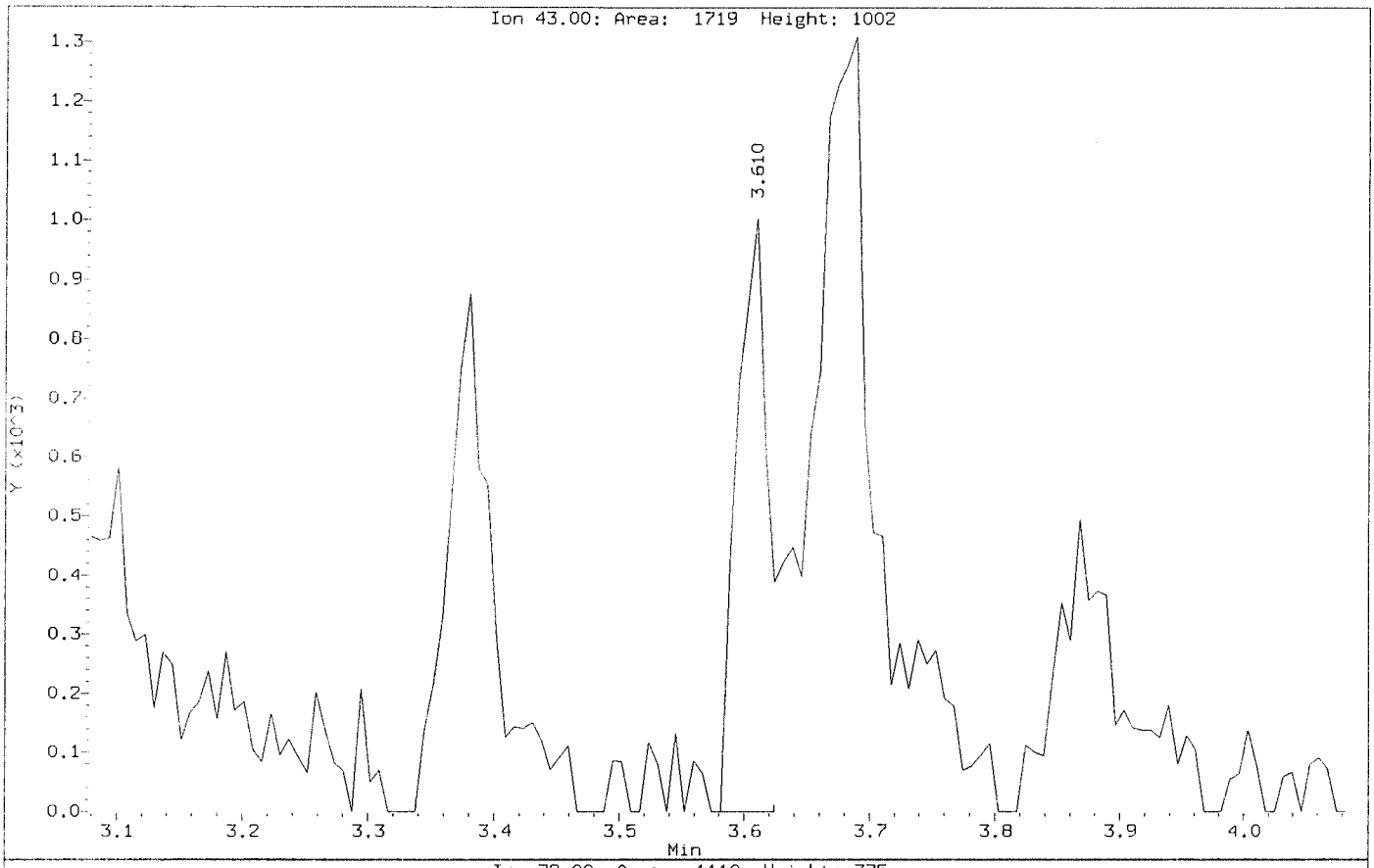
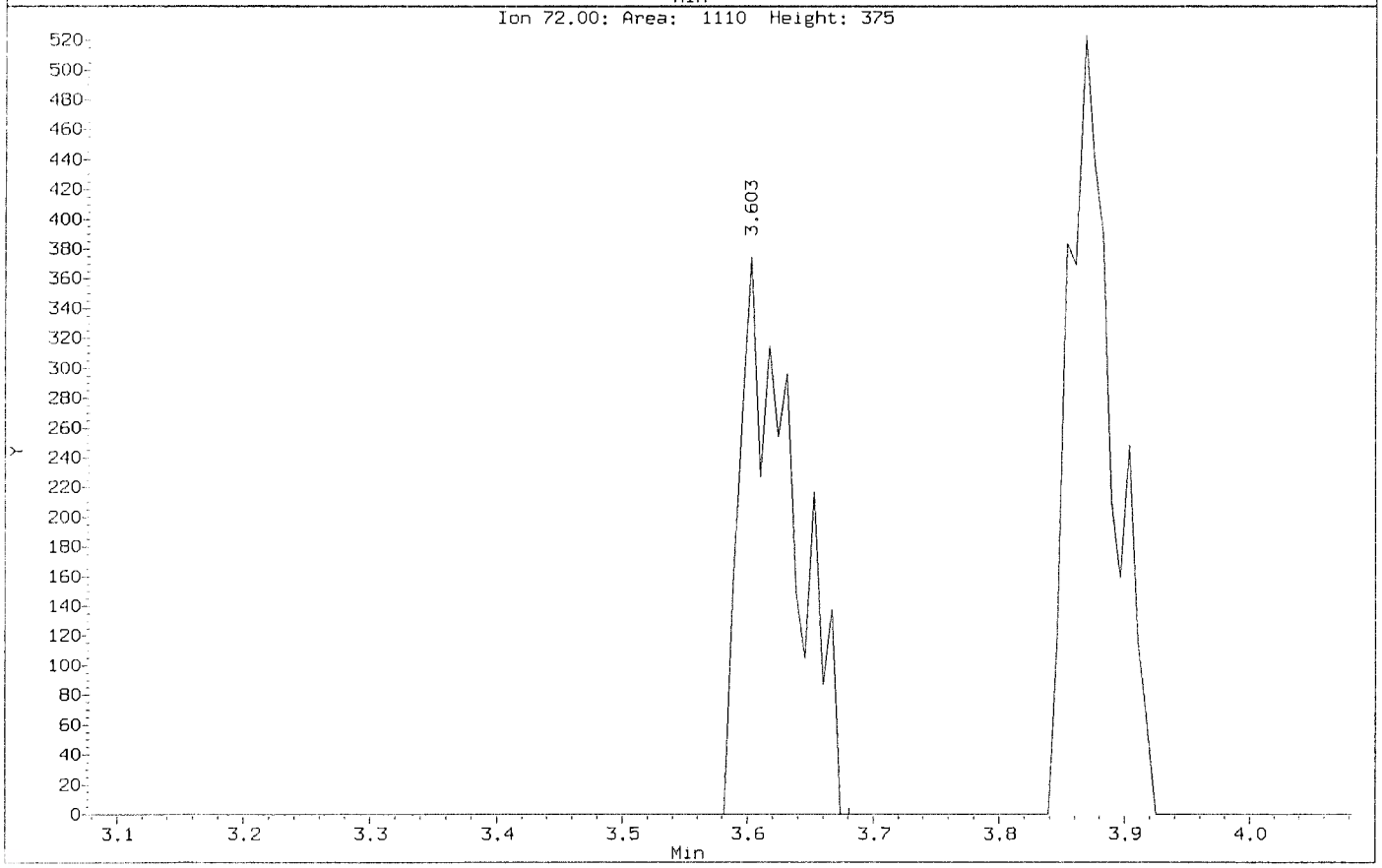
Compound: 2-Butanone
CAS Number: 78-93-3





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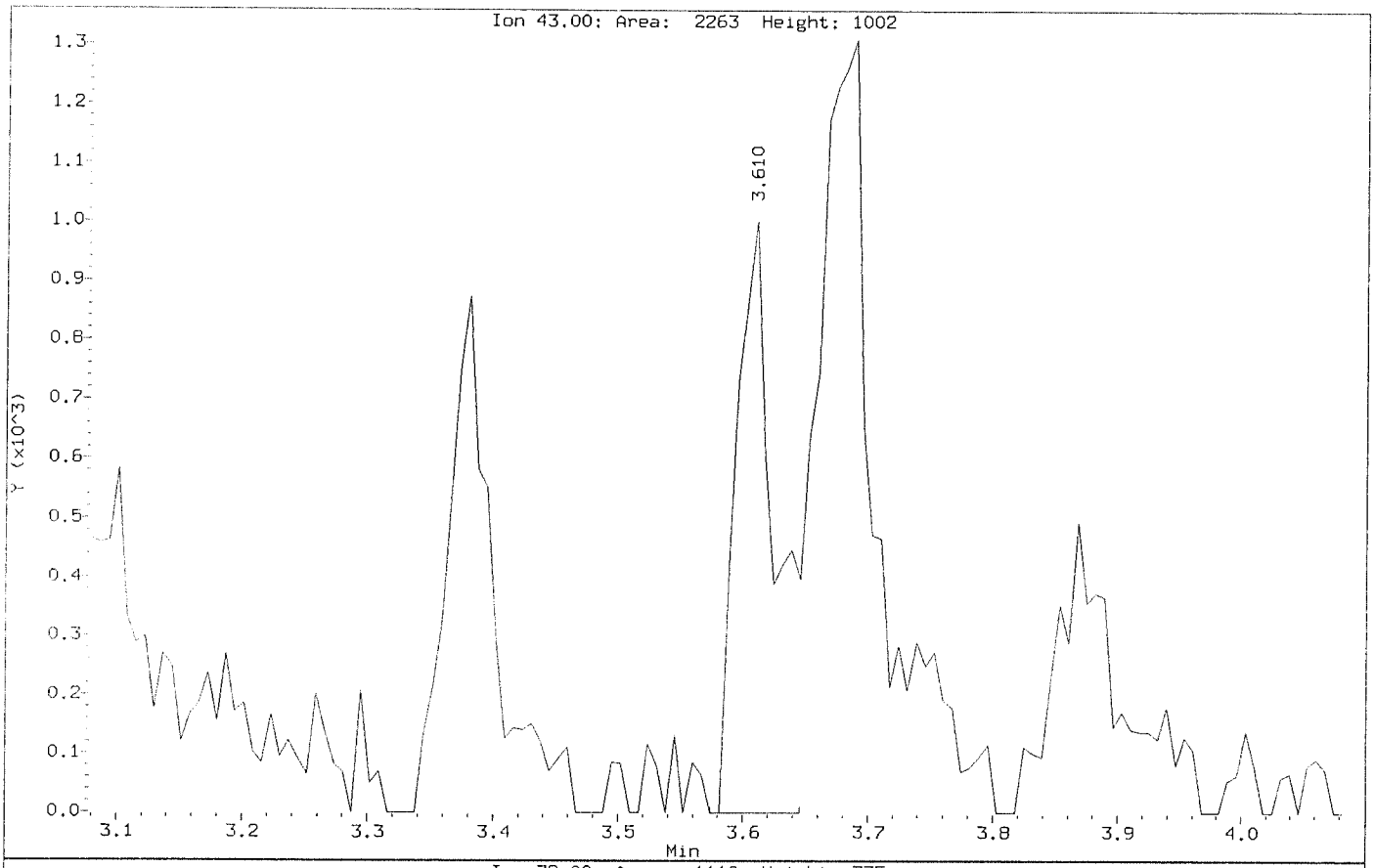
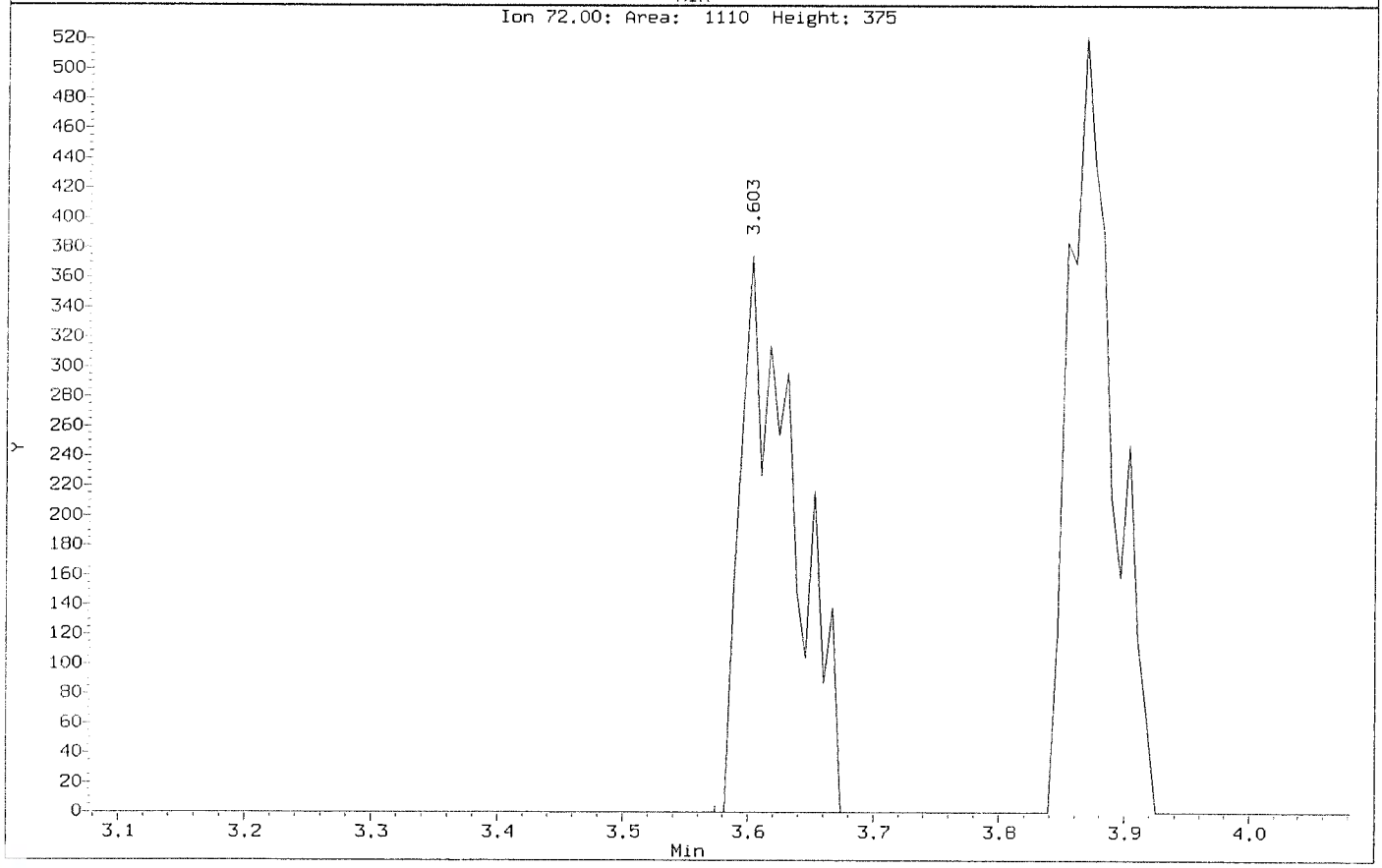
Compound: 2-Butanone
CAS Number: 78-93-3





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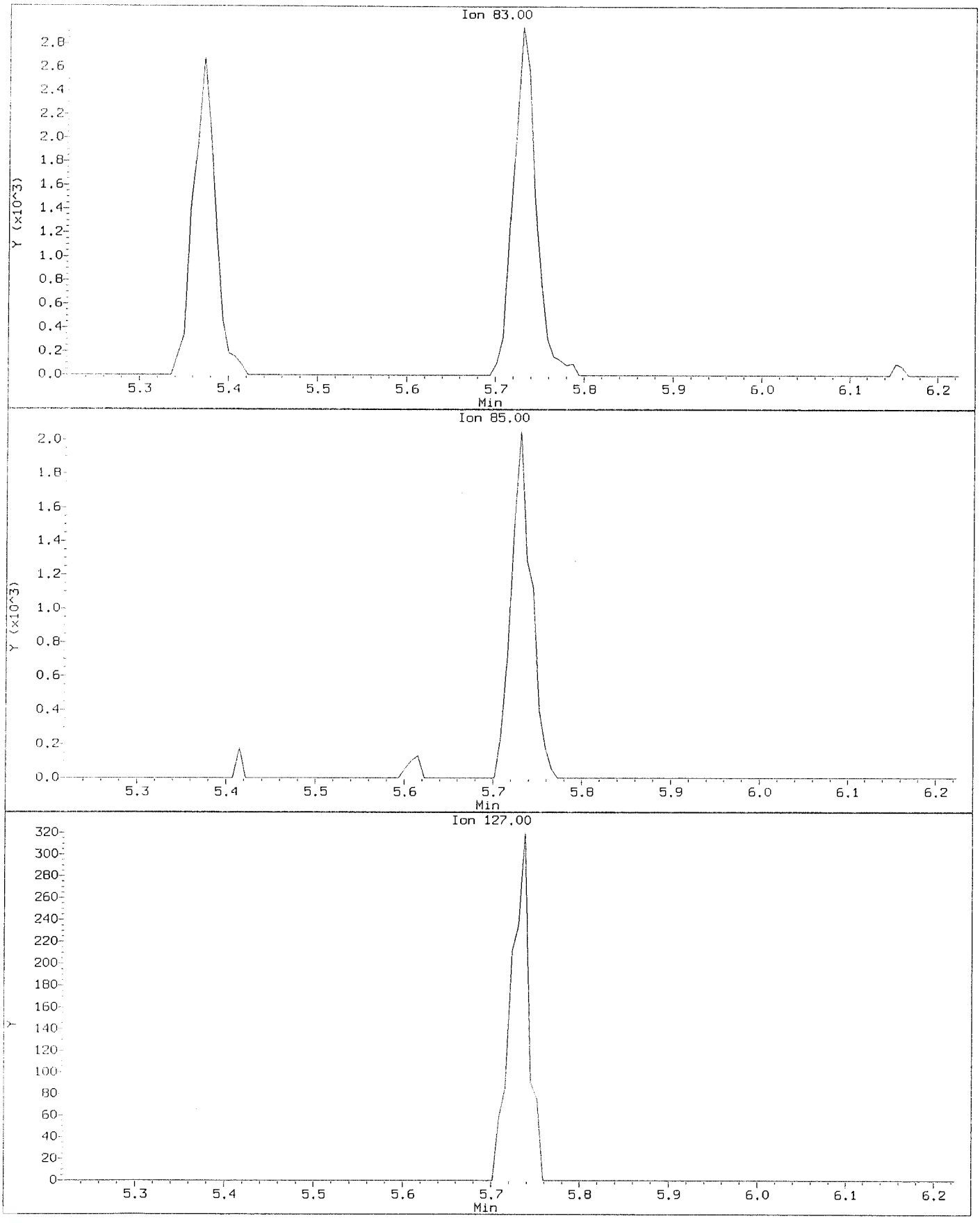
Instrument: voa6.i
Client Sample ID: VSTD001

Compound: Bromodichloromethane
CAS Number: 75-27-4



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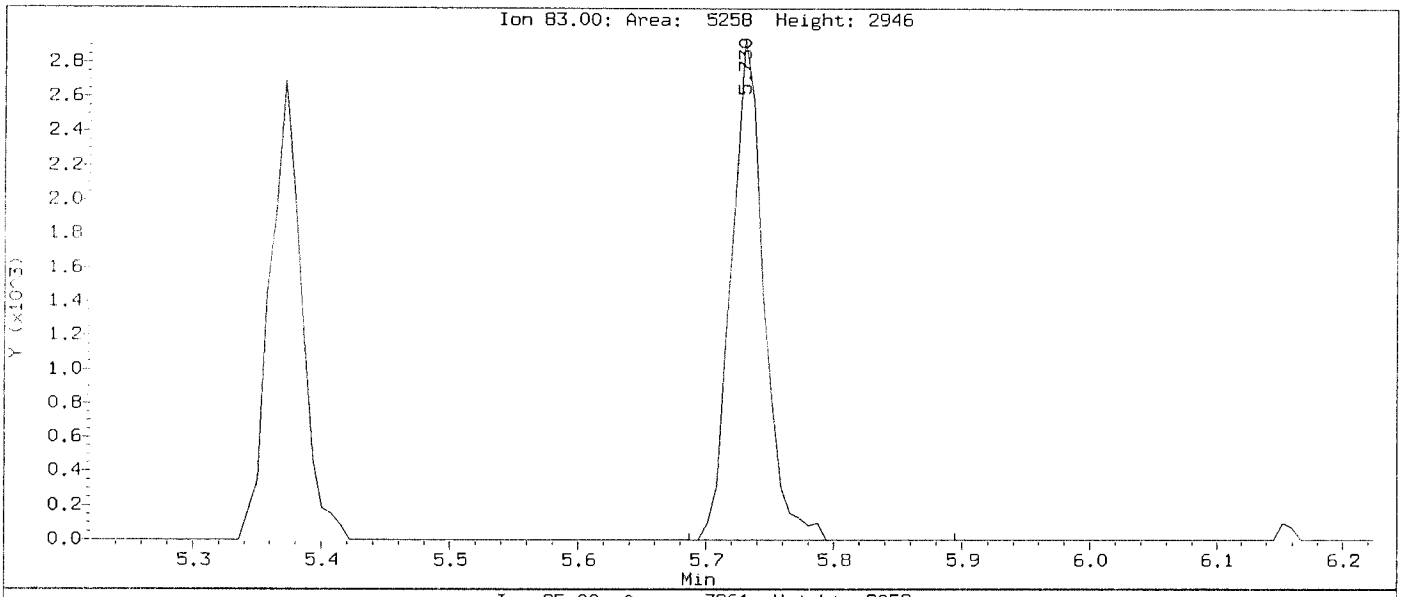
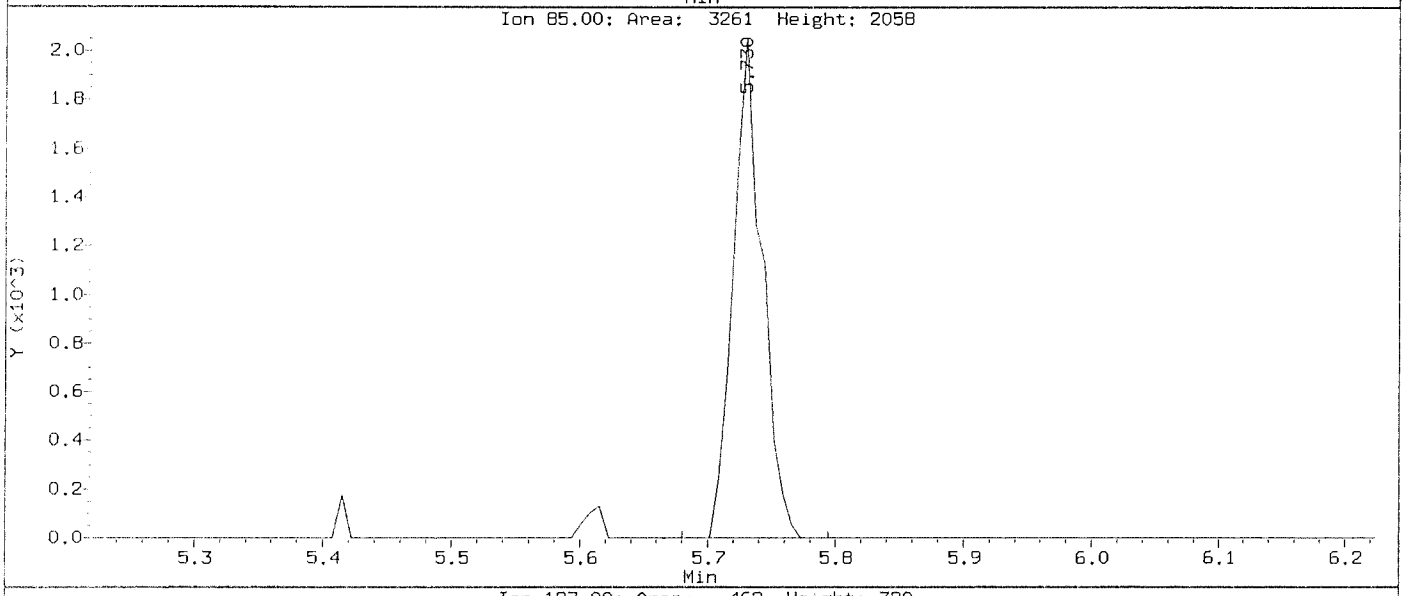
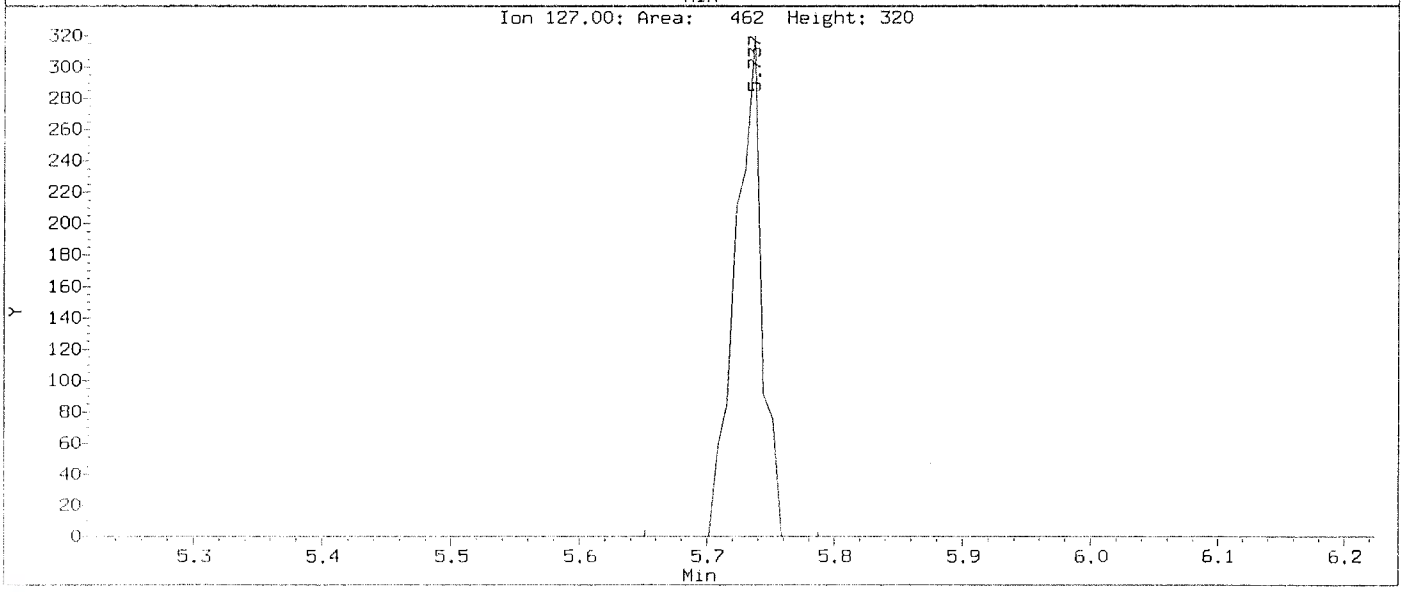
Compound: Bromodichloromethane
CAS Number: 75-27-4







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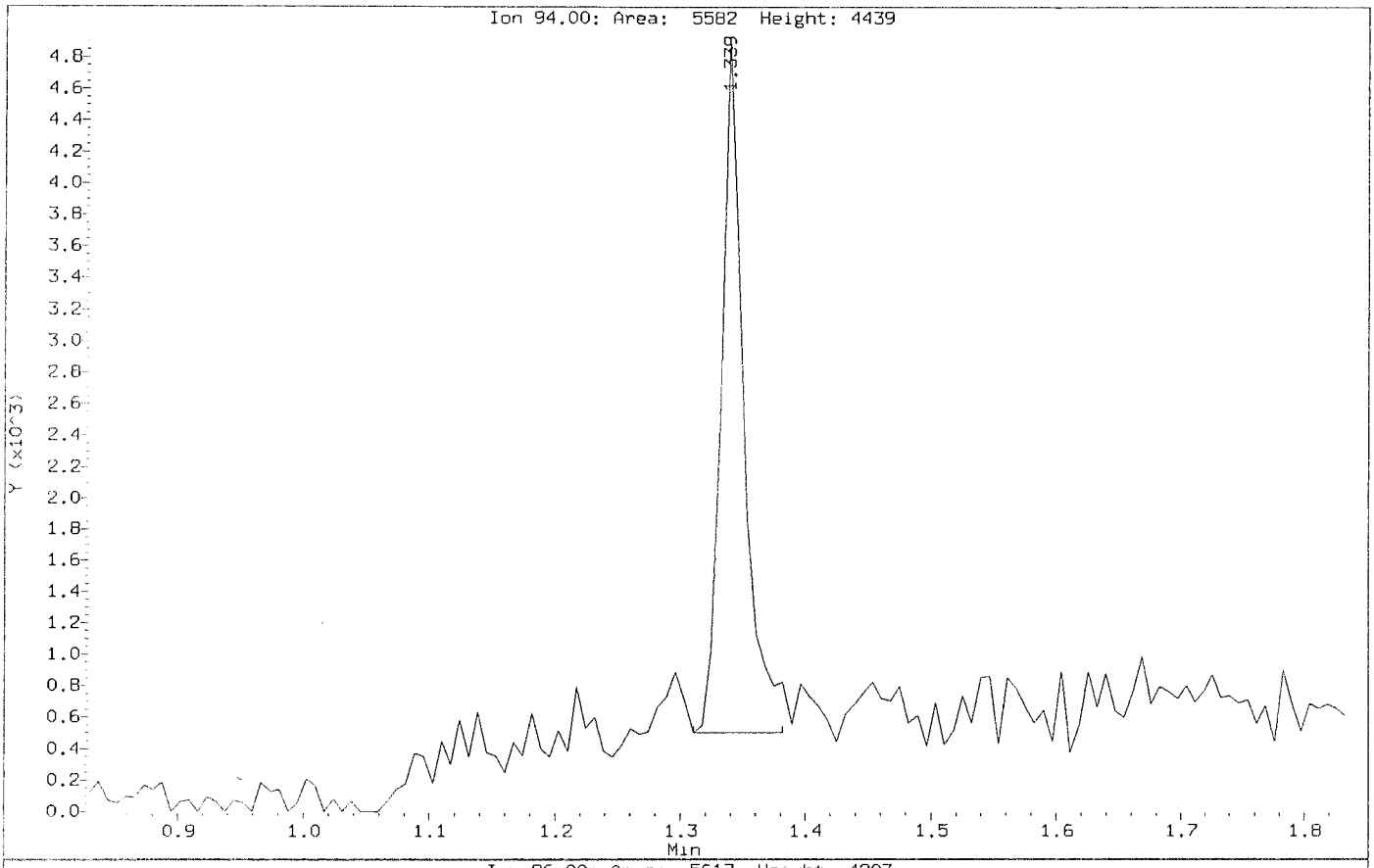
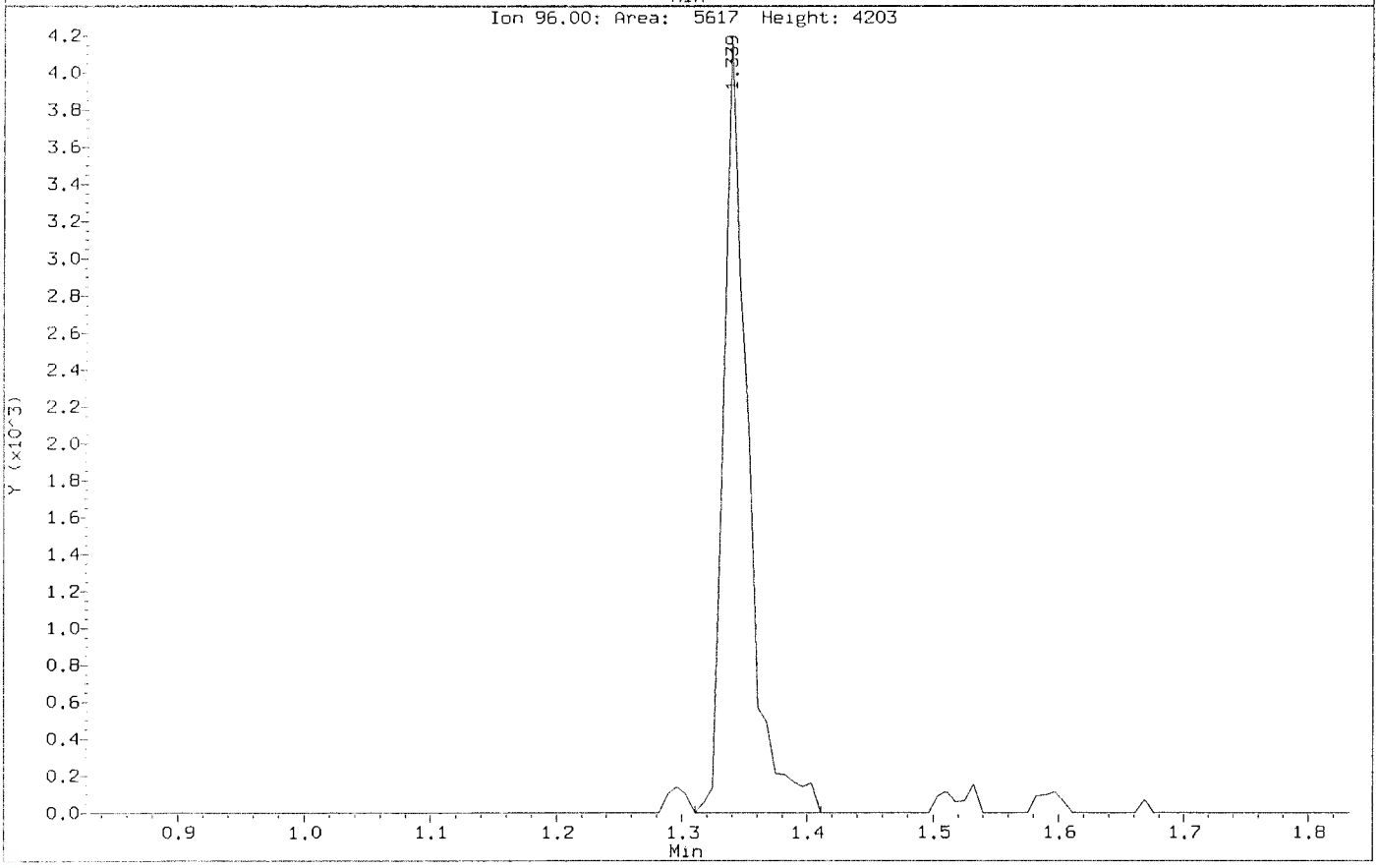
Client Sample ID: VSTD001

Compound: Bromomethane
CAS Number: 74-83-9





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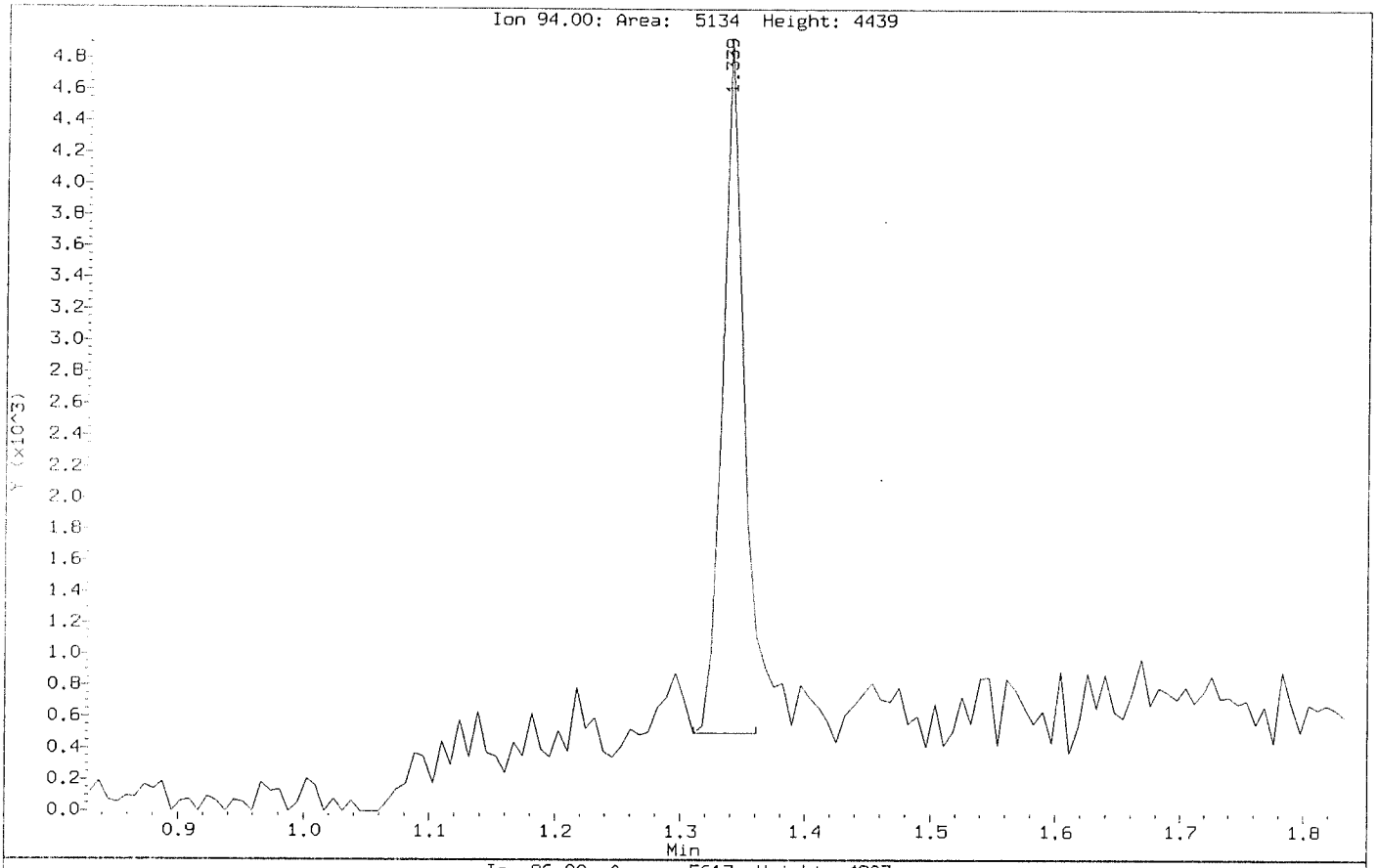
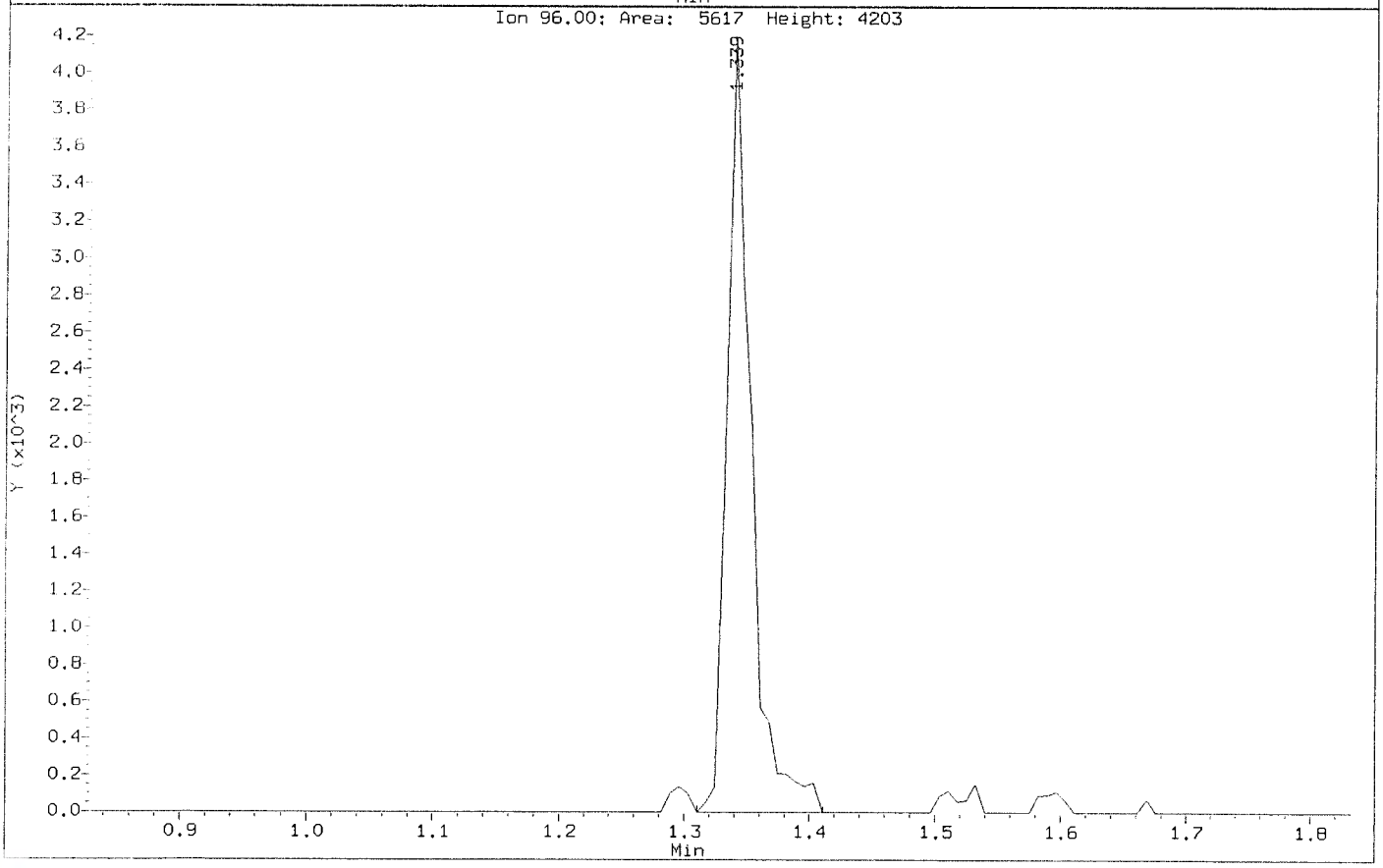
Compound: Bromomethane
CAS Number: 74-83-9





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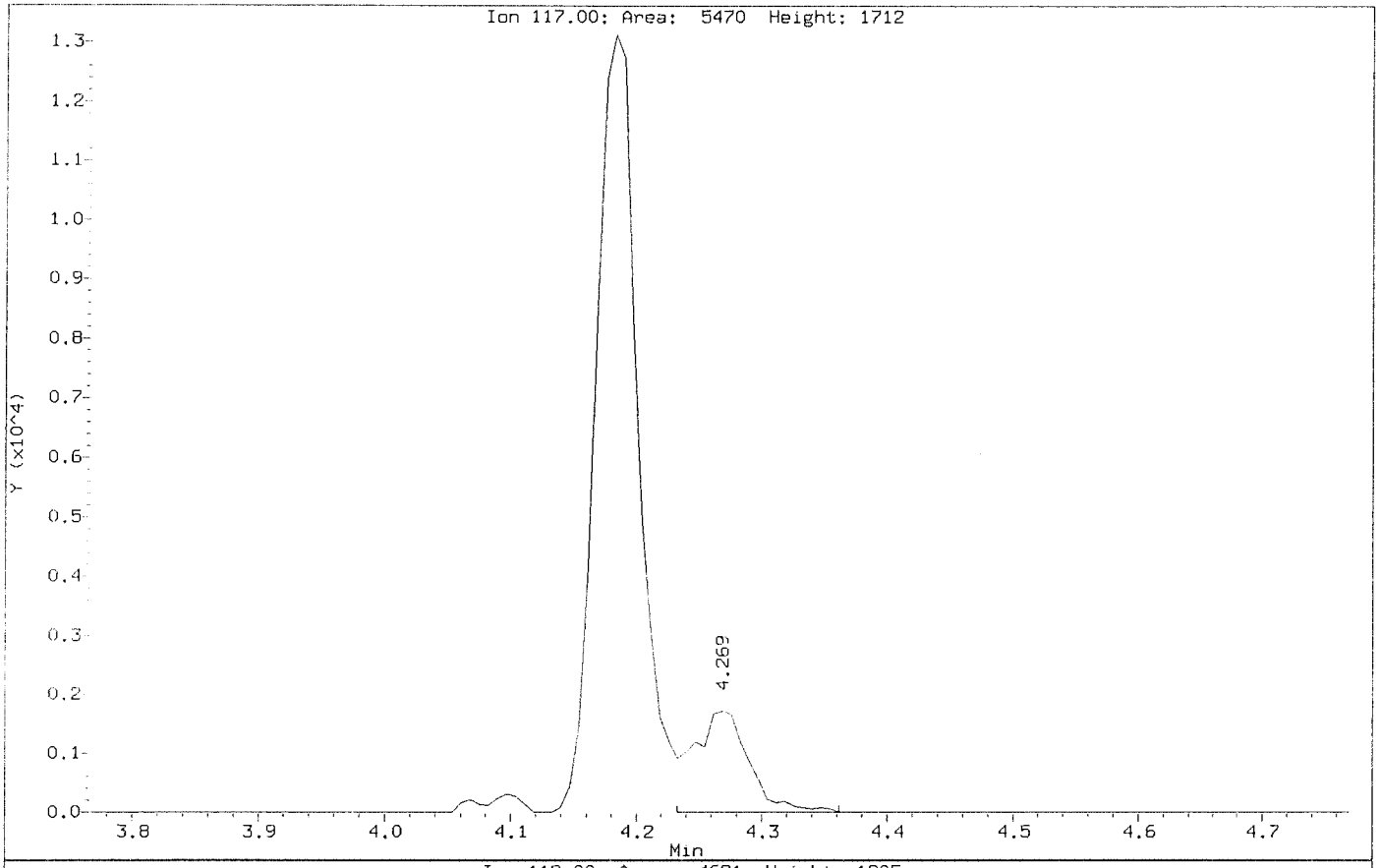
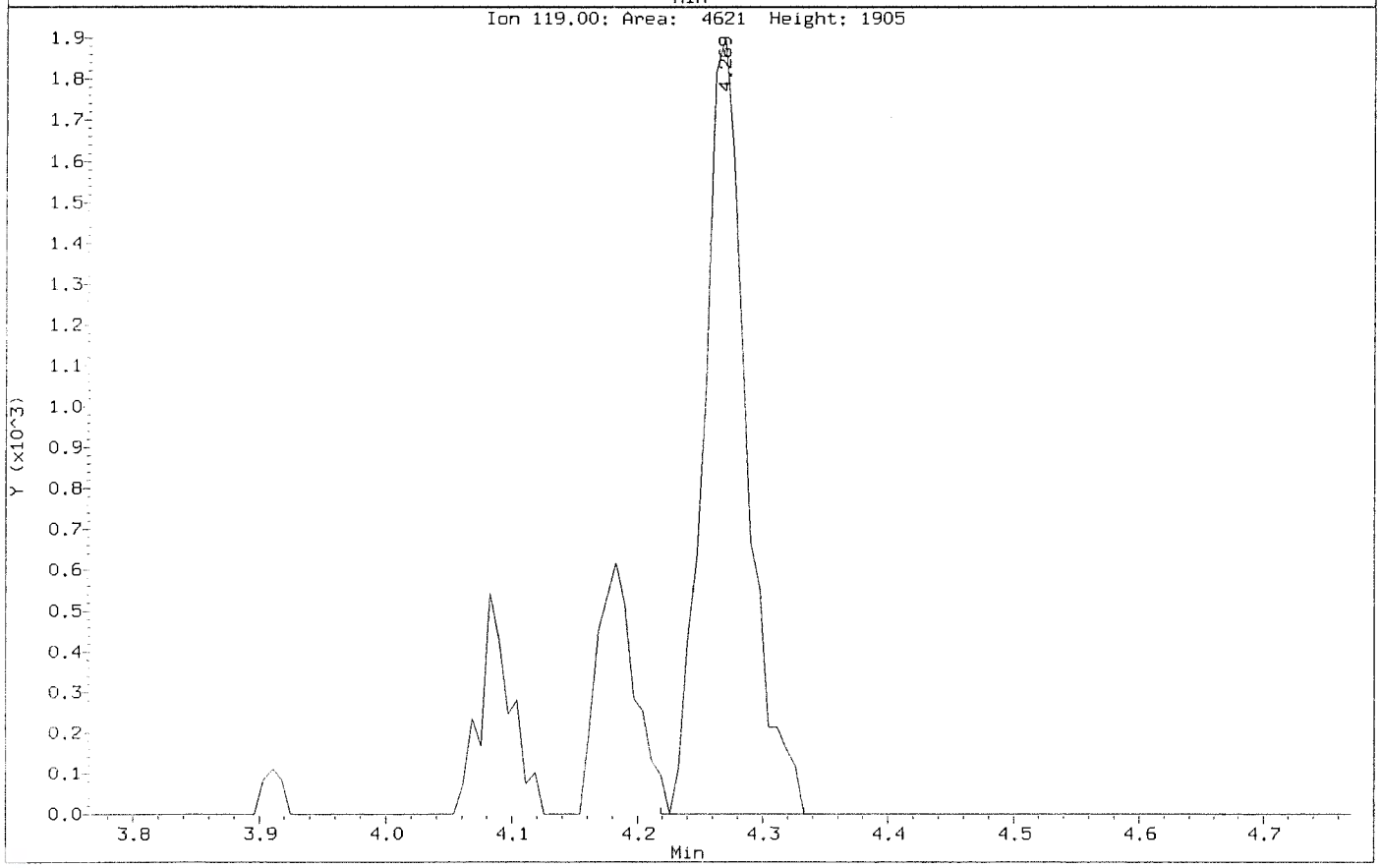
Instrument: voa6.i
Client Sample ID: VSTD001

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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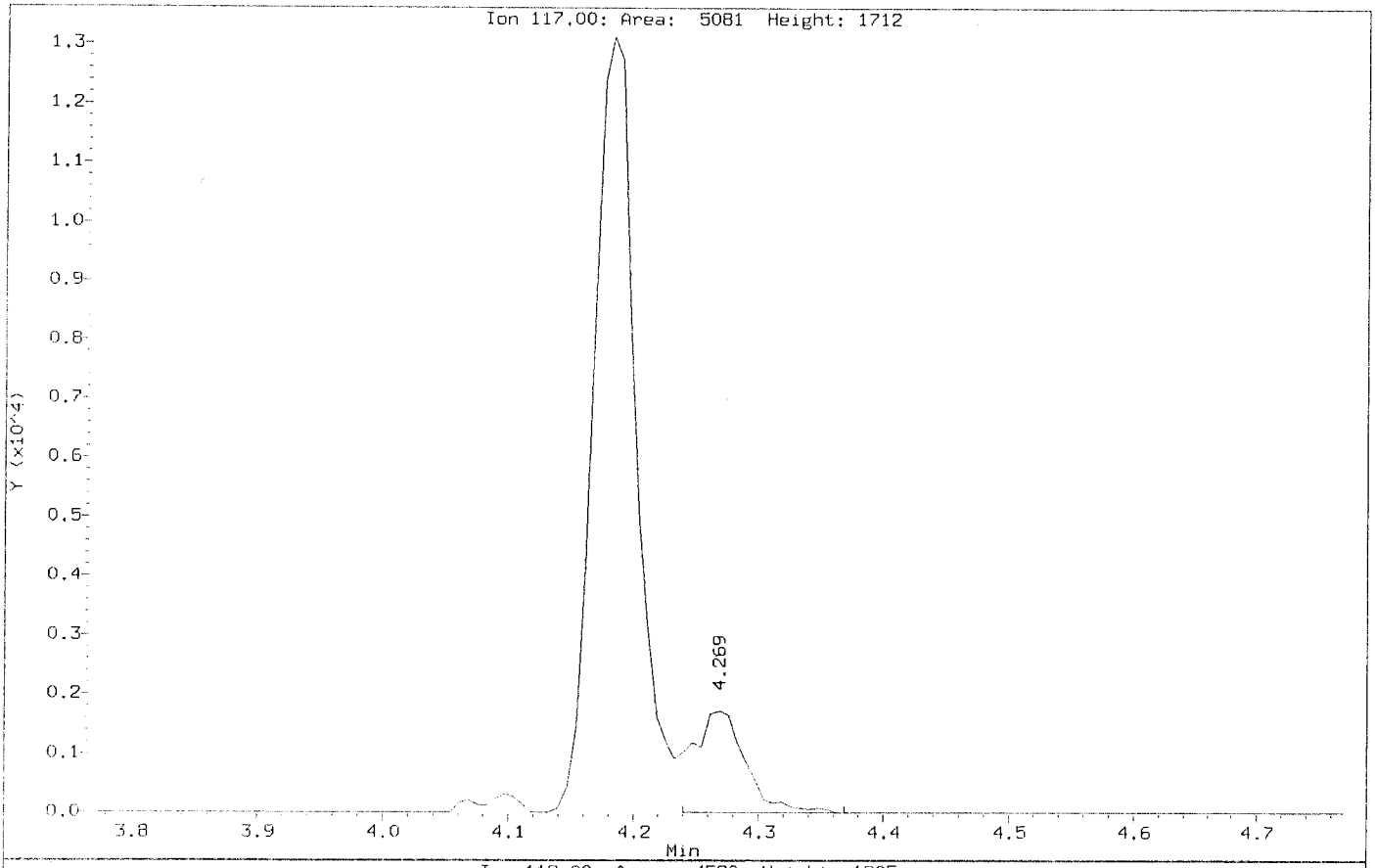
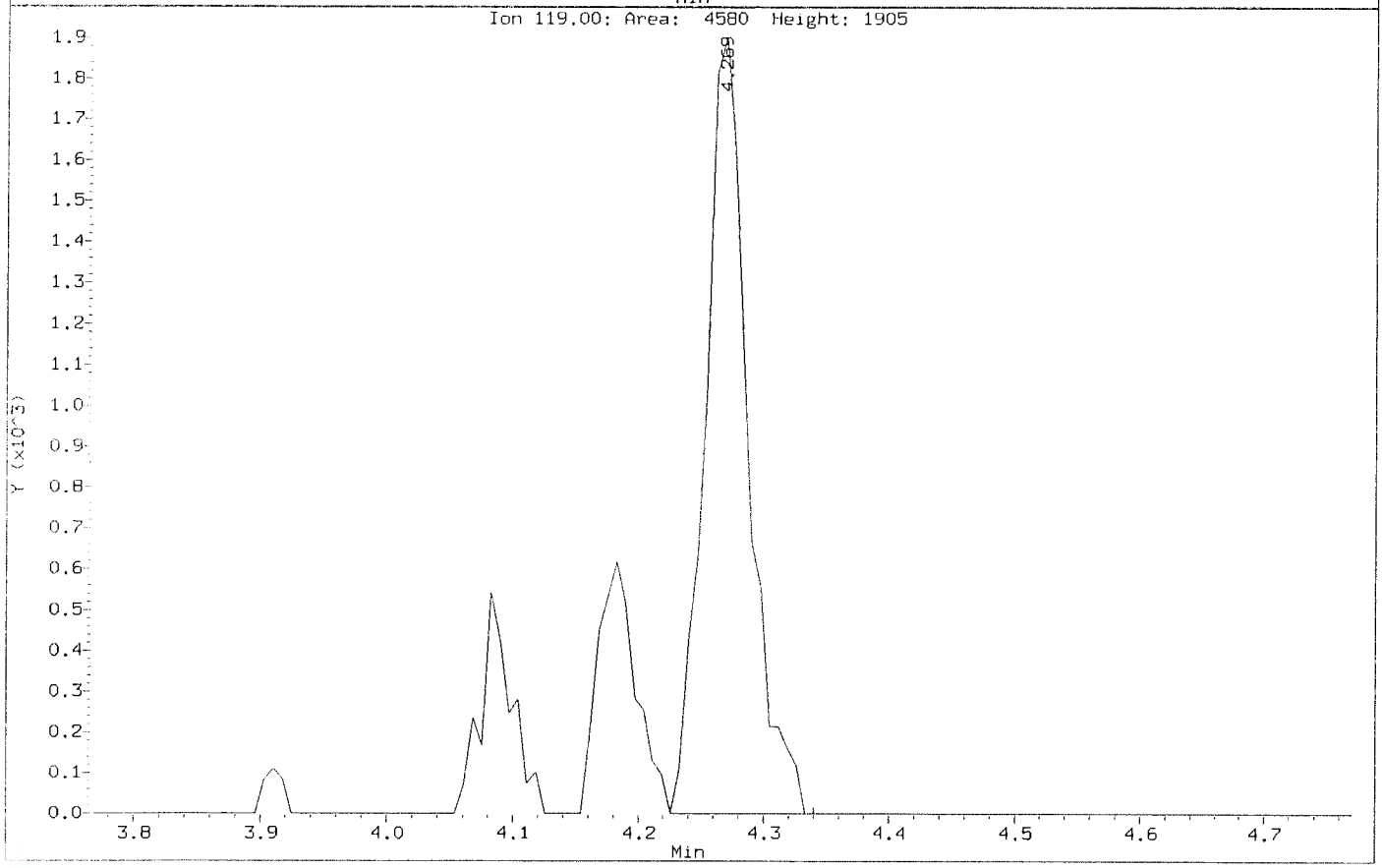
Client Sample ID: VSTD001

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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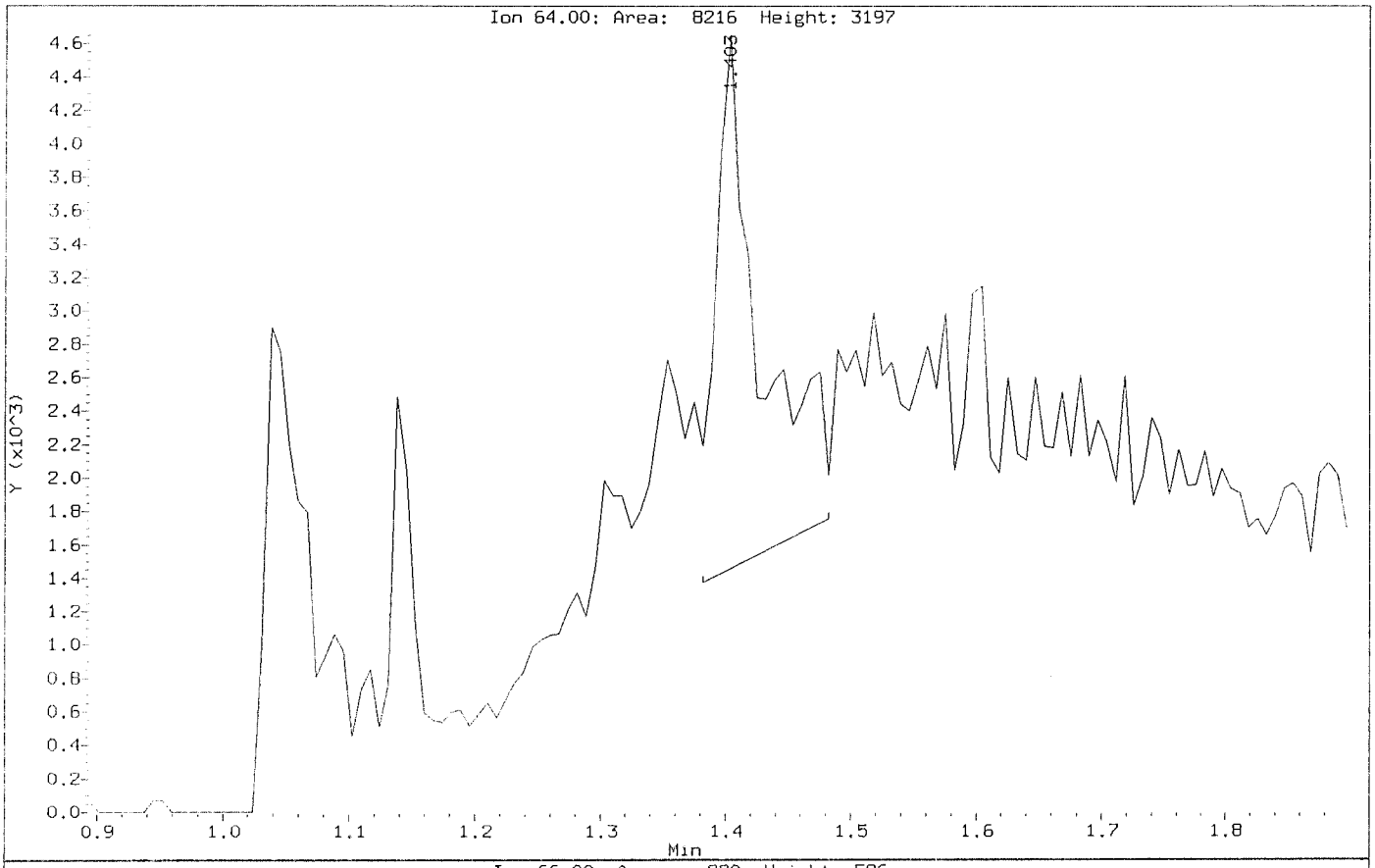
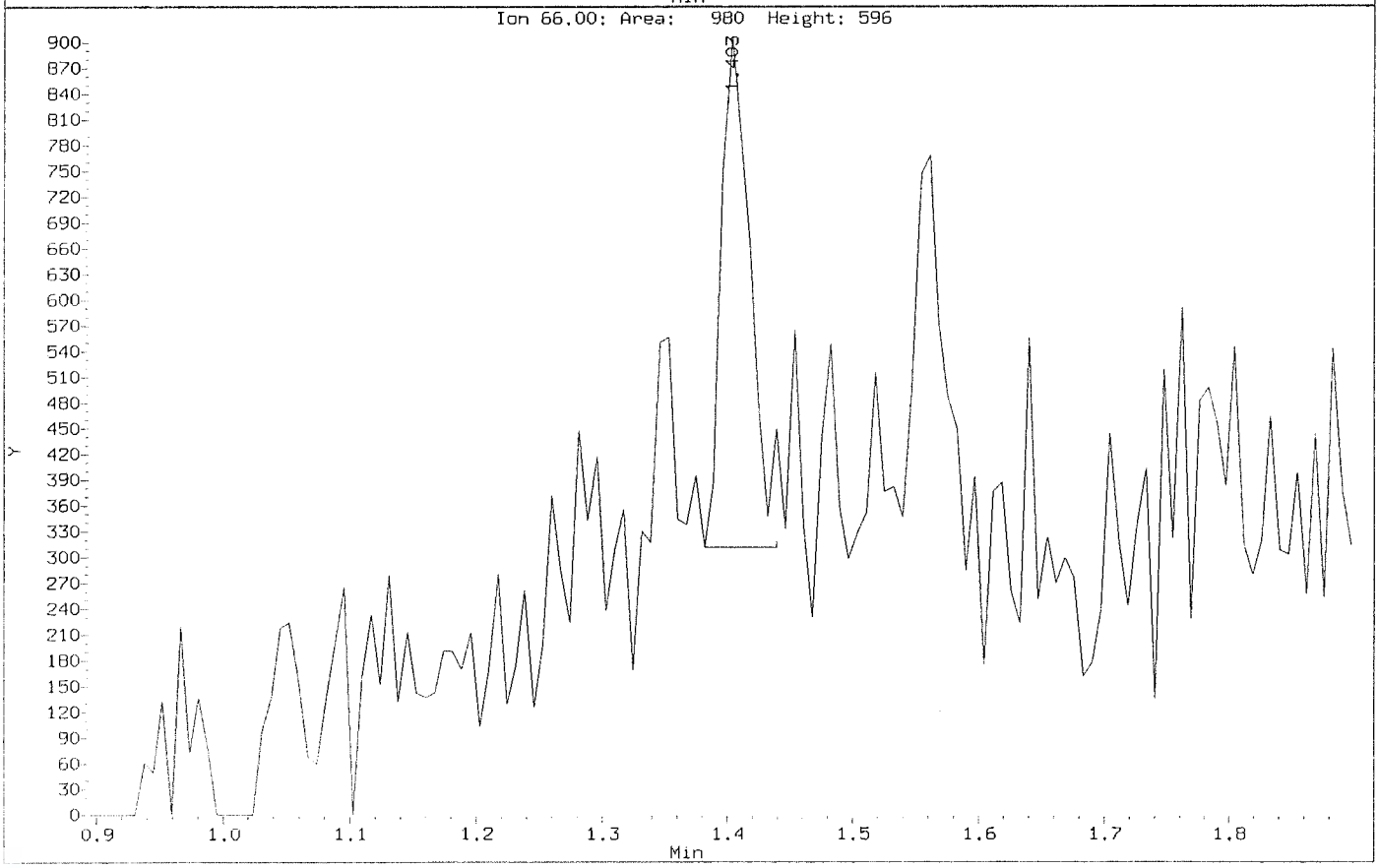
Compound: Chloroethane
CAS Number: 75-00-3





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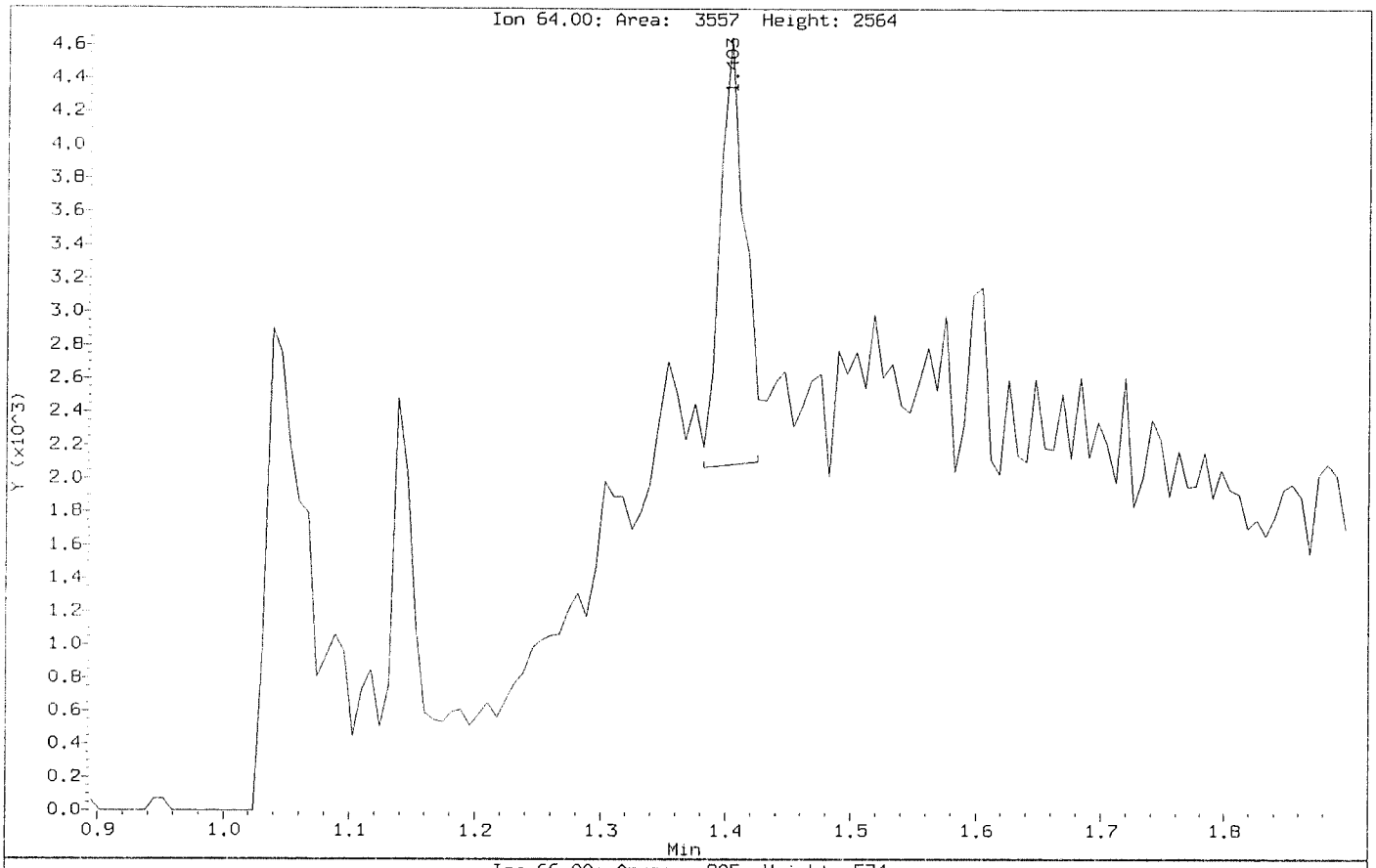
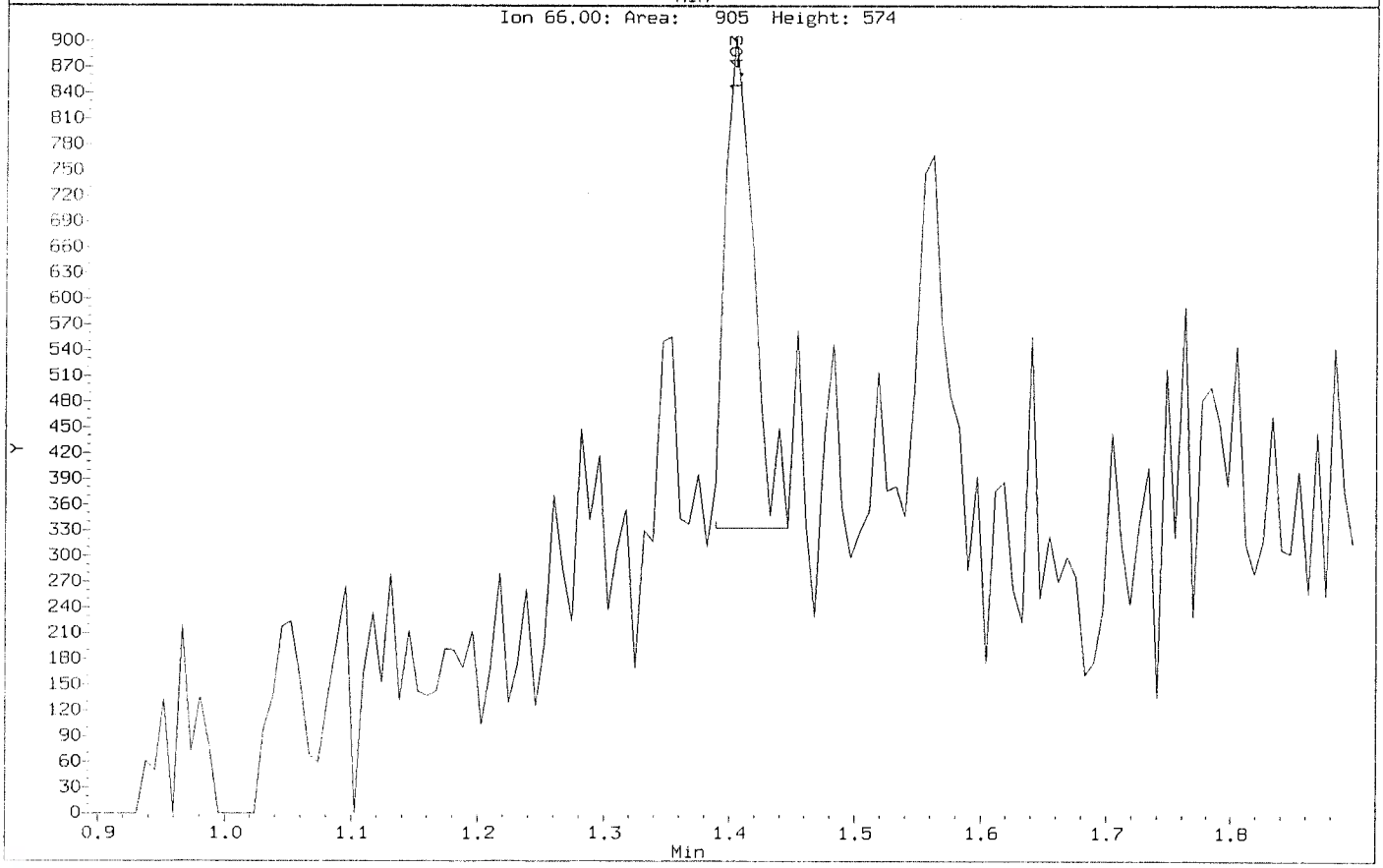
Compound: Chloroethane
CAS Number: 75-00-3





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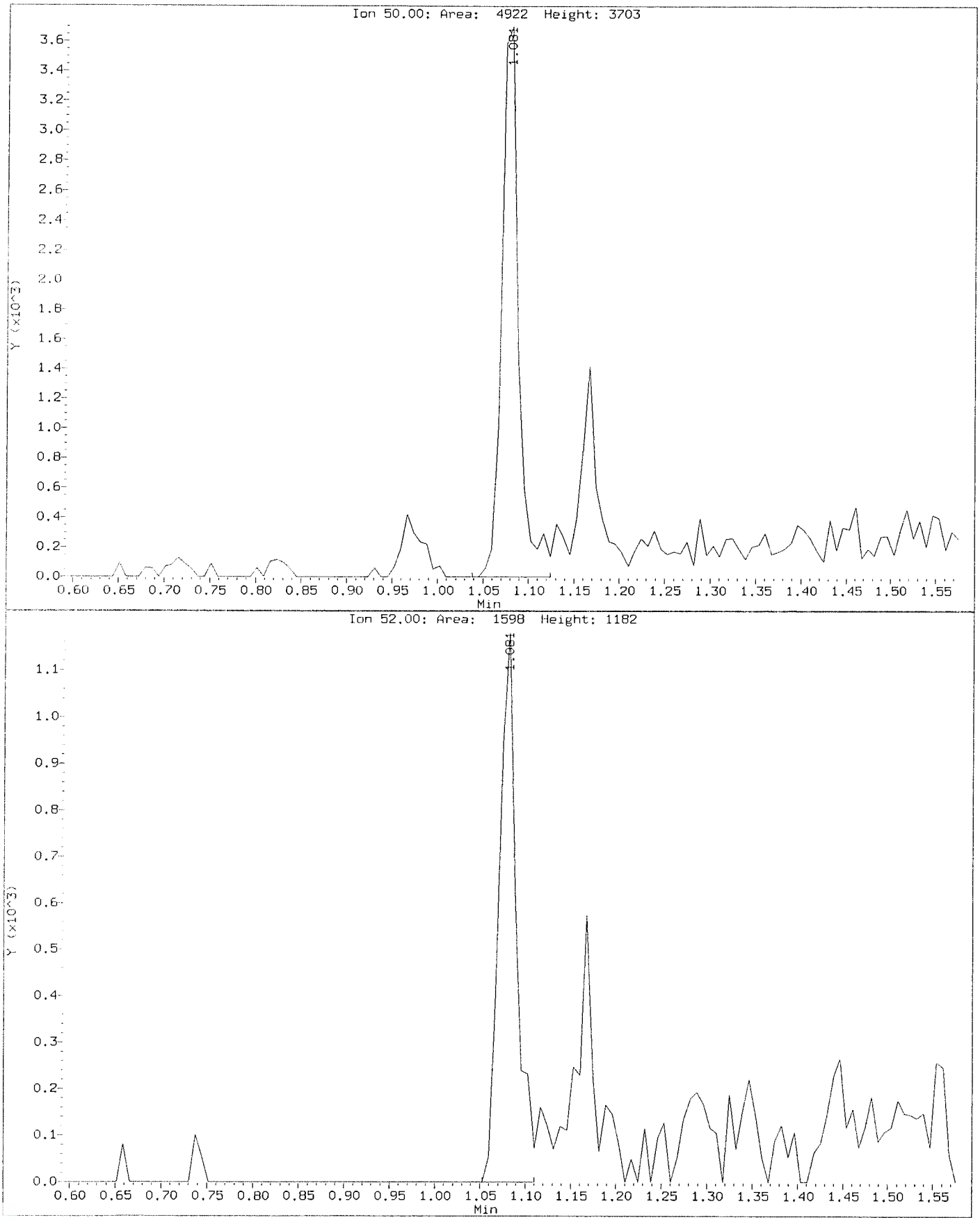
Compound: Chloromethane
CAS Number: 74-87-3



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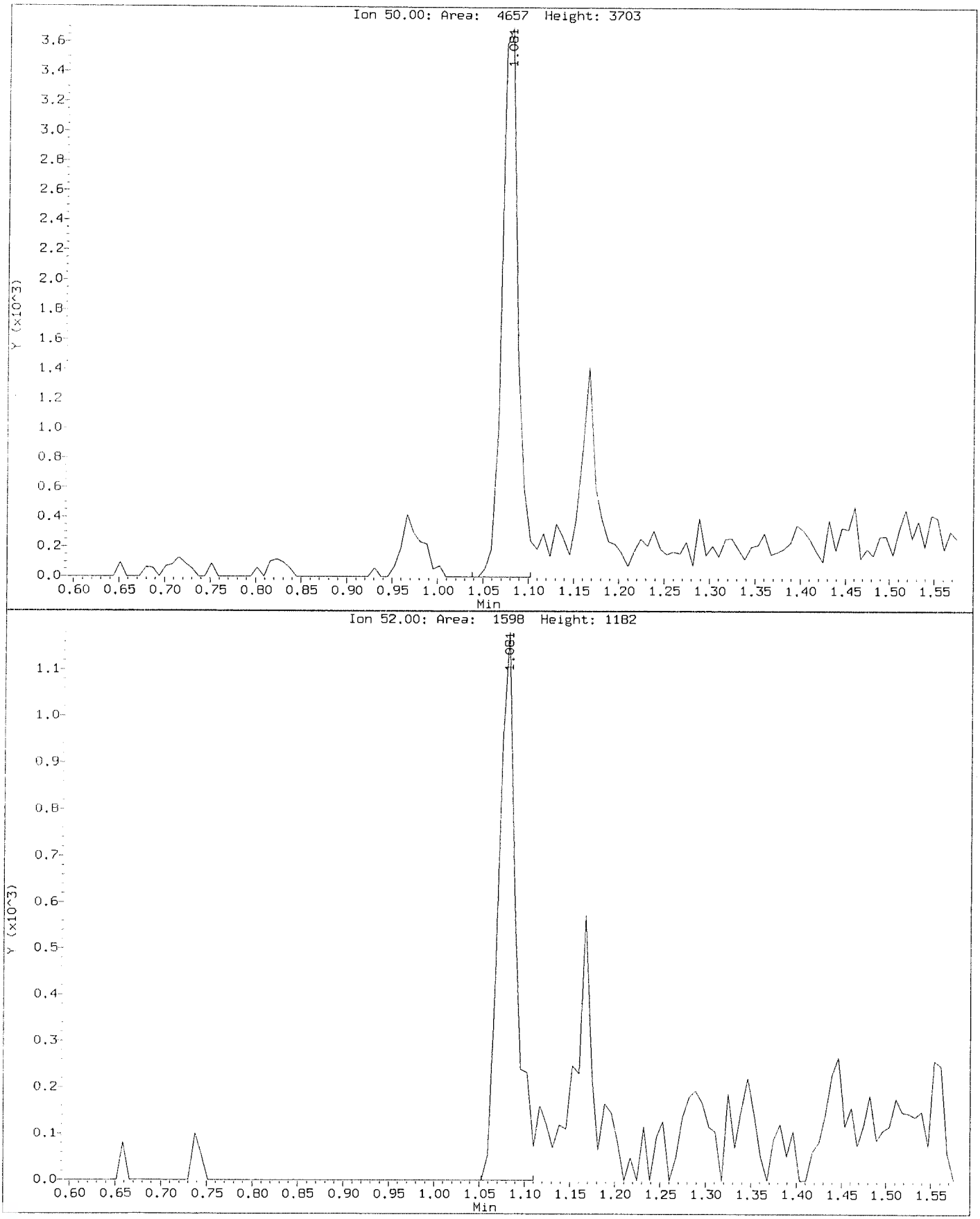
CAS Number: 74-87-3



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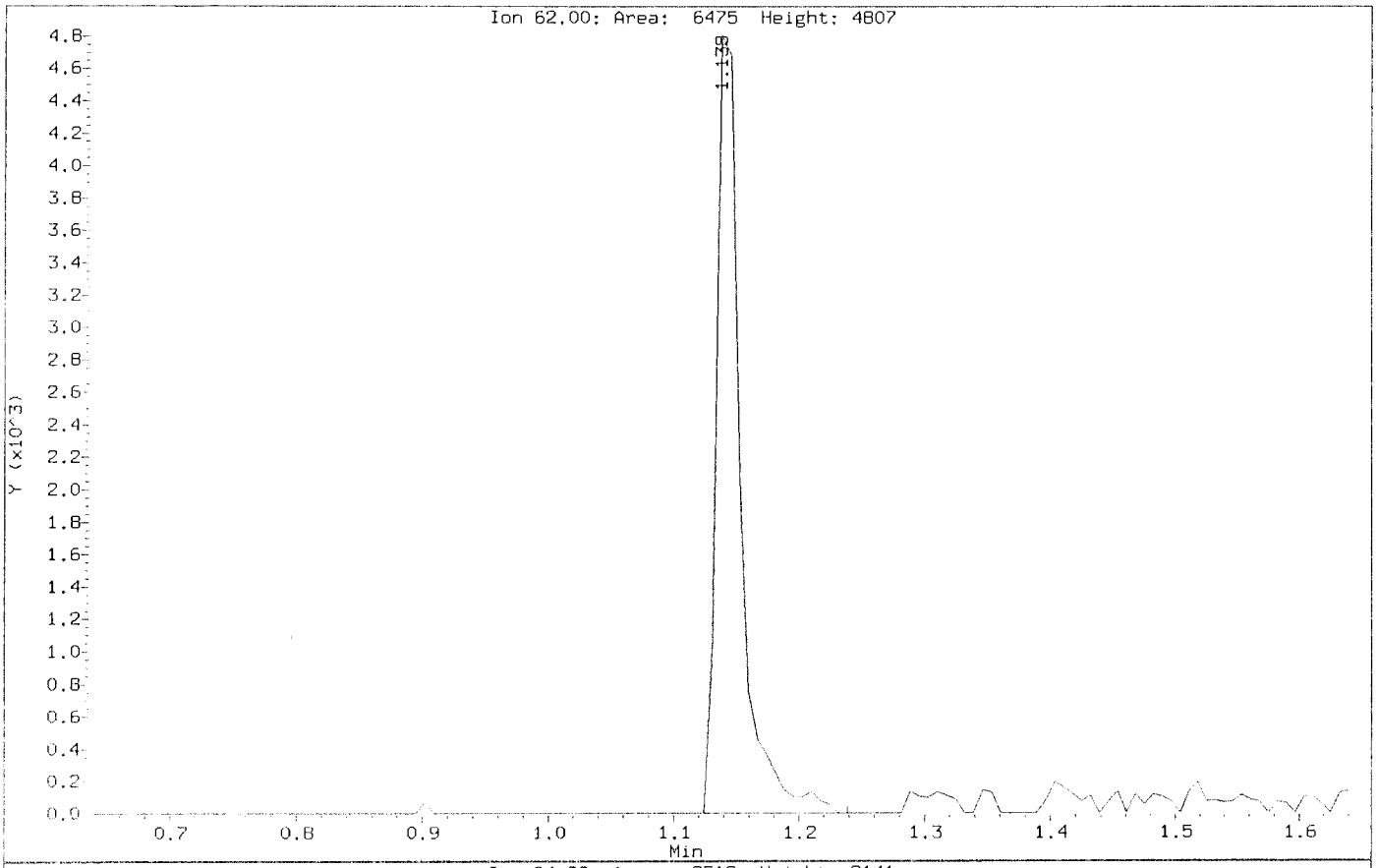
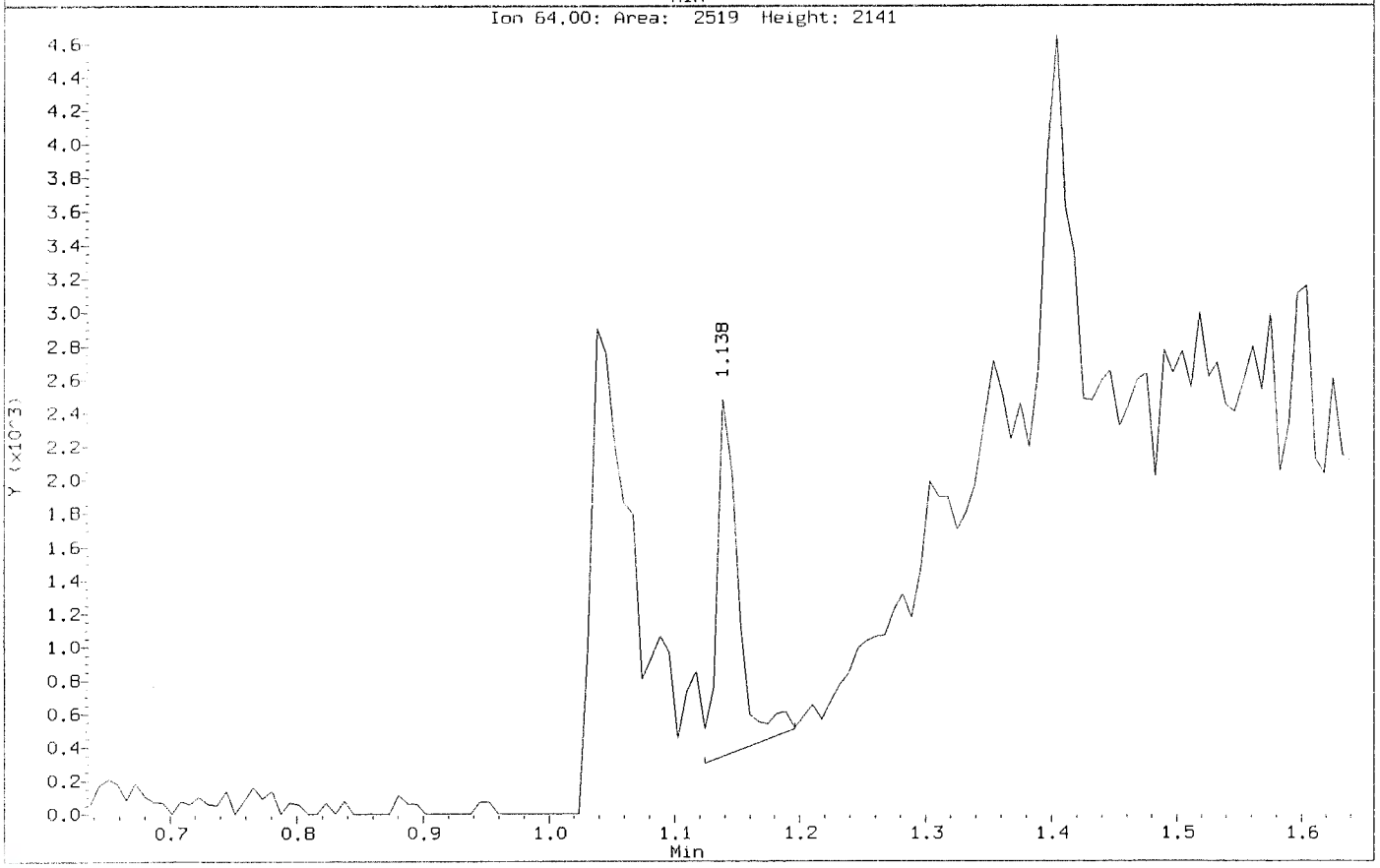
Compound: Vinyl Chloride
CAS Number: 75-01-4





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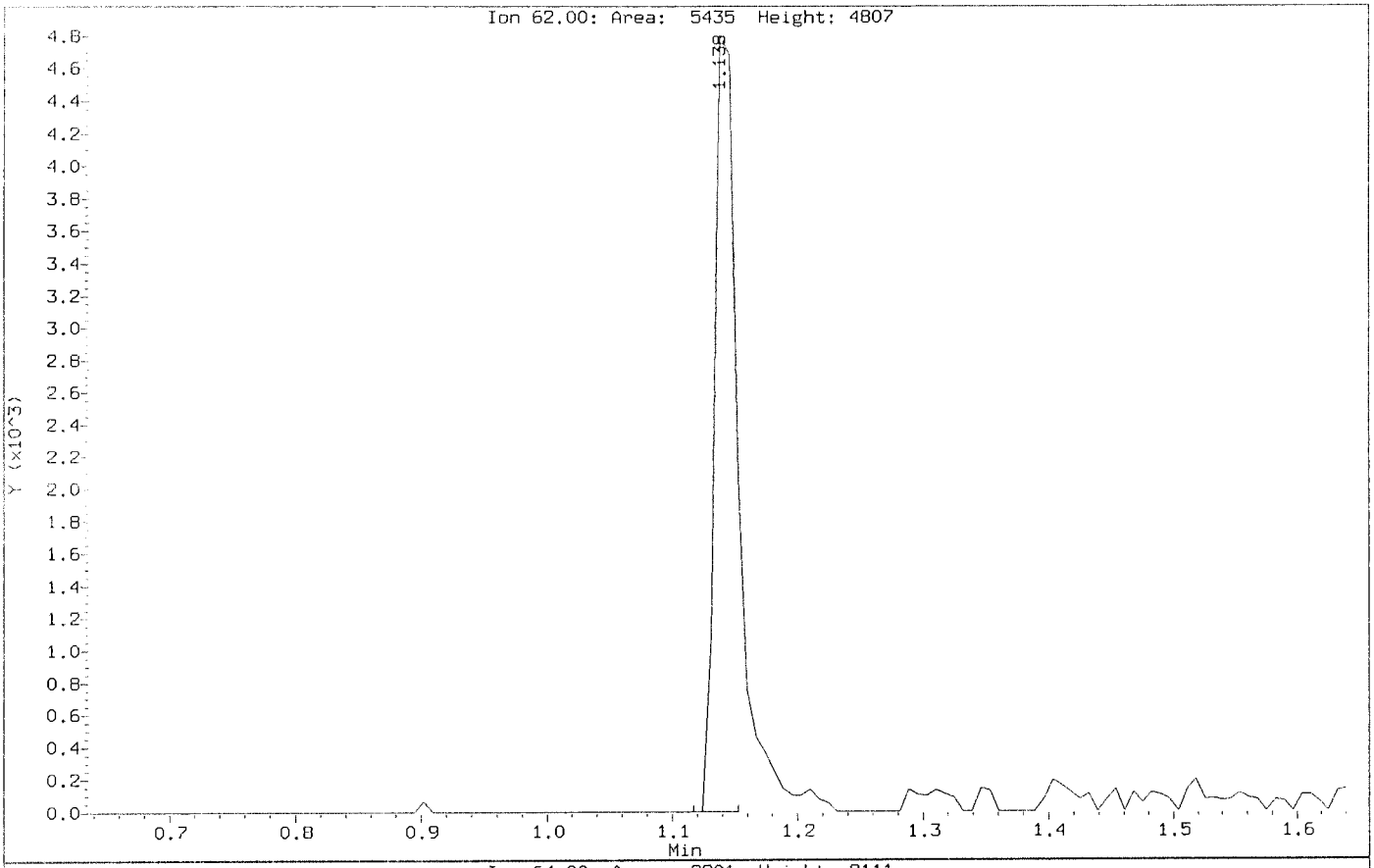
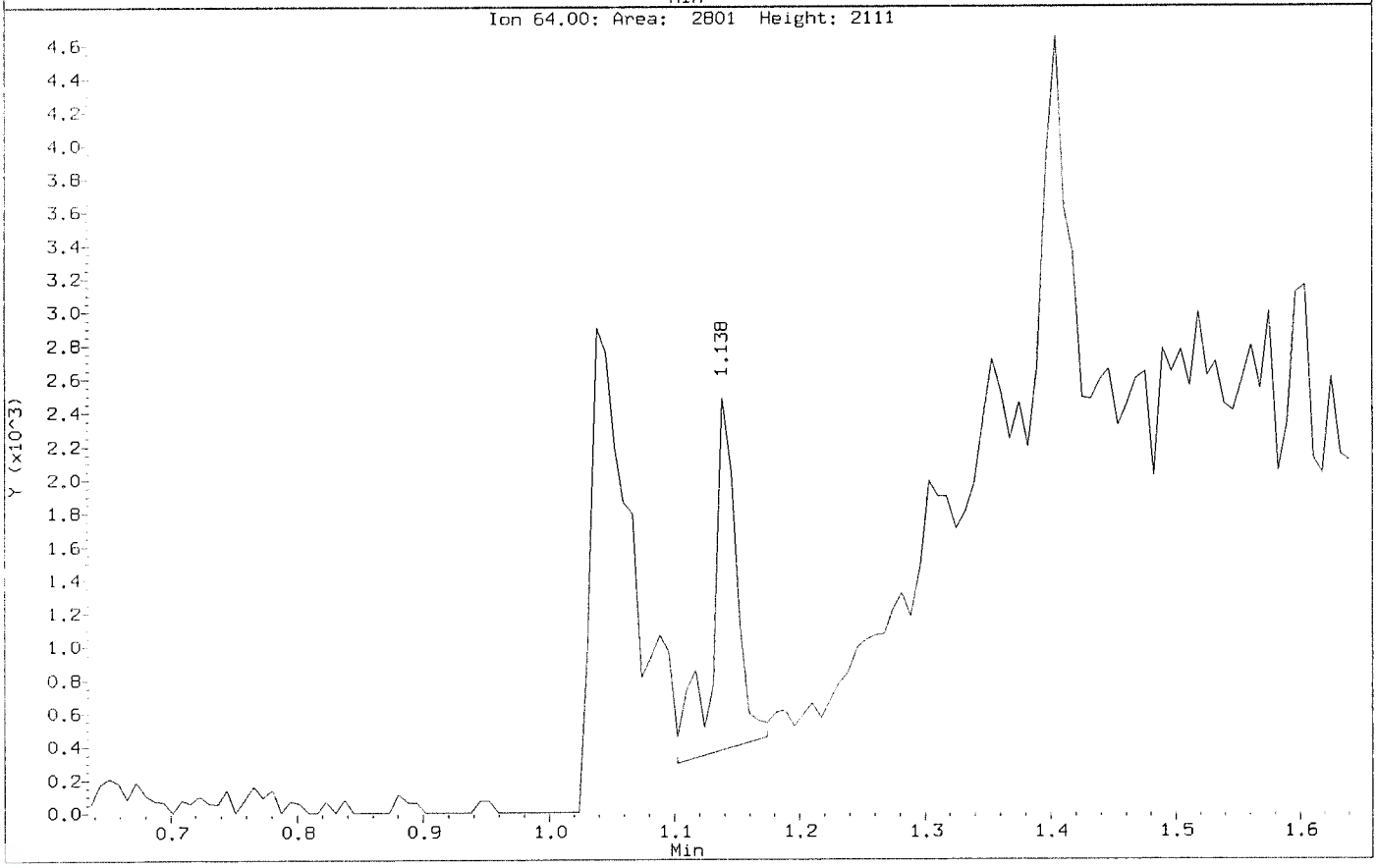
Compound: Vinyl Chloride
CAS Number: 75-01-4





ALS Laboratory Group

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Inj Date : 26-MAY-2021 13:58
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 30-Jun-2021 18:30 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 13:37 Cal File: X052604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

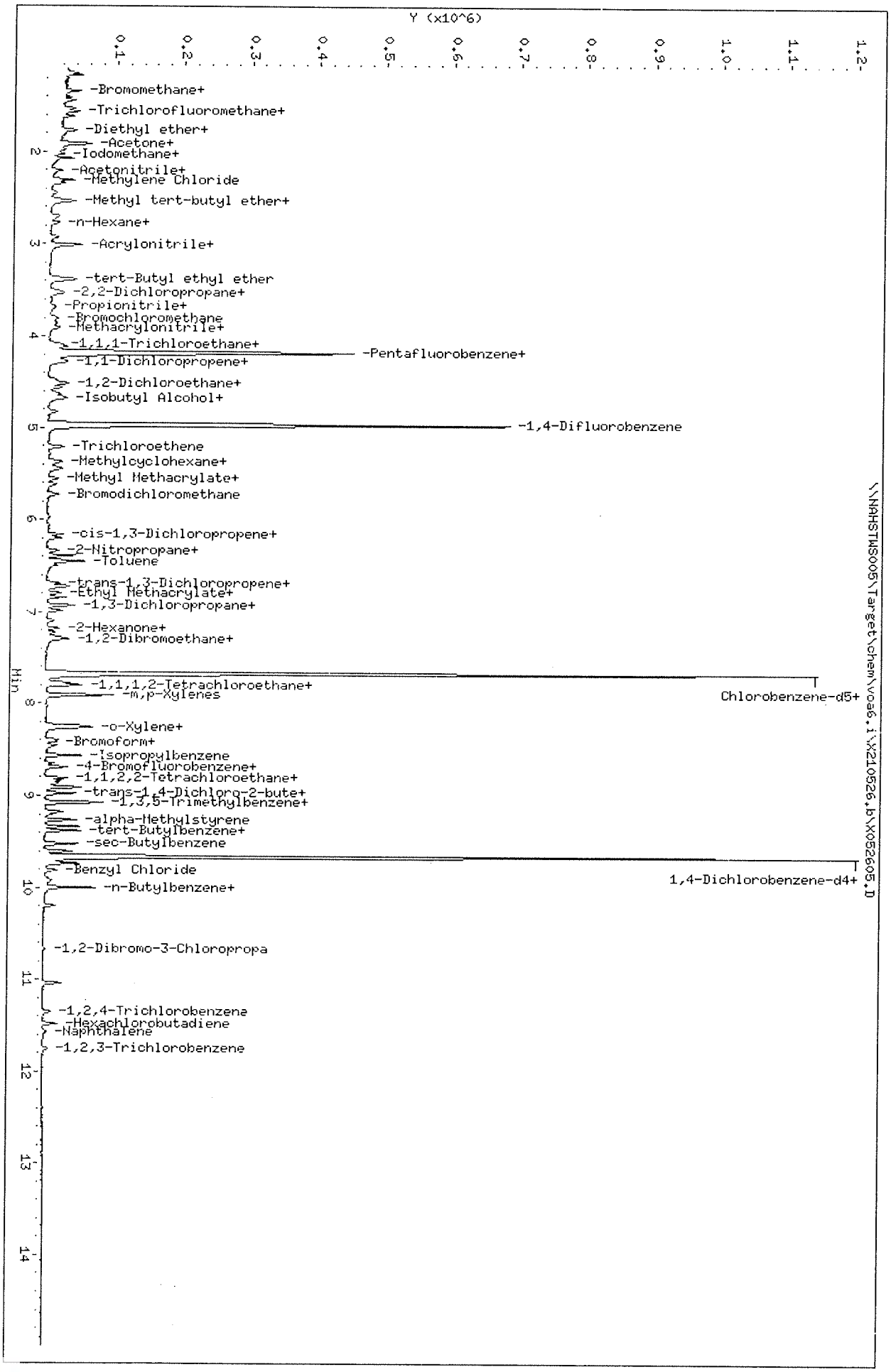
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT STG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	387304	50.0000	
*	36 1,4-Difluorobenzene	114	4.970	4.970	(1.000)	629894	50.0000	
*	47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	565577	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	269984	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.103	(0.981)	8033	2.00000	1.94(a)
$	35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	8542	2.00000	1.64(a)
$	48 Toluene-d8	98	6.388	6.388	(0.833)	26638	2.00000	1.89(a)
$	69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	10368	2.00000	2.80(a)
	60 1,1,1,2-Tetrachloroethane	131	7.778	7.778	(1.014)	7699	2.00000	1.84(a)
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	11748	2.00000	2.05(a)
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	9638	2.00000	1.44(a)
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	6242	2.00000	2.03(a)
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	12991	2.00000	2.12(a)
	11 1,1-Dichloroethene	96	1.919	1.919	(0.459)	8783	2.00000	2.20(a)
	32 1,1-Dichloropropene	75	4.282	4.282	(0.862)	9888	2.00000	2.04(a)
	93 1,2,3-Trichlorobenzene	180	11.753	11.753	(1.216)	3409	2.00000	2.08(a)
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	6933	2.00000	2.05(aM)
	90 1,2,4-Trichlorobenzene	180	11.352	11.352	(1.175)	4917	2.00000	1.84(a)
	79 1,2,4-Trimethylbenzene	105	9.382	9.382	(0.971)	25642	2.00000	2.08(a)
	89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	630	2.00000	1.96(a)
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	7883	2.00000	1.89(a)
	88 1,2-Dichlorobenzene	146	9.998	9.998	(1.035)	15268	2.00000	2.08(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.562	4.562	(0.918)	9733	2.00000	1.93(a)
42	1,2-Dichloropropane	63	5.436	5.436	(1.094)	7597	2.00000	2.04(aM)
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	25985	2.00000	2.12(a)
83	1,3-Dichlorobenzene	146	9.612	9.612	(0.995)	15680	2.00000	2.05(a)
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	11498	2.00000	1.88(a)
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	16413	2.00000	2.06(a)
26	2,2-Dichloropropane	77	3.516	3.516	(0.841)	11139	2.00000	2.10(a)
24	2-Butanone	43	3.595	3.595	(0.860)	4608	4.00000	3.91(aH)
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	23380	2.00000	2.31(a)
52	2-Hexanone	43	7.097	7.097	(0.925)	7204	4.00000	3.42(a)
77	4-Chlorotoluene	91	9.074	9.074	(0.939)	26083	2.00000	2.16(a)
82	p-Isopropyltoluene	119	9.655	9.655	(0.999)	26579	2.00000	2.12(a)
45	4-Methyl-2-Pentanone	43	6.331	6.331	(0.825)	12267	4.00000	3.76(a)
10	Acetone	43	1.976	1.976	(0.473)	9004	4.00000	3.68(a)
37	Benzene	78	4.512	4.512	(0.908)	30110	2.00000	2.08(a)
74	Bromobenzene	156	8.809	8.809	(0.912)	9664	2.00000	2.15(a)
29	Bromochloromethane	128	3.802	3.802	(0.909)	4539	2.00000	1.93(a)
39	Bromodichloromethane	83	5.729	5.729	(1.153)	11090	2.00000	2.04(a)
66	Bromoform	173	8.415	8.415	(1.097)	5644	2.00000	1.78(Ta)
6	Bromomethane	94	1.338	1.338	(0.320)	10705	2.00000	2.82(a)
19	Carbon Disulfide	76	2.069	2.069	(0.495)	40958	4.00000	4.32(a)
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	11201	2.00000	2.14(aH)
59	Chlorobenzene	112	7.692	7.692	(1.003)	22805	2.00000	1.93(a)
7	Chloroethane	64	1.403	1.403	(0.336)	6715	2.00000	1.12(aM)
28	Chloroform	83	3.910	3.910	(0.935)	13954	2.00000	2.04(a)
3	Chloromethane	50	1.073	1.073	(0.257)	9388	2.00000	0.08(a)
27	cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	8971	2.00000	2.20(a)
46	cis-1,3-Dichloropropene	75	6.159	6.159	(1.239)	11180	2.00000	1.75(a)
55	Dibromochloromethane	129	7.176	7.176	(0.936)	8317	2.00000	1.78(a)
44	Dibromomethane	93	5.557	5.557	(1.118)	4906	2.00000	1.76(a)
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	8466	2.00000	2.17(aM)
61	Ethylbenzene	106	7.799	7.799	(1.017)	10776	2.00000	1.98(a)
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	3790	2.00000	3.30(a)
67	Isopropylbenzene	105	8.566	8.566	(1.117)	33508	2.00000	2.01(a)
62	m,p-Xylenes	106	7.907	7.907	(1.031)	27594	4.00000	3.89(a)
17	Methylene Chloride	84	2.305	2.305	(0.551)	9737	2.00000	1.51(a)
87	n-Butylbenzene	91	9.998	9.998	(1.035)	21318	2.00000	2.02(a)
73	n-Propylbenzene	91	8.917	8.917	(0.923)	37124	2.00000	2.20(a)
92	Naphthalene	128	11.560	11.560	(1.196)	7708	2.00000	1.99(aM)
63	o-Xylene	106	8.243	8.243	(1.075)	13034	2.00000	1.88(a)
81	sec-Butylbenzene	105	9.526	9.526	(0.986)	30860	2.00000	2.17(a)
64	Styrene	104	8.265	8.265	(1.078)	20015	2.00000	1.73(a)
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	23163	2.00000	2.20(a)
56	Tetrachloroethene	164	6.925	6.925	(0.903)	7019	2.00000	2.01(a)
50	Toluene	91	6.446	6.446	(0.840)	33990	2.00000	2.05(a)
20	trans-1,2-Dichloroethene	96	2.535	2.535	(0.606)	7304	2.00000	2.01(a)
51	trans-1,3-Dichloropropene	75	6.689	6.689	(1.346)	9851	2.00000	1.78(a)
38	Trichloroethene	130	5.206	5.206	(1.048)	8523	2.00000	1.97(a)
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	16056	2.00000	2.29(a)
5	Vinyl Chloride	62	1.145	1.145	(0.274)	10726	2.00000	2.33(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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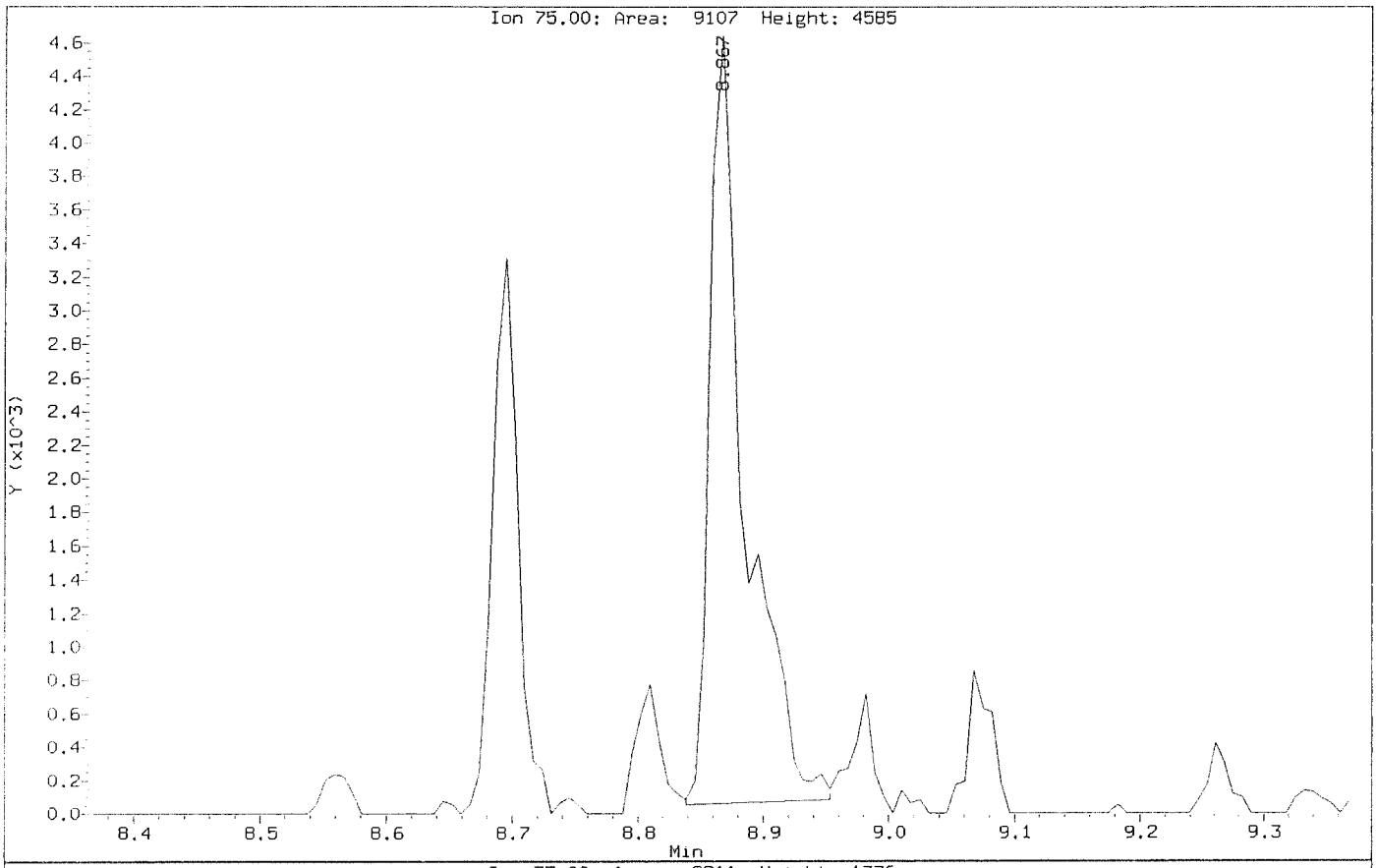
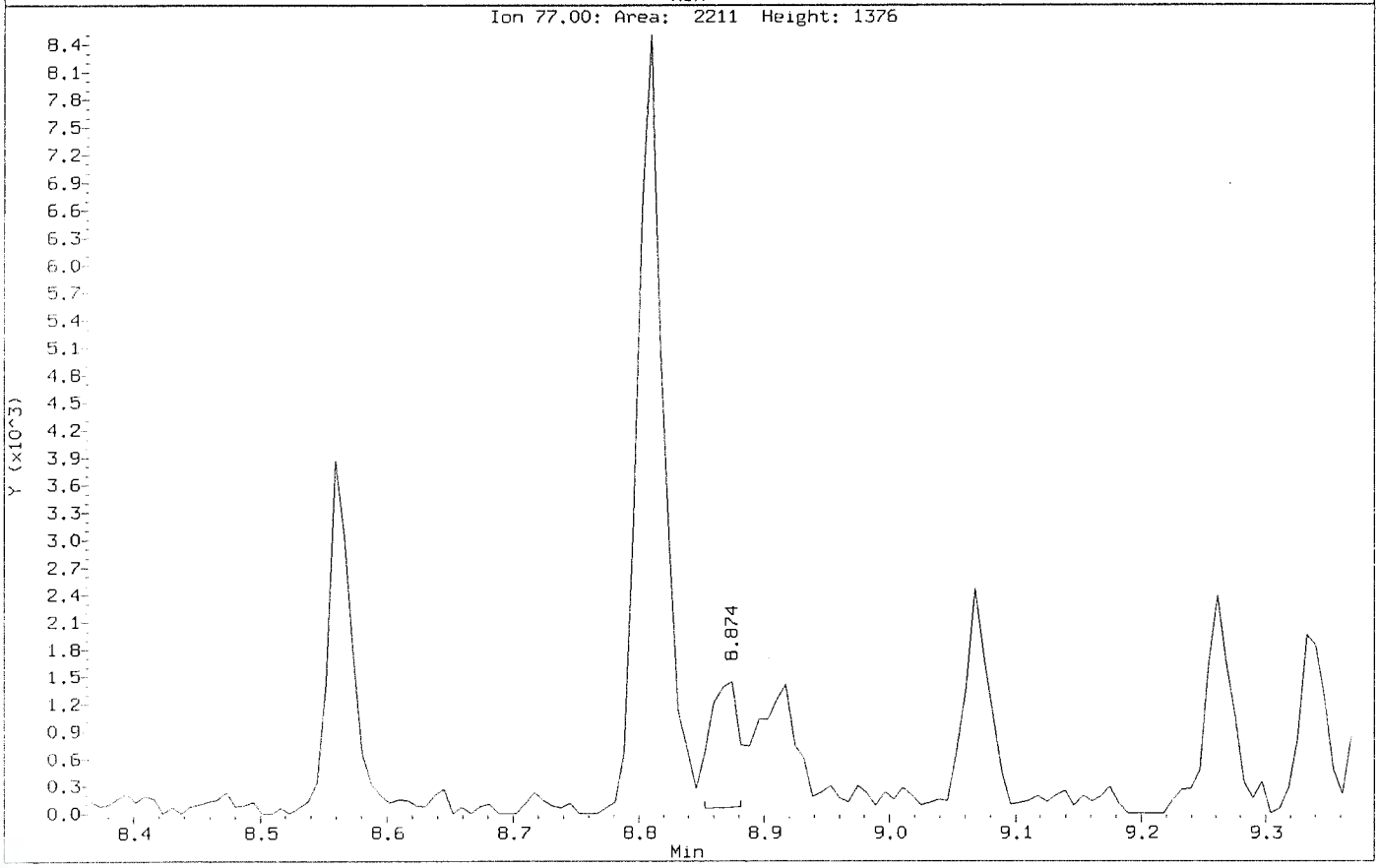
Date : 26-MAY-2021 13:58
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before2\X052605.D
Injection Date: 26-MAY-2021 13:58
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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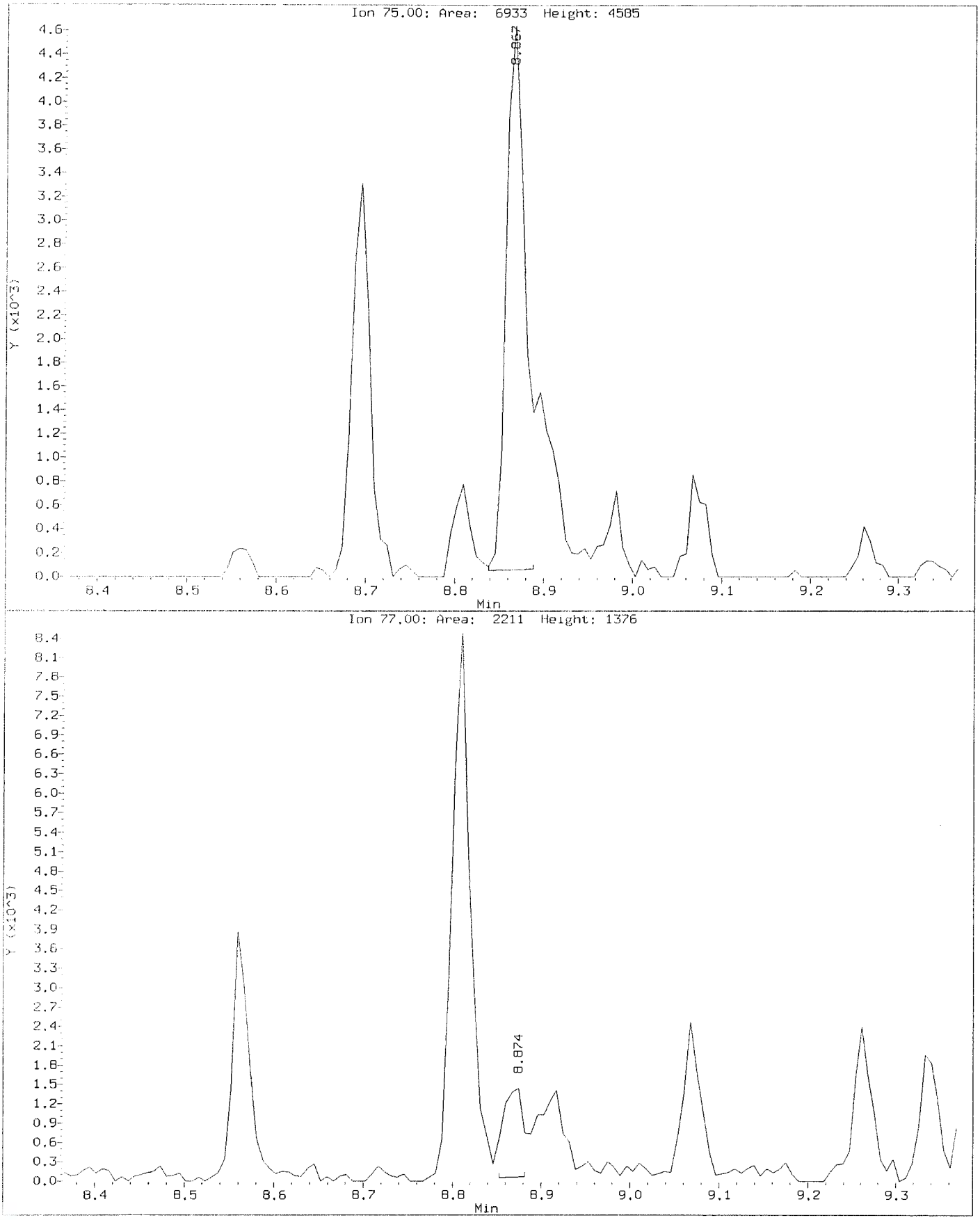
Compound: 1.2.3-Trichloropropane
CAS Number: 96-18-4



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Instrument: voa6.i
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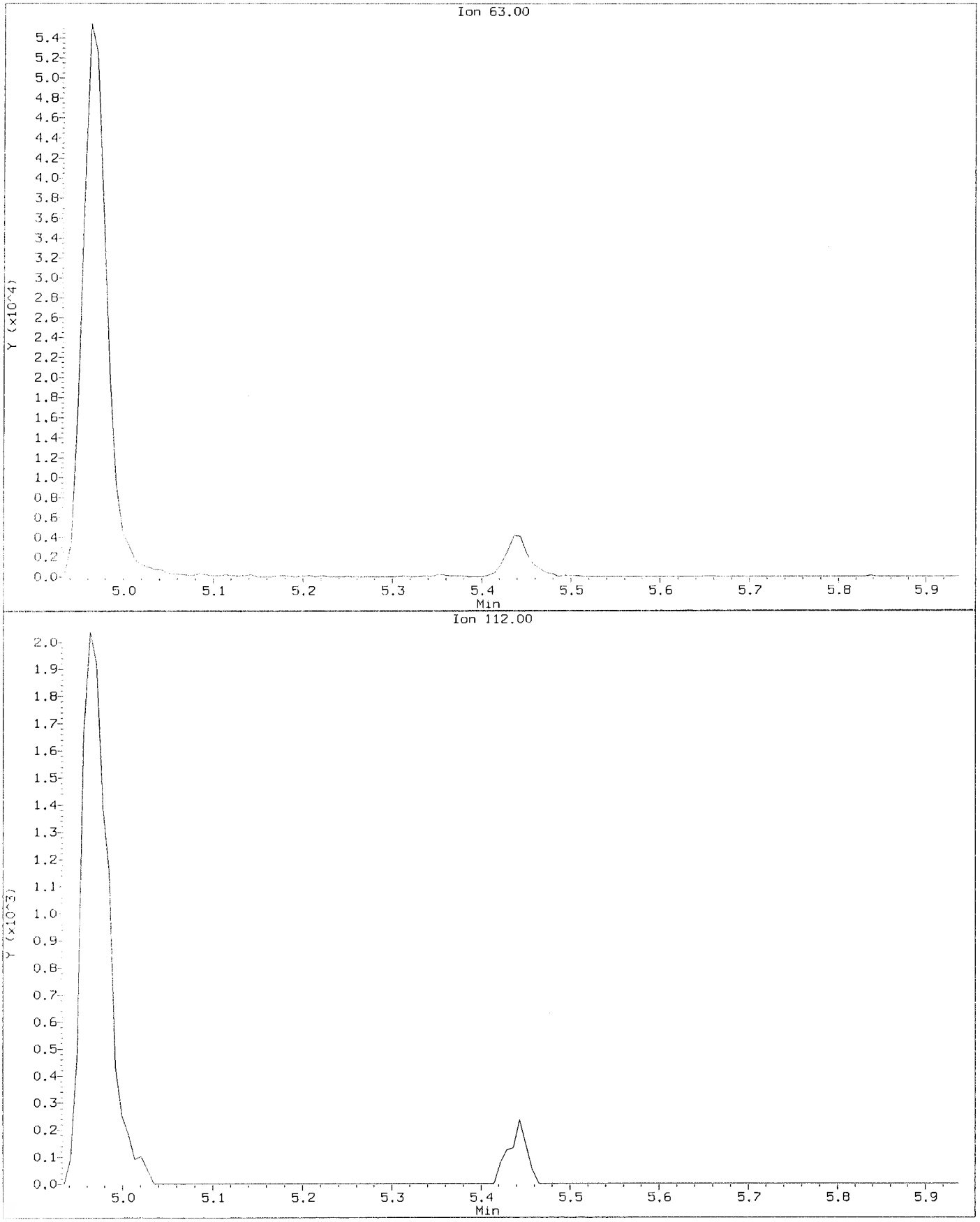
Compound: 1,2-Dichloropropane
CAS Number: 78-87-5



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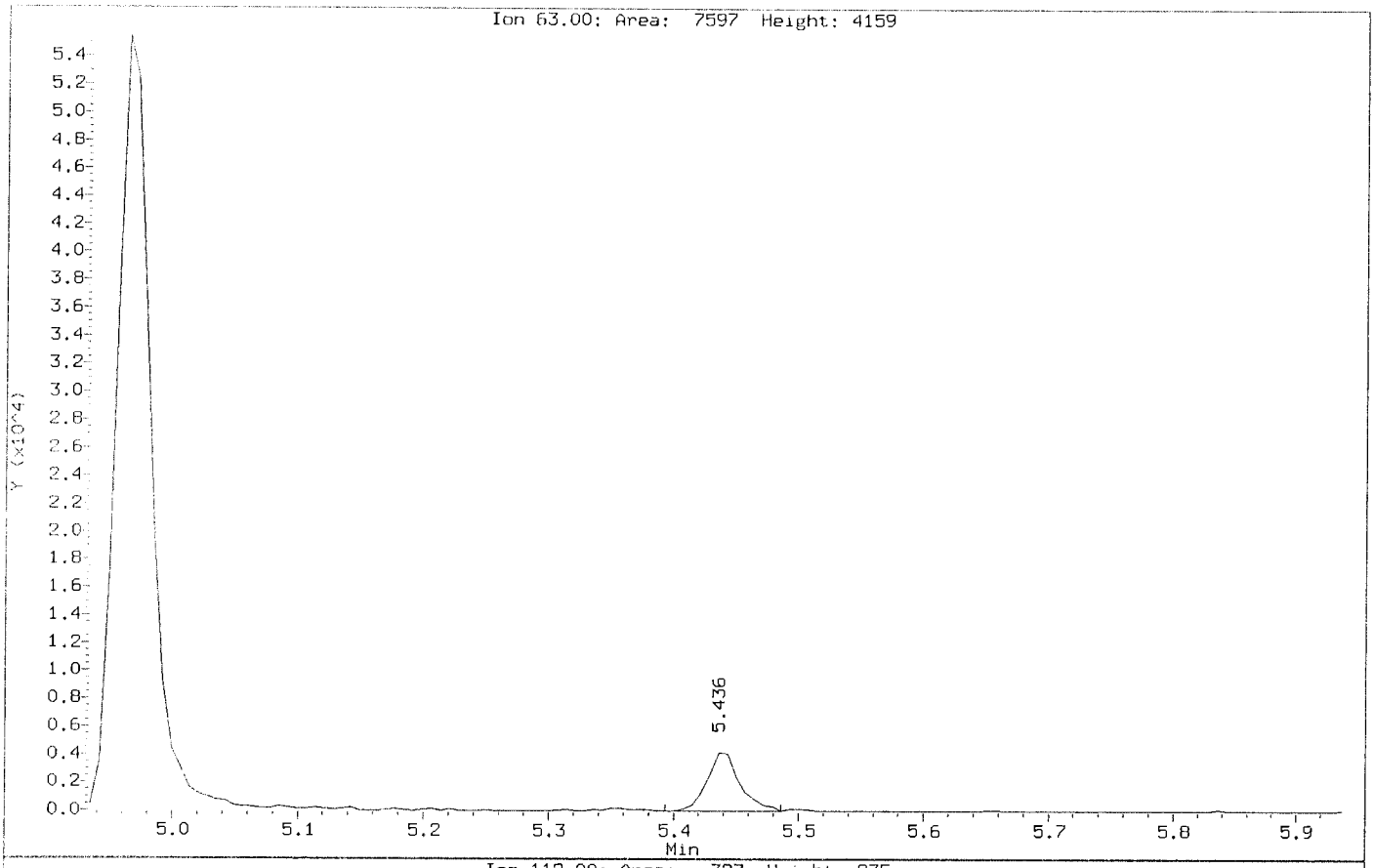
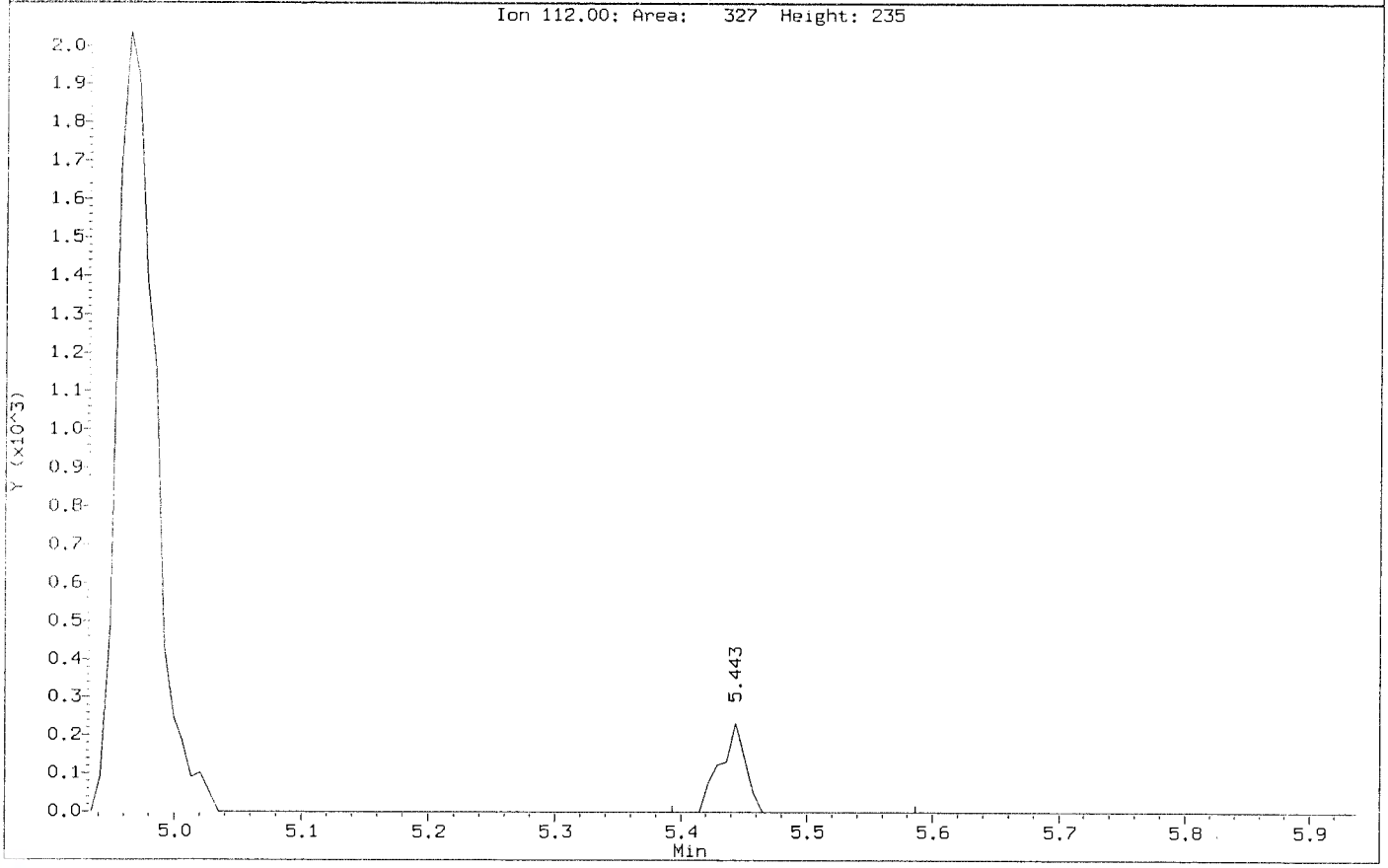
Client Sample ID: VSTD002

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5





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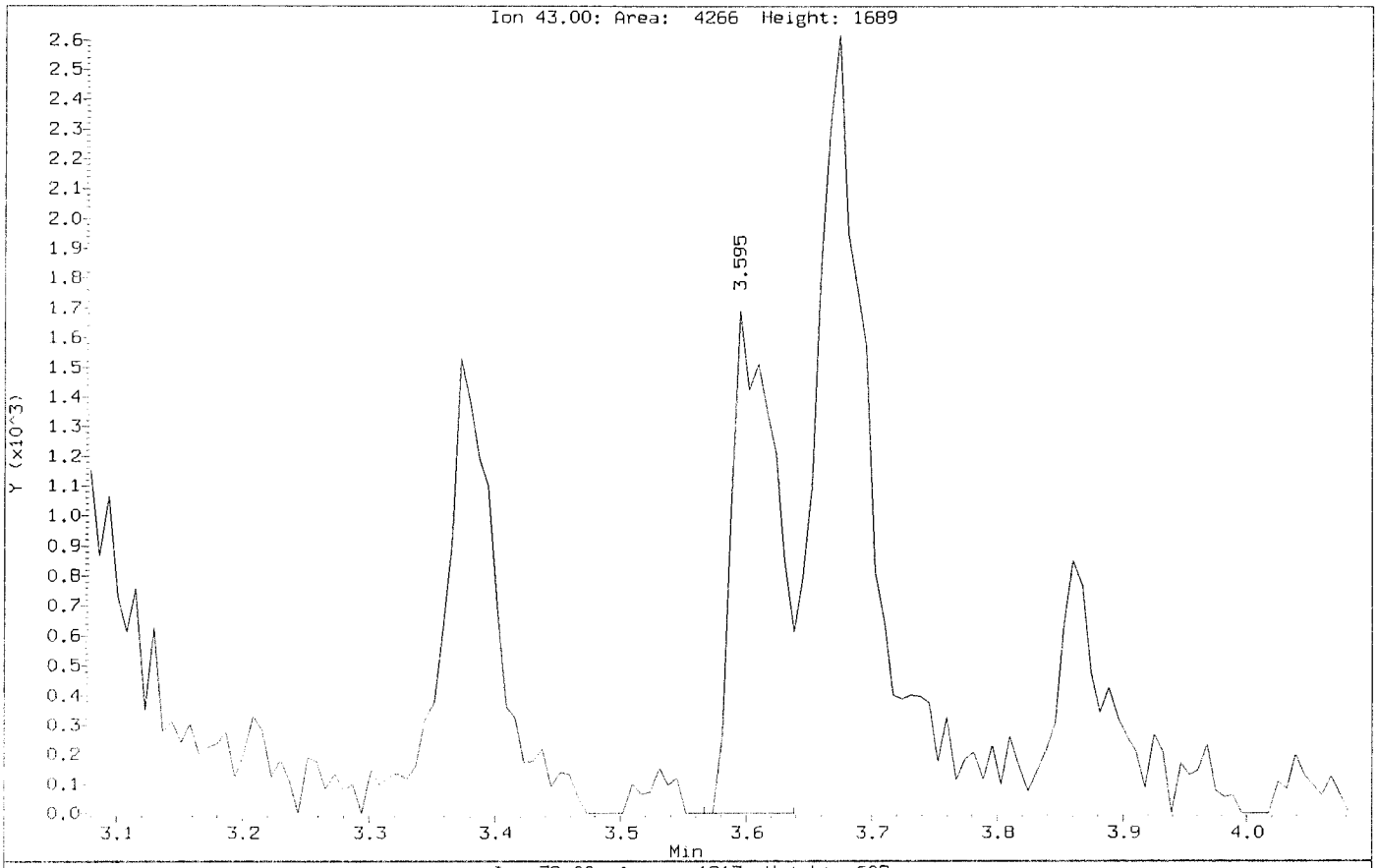
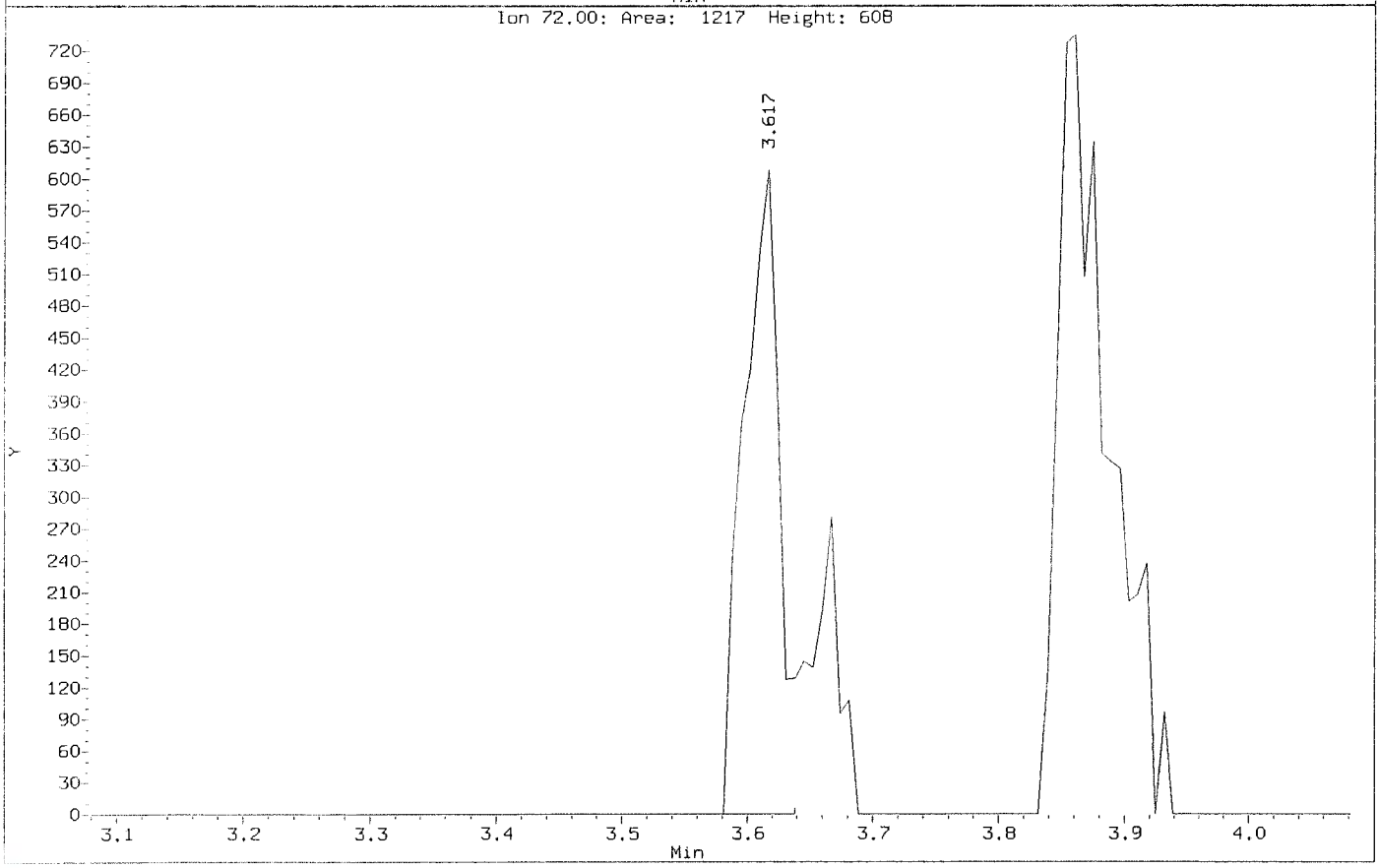
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: 2-Butanone
CAS Number: 78-93-3





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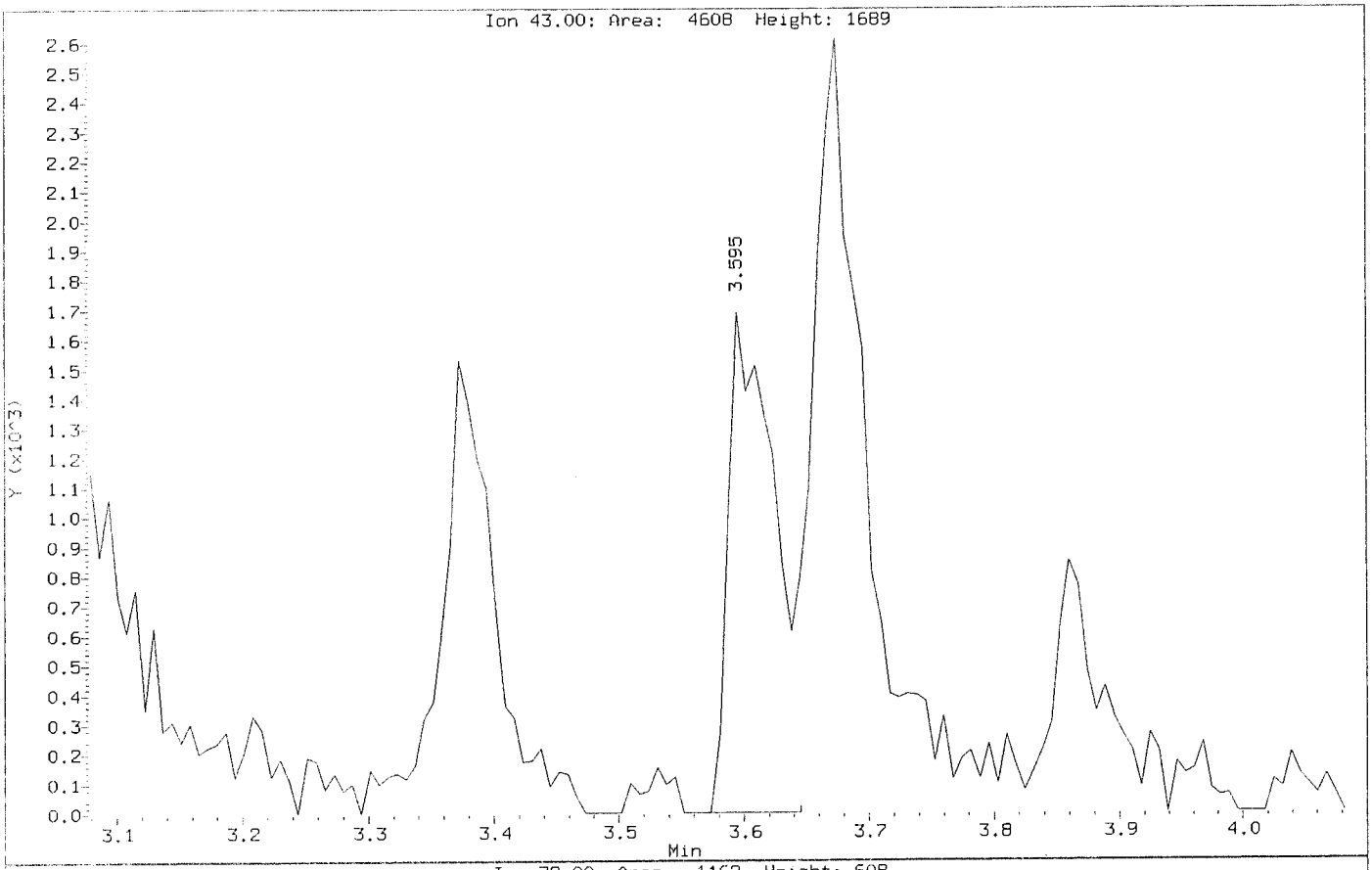
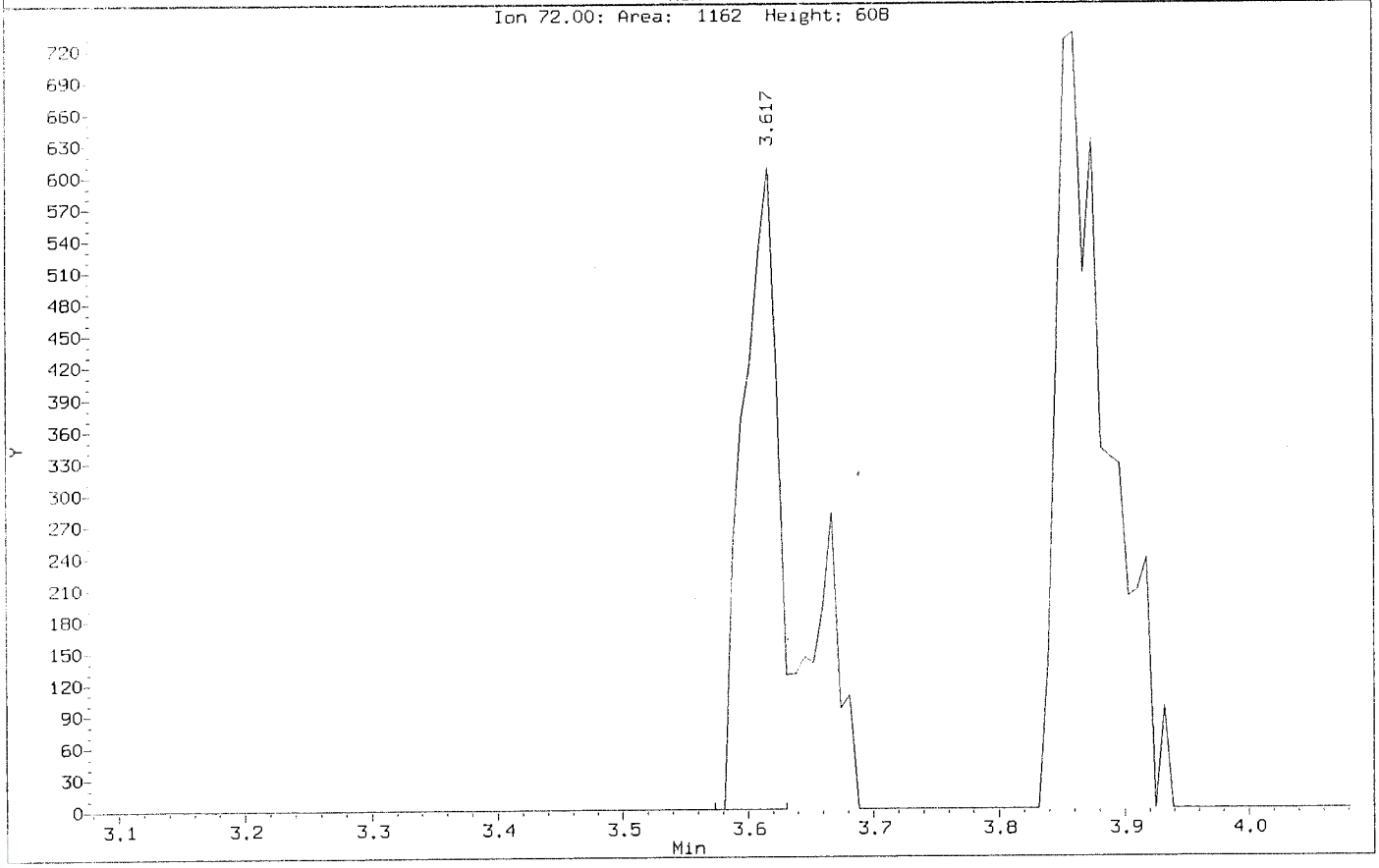
Compound: 2-Butanone
CAS Number: 78-93-3





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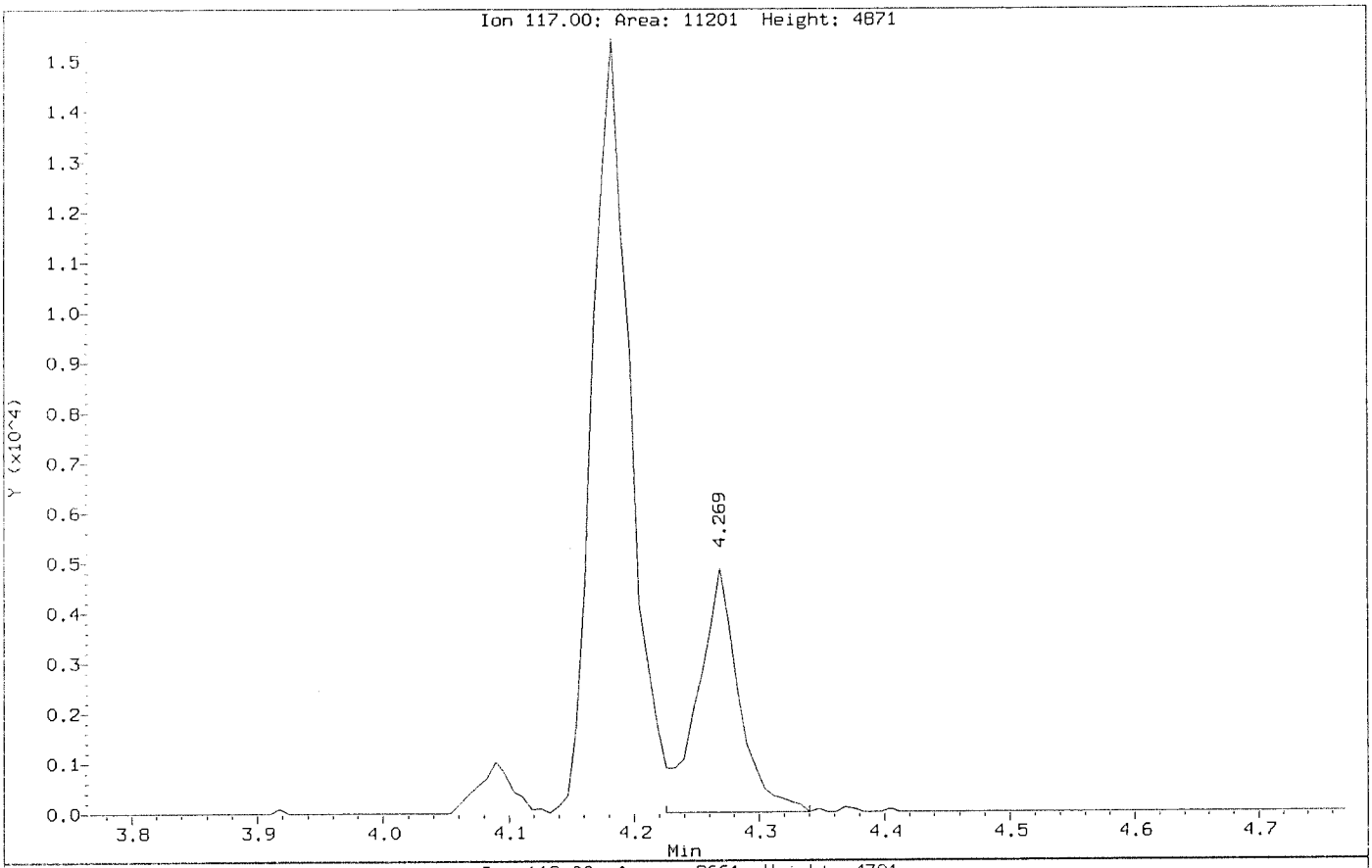
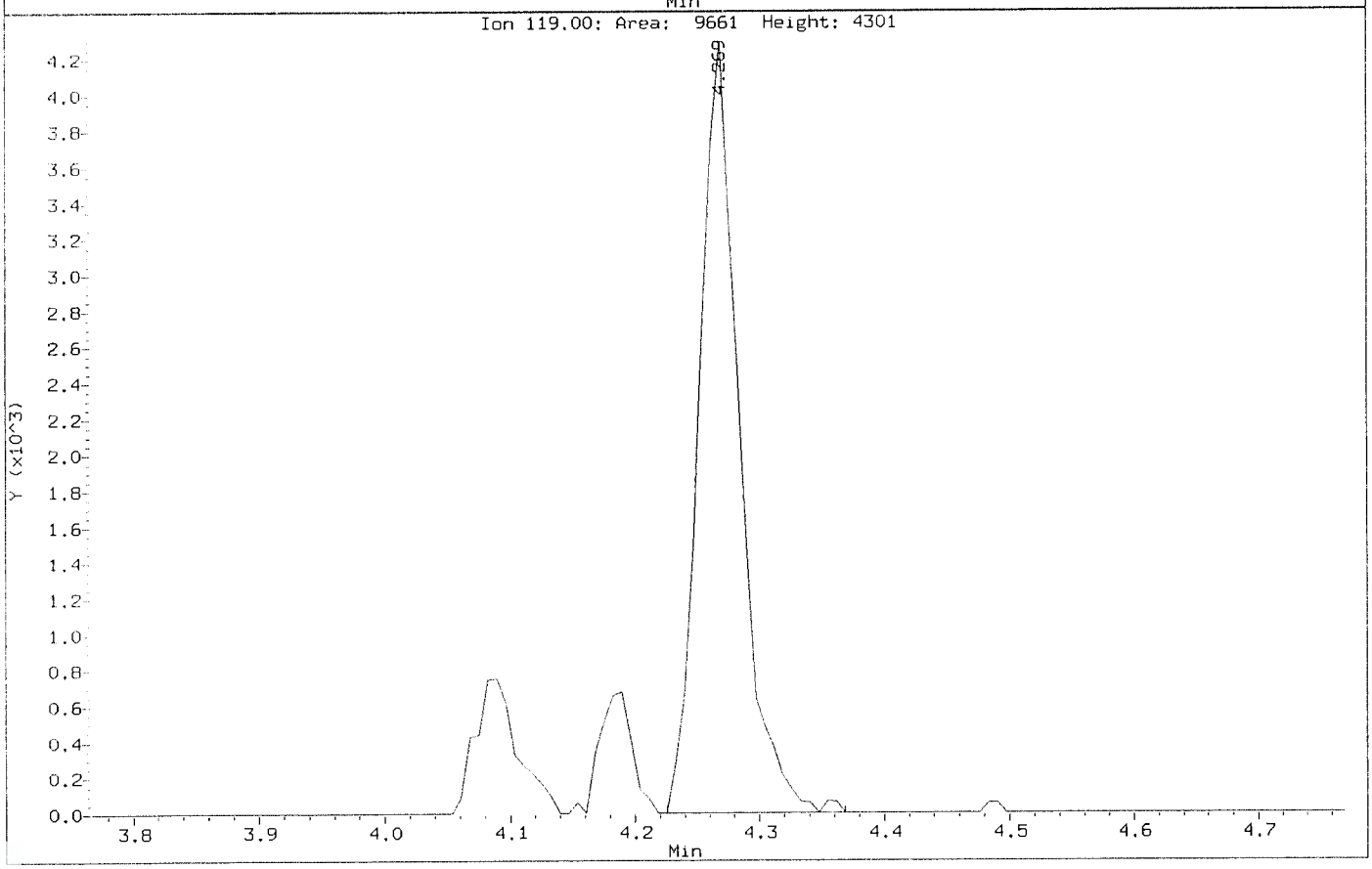
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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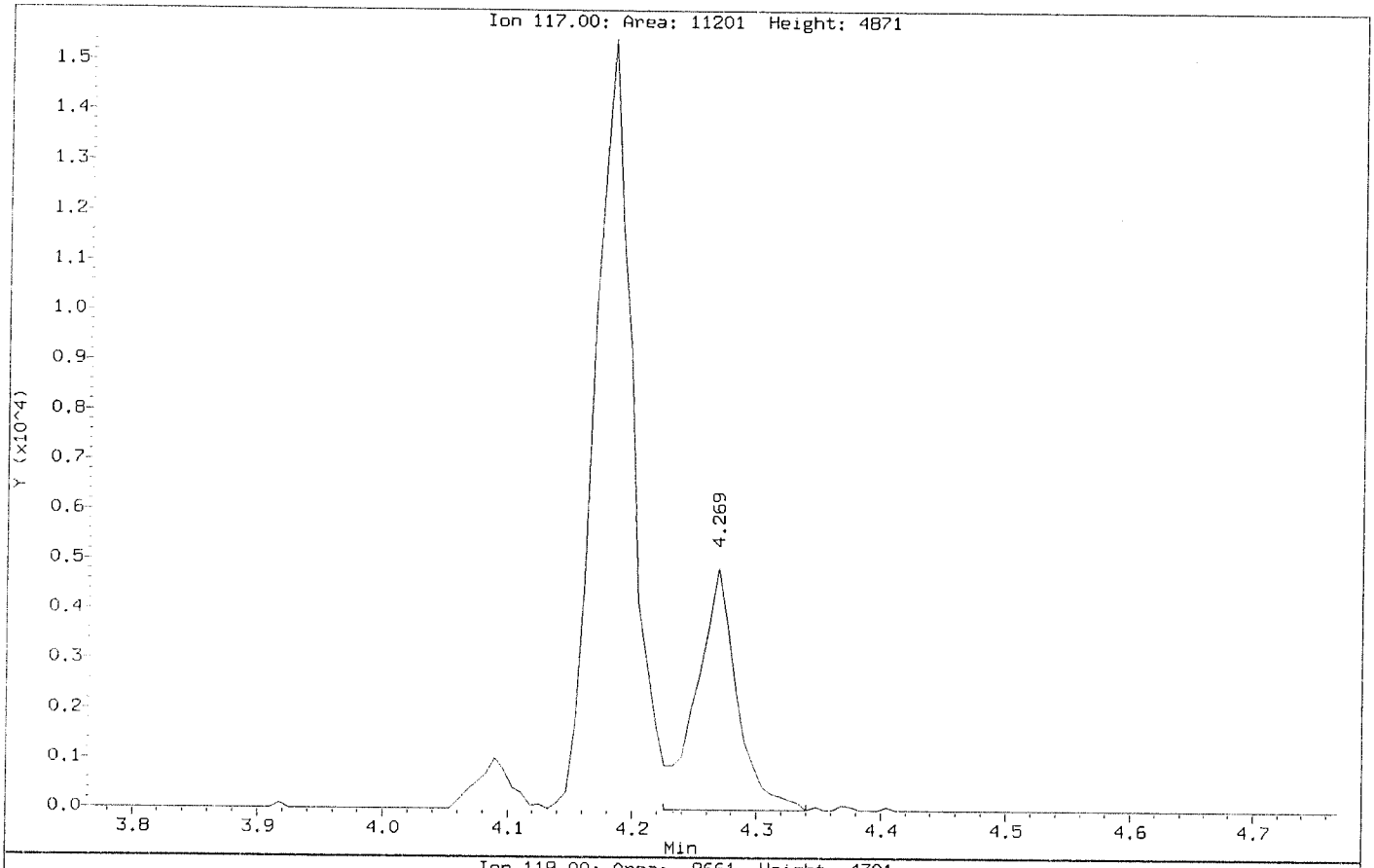
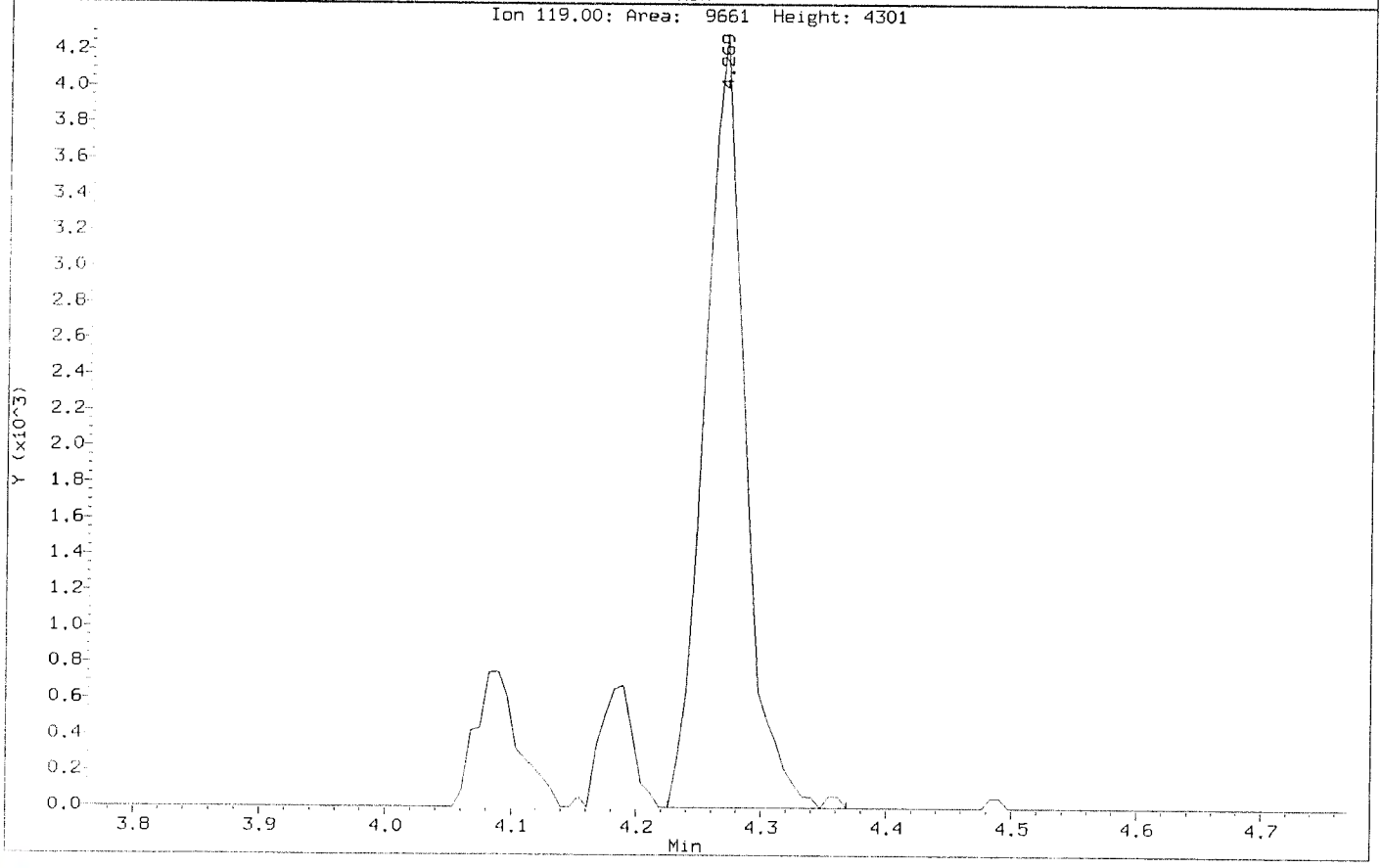
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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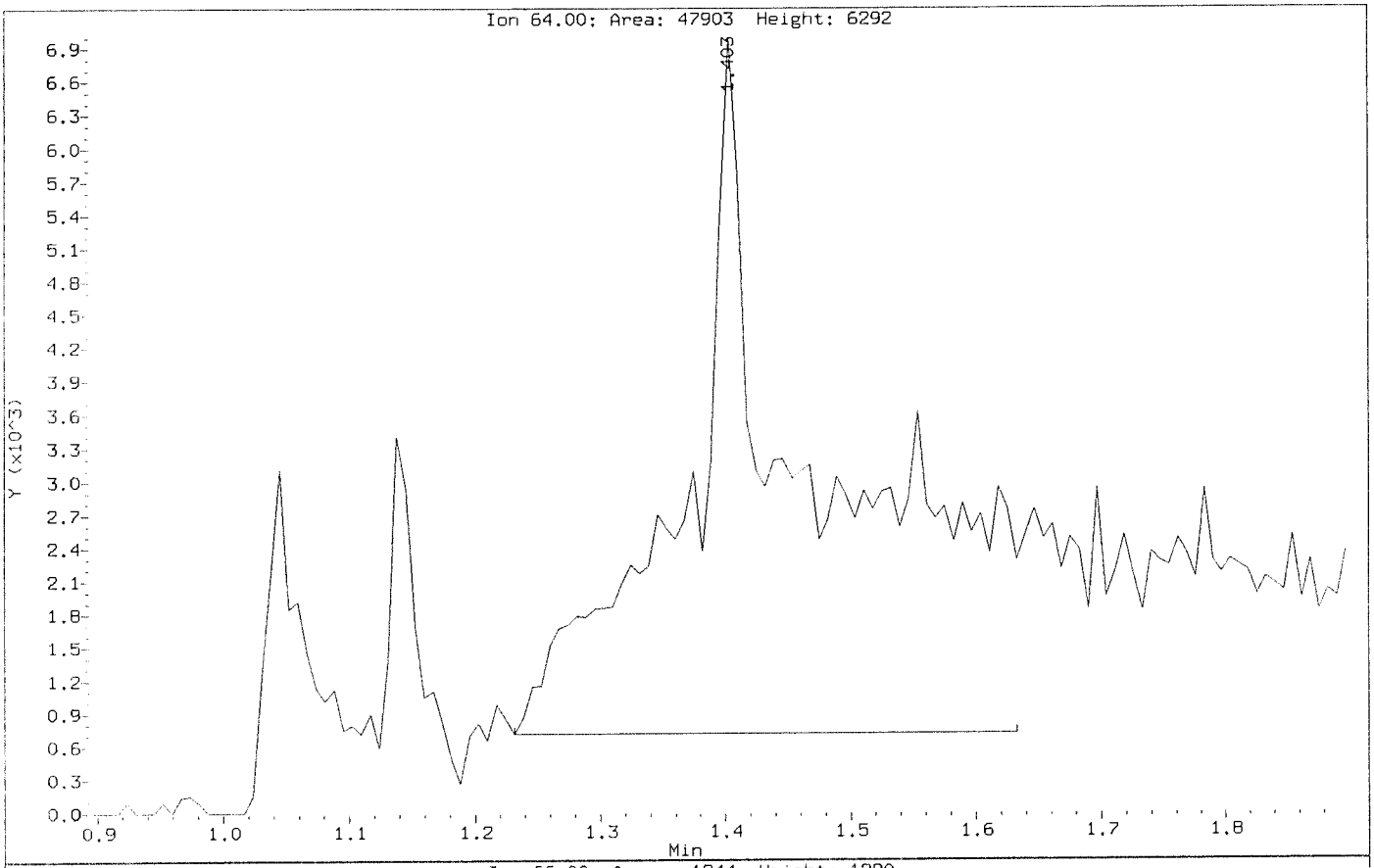
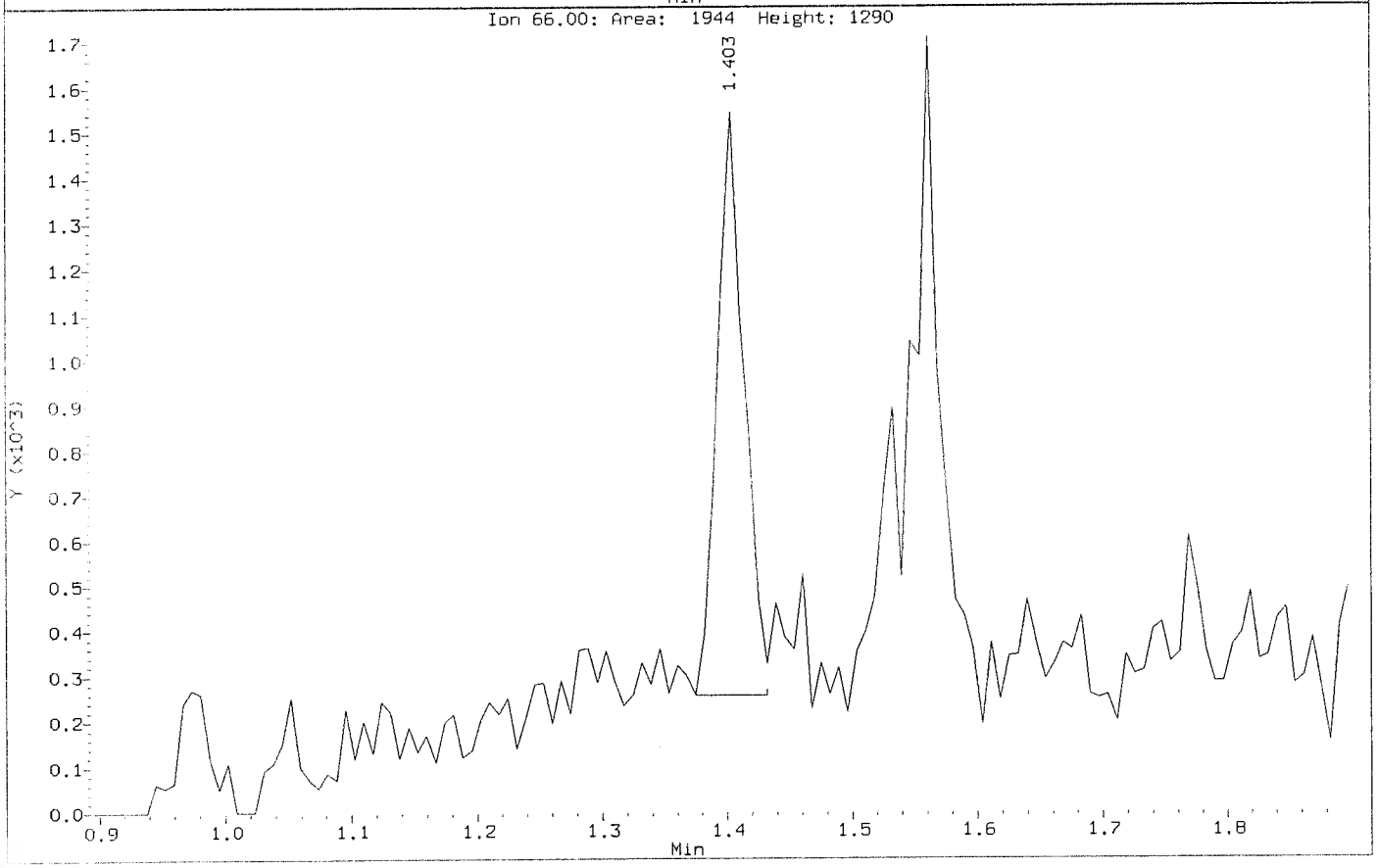
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: Chloroethane
CAS Number: 75-00-3





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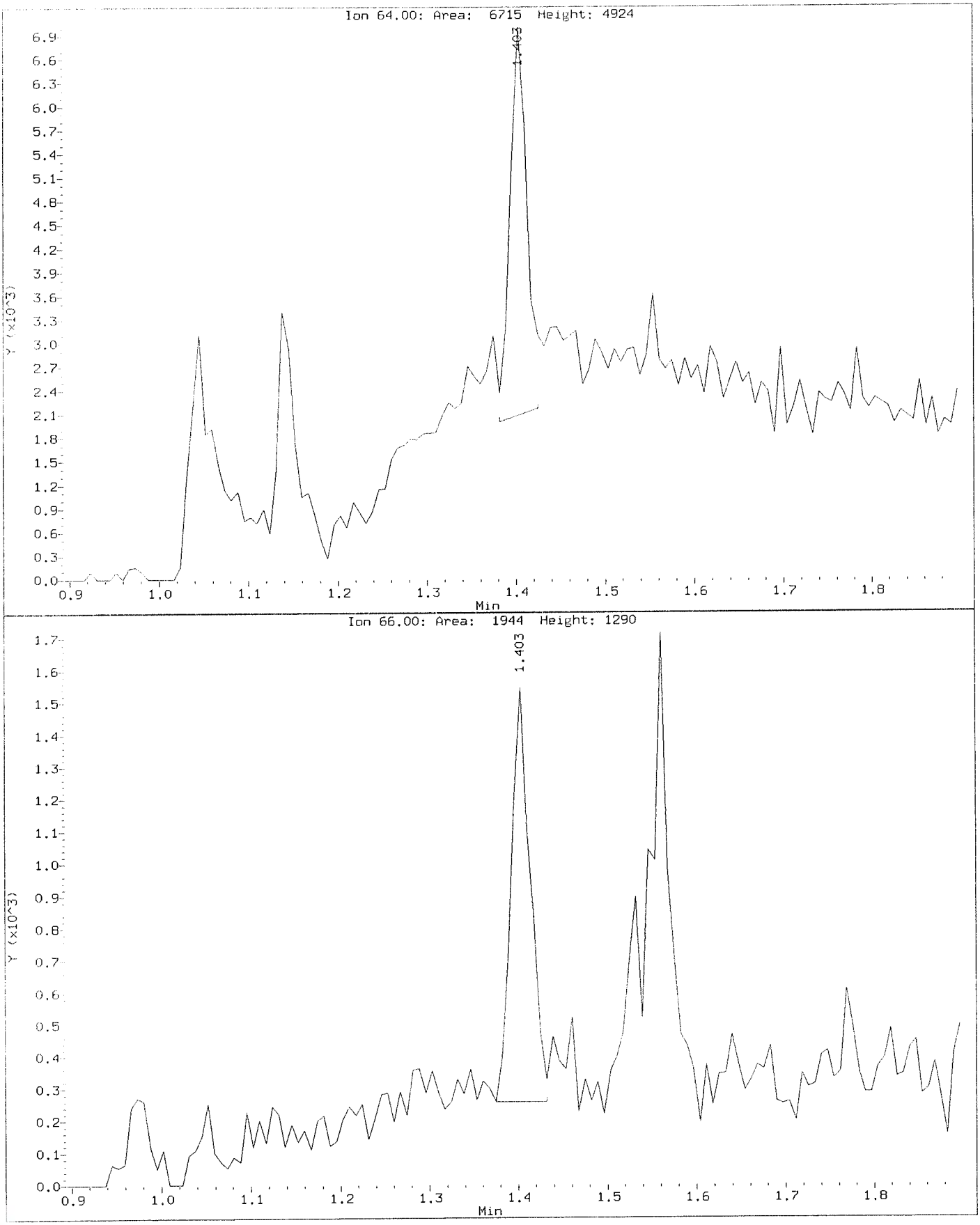
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: Chloroethane
CAS Number: 75-00-3



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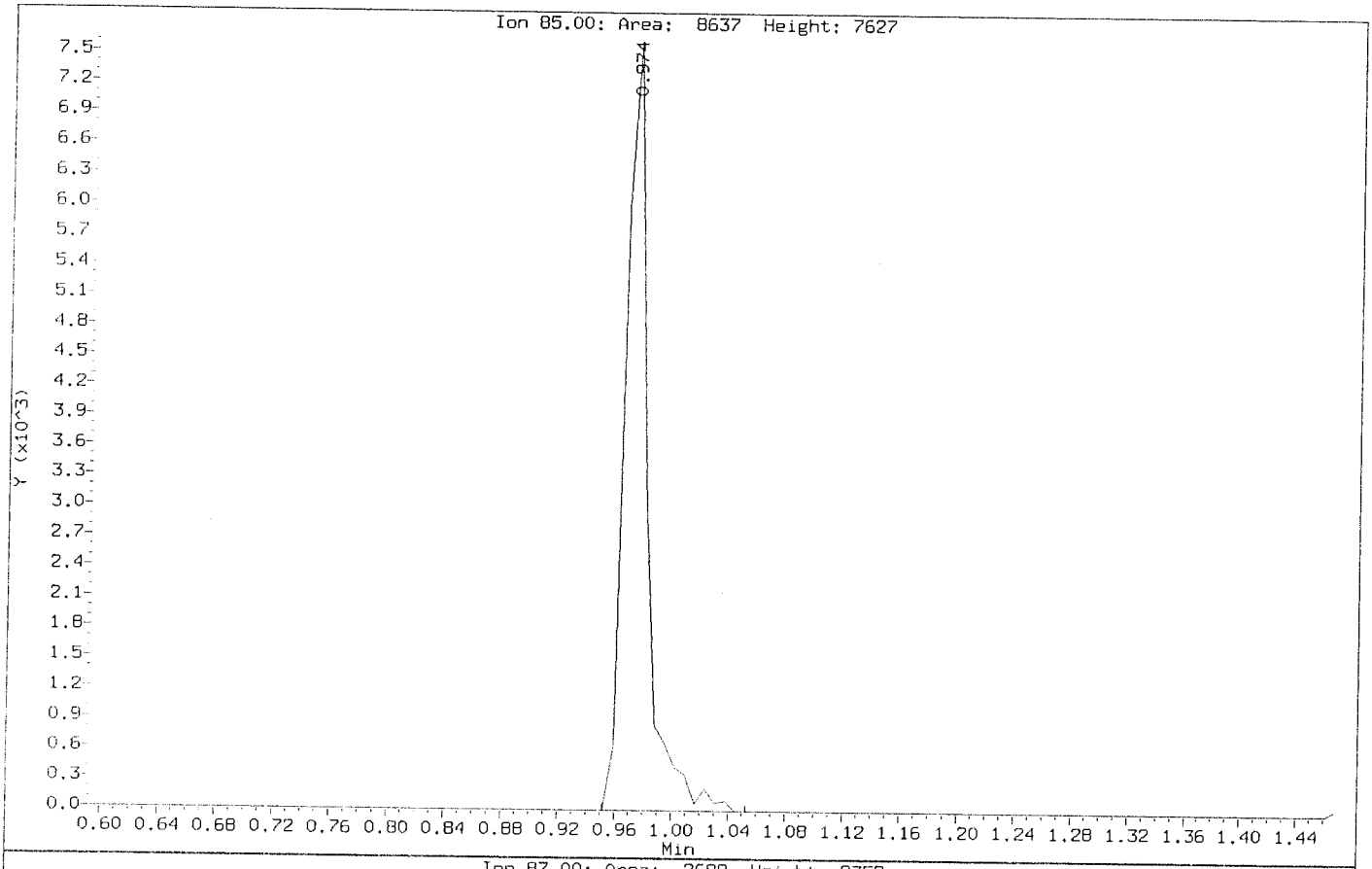
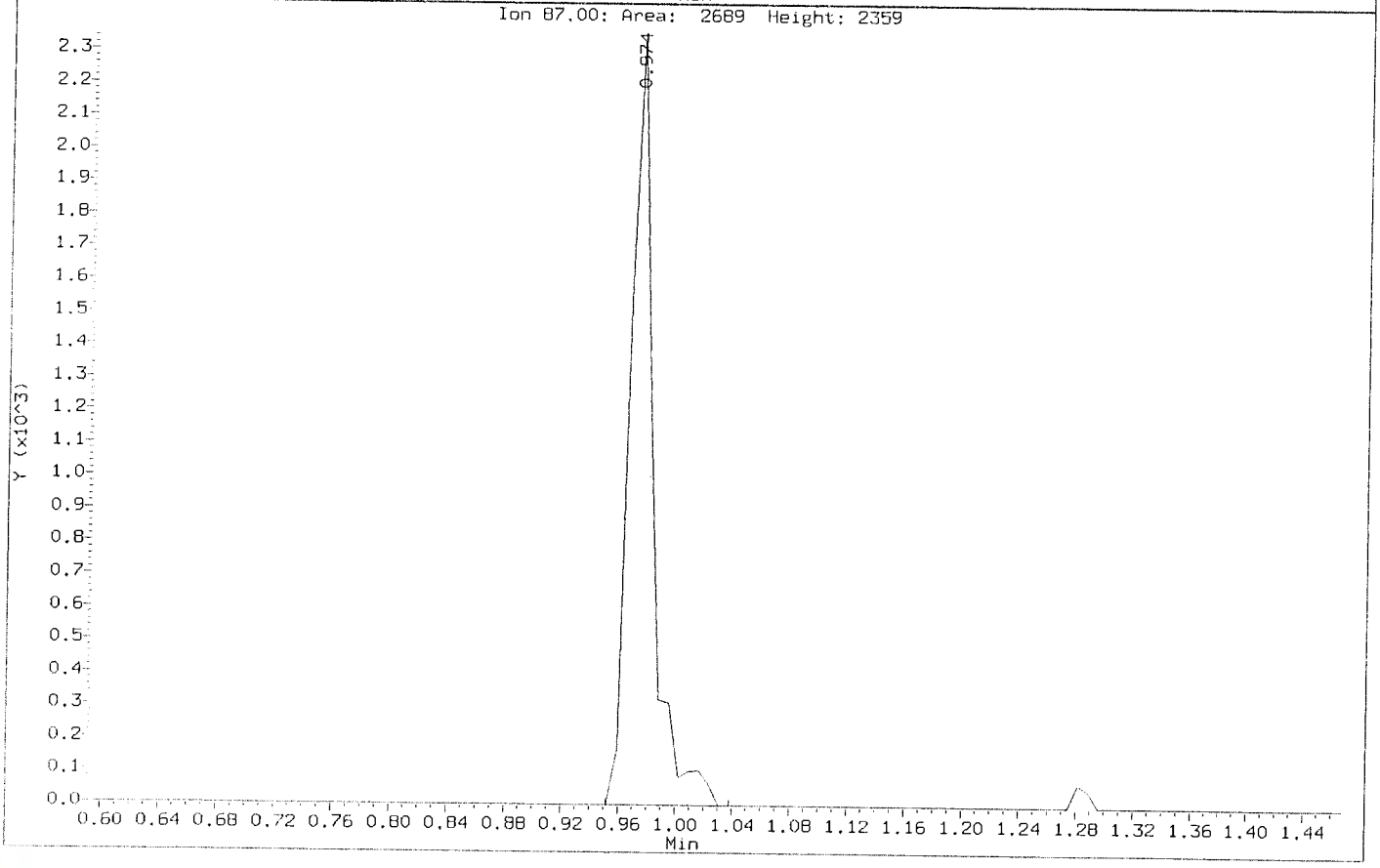
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8





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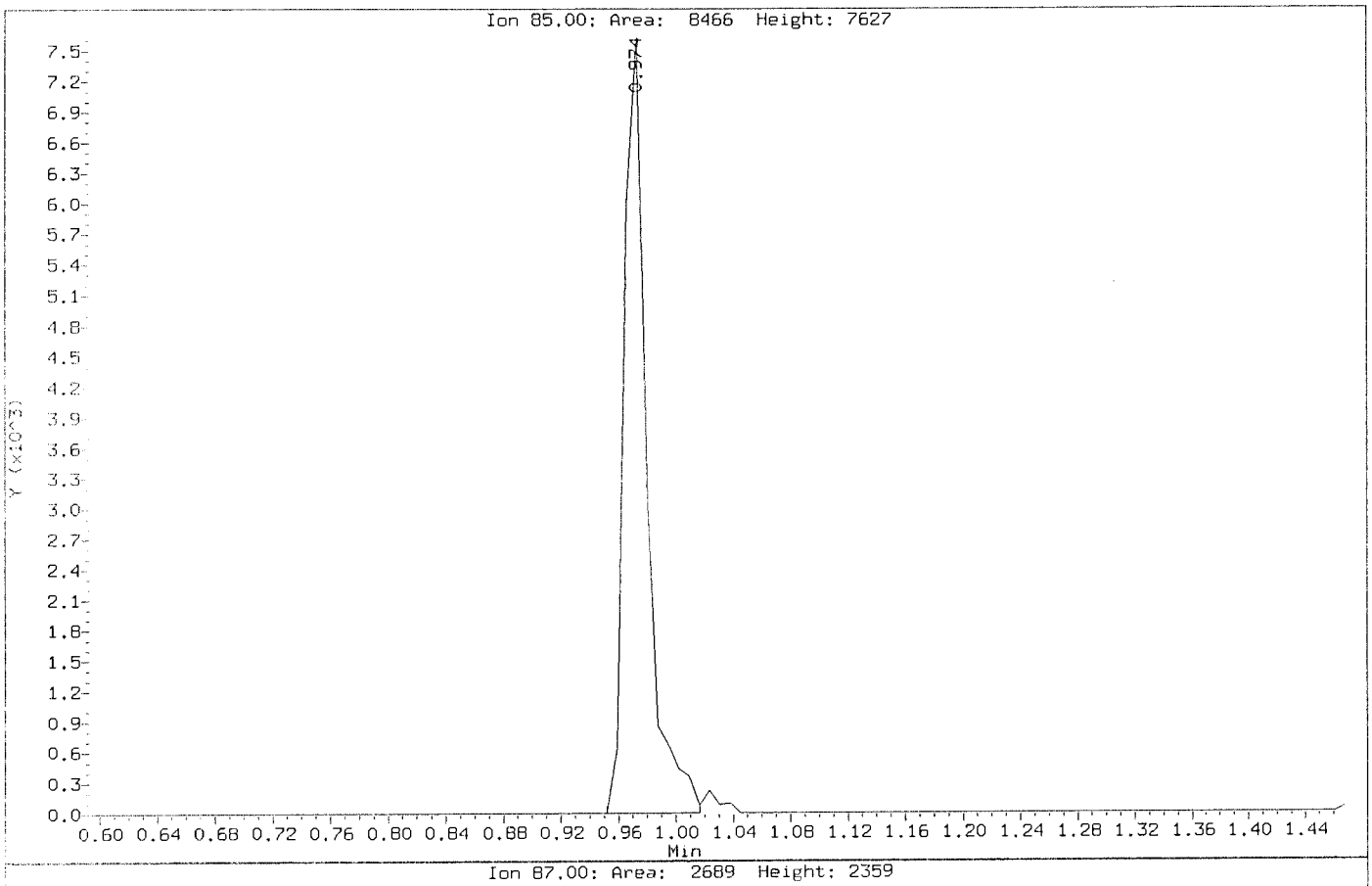
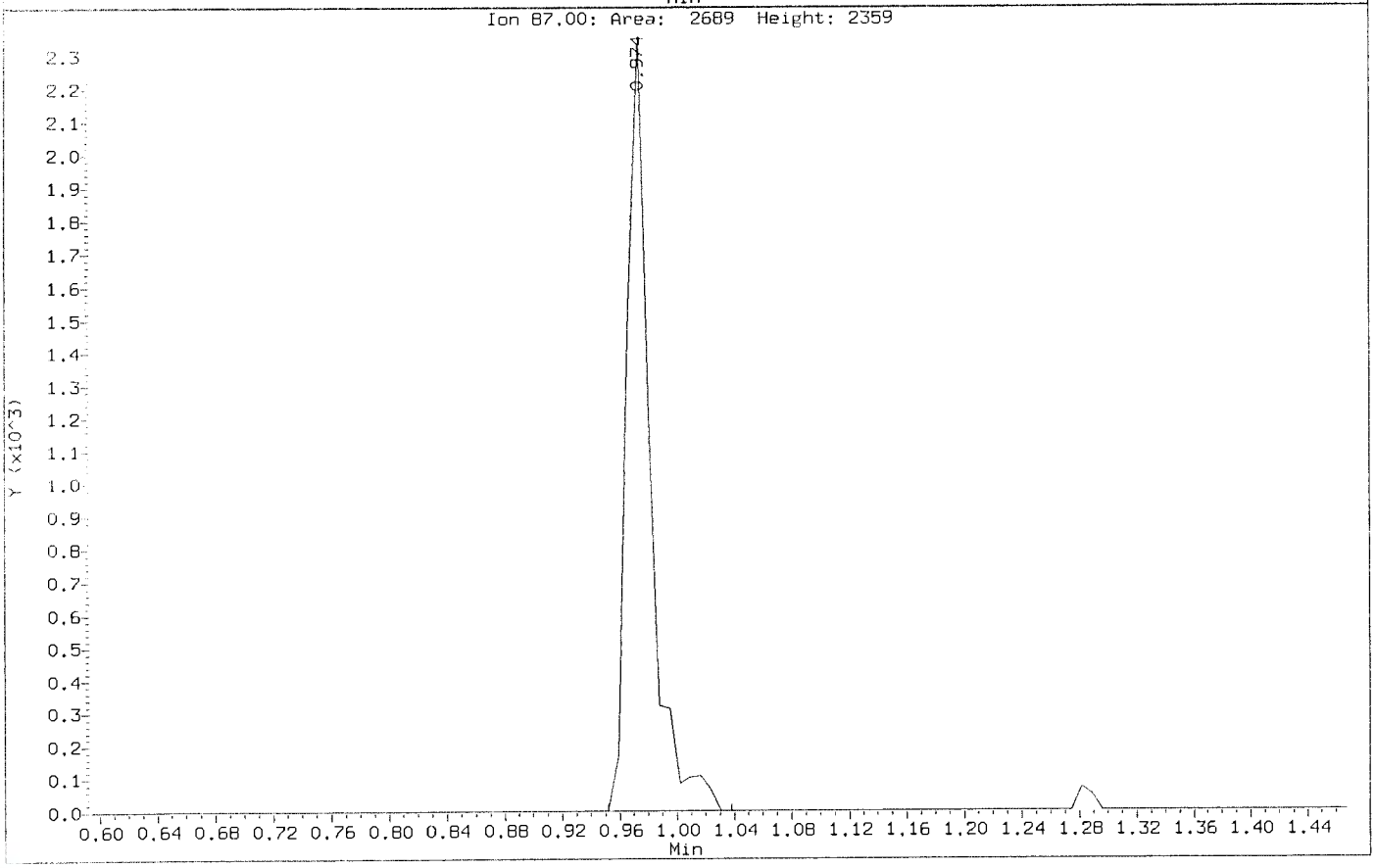
Client Sample ID: VSTD002

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8





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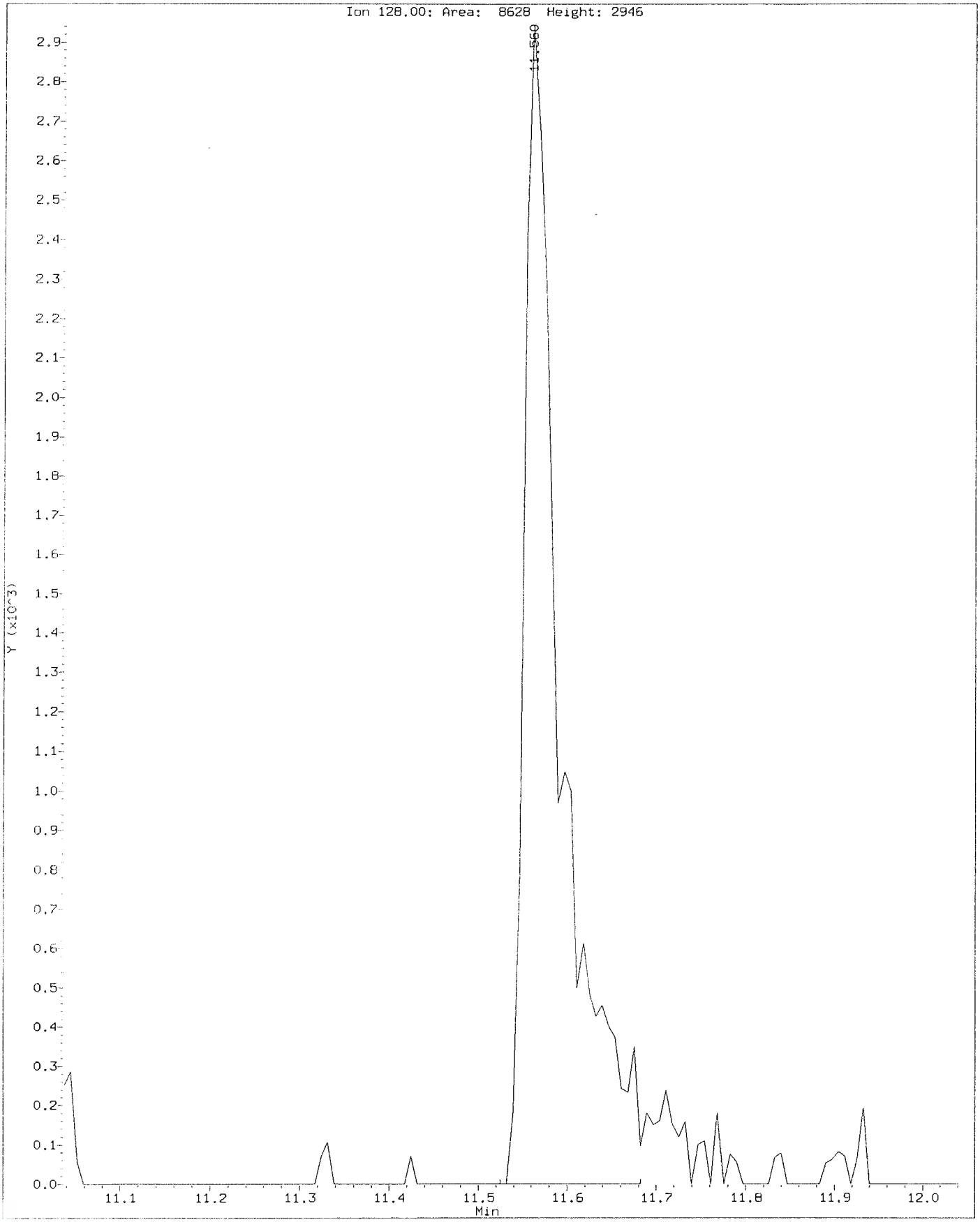
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: Naphthalene
CAS Number: 91-20-3



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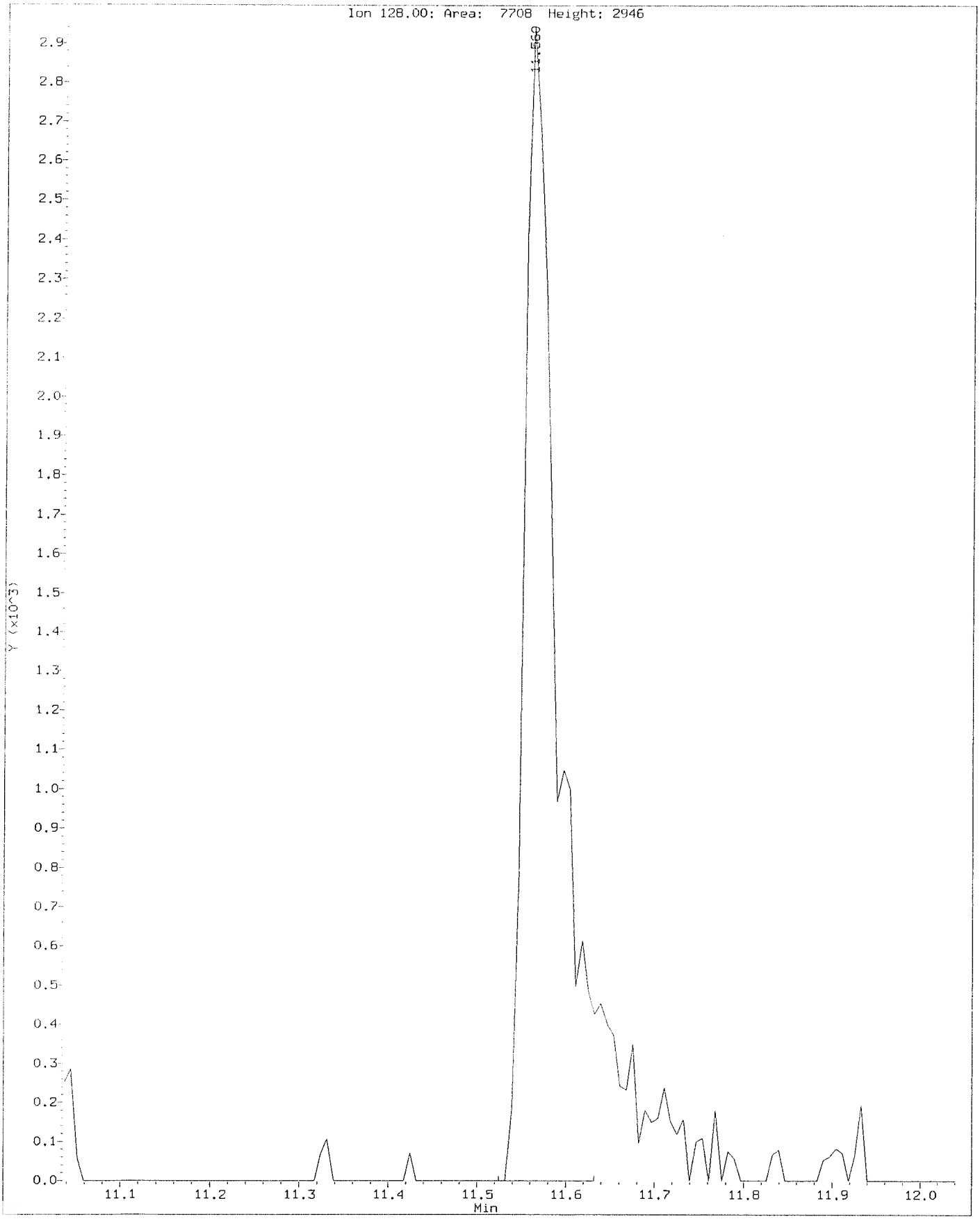
Client Sample ID: VSTD002

Compound: Naphthalene
CAS Number: 91-20-3



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Instrument: voa6.i
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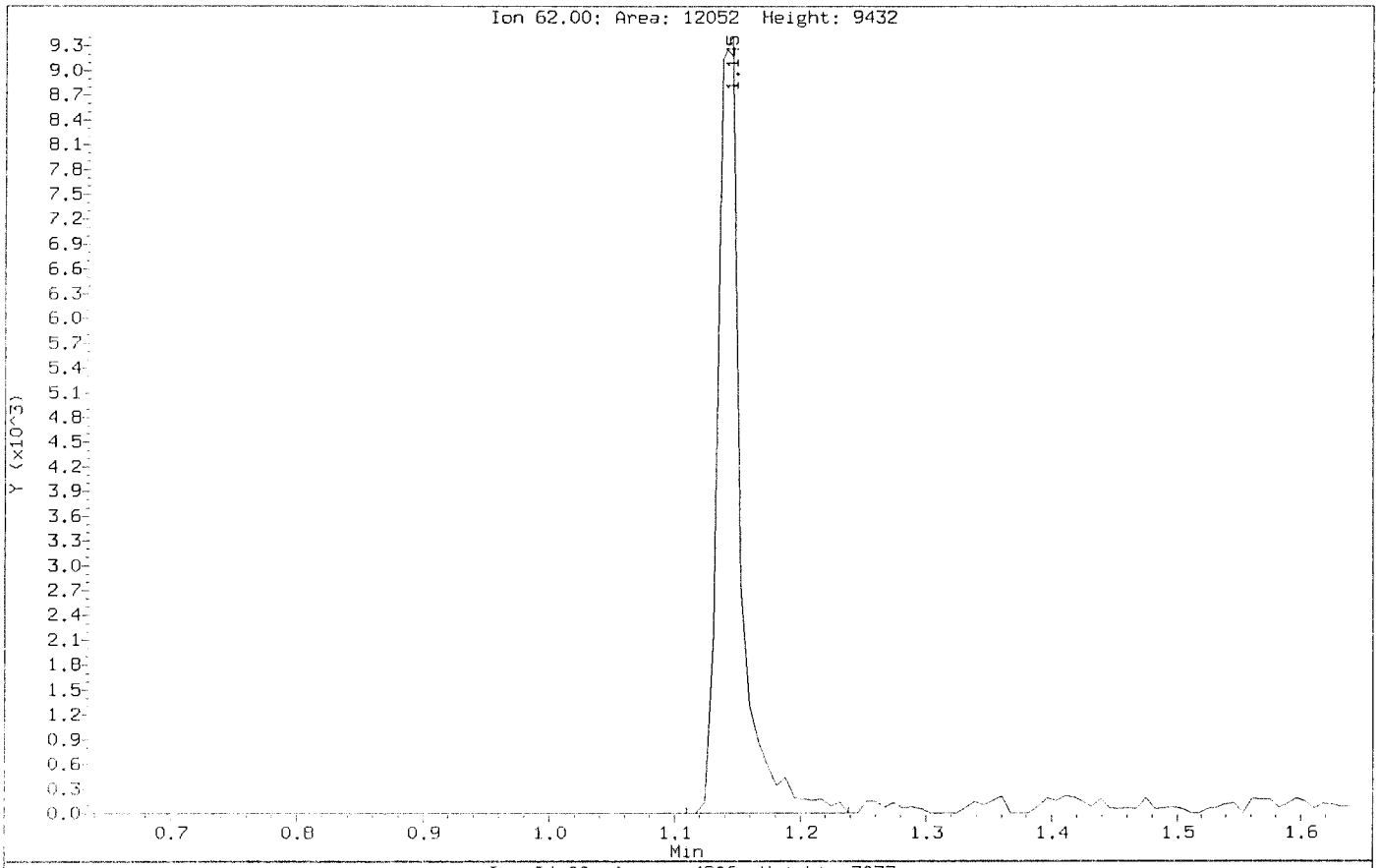
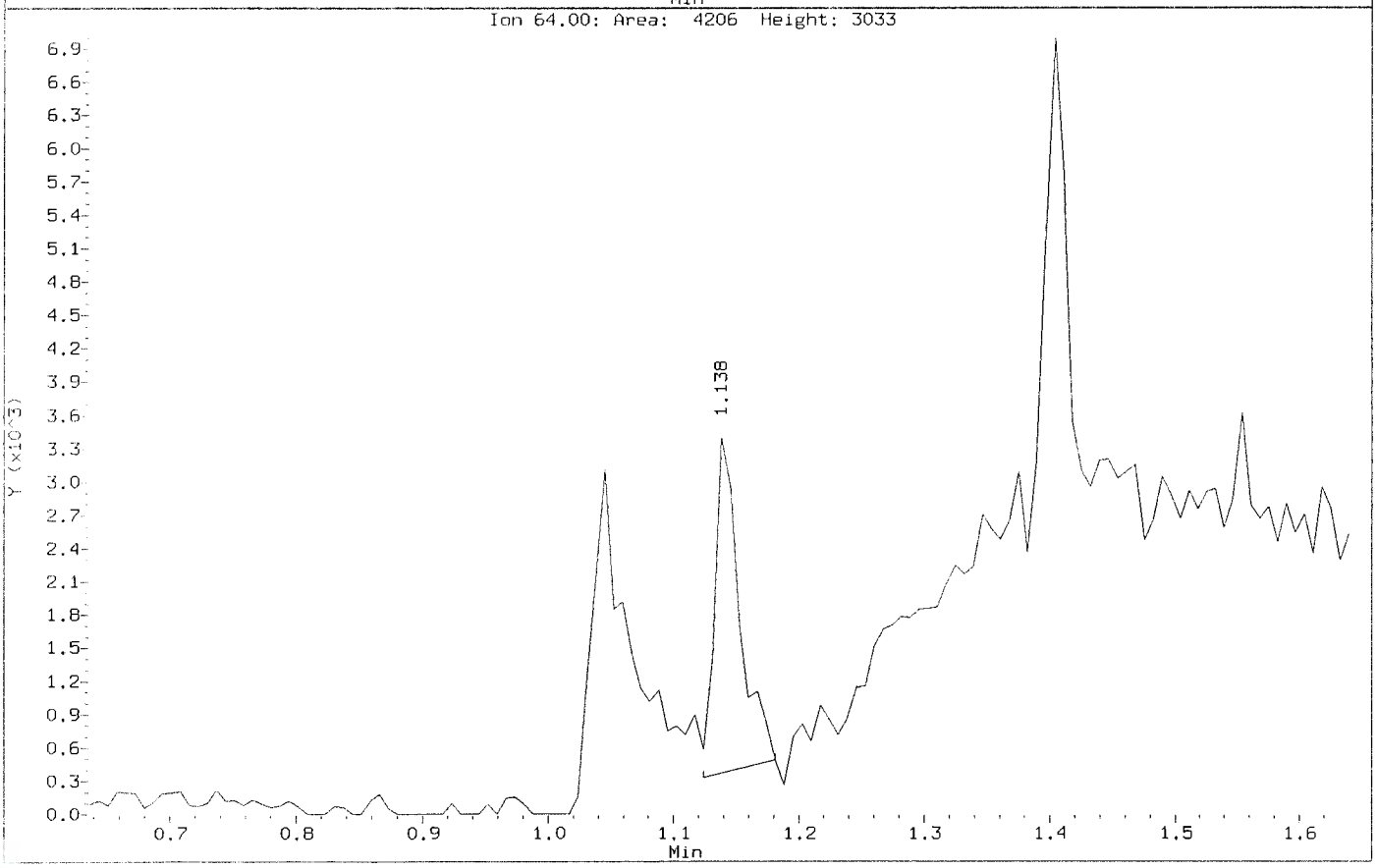
Compound: Vinyl Chloride
CAS Number: 75-01-4





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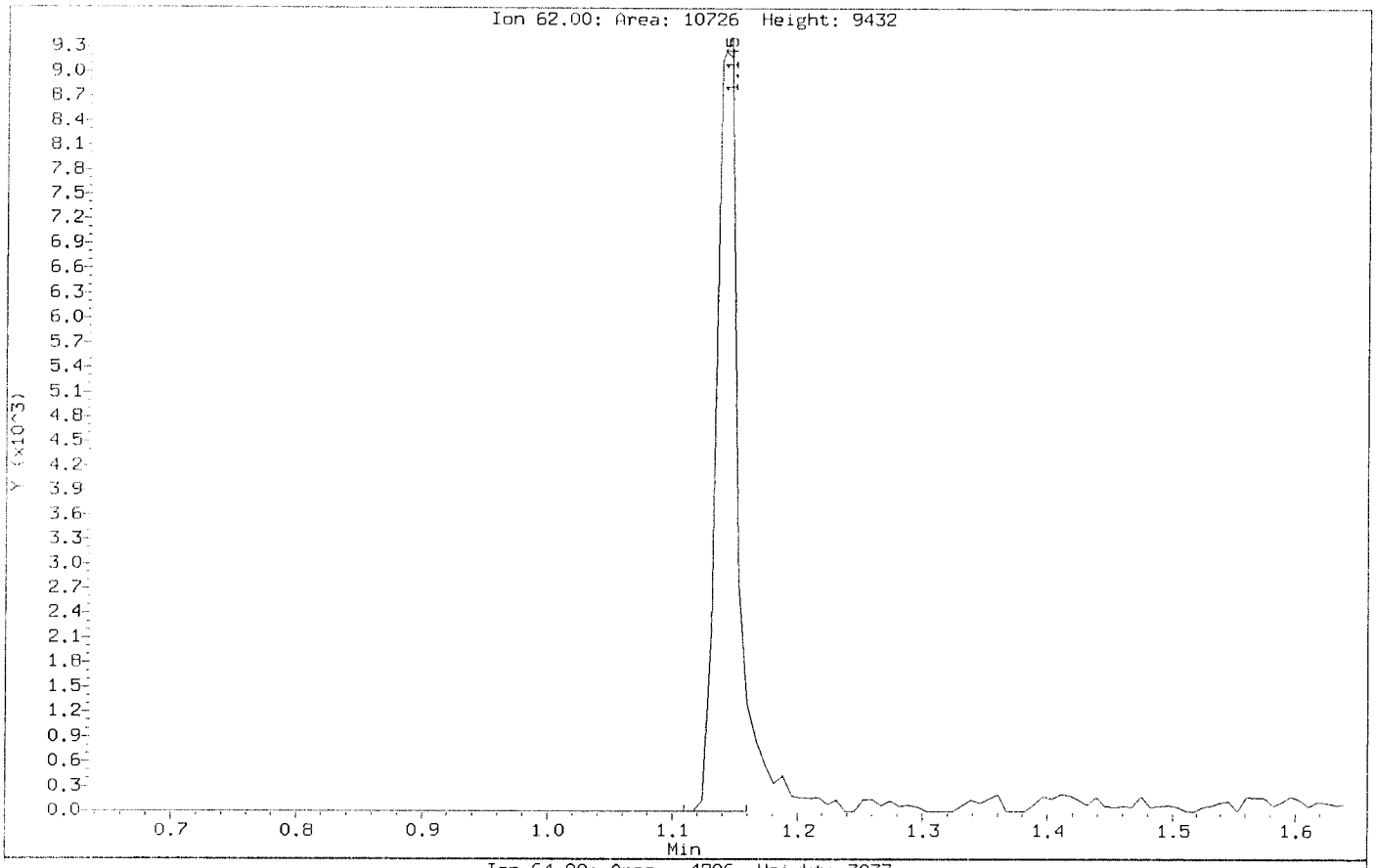
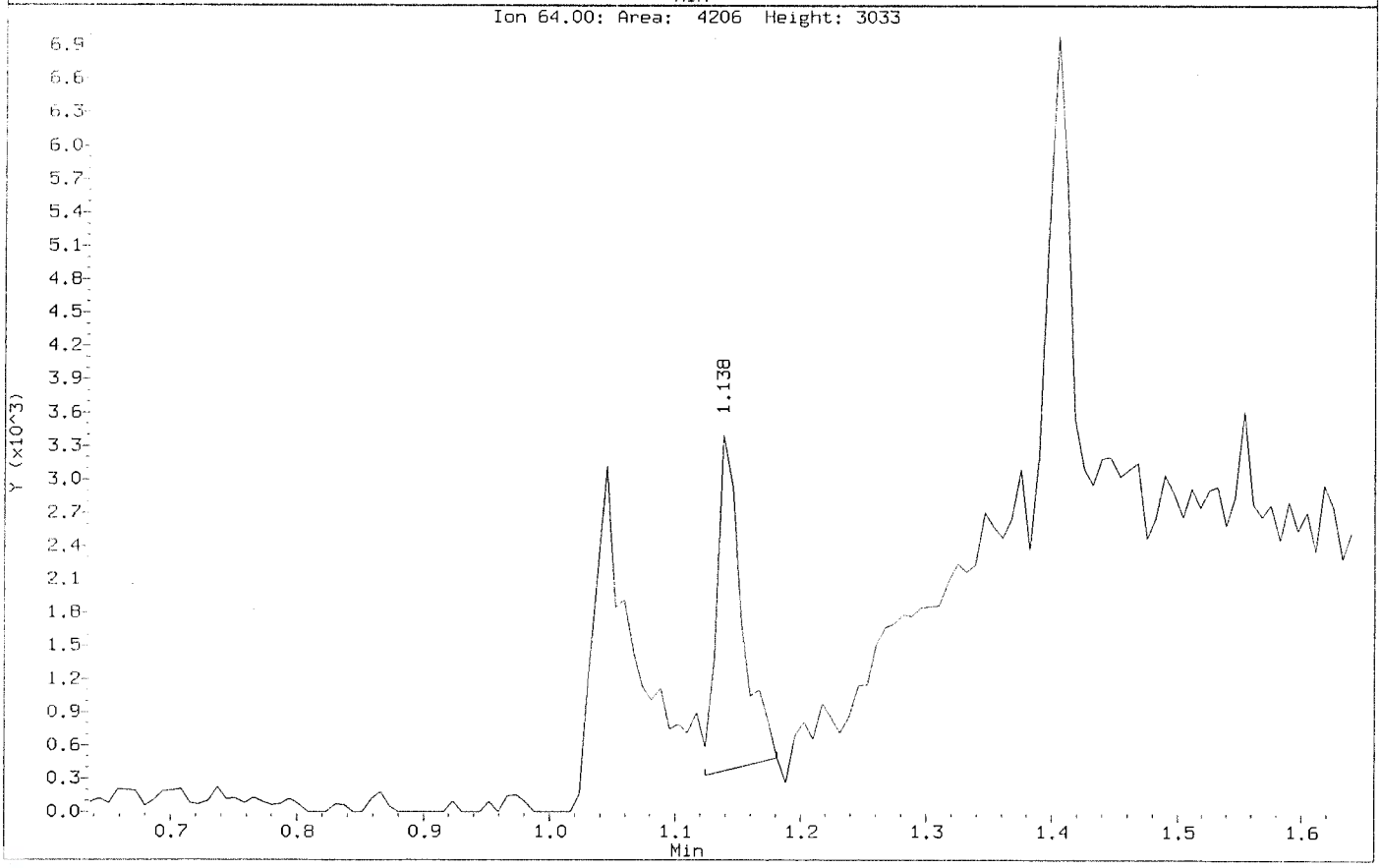
Compound: Vinyl Chloride
CAS Number: 75-01-4





ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052606.D
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Inj Date : 26-MAY-2021 14:19
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 30-Jun-2021 18:30 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 13:58 Cal File: X052605.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

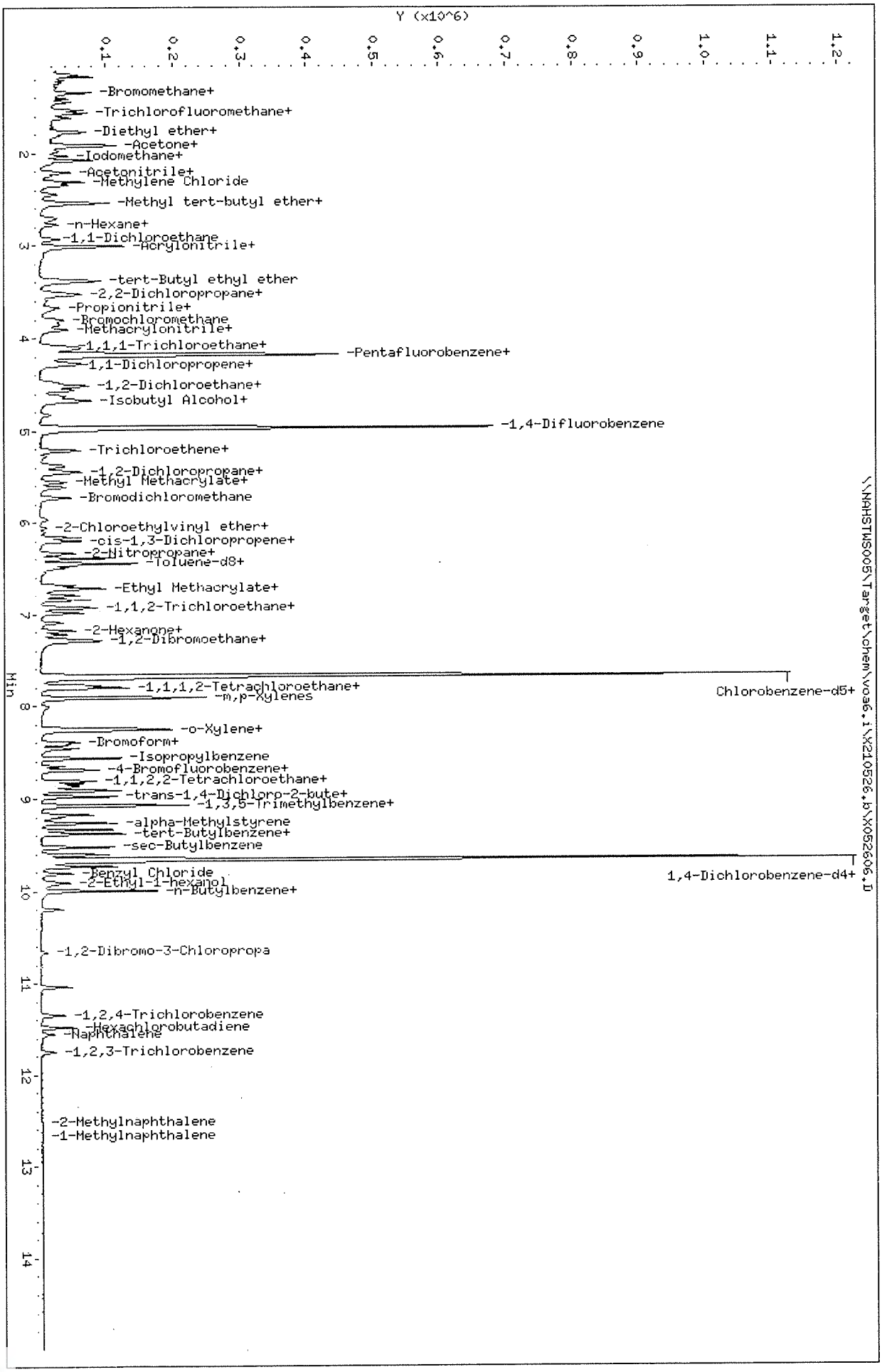
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	375848	50.0000	
*	36 1,4-Difluorobenzene	114	4.970	4.970	(1.000)	599369	50.0000	
*	47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	554828	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	272673	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.103	(0.981)	21089	5.00000	5.55
$	35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	21575	5.00000	5.39
$	48 Toluene-d8	98	6.388	6.388	(0.833)	68712	5.00000	4.97(a)
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	25524	5.00000	5.91
	60 1,1,1,2-Tetrachloroethane	131	7.778	7.778	(1.014)	20225	5.00000	4.92(a)
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	28395	5.00000	5.11
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	24326	5.00000	5.41
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	17061	5.00000	5.67
	22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	32111	5.00000	5.40
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	19736	5.00000	5.09
	32 1,1-Dichloropropene	75	4.290	4.290	(0.863)	22162	5.00000	4.82(a)
	93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	7772	5.00000	4.70(a)
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	17848	5.00000	5.25(M)
	90 1,2,4-Trichlorobenzene	180	11.345	11.345	(1.174)	12851	5.00000	4.76(a)
	79 1,2,4-Trimethylbenzene	105	9.382	9.382	(0.971)	58187	5.00000	4.67(a)
	89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	2323	5.00000	5.82
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	21217	5.00000	5.19
	88 1,2-Dichlorobenzene	146	9.998	9.998	(1.035)	36886	5.00000	4.98(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.562	4.562	(0.918)	25252	5.00000	5.28
42	1,2-Dichloropropane	63	5.436	5.436	(1.094)	18865	5.00000	5.34
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	58197	5.00000	4.70(a)
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	38487	5.00000	5.00
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	31865	5.00000	5.33
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	39709	5.00000	4.94(a)
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	27936	5.00000	5.43
24	2-Butanone	43	3.588	3.588	(0.858)	11362	10.0000	9.93(H)
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	53843	5.00000	5.27
52	2-Hexanone	43	7.090	7.090	(0.924)	21892	10.0000	10.62
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	58486	5.00000	4.81(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	55825	5.00000	4.42(a)
45	4-Methyl-2-Pentanone	43	6.331	6.331	(0.825)	32371	10.0000	10.13
10	Acetone	43	1.976	1.976	(0.473)	15534	10.0000	11.18
37	Benzene	78	4.512	4.512	(0.908)	71697	5.00000	5.20
74	Bromobenzene	156	8.809	8.809	(0.912)	22574	5.00000	4.98(a)
29	Bromochloromethane	128	3.802	3.802	(0.909)	12517	5.00000	5.50
39	Bromodichloromethane	83	5.722	5.722	(1.151)	27200	5.00000	5.27
66	Bromoform	173	8.408	8.408	(1.096)	13722	5.00000	4.43(a)
6	Bromomethane	94	1.338	1.338	(0.320)	24597	5.00000	6.46
19	Carbon Disulfide	76	2.069	2.069	(0.495)	93831	10.0000	10.22
34	Carbon Tetrachloride	117	4.268	4.268	(0.859)	24074	5.00000	4.84(aH)
59	Chlorobenzene	112	7.692	7.692	(1.003)	57208	5.00000	4.95(a)
7	Chloroethane	64	1.403	1.403	(0.336)	15071	5.00000	4.46(aM)
28	Chloroform	83	3.910	3.910	(0.935)	36863	5.00000	5.57
3	Chloromethane	50	1.080	1.080	(0.258)	23565	5.00000	4.57(a)
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	21562	5.00000	5.47
46	cis-1,3-Dichloropropene	75	6.159	6.159	(1.239)	31771	5.00000	5.23
55	Dibromochloromethane	129	7.176	7.176	(0.936)	22651	5.00000	4.96(a)
44	Dibromomethane	93	5.557	5.557	(1.118)	14381	5.00000	5.42
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	18295	5.00000	5.11
61	Ethylbenzene	106	7.799	7.799	(1.017)	26847	5.00000	5.03
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	8556	5.00000	6.15
67	Isopropylbenzene	105	8.566	8.566	(1.117)	72549	5.00000	4.45(a)
62	m,p-Xylenes	106	7.907	7.907	(1.031)	65384	10.0000	9.41
17	Methylene Chloride	84	2.305	2.305	(0.551)	21744	5.00000	5.22
87	n-Butylbenzene	91	9.998	9.998	(1.035)	47016	5.00000	4.43(a)
73	n-Propylbenzene	91	8.910	8.910	(0.922)	79074	5.00000	4.64(a)
92	Naphthalene	128	11.553	11.553	(1.196)	18362	5.00000	4.71(a)
63	o-Xylene	106	8.244	8.244	(1.075)	33045	5.00000	4.87(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	66177	5.00000	4.62(a)
64	Styrene	104	8.258	8.258	(1.077)	52432	5.00000	4.63(a)
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	50317	5.00000	4.74(a)
56	Tetrachloroethene	164	6.933	6.933	(0.904)	16008	5.00000	4.68(a)
50	Toluene	91	6.446	6.446	(0.840)	80843	5.00000	4.99(a)
20	trans-1,2-Dichloroethene	96	2.535	2.535	(0.606)	18528	5.00000	5.27
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.344)	26258	5.00000	5.01
38	Trichloroethene	130	5.206	5.206	(1.048)	20721	5.00000	5.03
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	36670	5.00000	5.40
5	Vinyl Chloride	62	1.145	1.145	(0.274)	23945	5.00000	5.38(M)

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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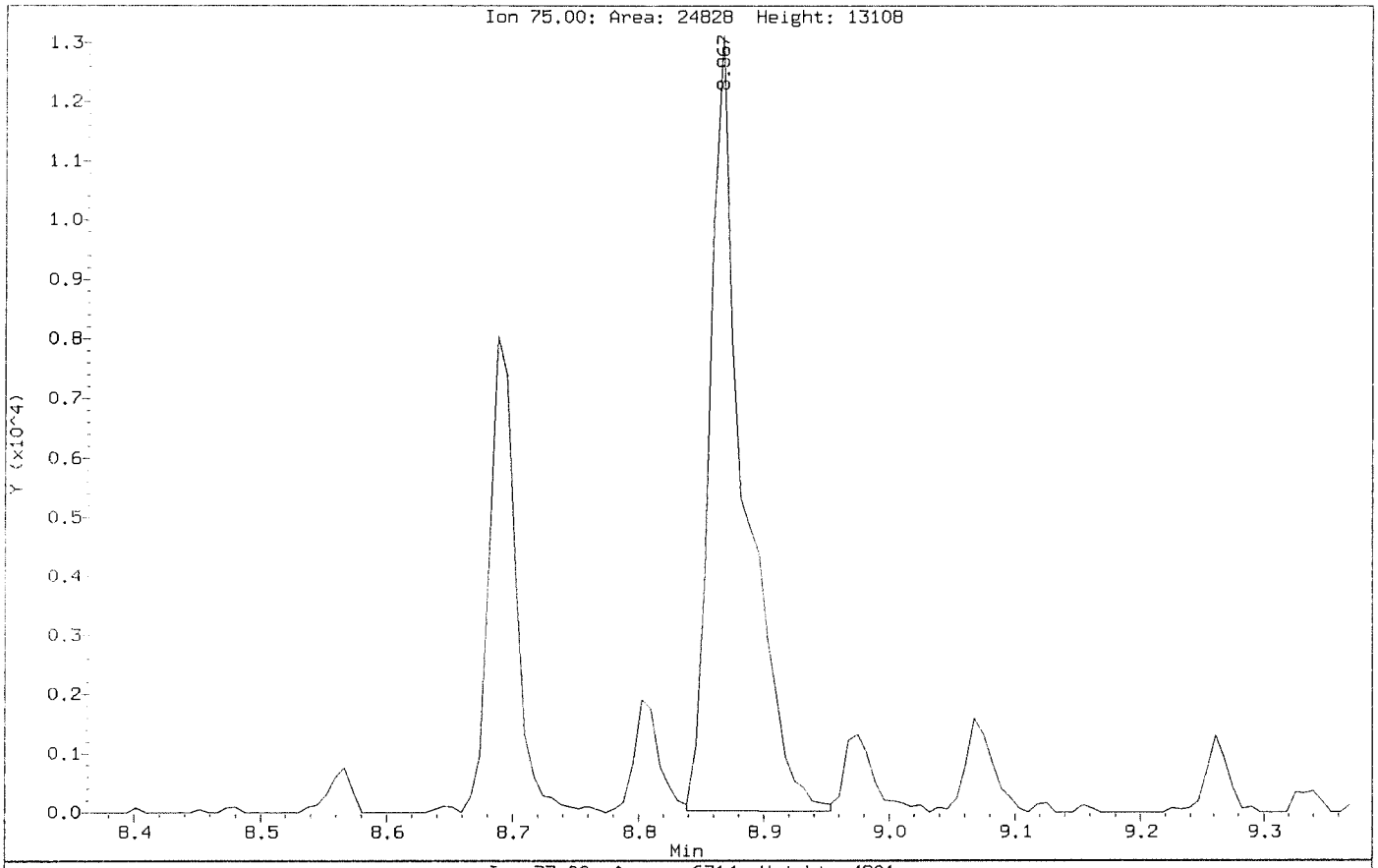
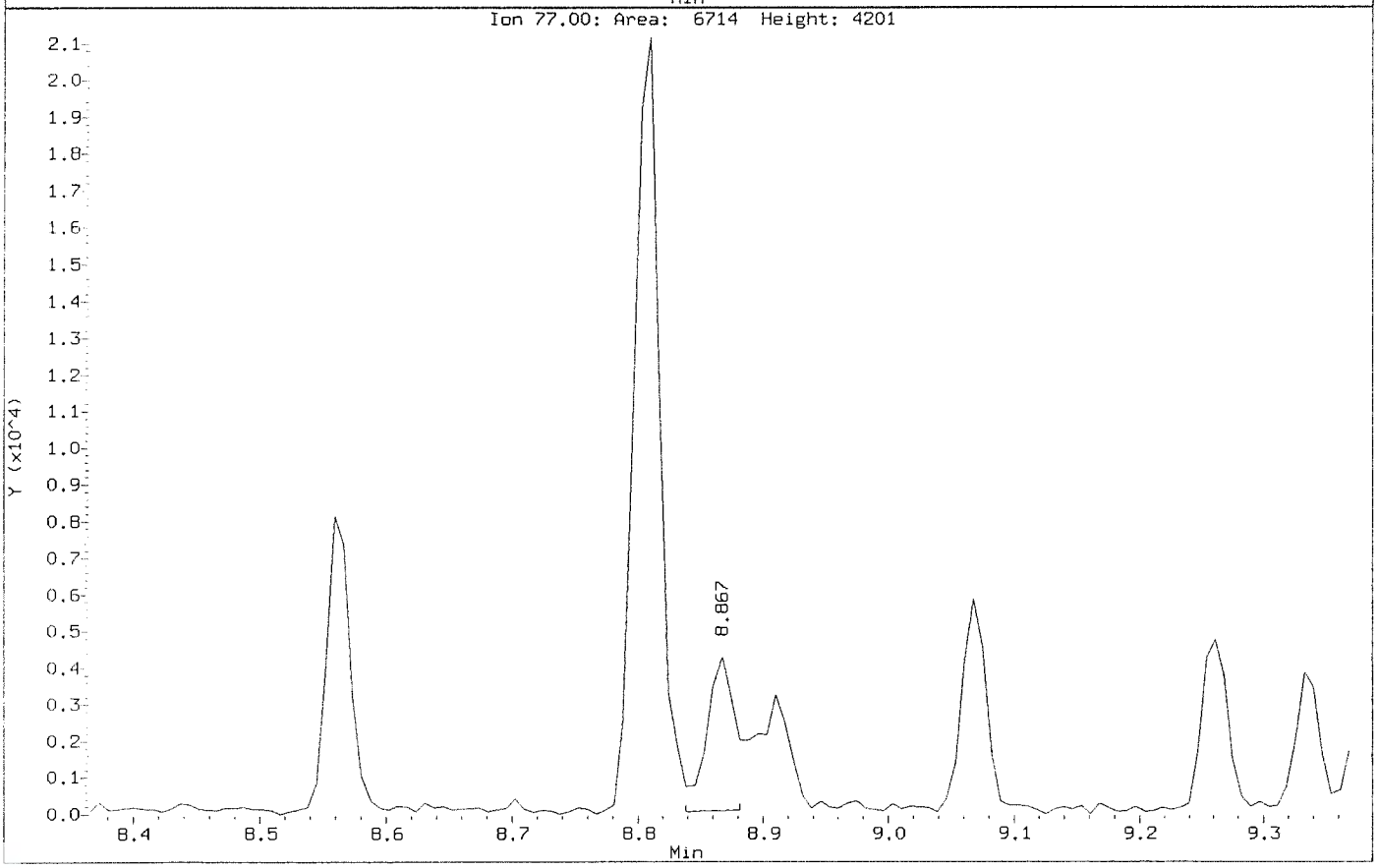
Date : 26-MAY-2021 14:19
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before2\X052606.D
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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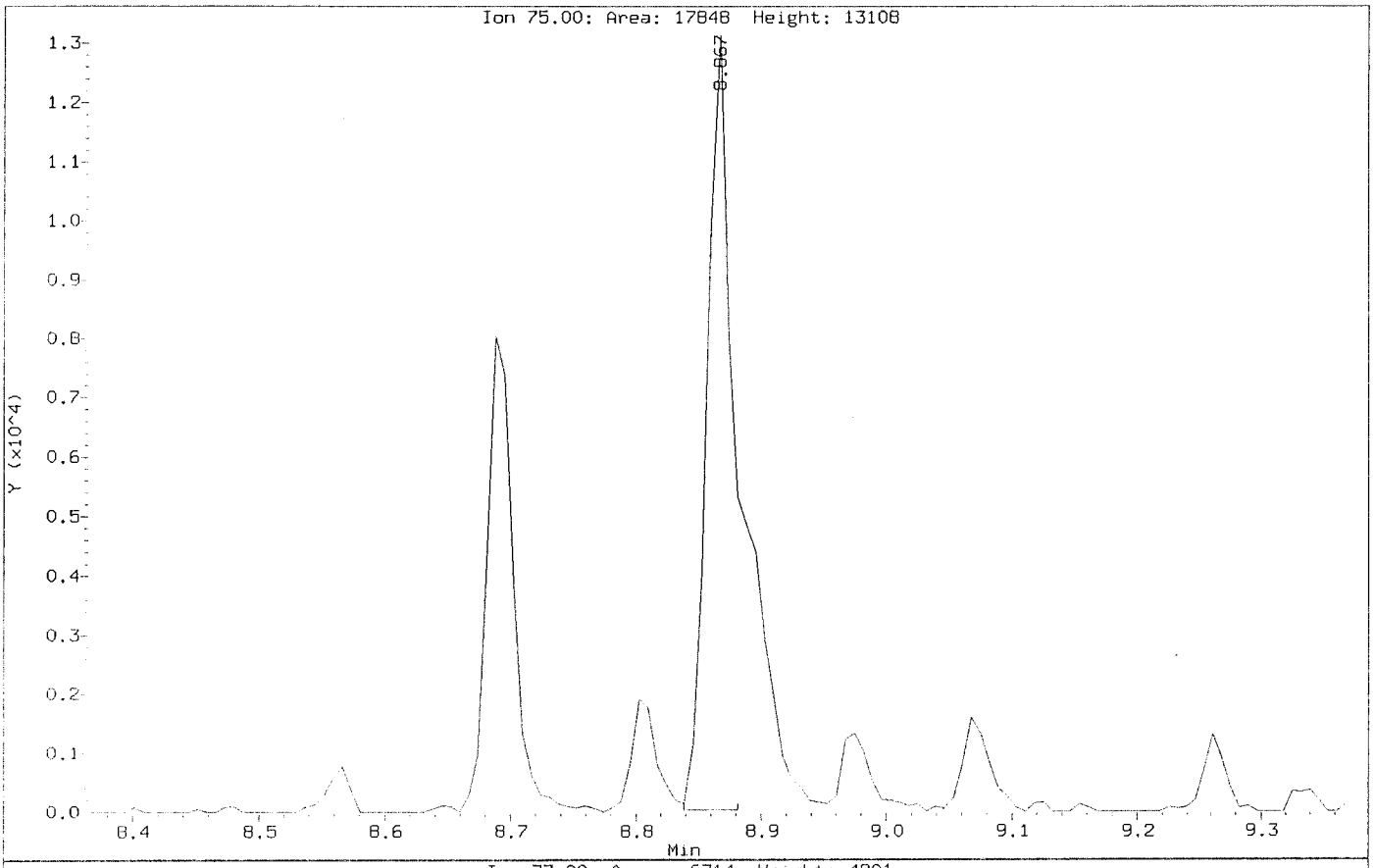
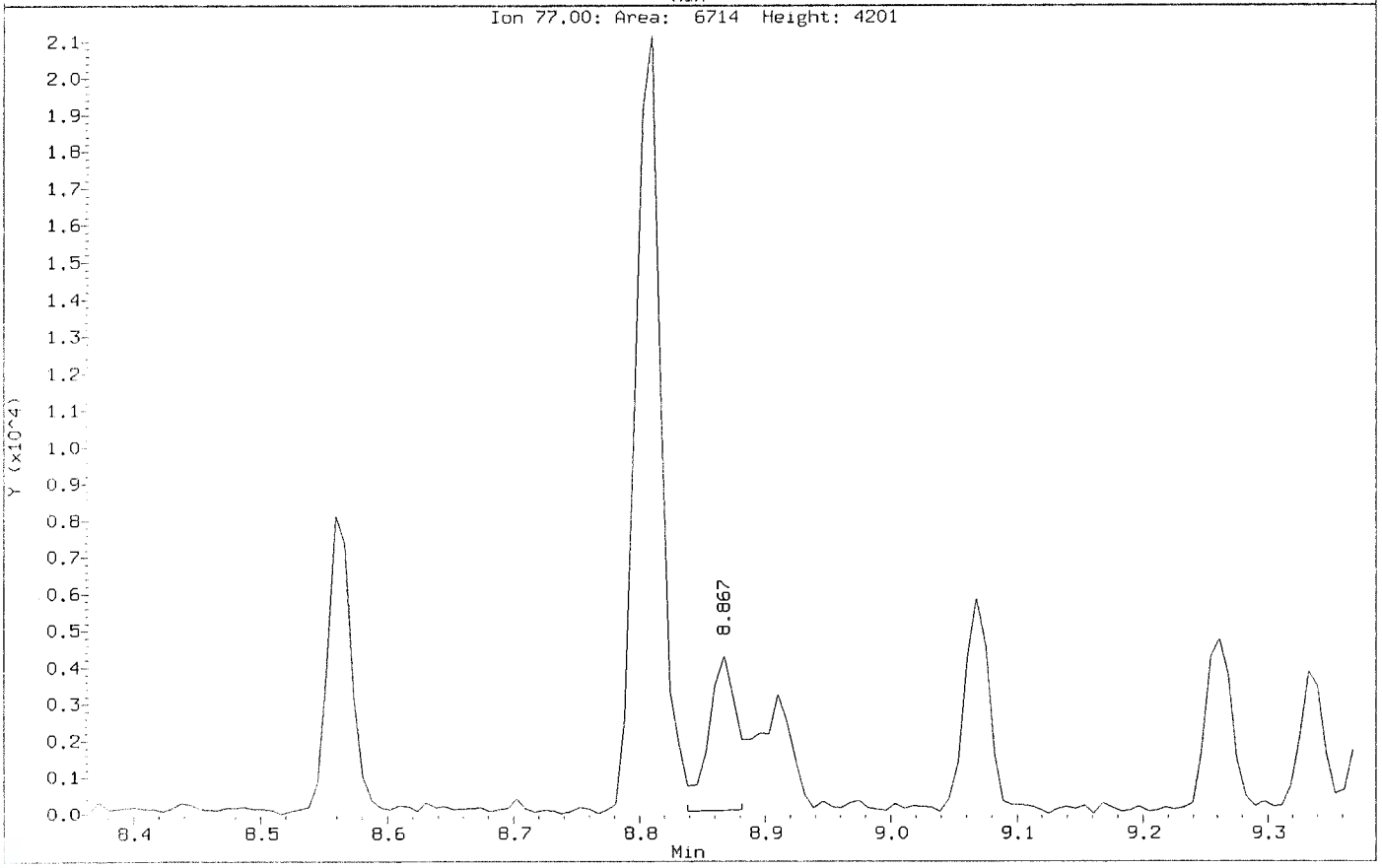
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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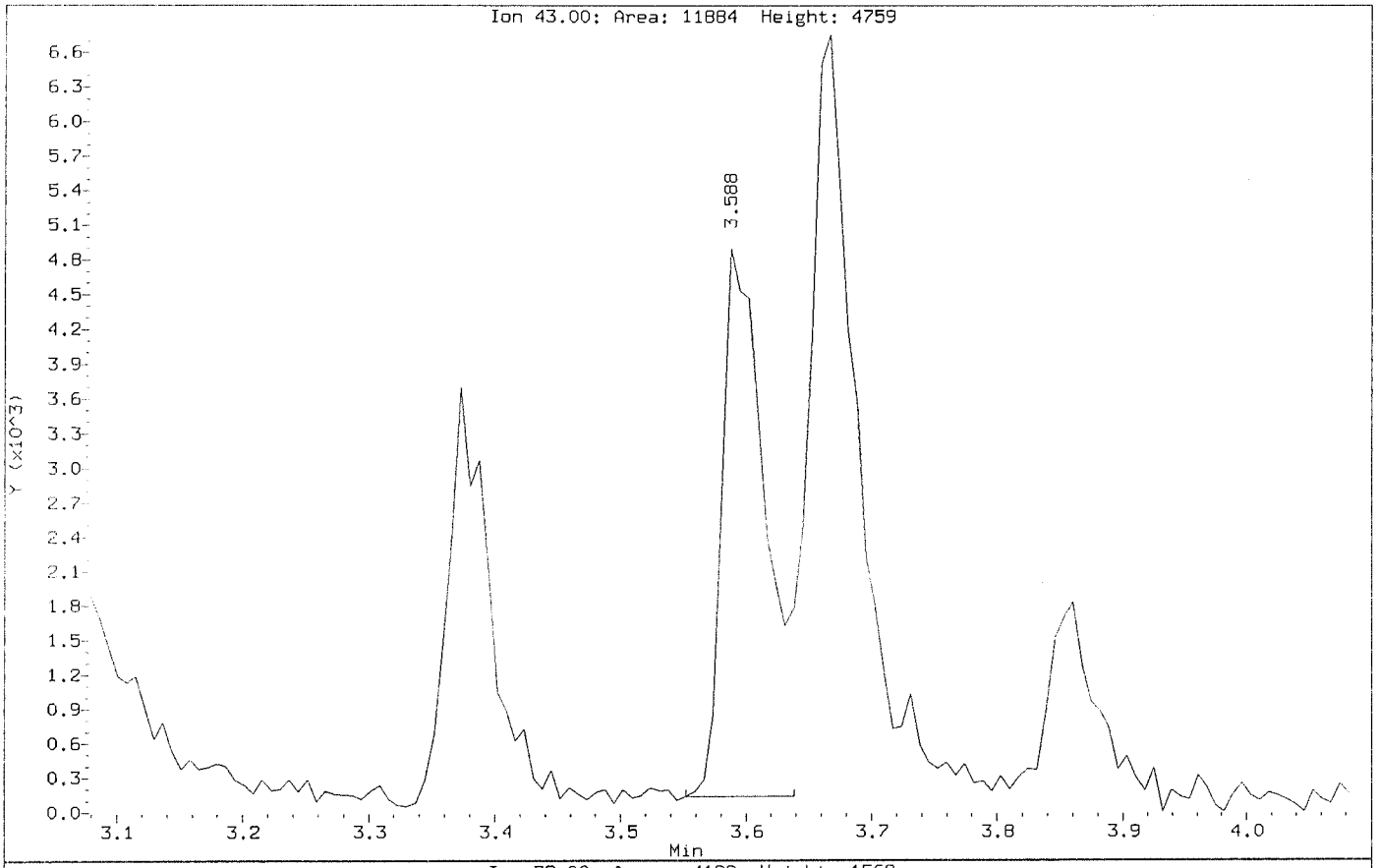
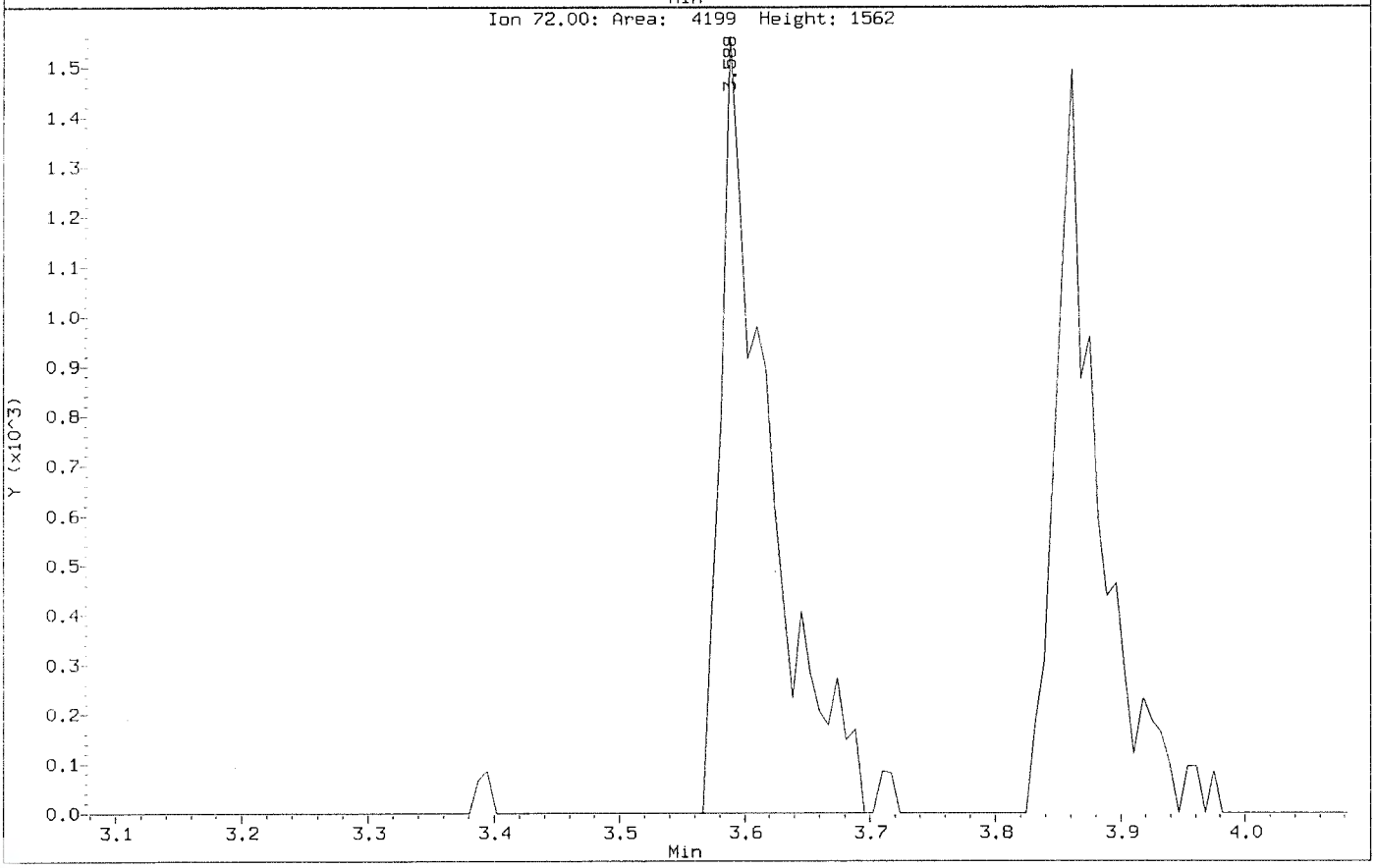
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: 2-Butanone
CAS Number: 78-93-3





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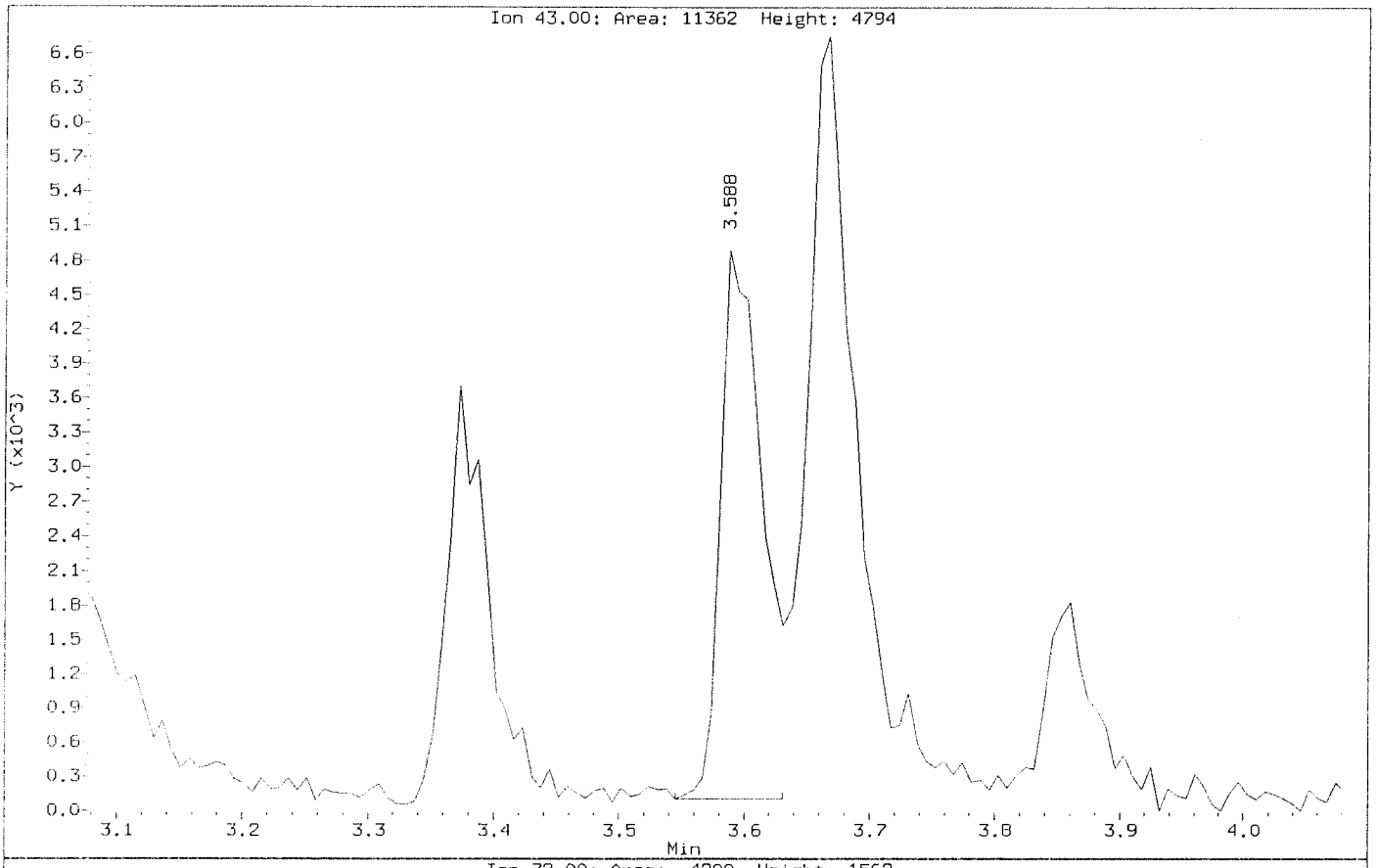
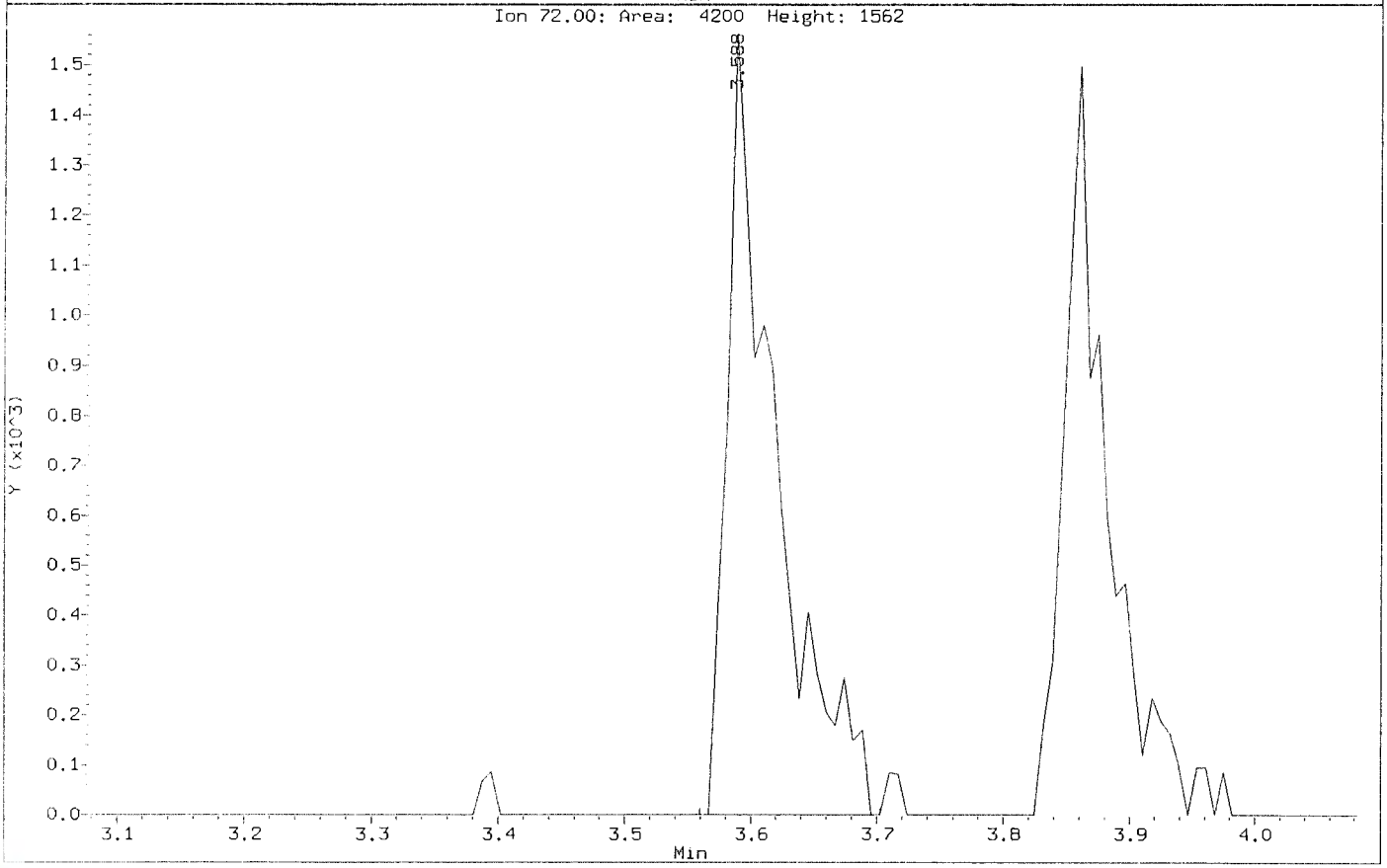
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: 2-Butanone
CAS Number: 78-93-3





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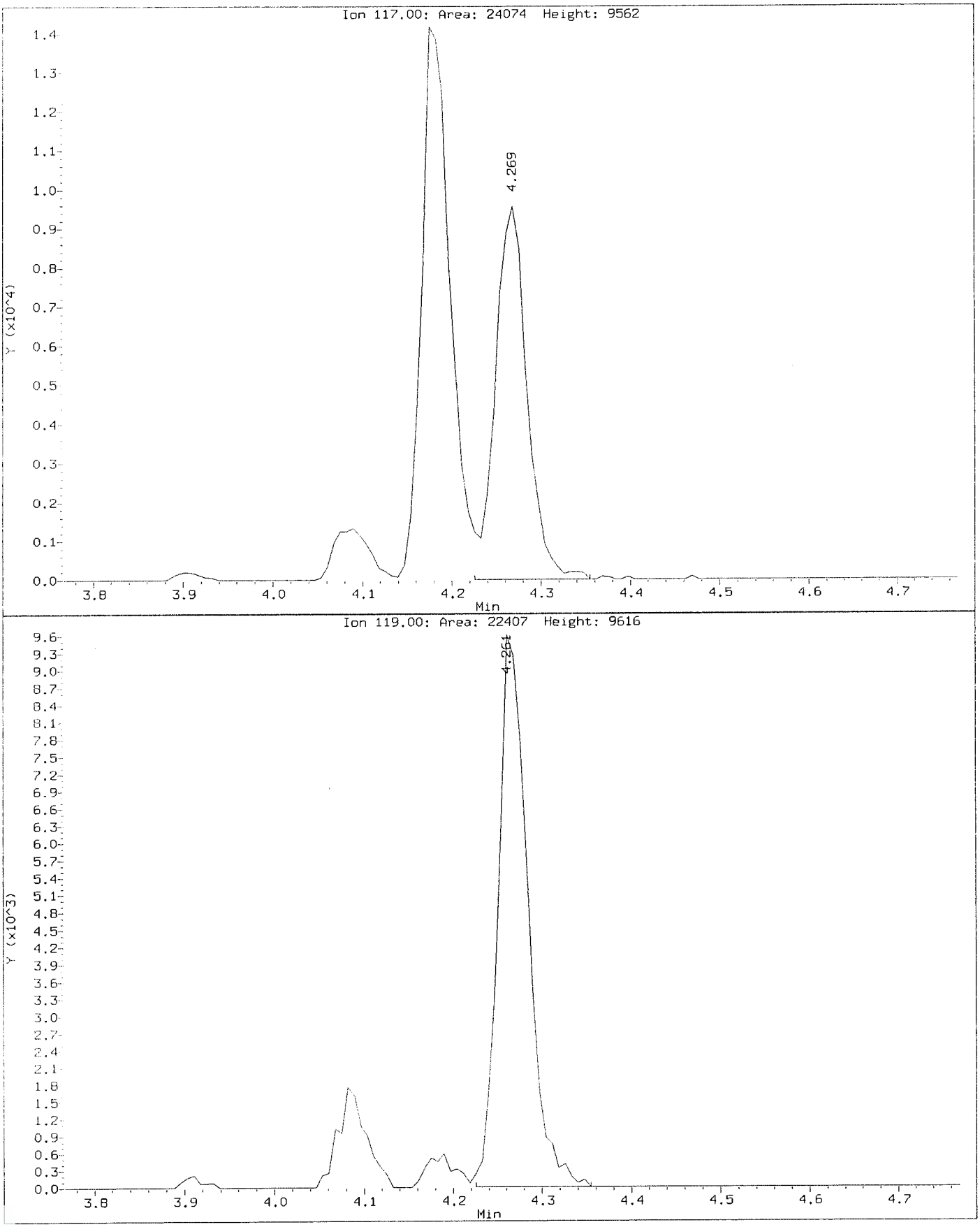
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: Carbon Tetrachloride
CAS Number: 56-23-5



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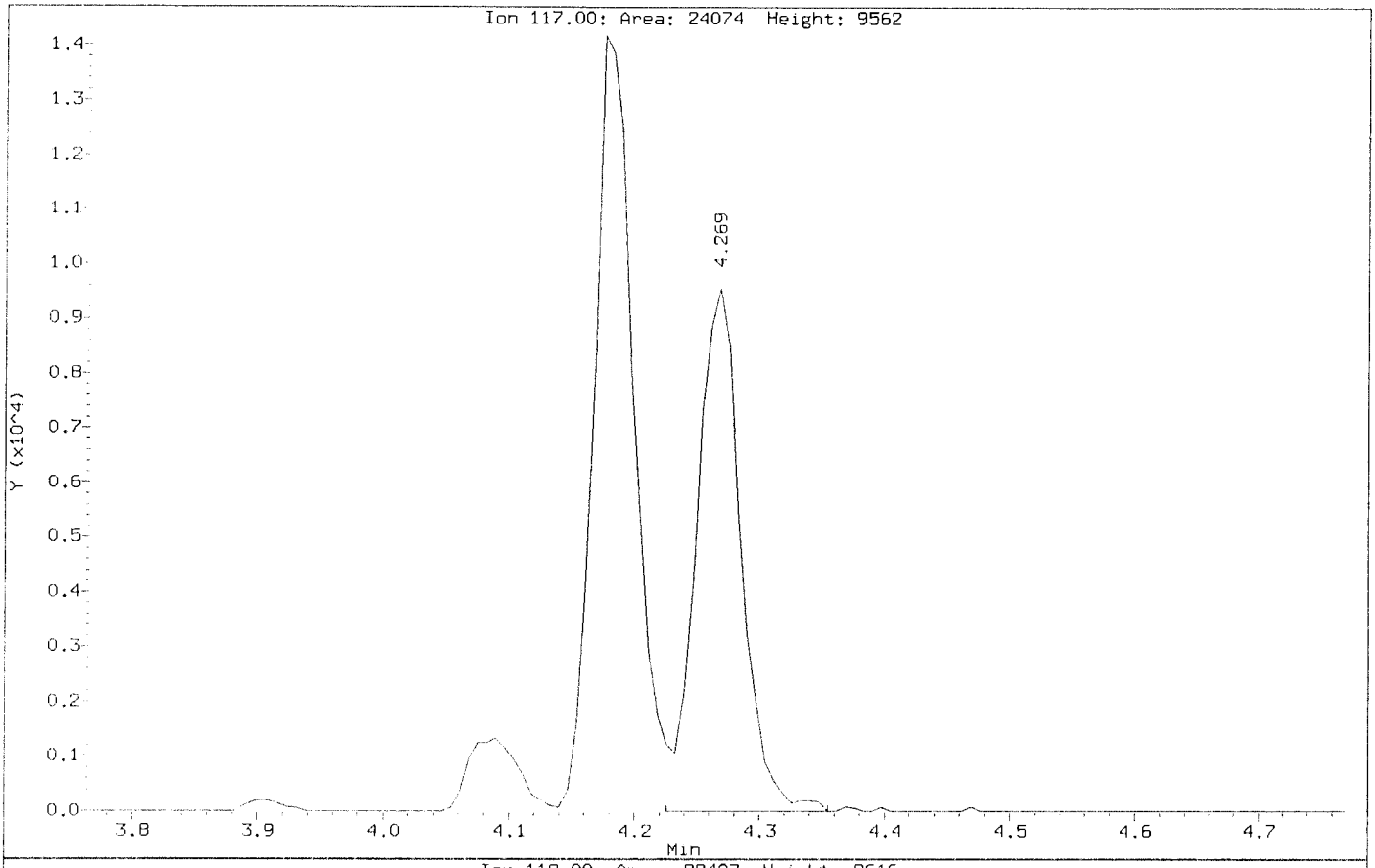
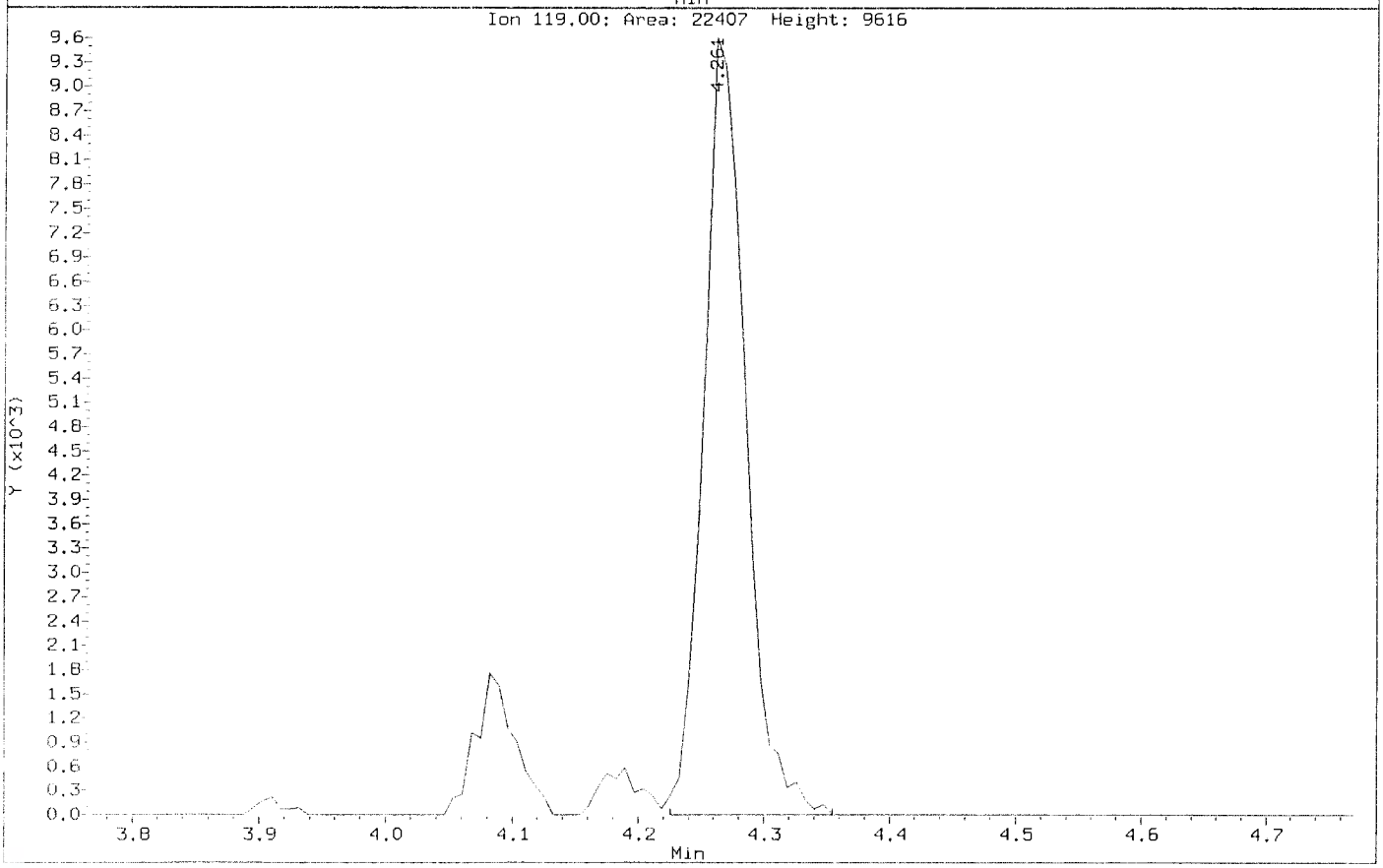
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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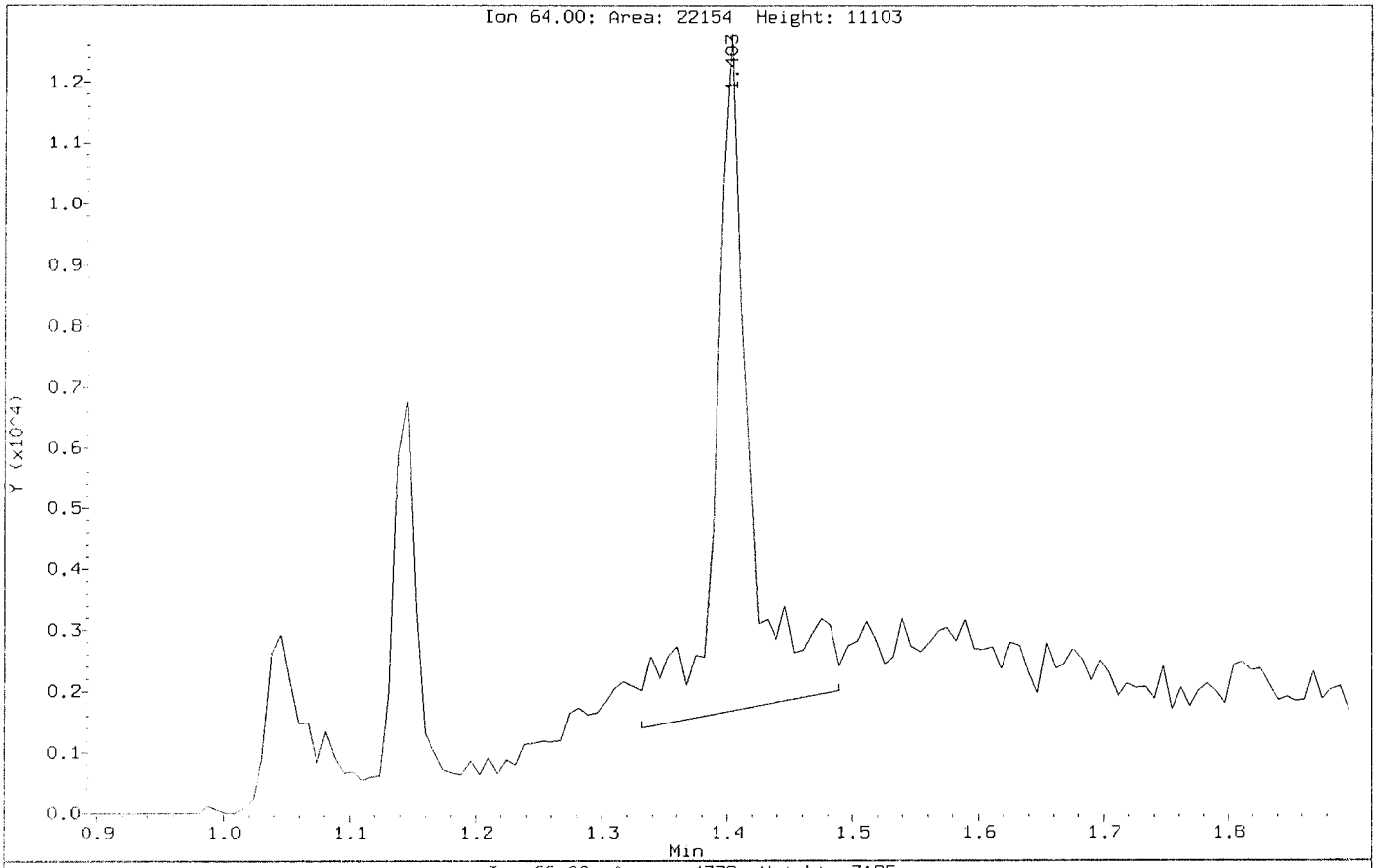
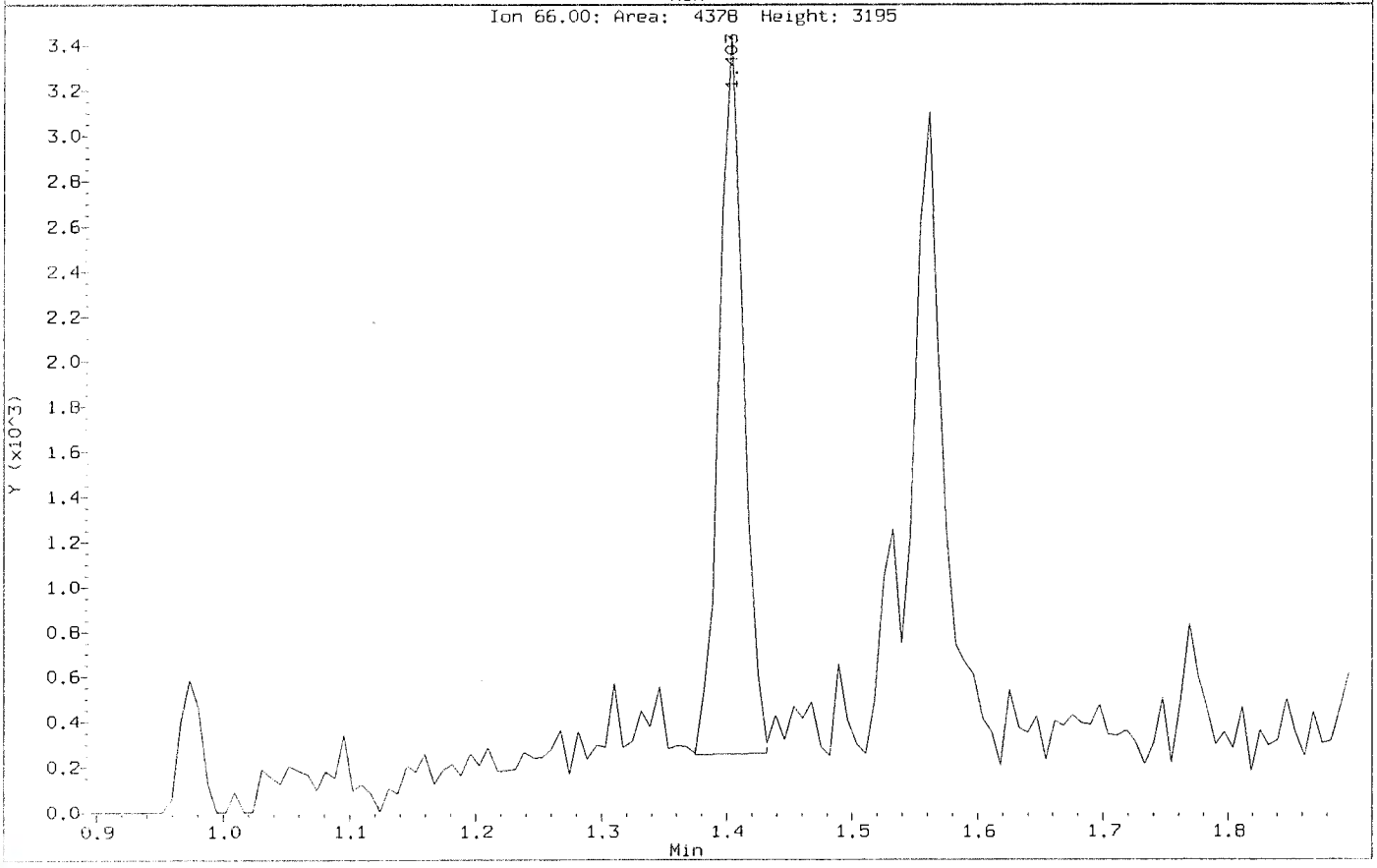
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: Chloroethane
CAS Number: 75-00-3





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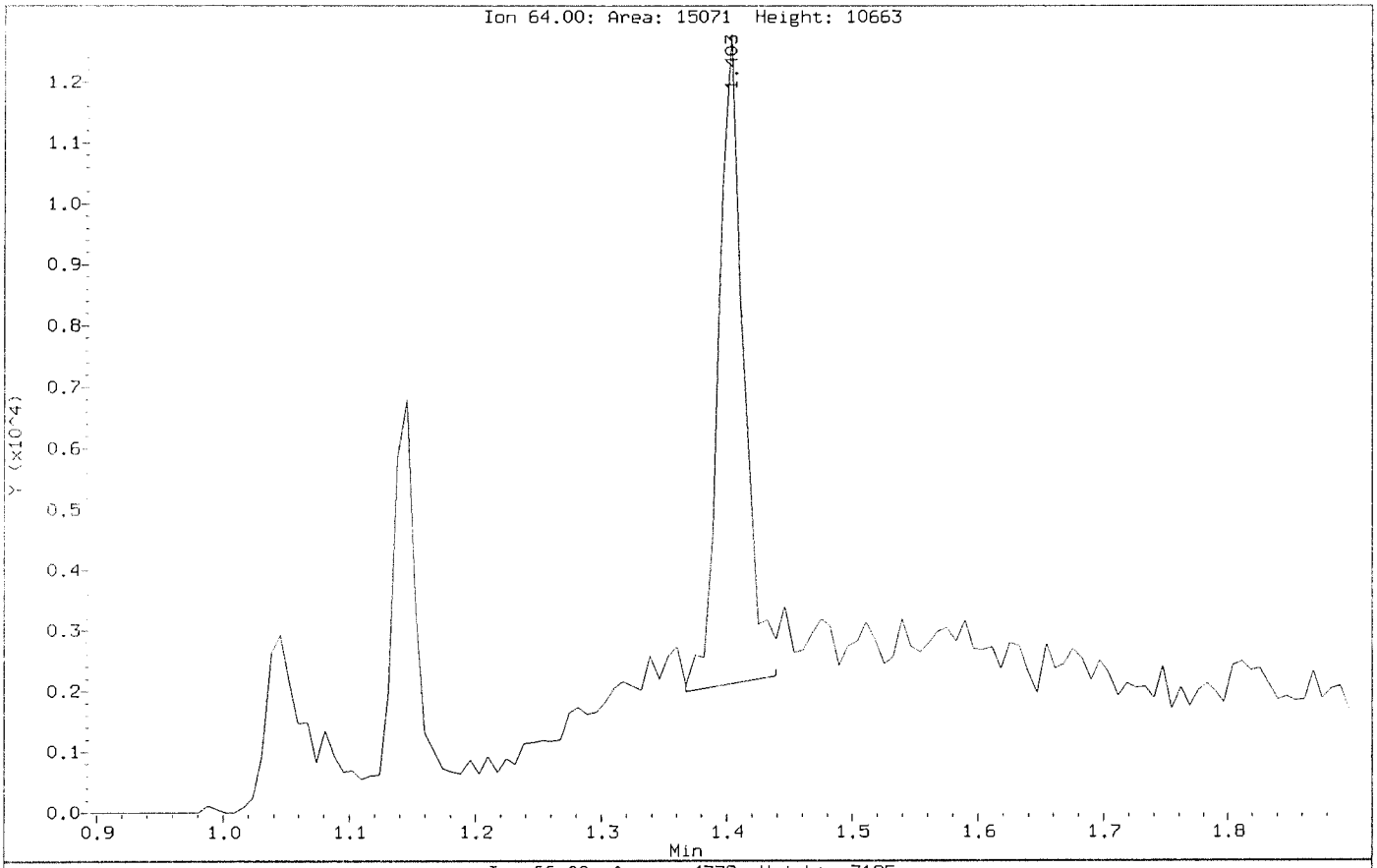
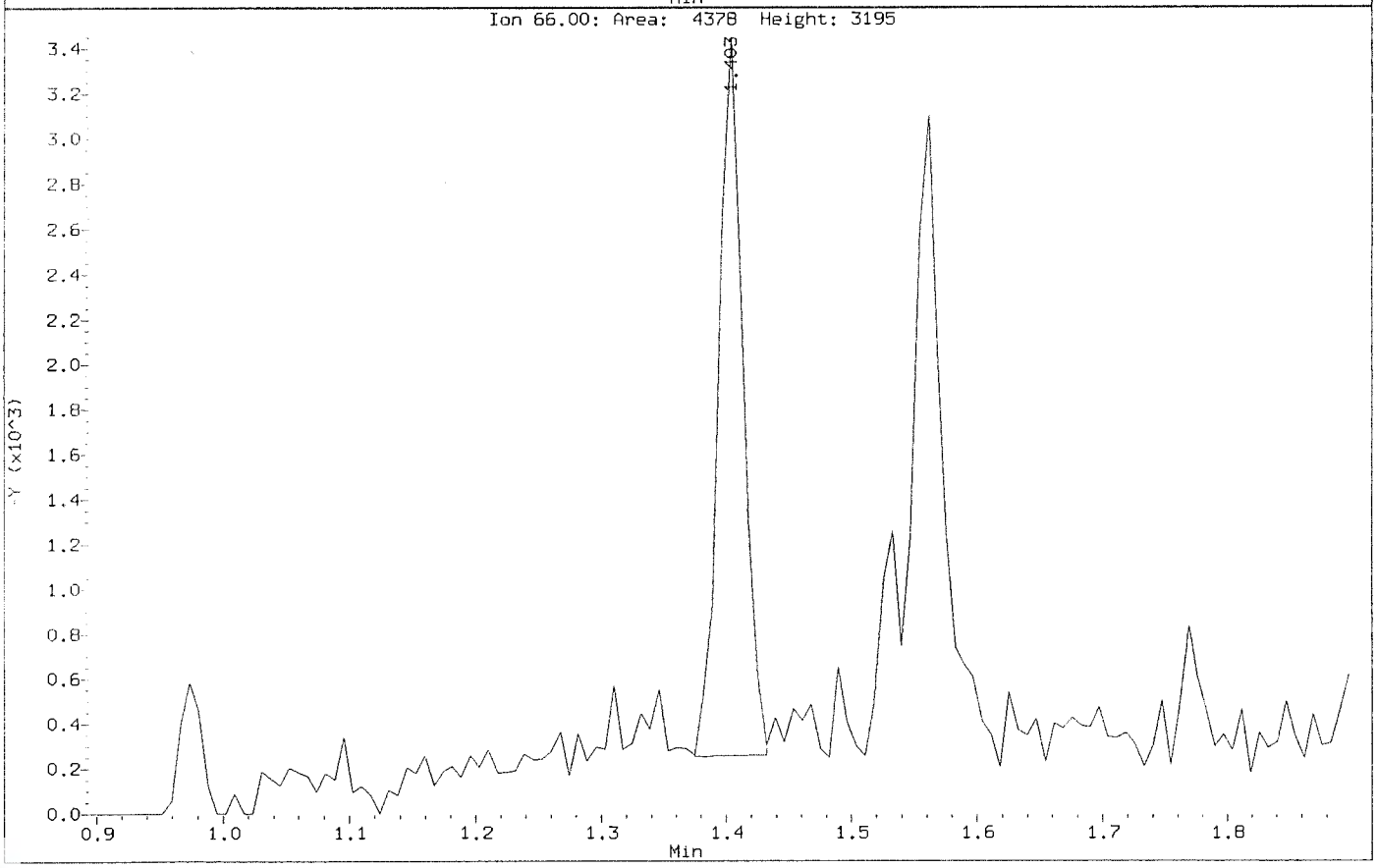
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: Chloroethane
CAS Number: 75-00-3





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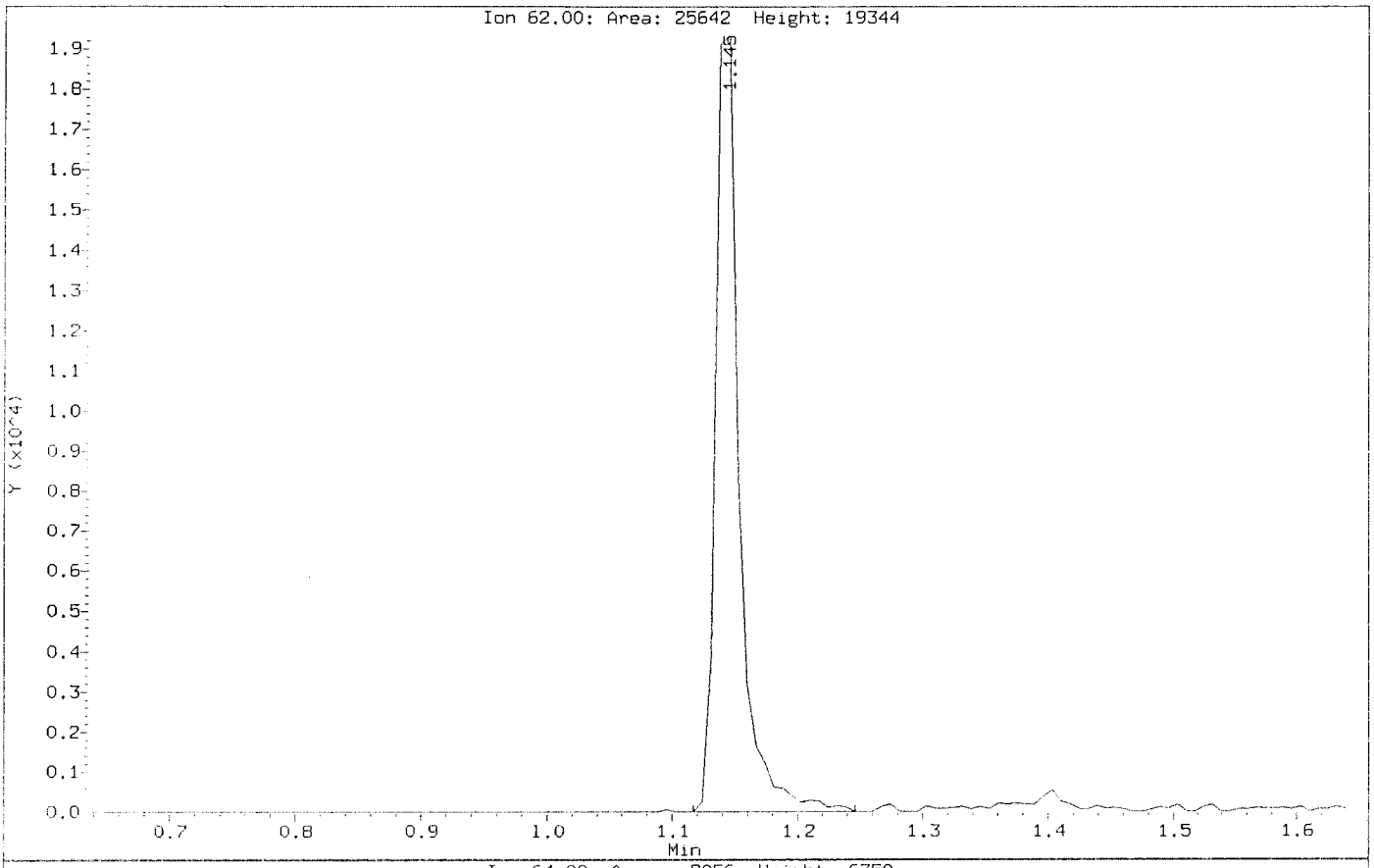
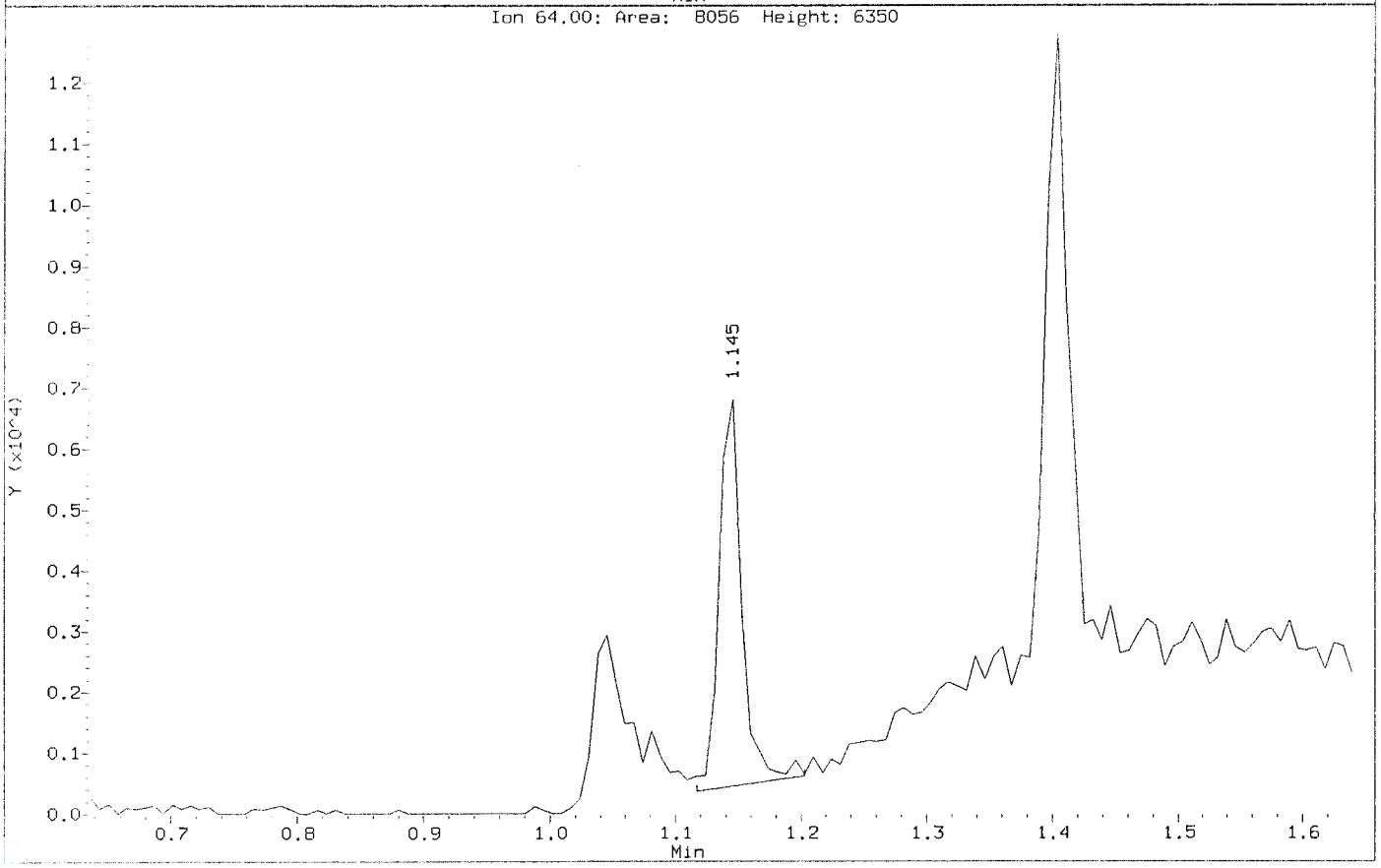
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: Vinyl Chloride
CAS Number: 75-01-4





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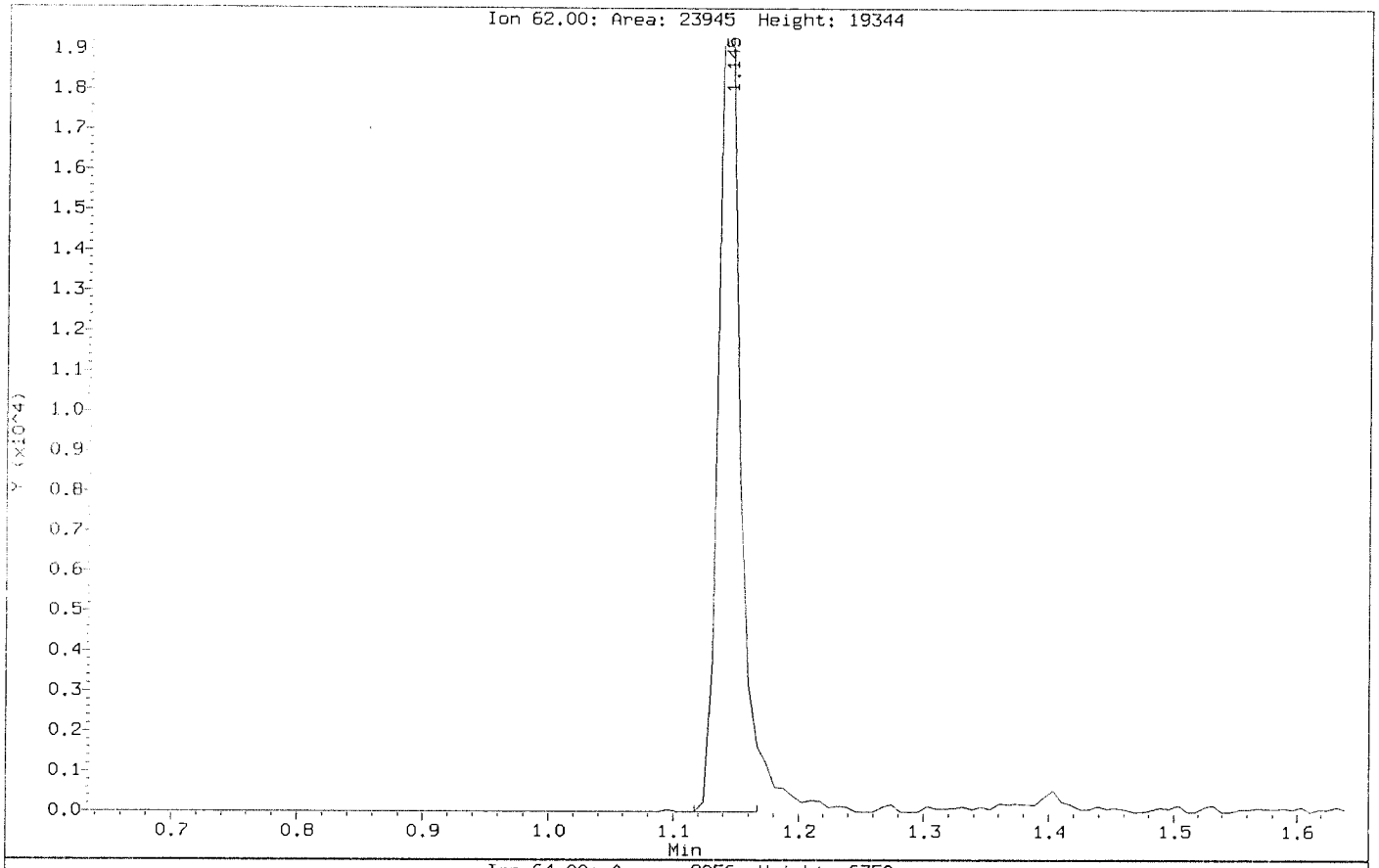
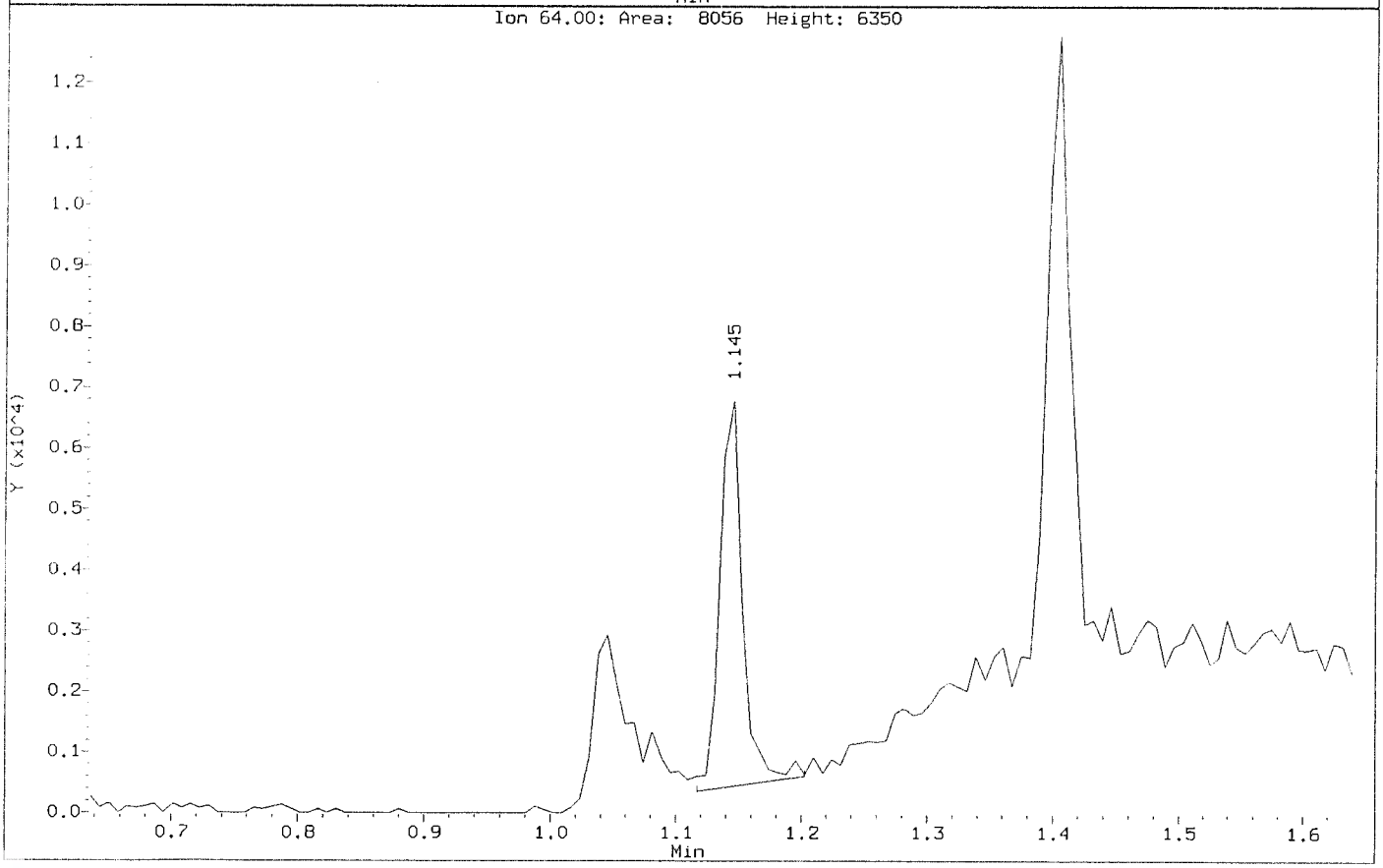
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: Vinyl Chloride
CAS Number: 75-01-4





ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052607.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 26-MAY-2021 14:40
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 30-Jun-2021 18:30 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 14:19 Cal File: X052606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

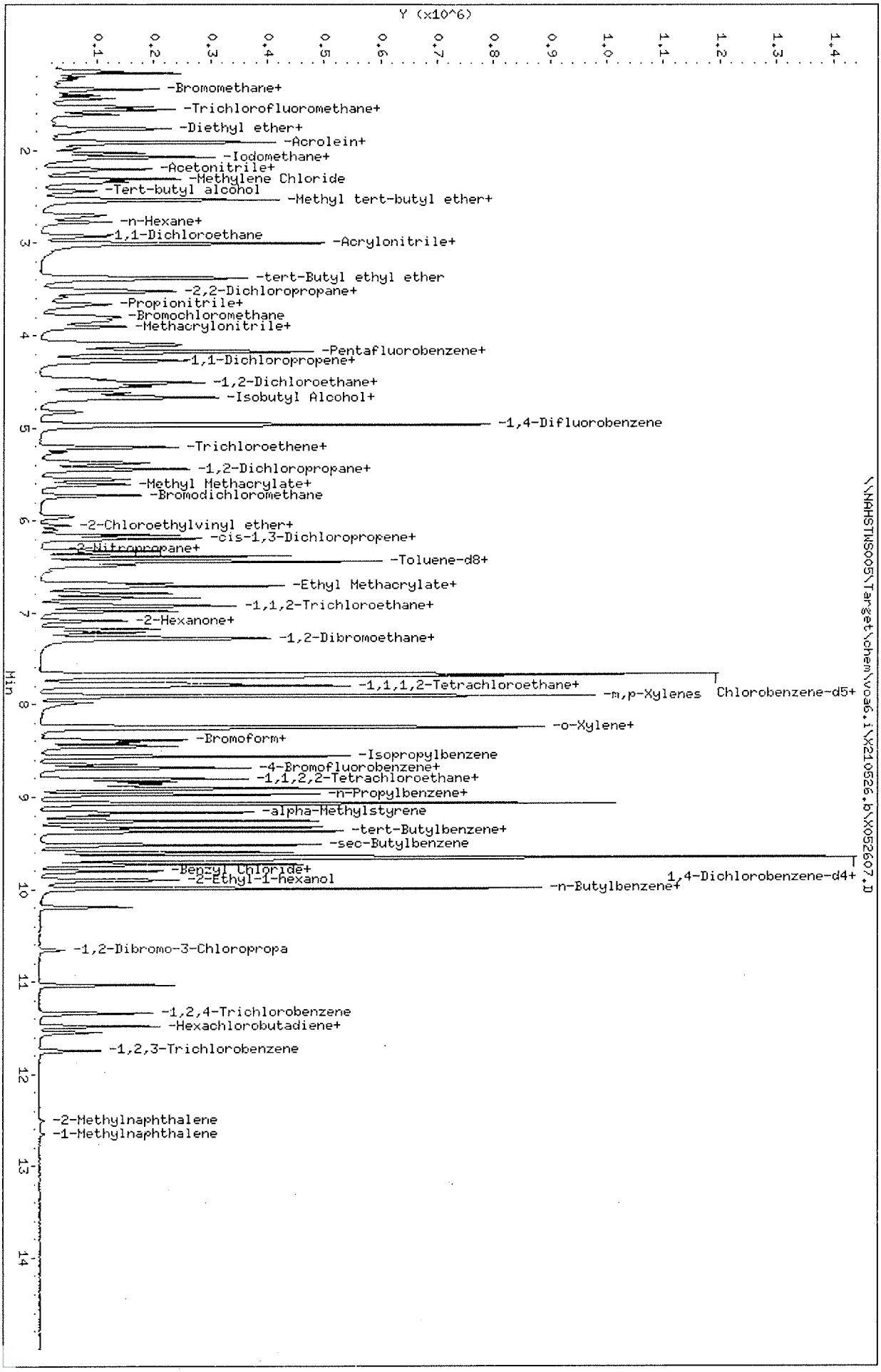
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	399349	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	620725	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	575687	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	297335	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.103	(0.981)	83421	20.0000	21.12
$	35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	79438	20.0000	20.41
$	48 Toluene-d8	98	6.388	6.388	(0.833)	267583	20.0000	18.65
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	97463	20.0000	19.73
	60 1,1,1,2-Tetrachloroethane	131	7.778	7.778	(1.014)	81457	20.0000	19.13
	31 1,1,1-Trichloroethane	97	4.089	4.089	(0.978)	111104	20.0000	18.82
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	94744	20.0000	22.42
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	60385	20.0000	19.36
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	135905	20.0000	19.94
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	78545	20.0000	19.09
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	91604	20.0000	19.26
	93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	34932	20.0000	19.40
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	75324	20.0000	20.31(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	59165	20.0000	20.12
	79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	258314	20.0000	19.04
	89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	9854	20.0000	21.18
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	81626	20.0000	19.25
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	154085	20.0000	19.10

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052607.D Page 2
Report Date: 30-Jun-2021 18:30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	97430	20.0000	19.69
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	70678	20.0000	19.34
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	254418	20.0000	18.85
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	159109	20.0000	18.97
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	121266	20.0000	19.55
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	165351	20.0000	18.89
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	104699	20.0000	19.16
24	2-Butanone	43	3.580	3.580	(0.856)	47300	40.0000	38.92(H)
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	216732	20.0000	19.47
52	2-Hexanone	43	7.090	7.090	(0.924)	83319	40.0000	38.96
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	249789	20.0000	18.84
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	254273	20.0000	18.49
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	124052	40.0000	37.41
10	Acetone	43	1.976	1.976	(0.473)	45478	40.0000	41.28
37	Benzene	78	4.512	4.512	(0.909)	277041	20.0000	19.42
74	Bromobenzene	156	8.802	8.802	(0.911)	97493	20.0000	19.76
29	Bromochloromethane	128	3.795	3.795	(0.908)	48508	20.0000	20.08
39	Bromodichloromethane	83	5.729	5.729	(1.154)	104002	20.0000	19.48
66	Bromoform	173	8.408	8.408	(1.096)	59434	20.0000	18.51
6	Bromomethane	94	1.338	1.338	(0.320)	81986	20.0000	19.96
19	Carbon Disulfide	76	2.069	2.069	(0.495)	372089	40.0000	38.14
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	95975	20.0000	18.65(H)
59	Chlorobenzene	112	7.692	7.692	(1.003)	222059	20.0000	18.52
7	Chloroethane	64	1.403	1.403	(0.336)	58283	20.0000	19.98
28	Chloroform	83	3.910	3.910	(0.935)	135997	20.0000	19.36
3	Chloromethane	50	1.073	1.073	(0.257)	83965	20.0000	21.80
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	85550	20.0000	20.43
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	127546	20.0000	20.28
55	Dibromochloromethane	129	7.176	7.176	(0.936)	91711	20.0000	19.35
44	Dibromomethane	93	5.550	5.550	(1.118)	56237	20.0000	20.48
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	78750	20.0000	21.34
61	Ethylbenzene	106	7.799	7.799	(1.017)	107937	20.0000	19.52
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	34297	20.0000	19.77
67	Isopropylbenzene	105	8.559	8.559	(1.116)	310873	20.0000	18.40
62	m,p-Xylenes	106	7.907	7.907	(1.031)	270046	40.0000	37.46
17	Methylene Chloride	84	2.305	2.305	(0.551)	78742	20.0000	20.99
87	n-Butylbenzene	91	9.991	9.991	(1.034)	216151	20.0000	18.68
73	n-Propylbenzene	91	8.910	8.910	(0.922)	351677	20.0000	18.96
92	Naphthalene	128	11.546	11.546	(1.195)	87321	20.0000	20.55
63	o-Xylene	106	8.244	8.244	(1.075)	131590	20.0000	18.72
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	292609	20.0000	18.74
64	Styrene	104	8.258	8.258	(1.077)	219724	20.0000	18.70
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	220623	20.0000	19.06
56	Tetrachloroethene	164	6.926	6.926	(0.903)	64343	20.0000	18.15
50	Toluene	91	6.446	6.446	(0.840)	307300	20.0000	18.28
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	70656	20.0000	18.94
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	107611	20.0000	19.83
38	Trichloroethene	130	5.206	5.206	(1.049)	83800	20.0000	19.67
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	139135	20.0000	19.30
5	Vinyl Chloride	62	1.138	1.138	(0.272)	91766	20.0000	19.41

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624

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

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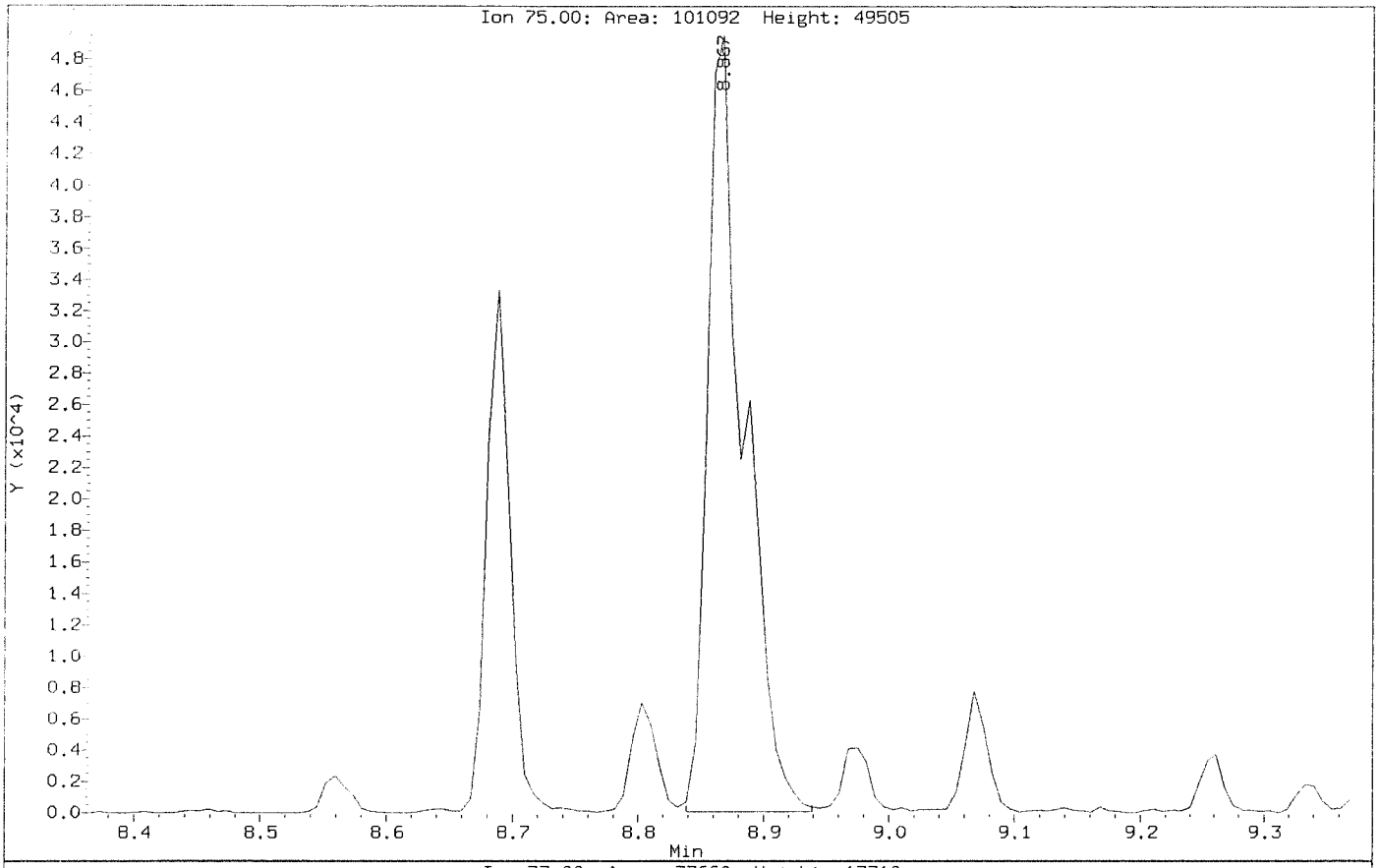
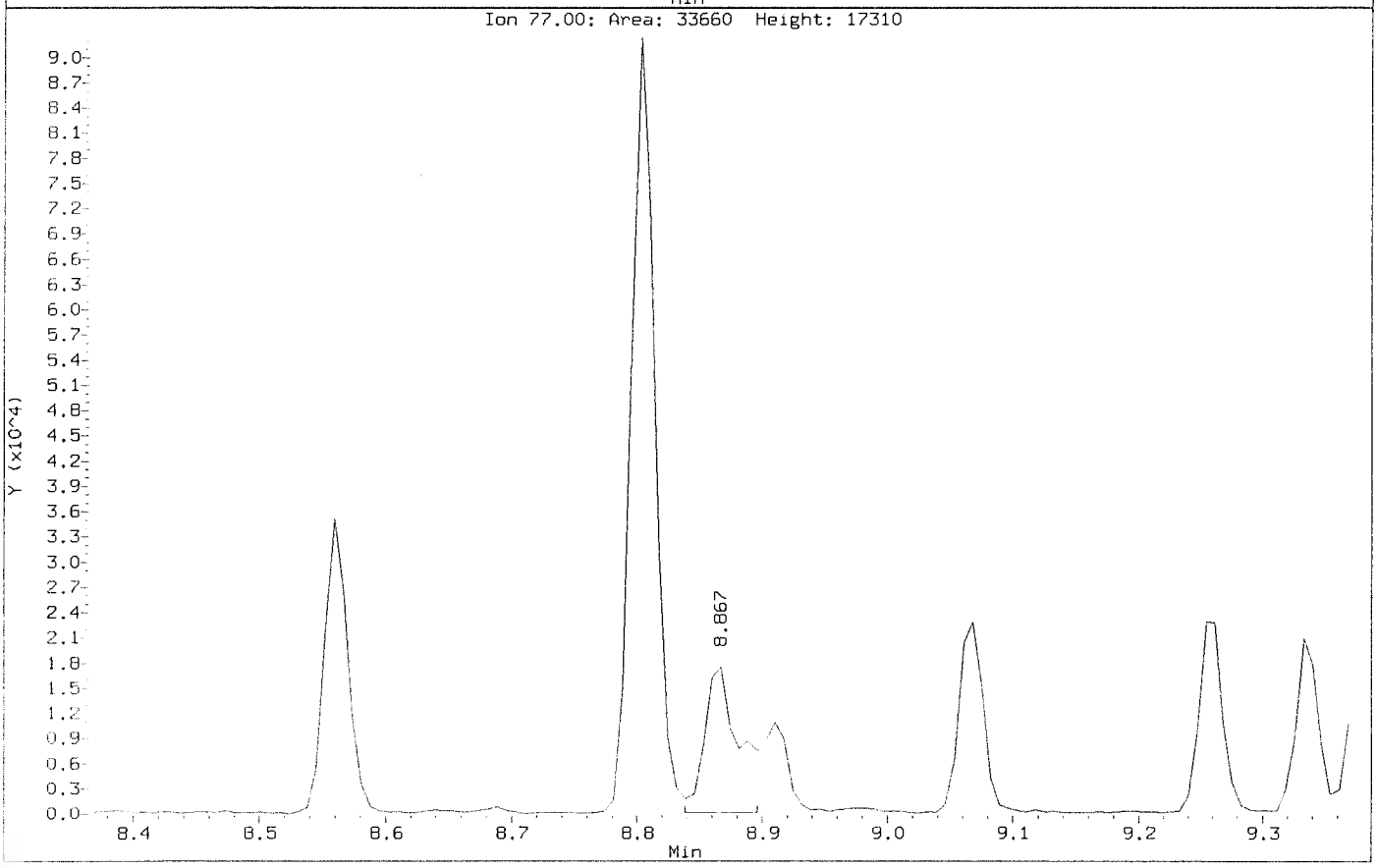
Injection Date: 26-MAY-2021 14:40
Instrument: voa6.i
Client Sample ID: VSTD020

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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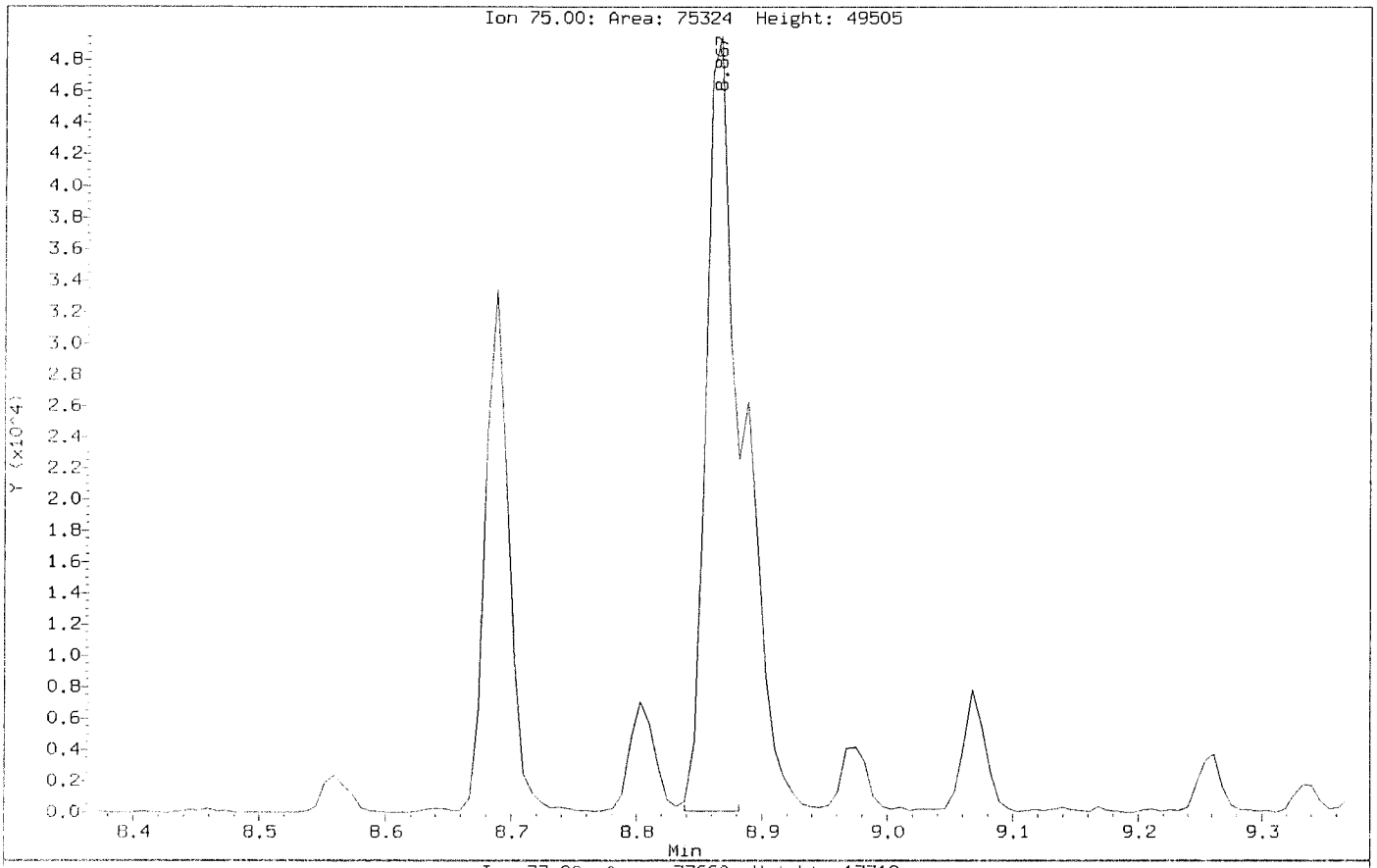
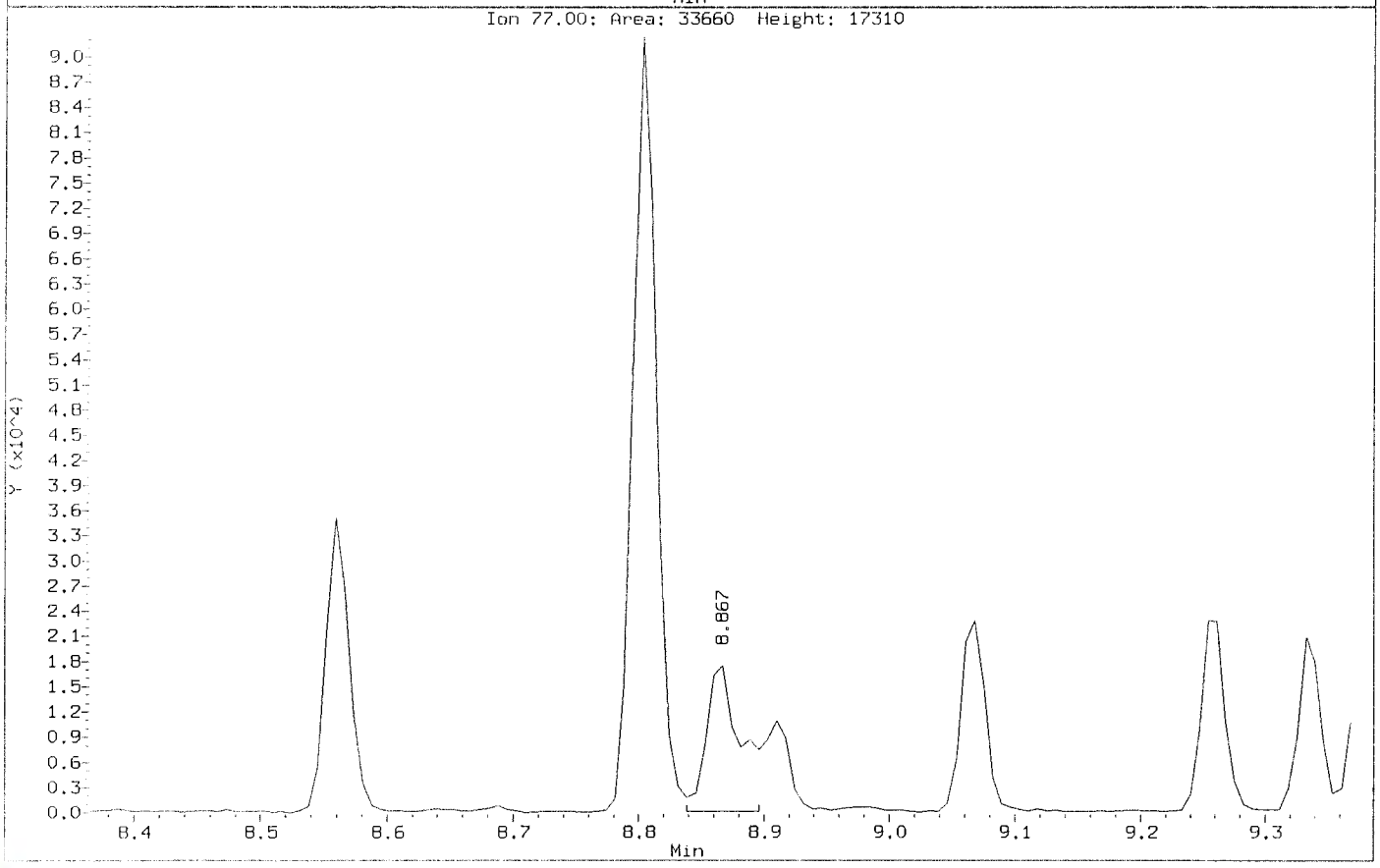
Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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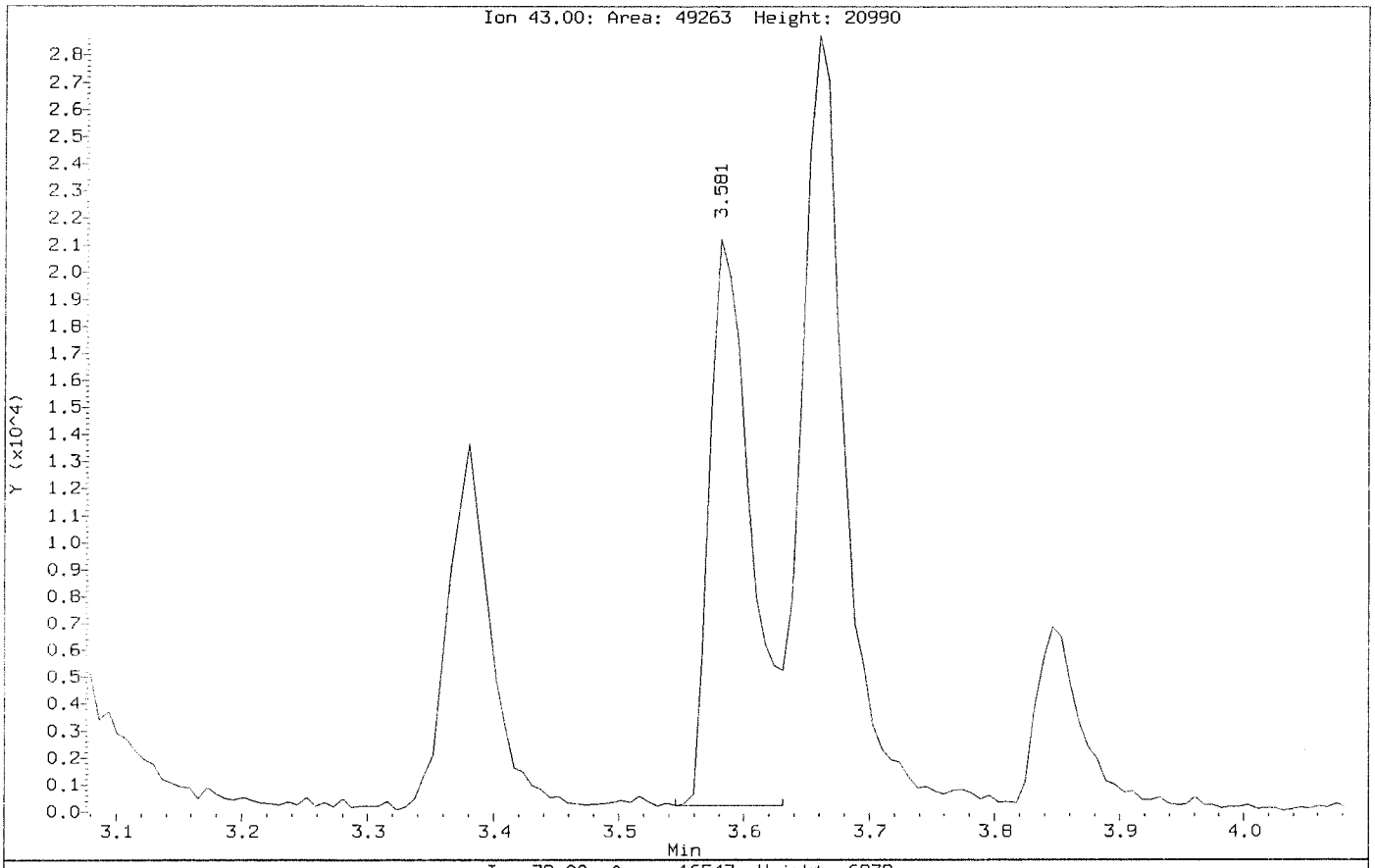
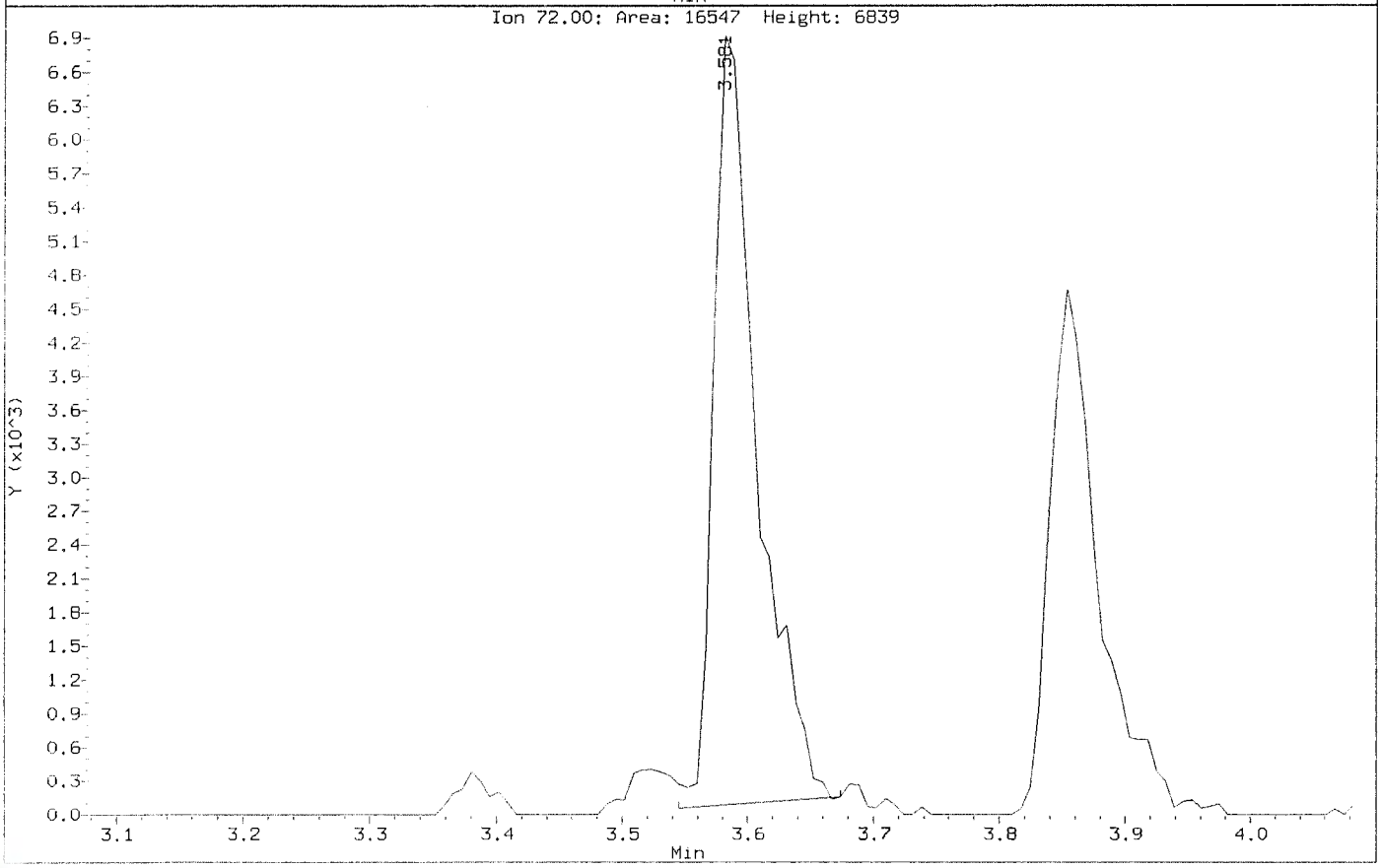
Instrument: voa6.i
Client Sample ID: VSTD020

Compound: 2-Butanone
CAS Number: 78-93-3





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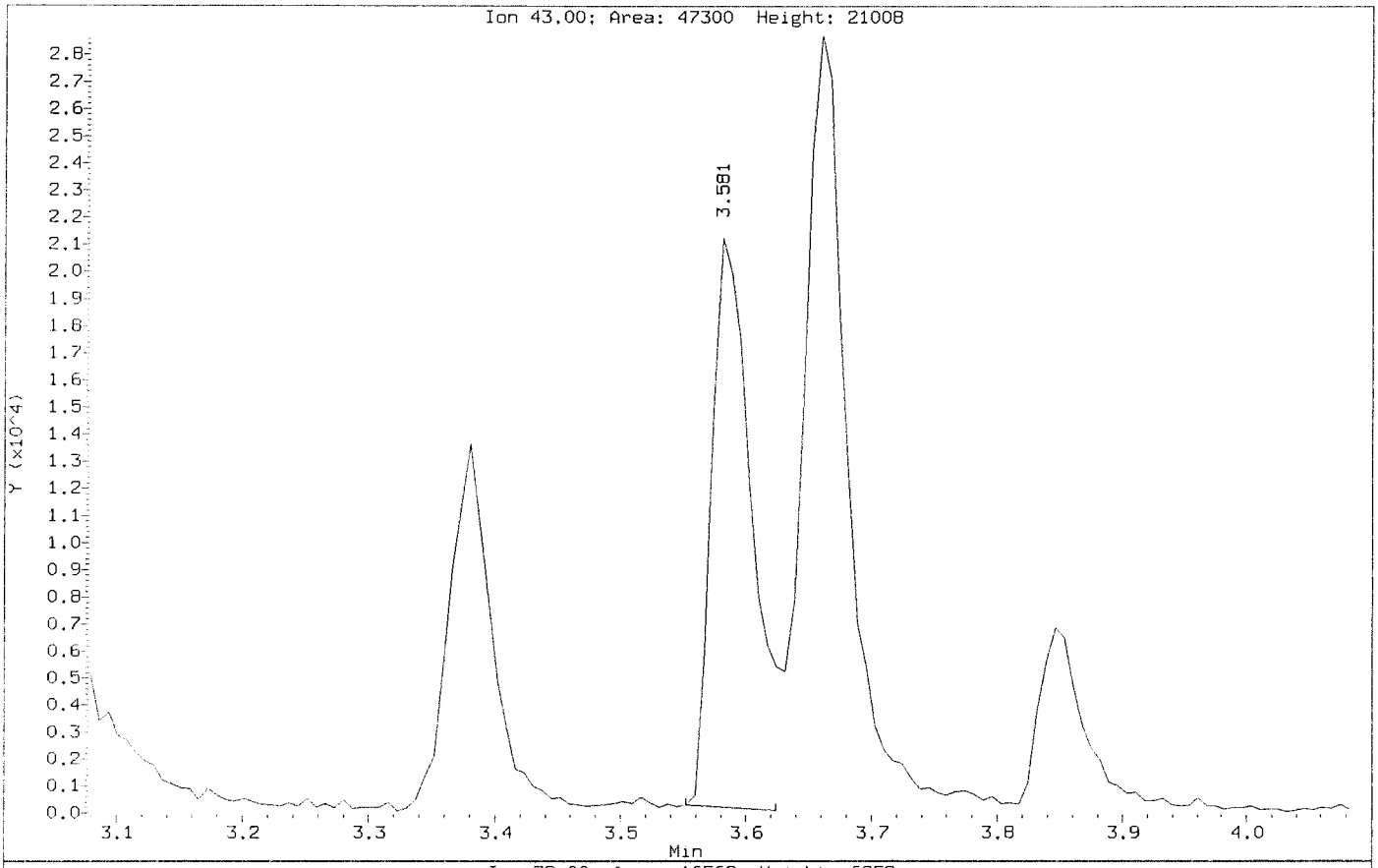
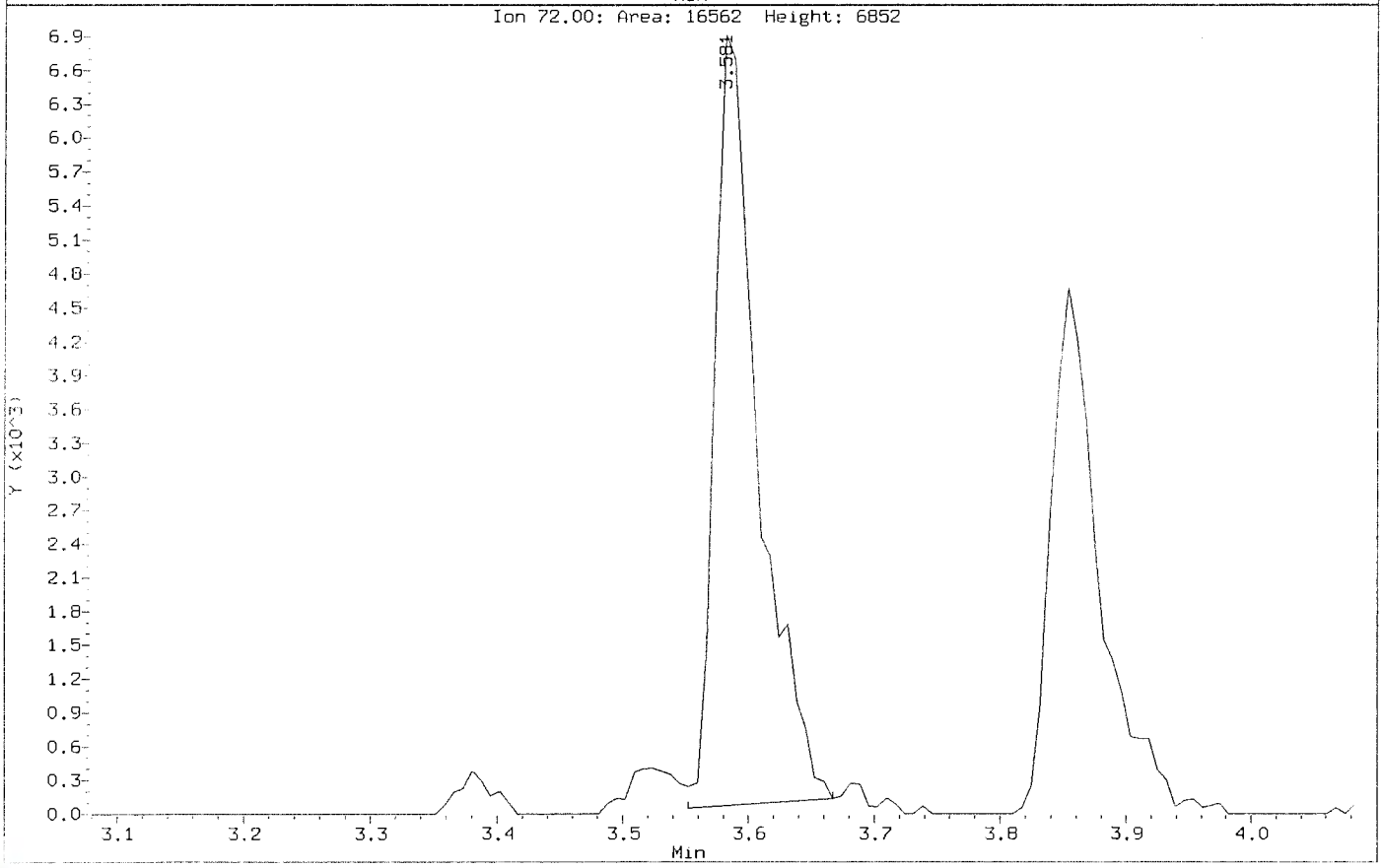
CAS Number: 78-93-3





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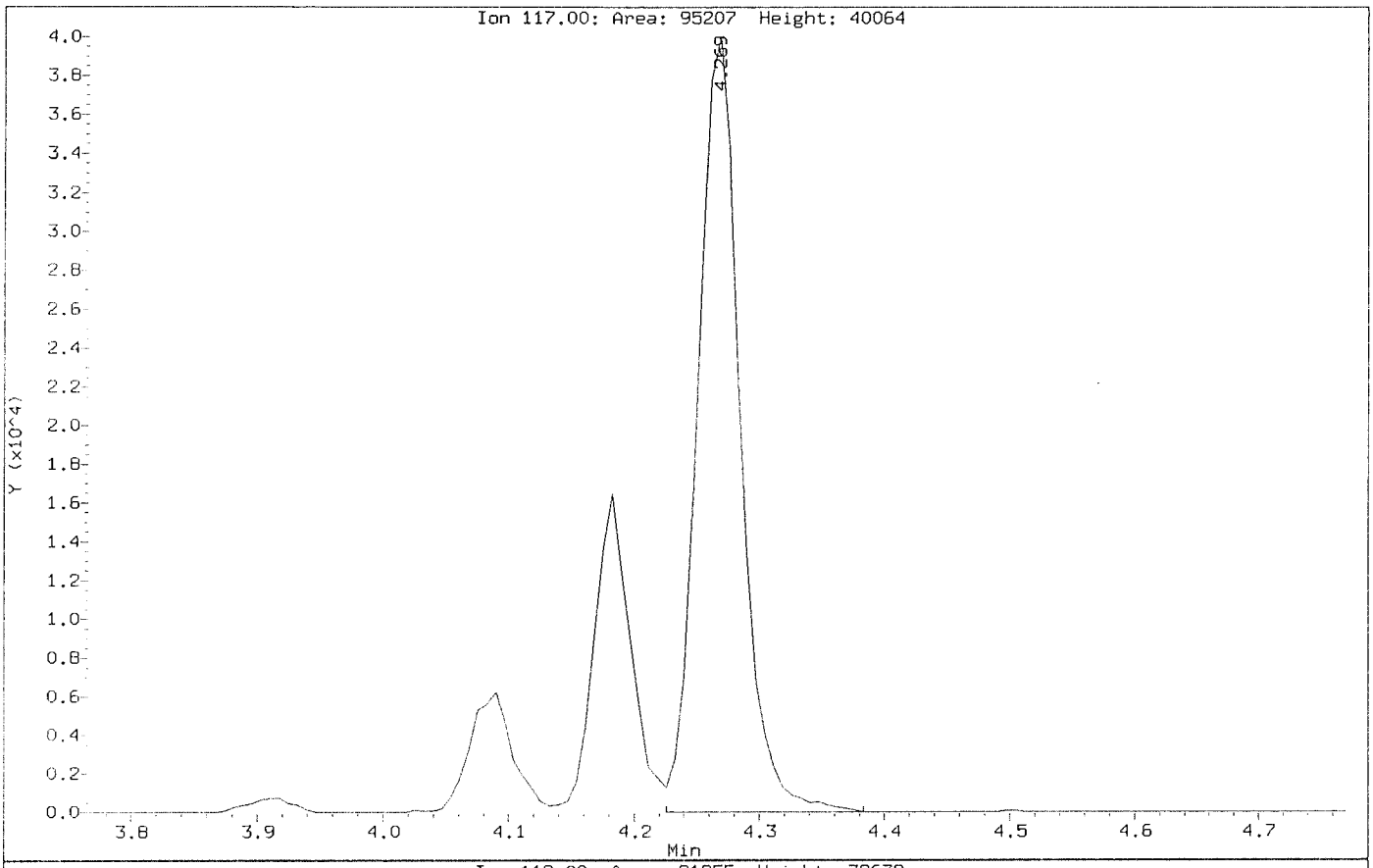
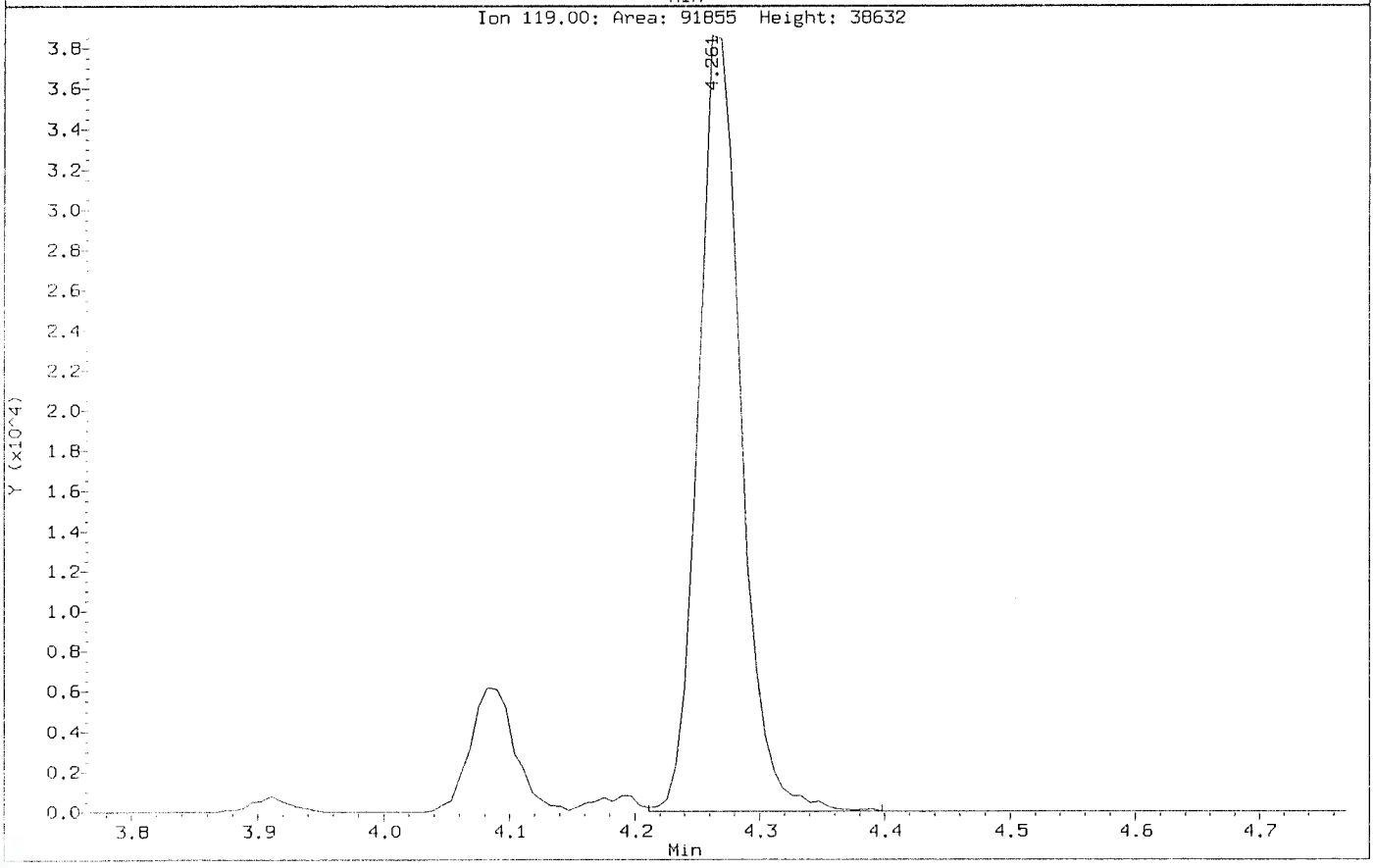
Client Sample ID: VSTD020

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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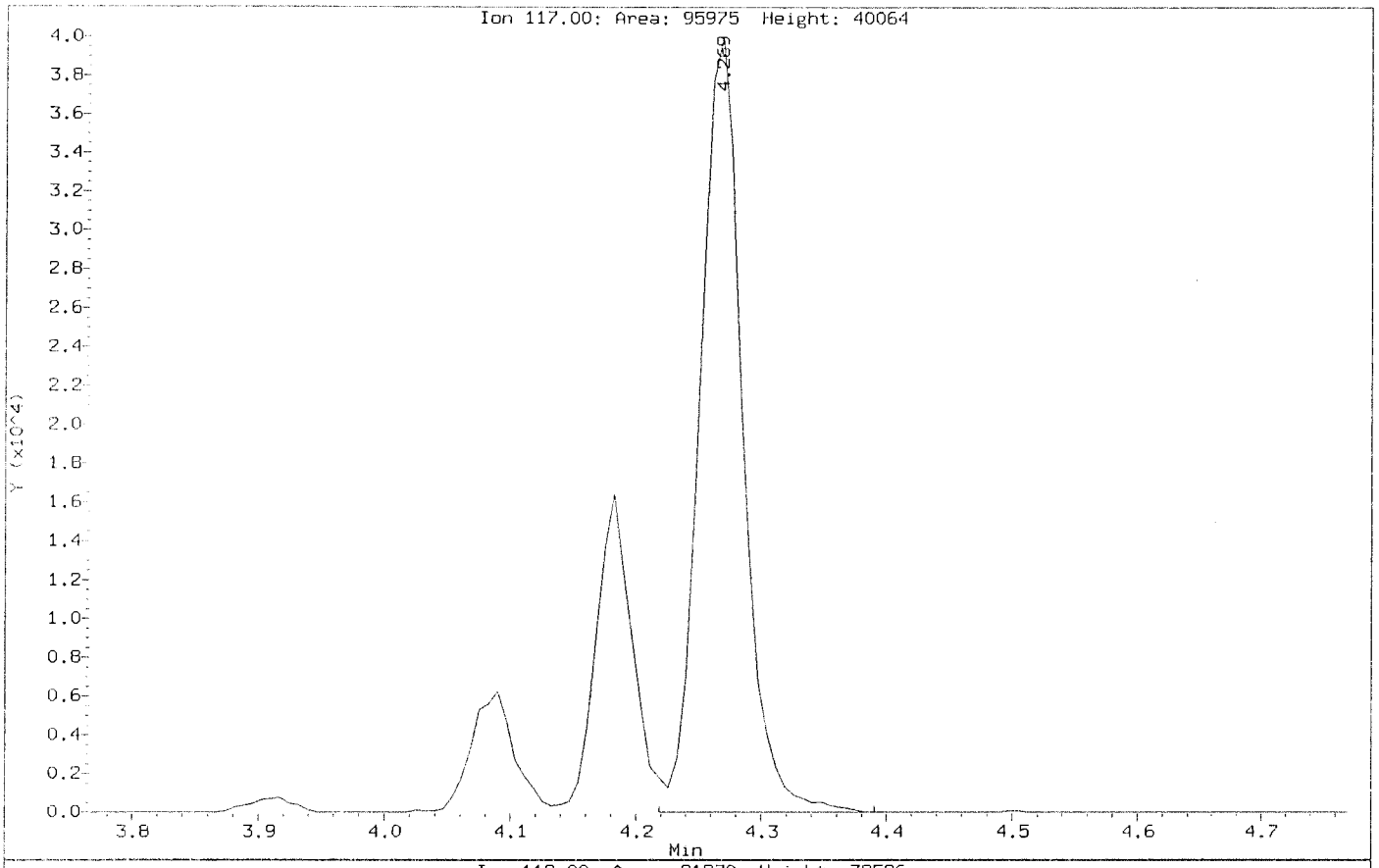
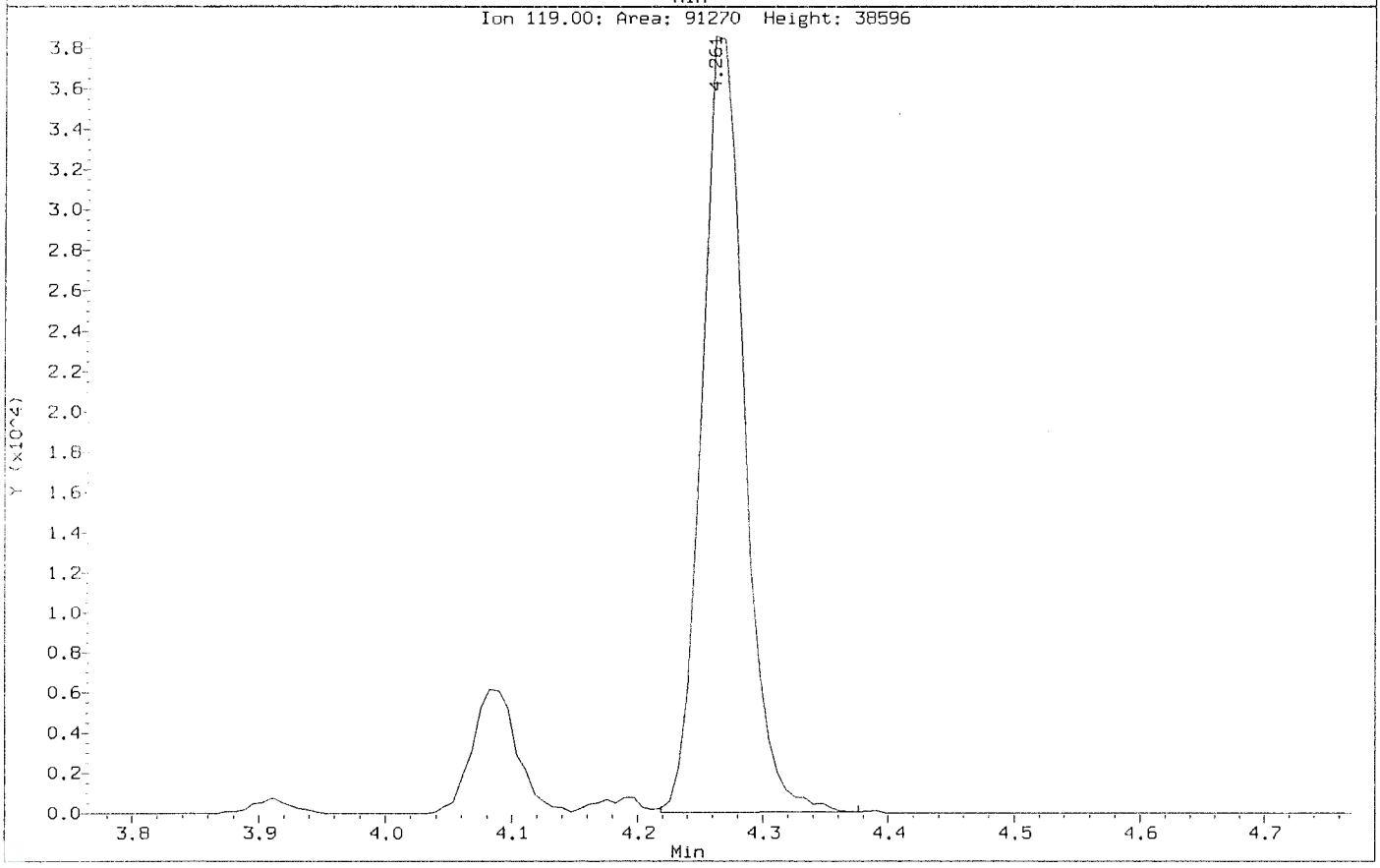
Instrument: voa6.i
Client Sample ID: VSTD020

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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Report Date: 30-Jun-2021 18:30

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052608.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 26-MAY-2021 15:01
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : HS18090001;WATER;0;1;
Comment :
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Meth Date : 30-Jun-2021 18:30 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 14:40 Cal File: X052607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

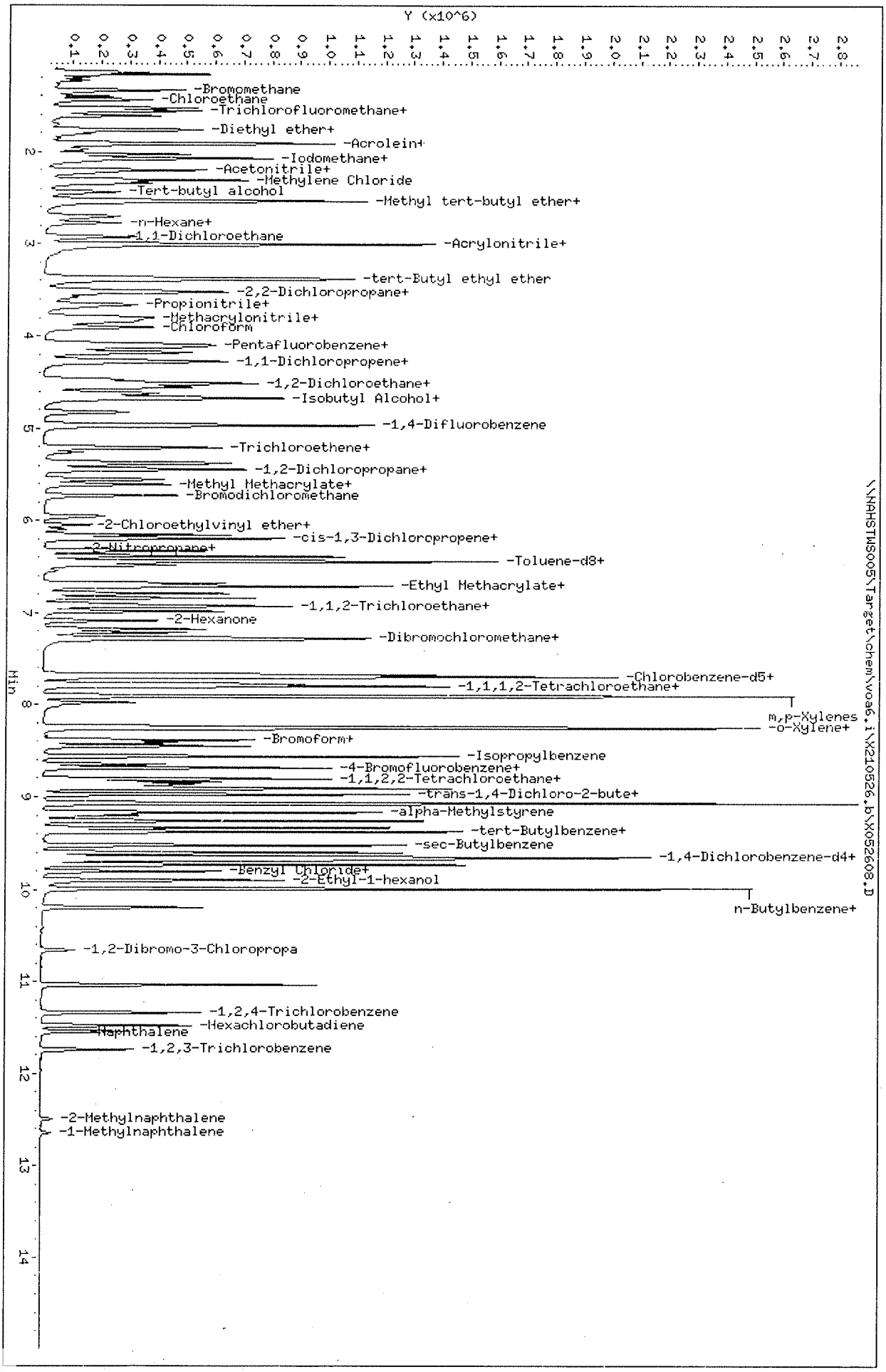
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	424959	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	666769	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	619576	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	345661	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	198305	50.0000	47.39
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	202707	50.0000	49.93
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	641202	50.0000	41.54
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	243279	50.0000	44.79
60 1,1,1,2-Tetrachloroethane	131	7.778	7.778	(1.014)	218401	50.0000	47.66
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	286118	50.0000	45.55
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	241138	50.0000	50.50
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	159364	50.0000	47.48
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	316911	50.0000	47.17
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	198252	50.0000	45.29
32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	227298	50.0000	44.50
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	97298	50.0000	46.49
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	200716	50.0000	46.57(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	163230	50.0000	47.76
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	692725	50.0000	43.93
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	26546	50.0000	48.42
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	218312	50.0000	47.85
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	432173	50.0000	46.09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	255497	50.0000	48.09
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	186813	50.0000	47.59
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	676389	50.0000	43.10
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	436776	50.0000	44.79
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	312775	50.0000	46.86
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	452783	50.0000	44.50
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	267855	50.0000	46.07
24	2-Butanone	43	3.581	3.581	(0.856)	132056	100.000	102.13(H)
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	563374	50.0000	43.54
52	2-Hexanone	43	7.090	7.090	(0.924)	217409	100.000	94.46
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	676517	50.0000	43.90
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	680168	50.0000	42.55
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	322230	100.000	90.31
10	Acetone	43	1.976	1.976	(0.473)	109289	100.000	100.72
37	Benzene	78	4.512	4.512	(0.909)	726648	50.0000	47.43
74	Bromobenzene	156	8.802	8.802	(0.911)	261051	50.0000	45.51
29	Bromochloromethane	128	3.795	3.795	(0.908)	125003	50.0000	48.64
39	Bromodichloromethane	83	5.722	5.722	(1.153)	272973	50.0000	47.62
66	Bromoform	173	8.408	8.408	(1.096)	170774	50.0000	49.42
6	Bromomethane	94	1.339	1.339	(0.320)	208957	50.0000	47.61
19	Carbon Disulfide	76	2.069	2.069	(0.495)	965194	100.000	92.98
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	244057	50.0000	44.15(H)
59	Chlorobenzene	112	7.692	7.692	(1.003)	575989	50.0000	44.65
7	Chloroethane	64	1.403	1.403	(0.336)	169882	50.0000	57.20
28	Chloroform	83	3.910	3.910	(0.935)	352687	50.0000	47.19
3	Chloromethane	50	1.073	1.073	(0.257)	214824	50.0000	56.27
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	219469	50.0000	49.27
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	335383	50.0000	49.65
55	Dibromochloromethane	129	7.176	7.176	(0.936)	248499	50.0000	48.73
44	Dibromomethane	93	5.550	5.550	(1.118)	141864	50.0000	48.09
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	189027	50.0000	48.41
61	Ethylbenzene	106	7.800	7.800	(1.017)	273828	50.0000	46.01
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	87915	50.0000	41.67
67	Isopropylbenzene	105	8.559	8.559	(1.116)	798894	50.0000	43.94
62	m,p-Xylenes	106	7.907	7.907	(1.031)	700454	100.000	90.30
17	Methylene Chloride	84	2.306	2.306	(0.551)	199728	50.0000	51.87
87	n-Butylbenzene	91	9.991	9.991	(1.034)	575579	50.0000	42.80
73	n-Propylbenzene	91	8.910	8.910	(0.922)	916886	50.0000	42.52
92	Naphthalene	128	11.539	11.539	(1.194)	235637	50.0000	47.70
63	o-Xylene	106	8.244	8.244	(1.075)	344243	50.0000	45.51
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	736380	50.0000	40.57
64	Styrene	104	8.258	8.258	(1.077)	606041	50.0000	47.94
78	tert-Butylbenzene	119	9.340	9.340	(0.967)	553101	50.0000	41.11
56	Tetrachloroethene	164	6.926	6.926	(0.903)	165887	50.0000	43.49
50	Toluene	91	6.446	6.446	(0.840)	806999	50.0000	44.61
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	188221	50.0000	47.43
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	287700	50.0000	49.37
38	Trichloroethene	130	5.207	5.207	(1.049)	221368	50.0000	48.37
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	347393	50.0000	45.28
5	Vinyl Chloride	62	1.138	1.138	(0.272)	233856	50.0000	46.48

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

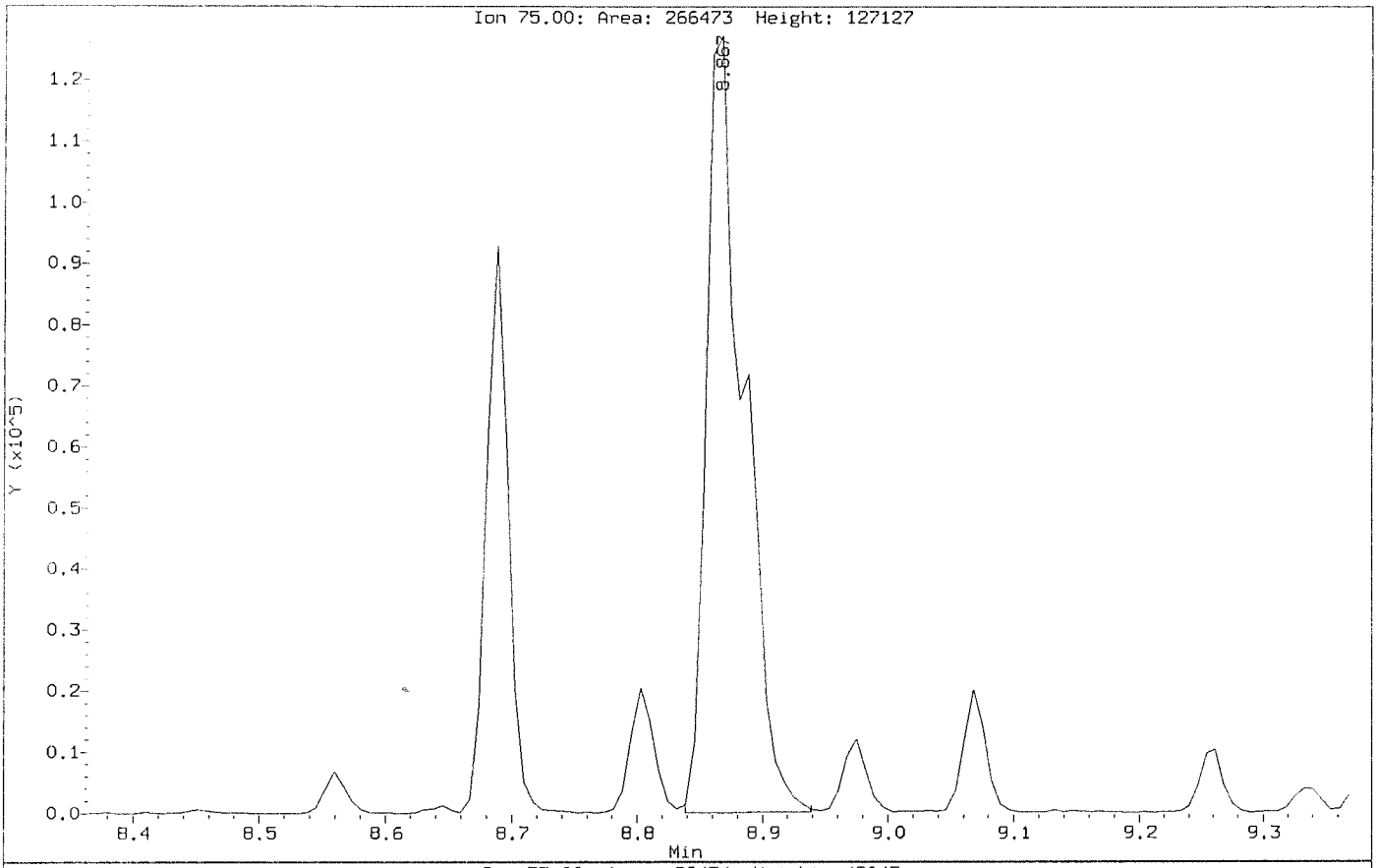


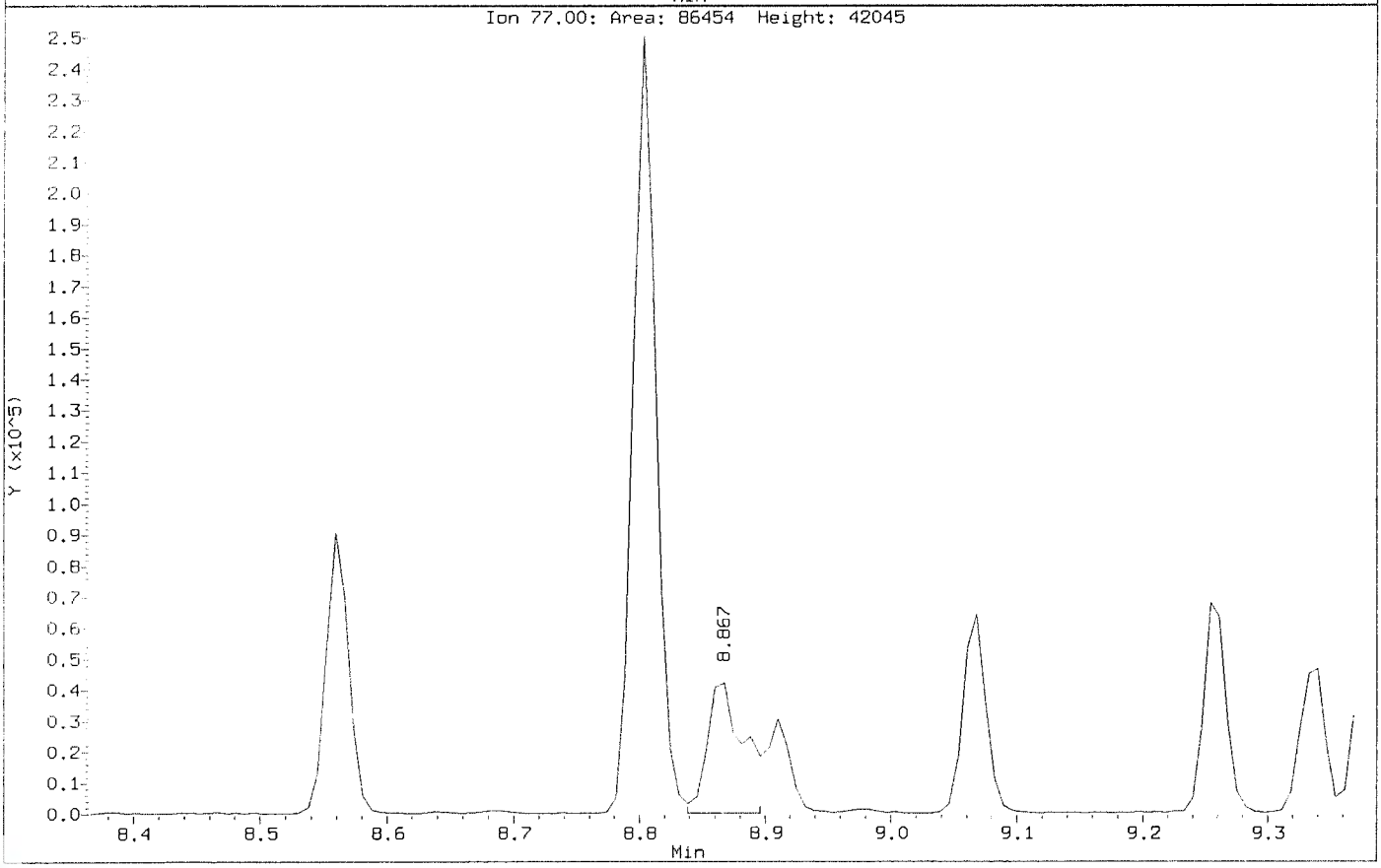
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052608.D
Date : 26-MAY-2021 15:01
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before2\X052608.D
Injection Date: 26-MAY-2021 15:01
Instrument: voa6.i
Client Sample ID: VSTD050

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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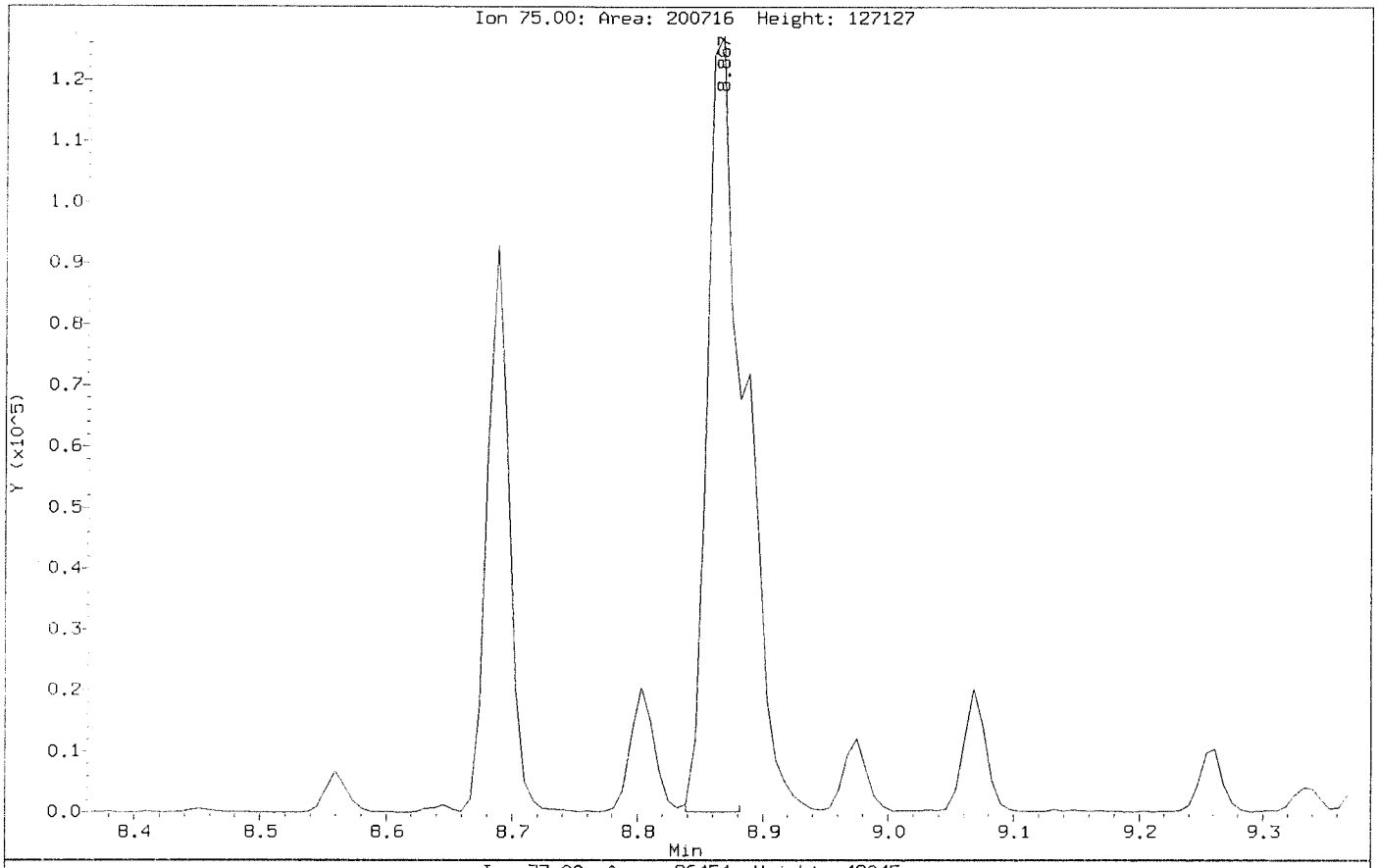
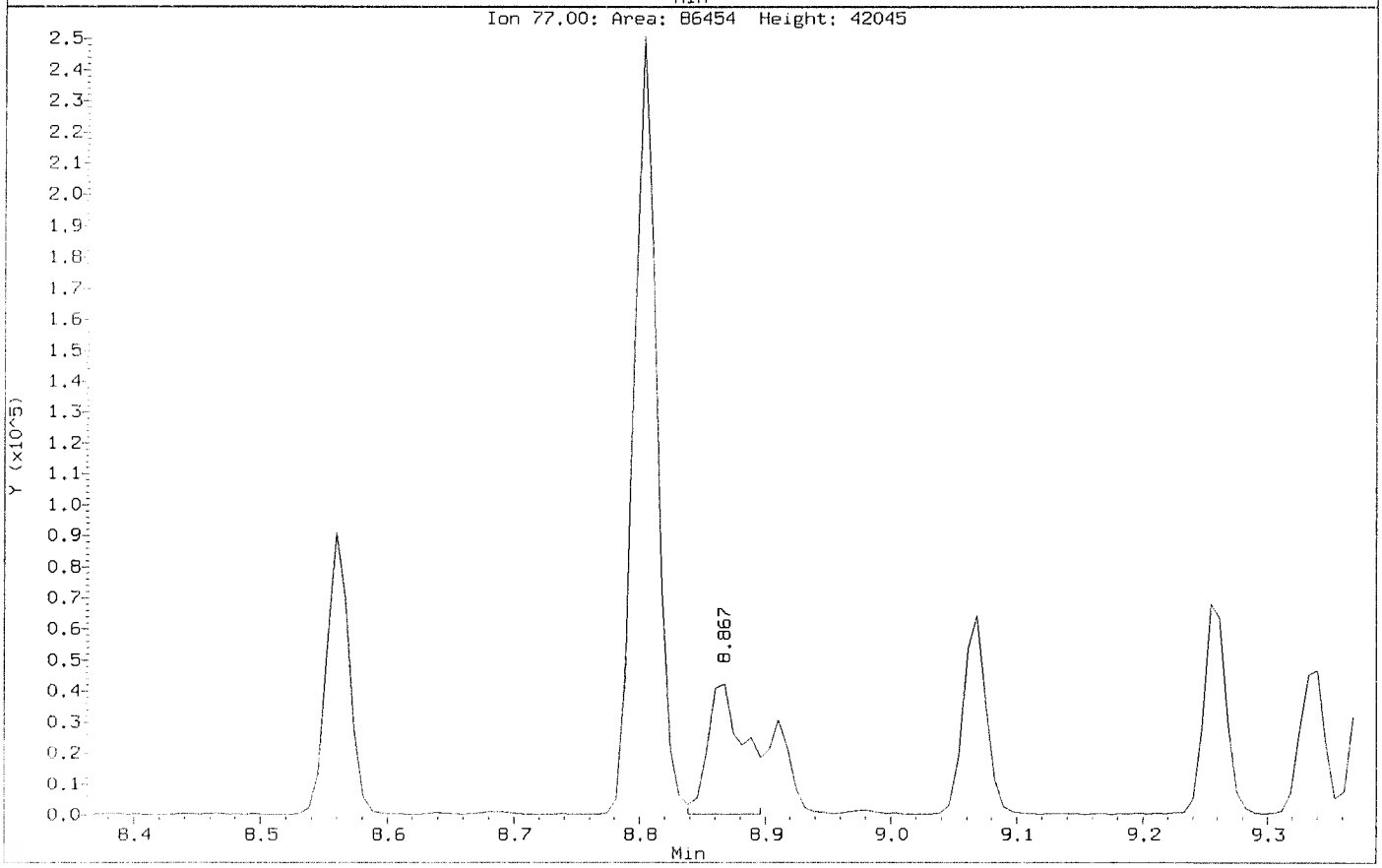
Instrument: voa6.i
Client Sample ID: VSTD050

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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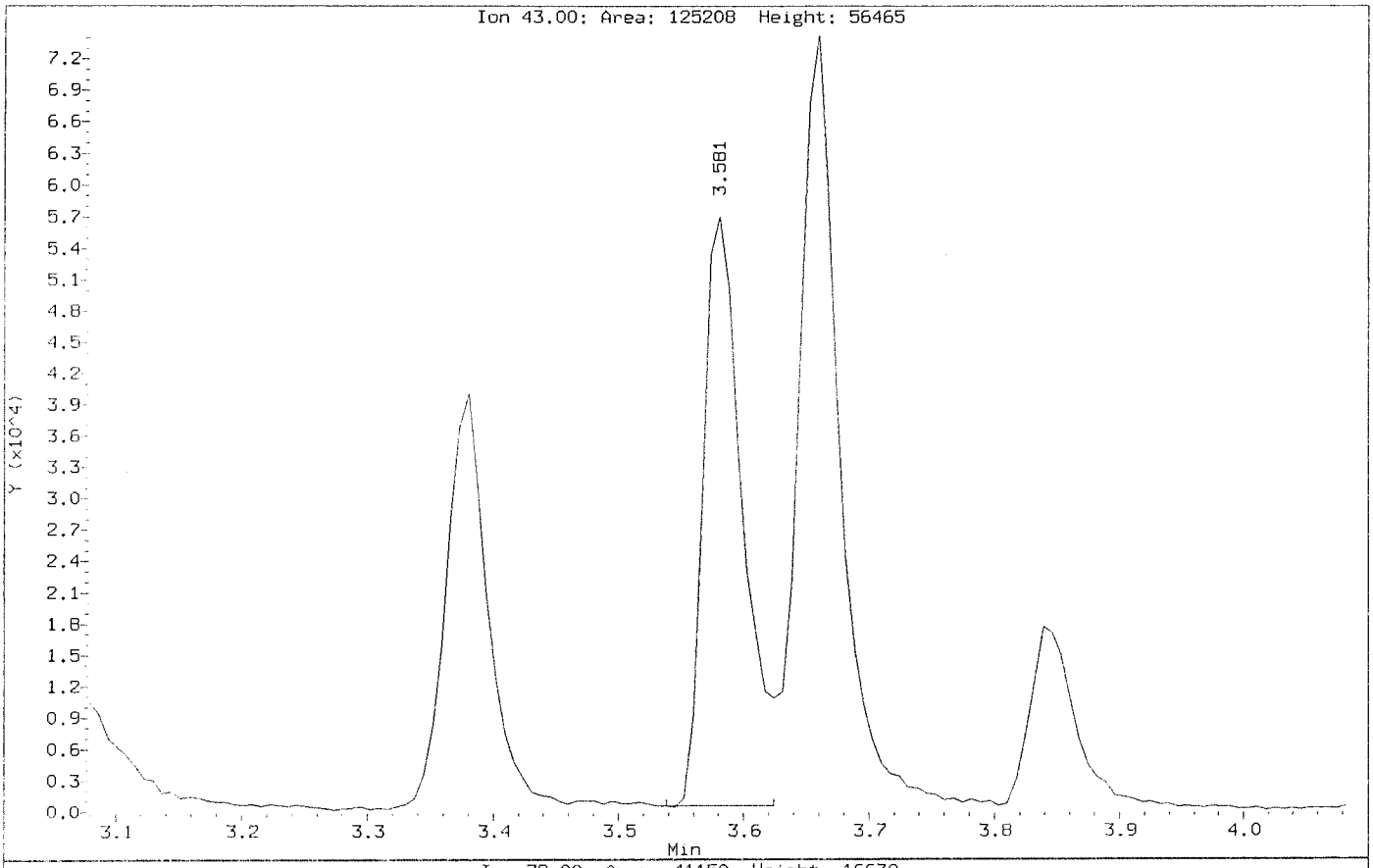
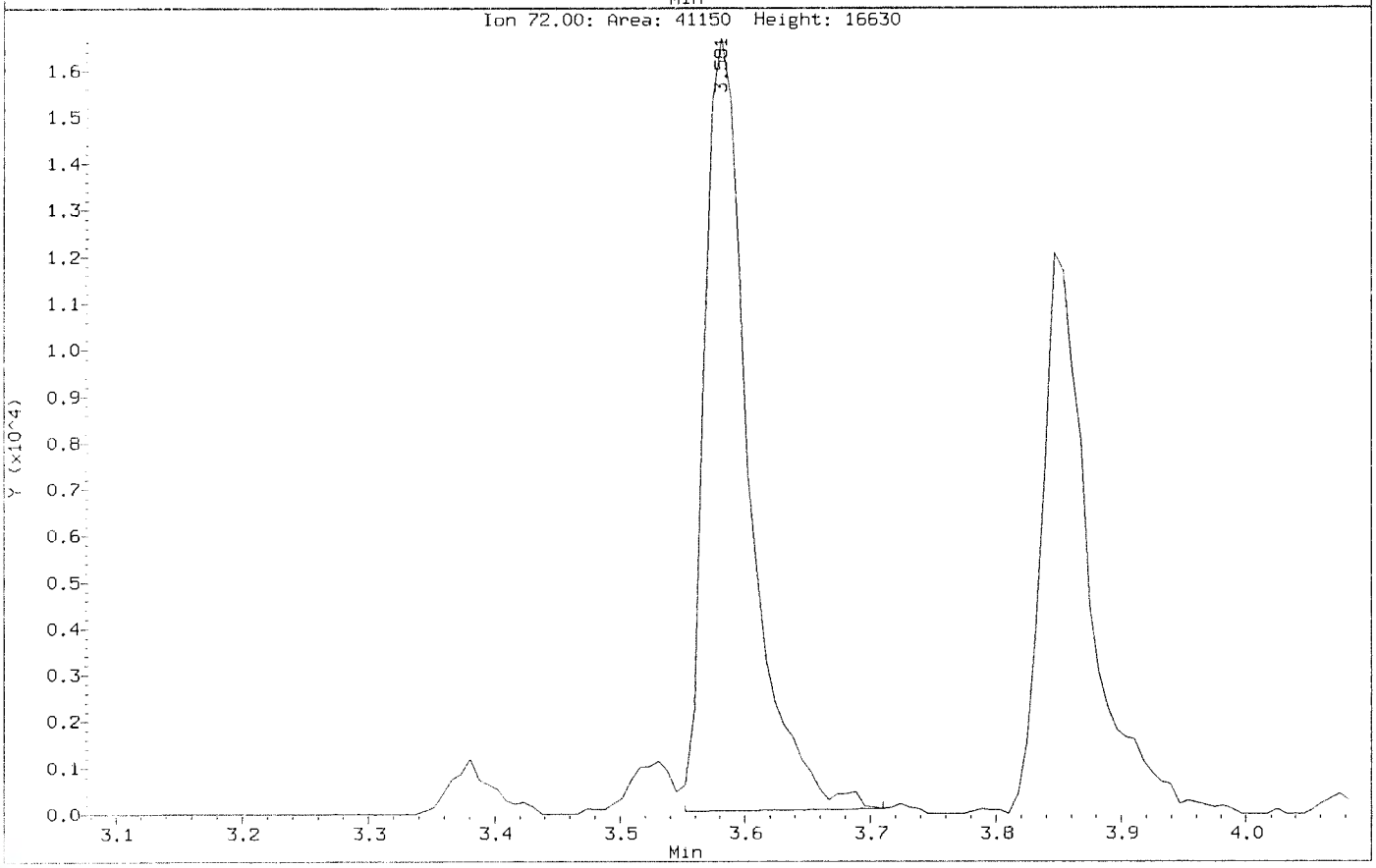
Injection Date: 26-MAY-2021 15:01
Instrument: voa6.i
Client Sample ID: VSTD050

Compound: 2-Butanone
CAS Number: 78-93-3





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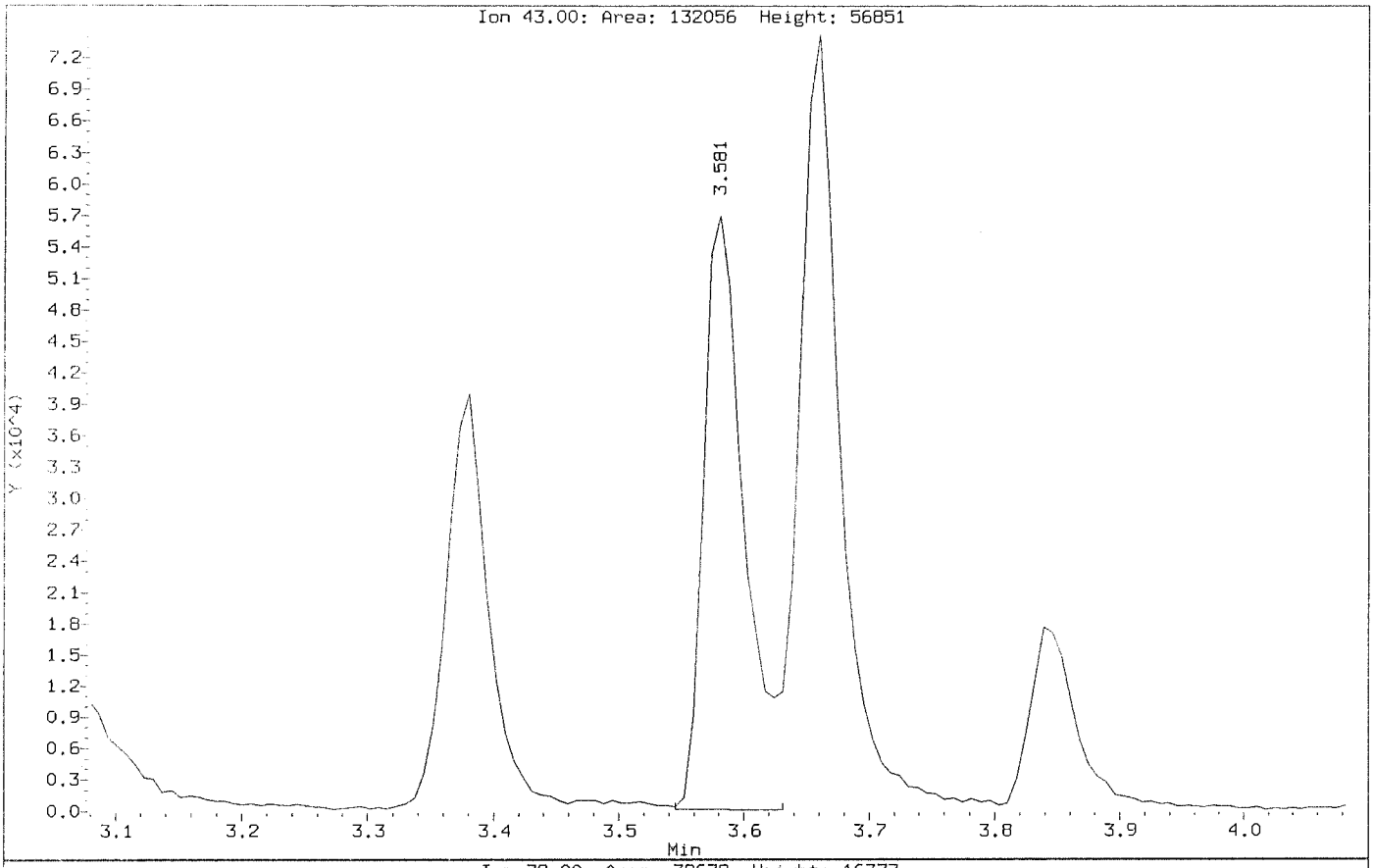
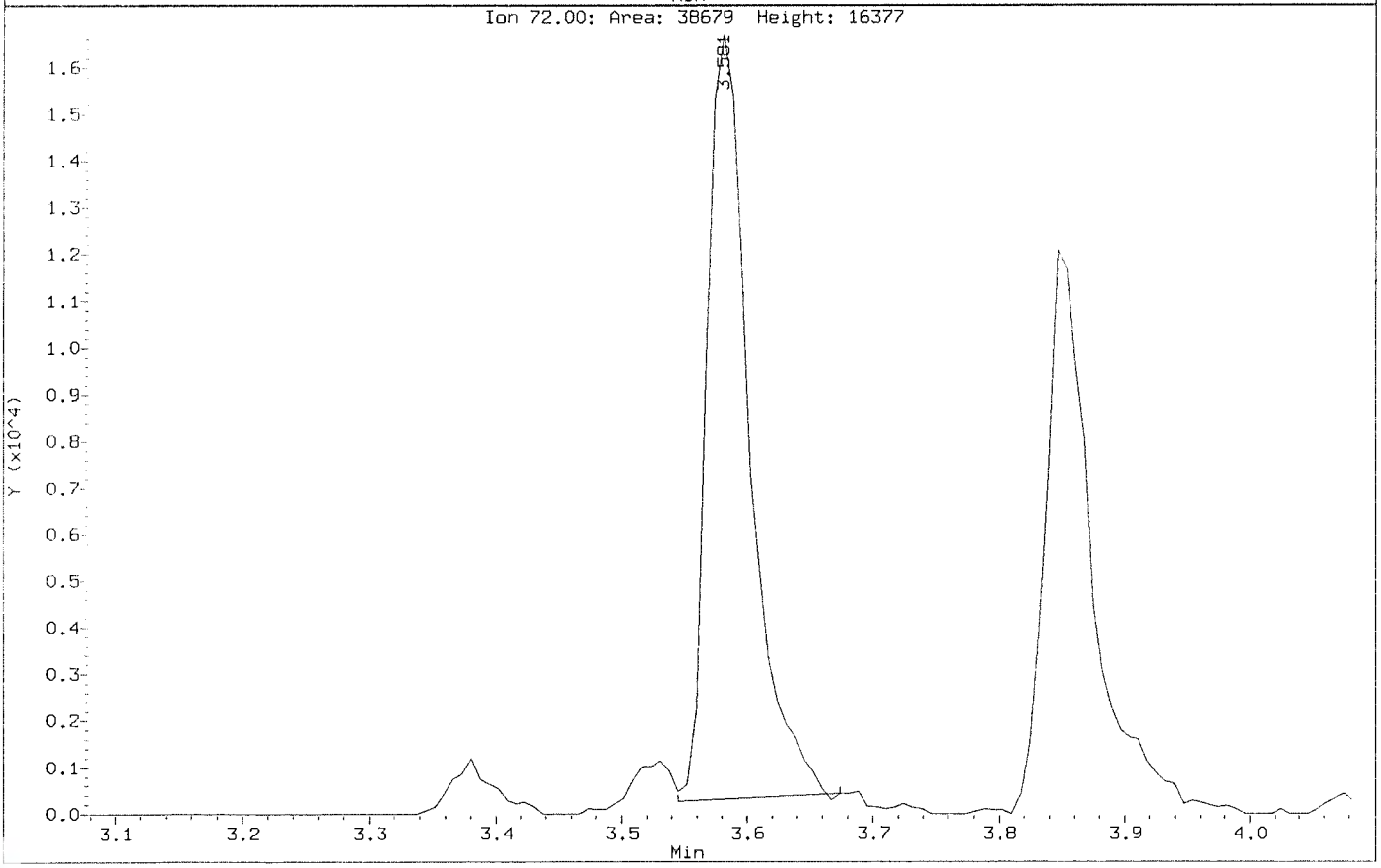
Instrument: voa6.i
Client Sample ID: VSTD050

Compound: 2-Butanone
CAS Number: 78-93-3





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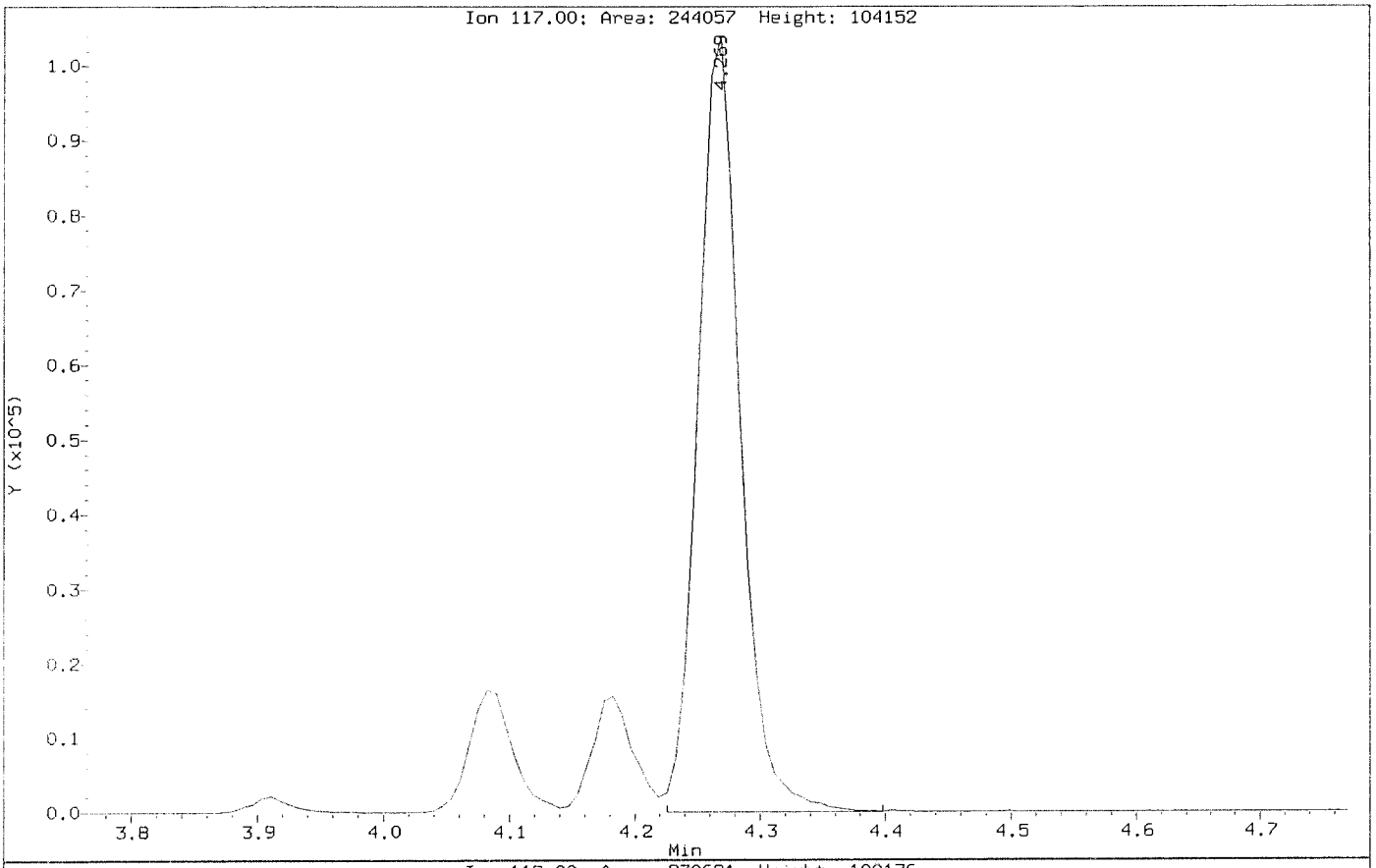
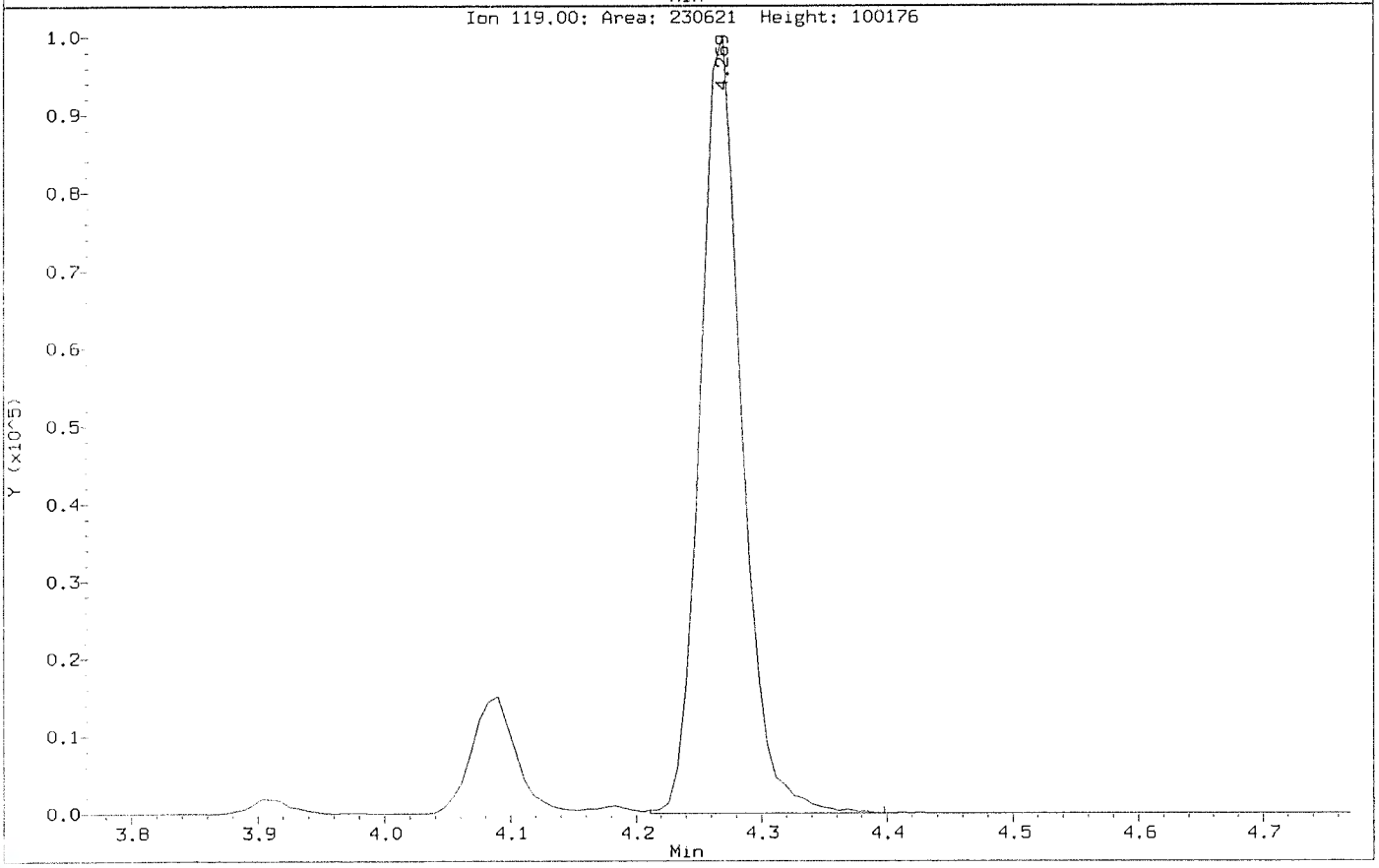
Injection Date: 26-MAY-2021 15:01
Instrument: voa6.i
Client Sample ID: VSTD050

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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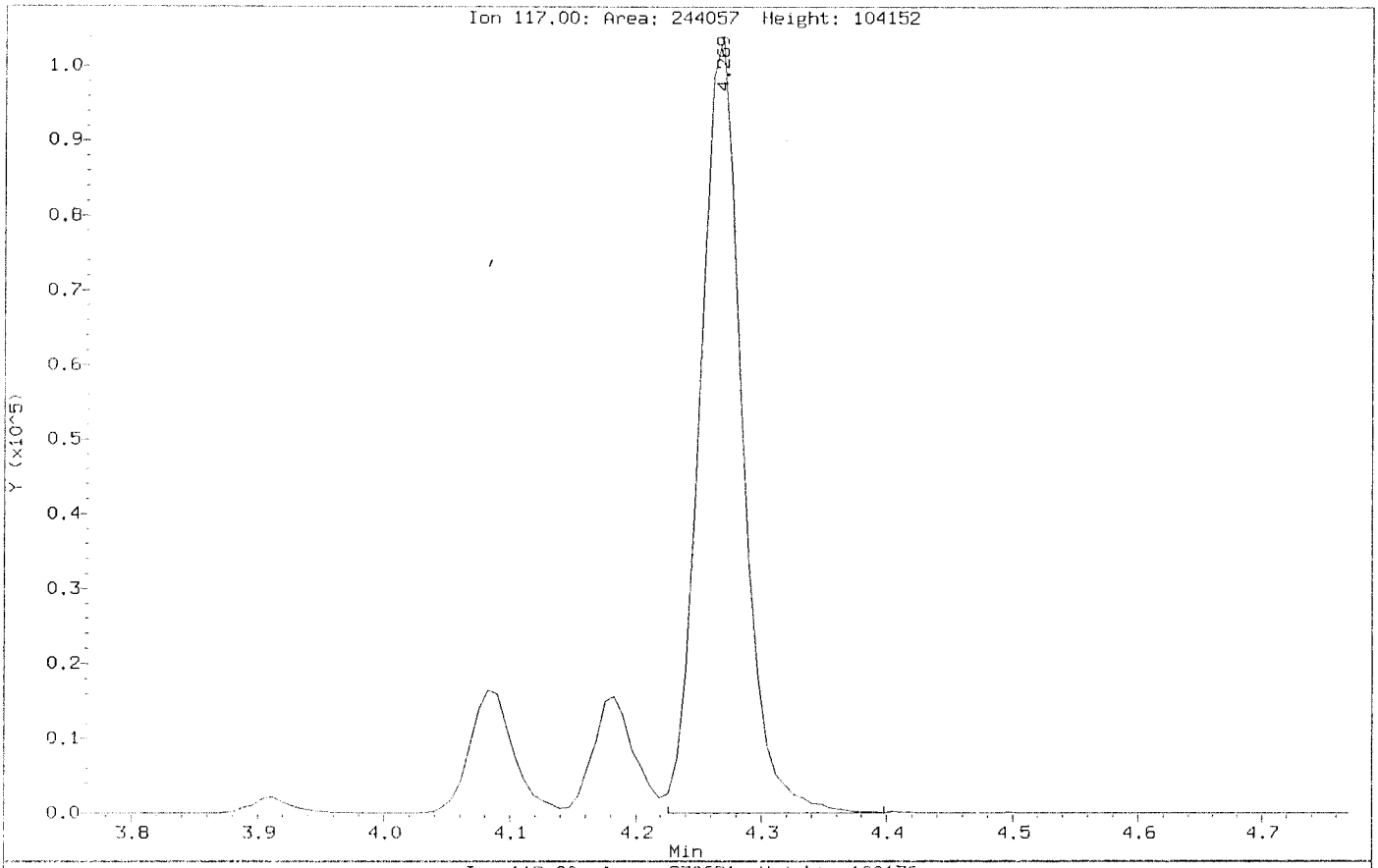
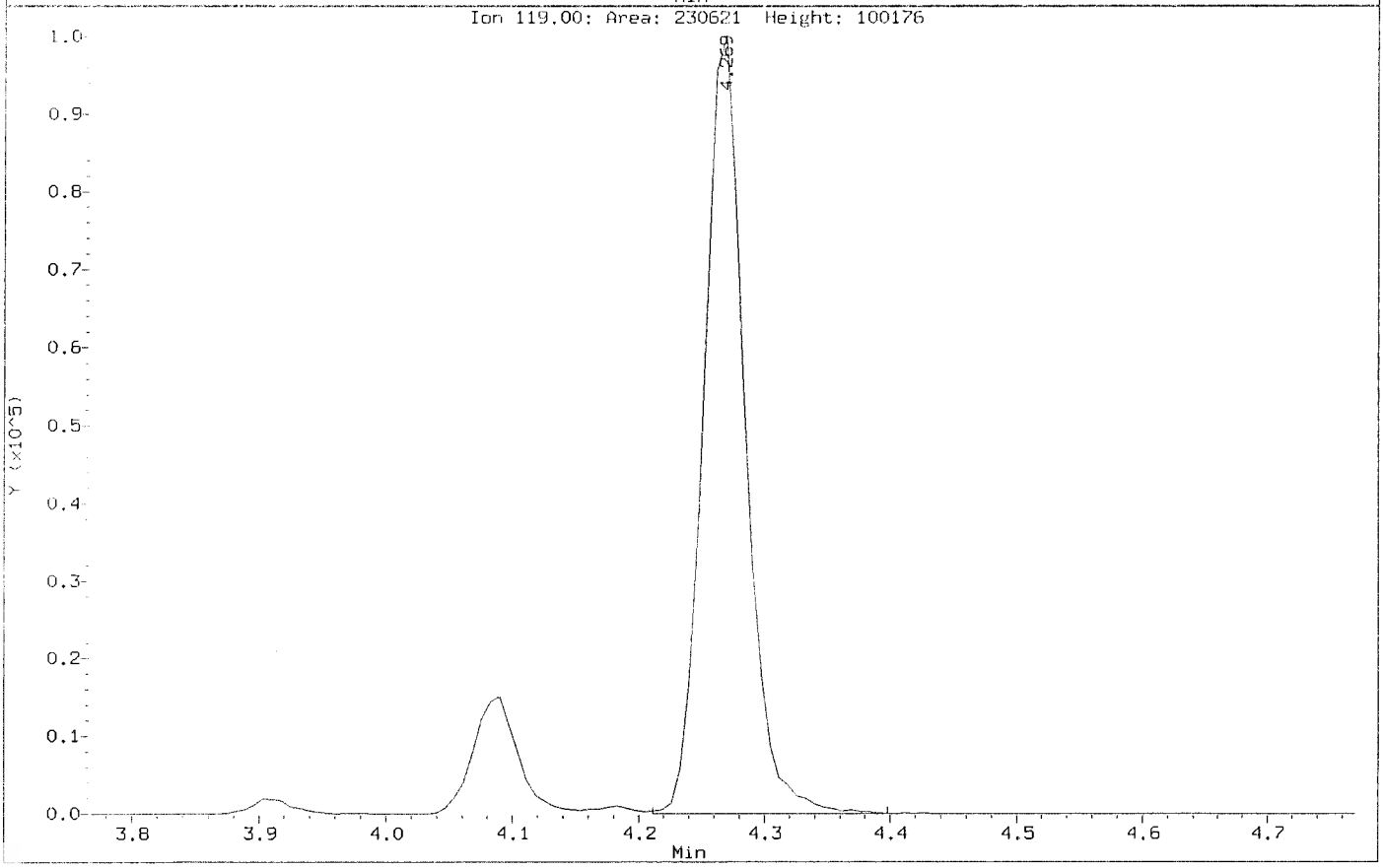
Injection Date: 26-MAY-2021 15:01
Instrument: voa6.i
Client Sample ID: VSTD050

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052609.D Page 1
Report Date: 30-Jun-2021 18:30

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 26-MAY-2021 15:22
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 30-Jun-2021 18:30 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

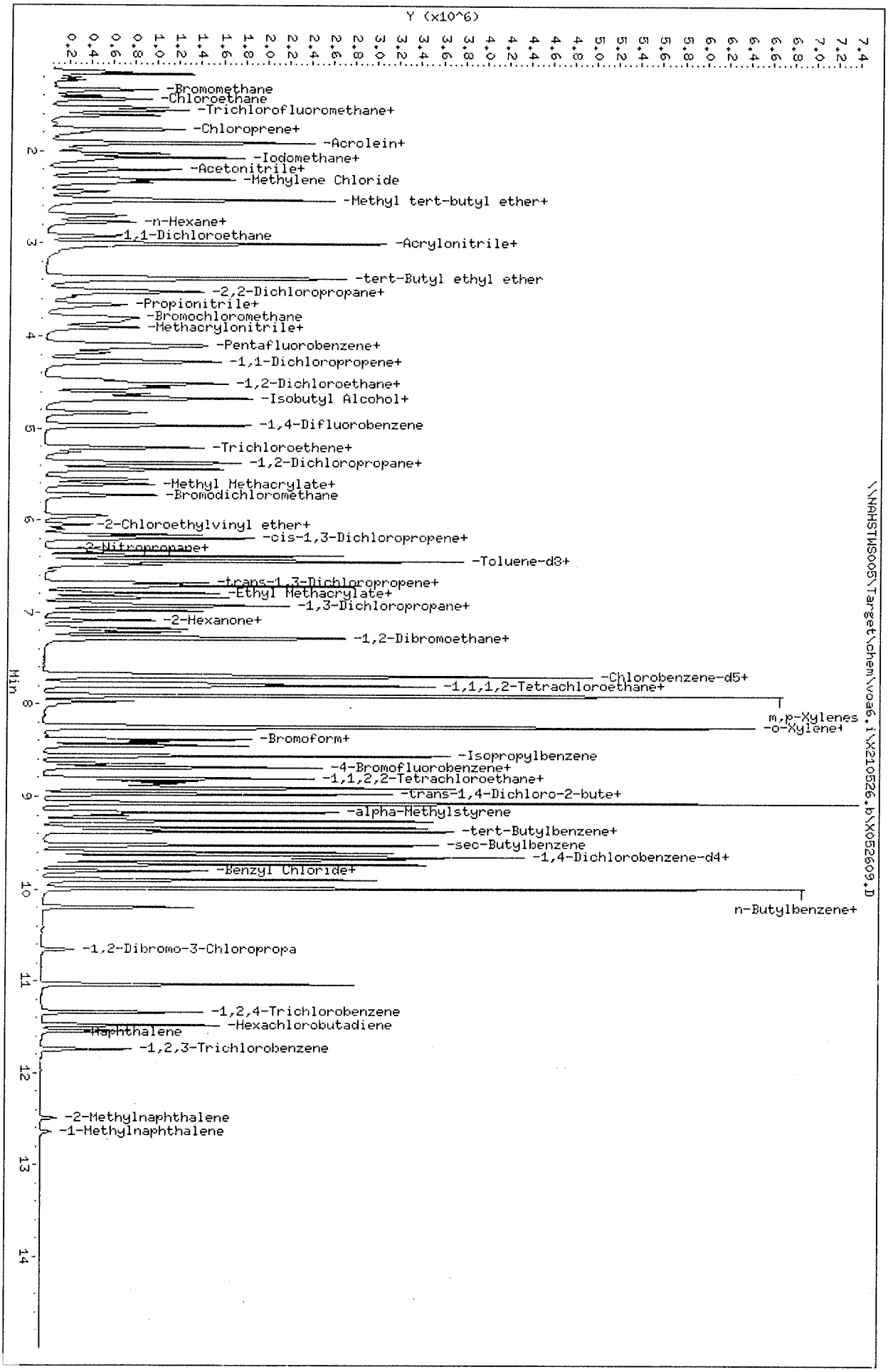
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	465829	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	710792	50.0000	
*	47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	666442	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	392601	50.0000	
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	469782	100.000	102.62
$	35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	450261	100.000	101.89
$	48 Toluene-d8	98	6.388	6.388	(0.833)	1608002	100.000	96.86
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	606080	100.000	102.75
	60 1,1,1,2-Tetrachloroethane	131	7.778	7.778	(1.014)	499295	100.000	101.30
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	661548	100.000	96.09
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	539471	100.000	100.64
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	346404	100.000	95.95
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	677723	100.000	92.02
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	458831	100.000	95.62
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	536358	100.000	98.52
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	234050	100.000	98.47
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	455527	100.000	93.06(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	411722	100.000	106.07
	79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	1745248	100.000	97.46
	89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	62281	100.000	99.48
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	478499	100.000	97.52
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	1073113	100.000	100.77

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	546071	100.000	96.42
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	402126	100.000	96.11
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	1755512	100.000	98.50
83	1,3-Dichlorobenzene	146	9.604	9.604	(0.994)	1072305	100.000	96.83
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	683449	100.000	95.20
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	1102148	100.000	95.37
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	601433	100.000	94.37
24	2-Butanone	43	3.580	3.580	(0.856)	285717	200.000	201.59(AH)
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	1366733	100.000	93.00
52	2-Hexanone	43	7.090	7.090	(0.924)	514396	200.000	207.78(A)
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	1673614	100.000	95.63
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	1855232	100.000	102.19
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	743310	200.000	193.68
10	Acetone	43	1.976	1.976	(0.473)	231561	200.000	200.25(A)
37	Benzene	78	4.512	4.512	(0.909)	1561197	100.000	95.60
74	Bromobenzene	156	8.802	8.802	(0.911)	631992	100.000	97.02
29	Bromochloromethane	128	3.795	3.795	(0.908)	264940	100.000	94.06
39	Bromodichloromethane	83	5.729	5.729	(1.154)	580394	100.000	94.98
66	Bromoform	173	8.408	8.408	(1.096)	405148	100.000	109.02
6	Bromomethane	94	1.338	1.338	(0.320)	464431	100.000	96.38
19	Carbon Disulfide	76	2.069	2.069	(0.495)	2136484	200.000	187.75
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	602380	100.000	102.23(H)
59	Chlorobenzene	112	7.692	7.692	(1.003)	1335922	100.000	96.29
7	Chloroethane	64	1.403	1.403	(0.336)	322237	100.000	100.02
28	Chloroform	83	3.910	3.910	(0.935)	762402	100.000	93.06
3	Chloromethane	50	1.073	1.073	(0.257)	427715	100.000	104.44
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	473541	100.000	96.98
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	723500	100.000	100.47
55	Dibromochloromethane	129	7.176	7.176	(0.936)	559785	100.000	102.05
44	Dibromomethane	93	5.550	5.550	(1.118)	307713	100.000	97.86
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	442975	100.000	103.74
61	Ethylbenzene	106	7.799	7.799	(1.017)	658754	100.000	102.92
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	268099	100.000	104.15
67	Isopropylbenzene	105	8.559	8.559	(1.116)	2067374	100.000	105.71
62	m,p-Xylenes	106	7.907	7.907	(1.031)	1732036	200.000	207.58(A)
17	Methylene Chloride	84	2.305	2.305	(0.551)	421178	100.000	101.02
87	n-Butylbenzene	91	9.991	9.991	(1.034)	1668557	100.000	109.24
73	n-Propylbenzene	91	8.910	8.910	(0.922)	2376997	100.000	97.06
92	Naphthalene	128	11.538	11.538	(1.194)	552247	100.000	98.43
63	o-Xylene	106	8.243	8.243	(1.075)	828253	100.000	101.80
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	2073082	100.000	100.55
64	Styrene	104	8.258	8.258	(1.077)	1469045	100.000	108.05
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	1530236	100.000	100.15
56	Tetrachloroethene	164	6.925	6.925	(0.903)	441656	100.000	107.65
50	Toluene	91	6.446	6.446	(0.840)	1856343	100.000	95.41
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	413319	100.000	95.02
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	636938	100.000	102.54
38	Trichloroethene	130	5.206	5.206	(1.049)	490520	100.000	100.54
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	841243	100.000	100.04
5	Vinyl Chloride	62	1.138	1.138	(0.272)	519936	100.000	94.29

QC Flag Legend

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



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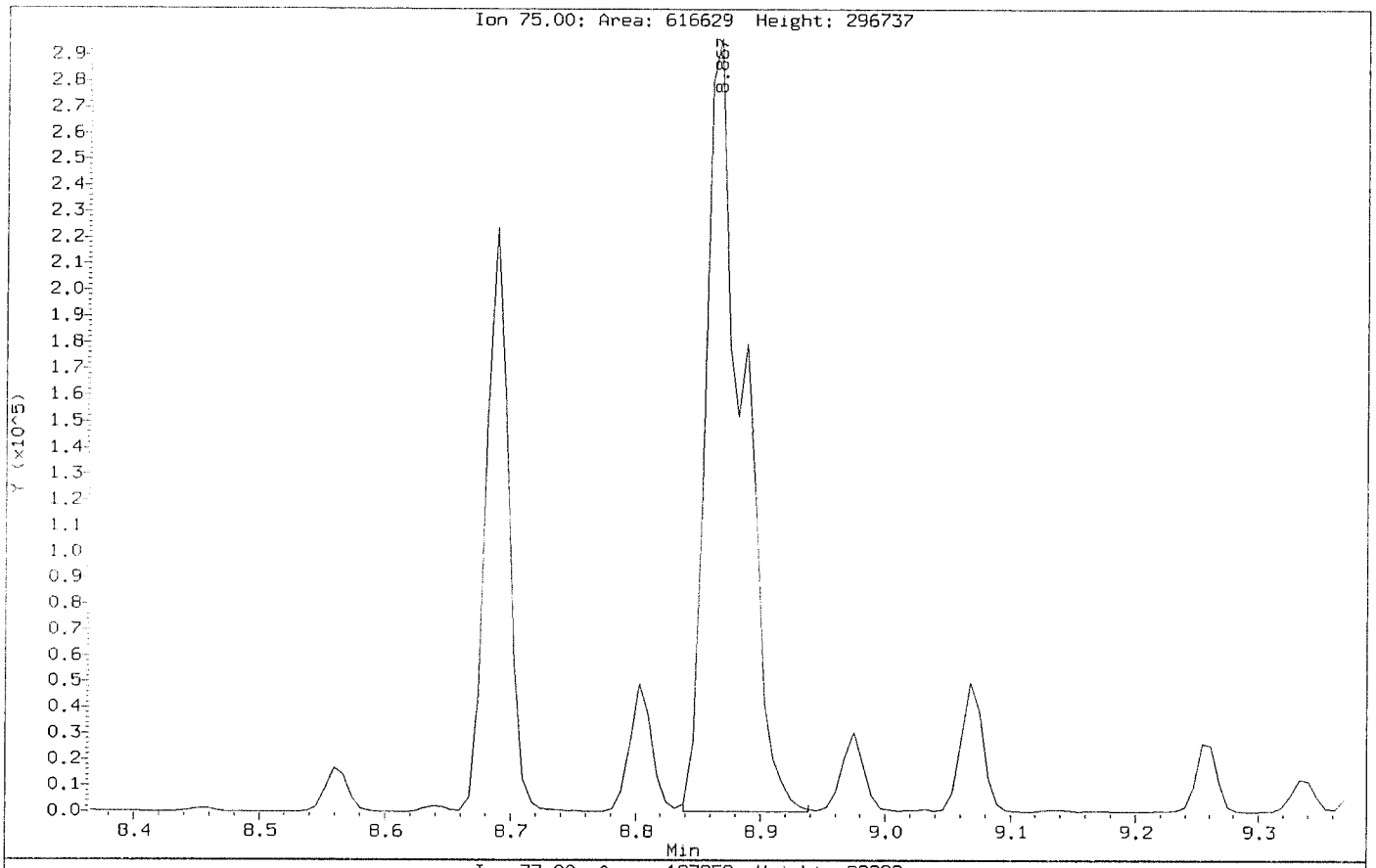
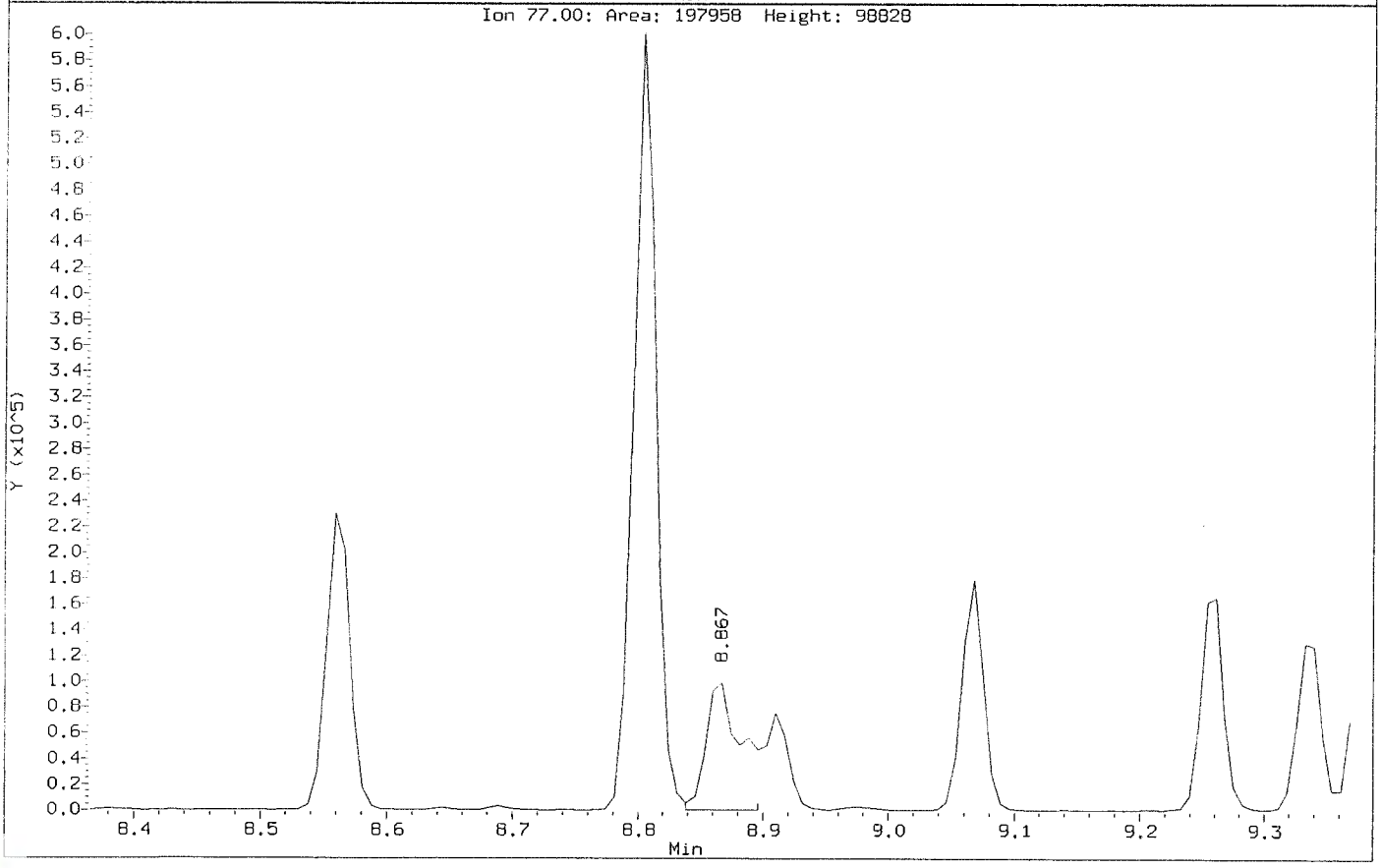
Date : 26-MAY-2021 15:22
Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before2\X052609.D
Injection Date: 26-MAY-2021 15:22
Instrument: voa6.i
Client Sample ID: VSTD100

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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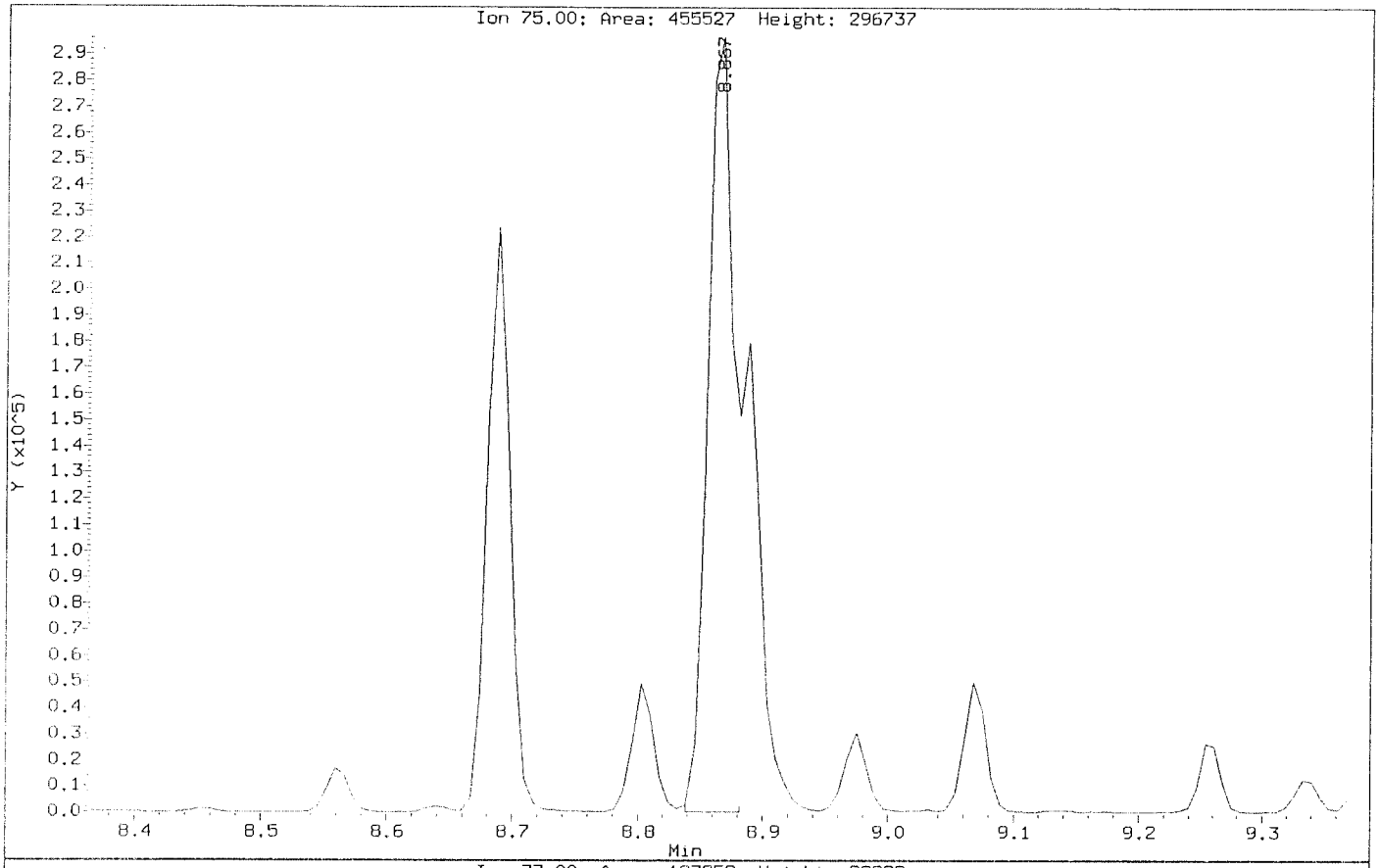
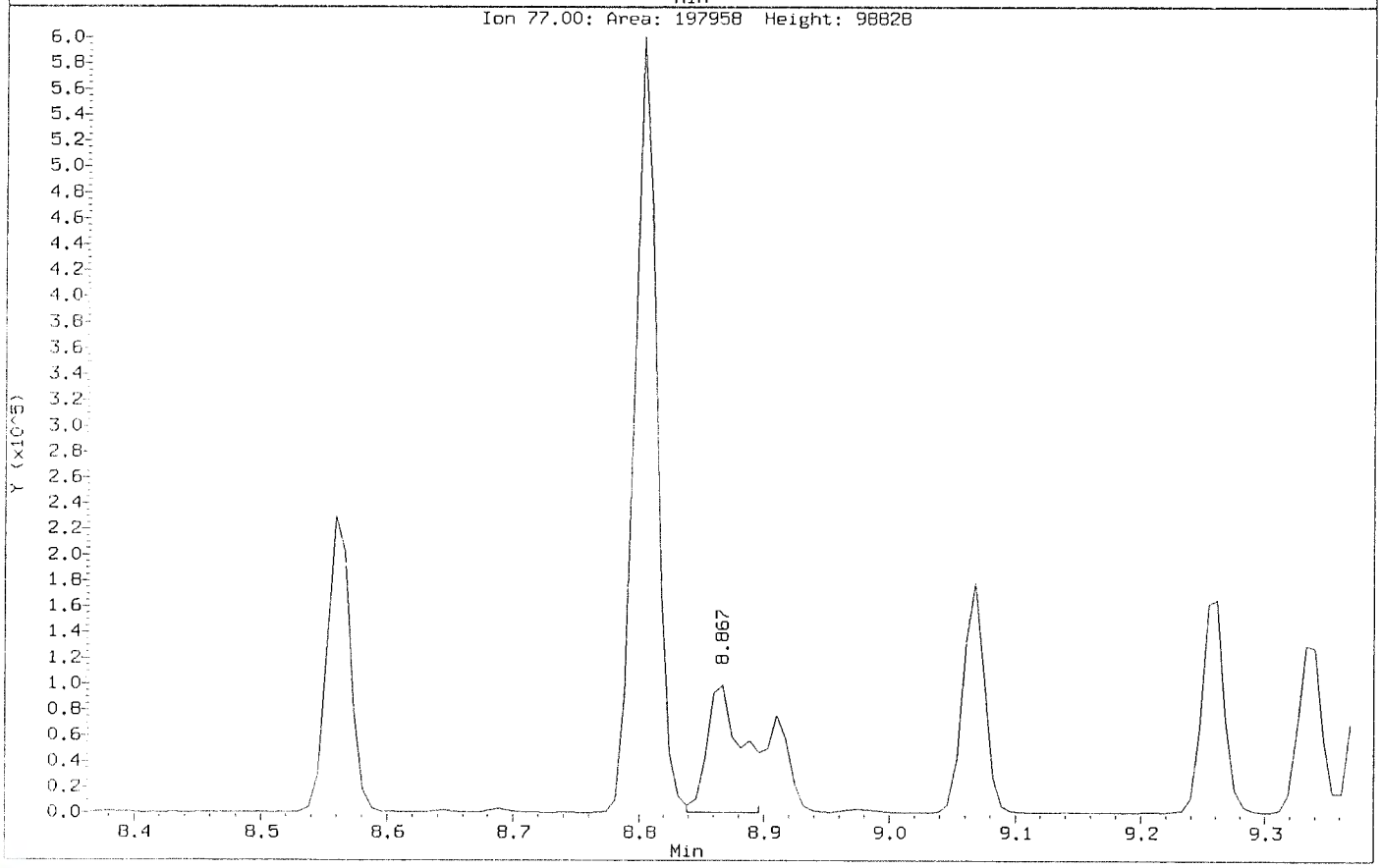
Injection Date: 26-MAY-2021 15:22
Instrument: voa6.i
Client Sample ID: VSTD100

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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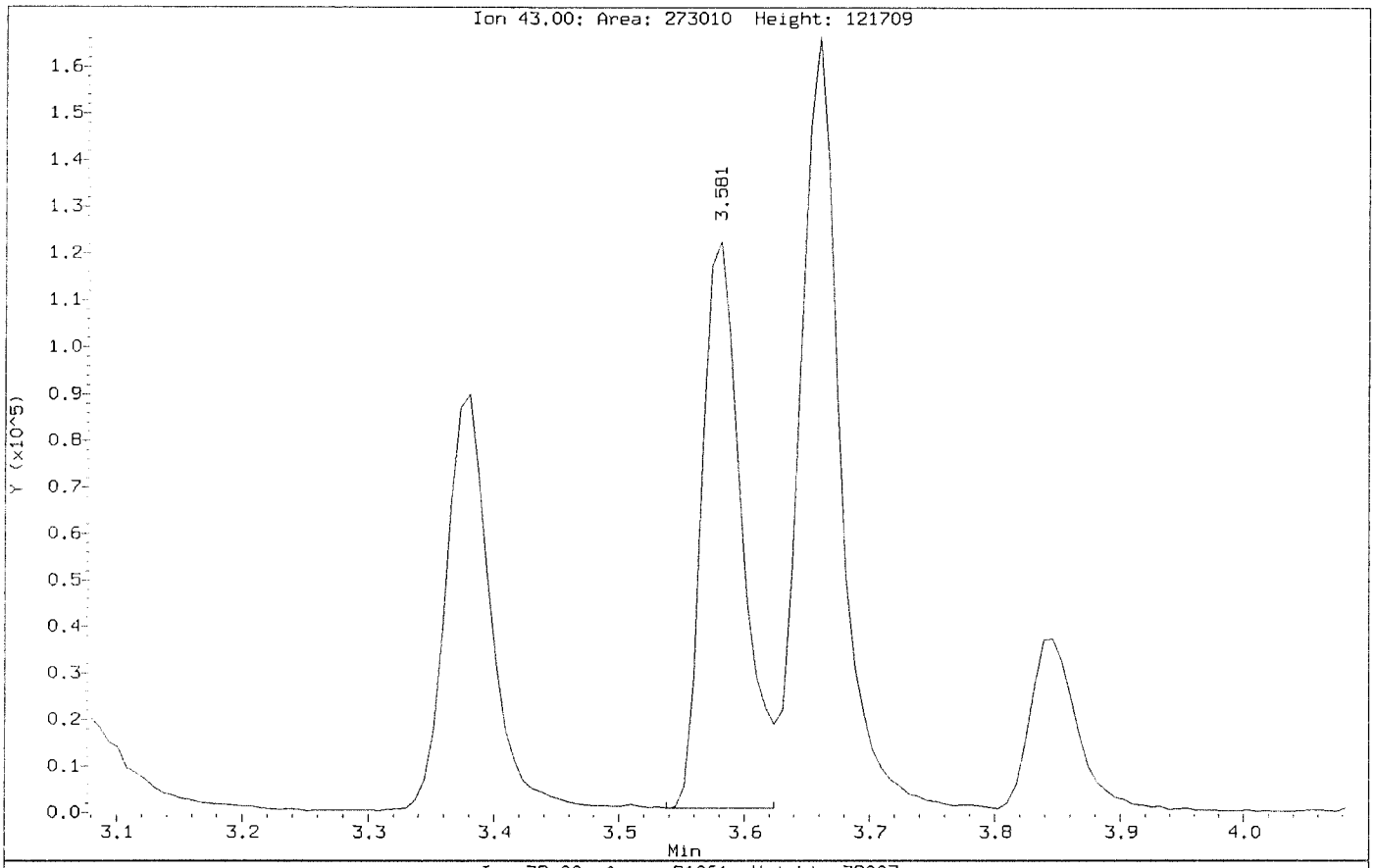
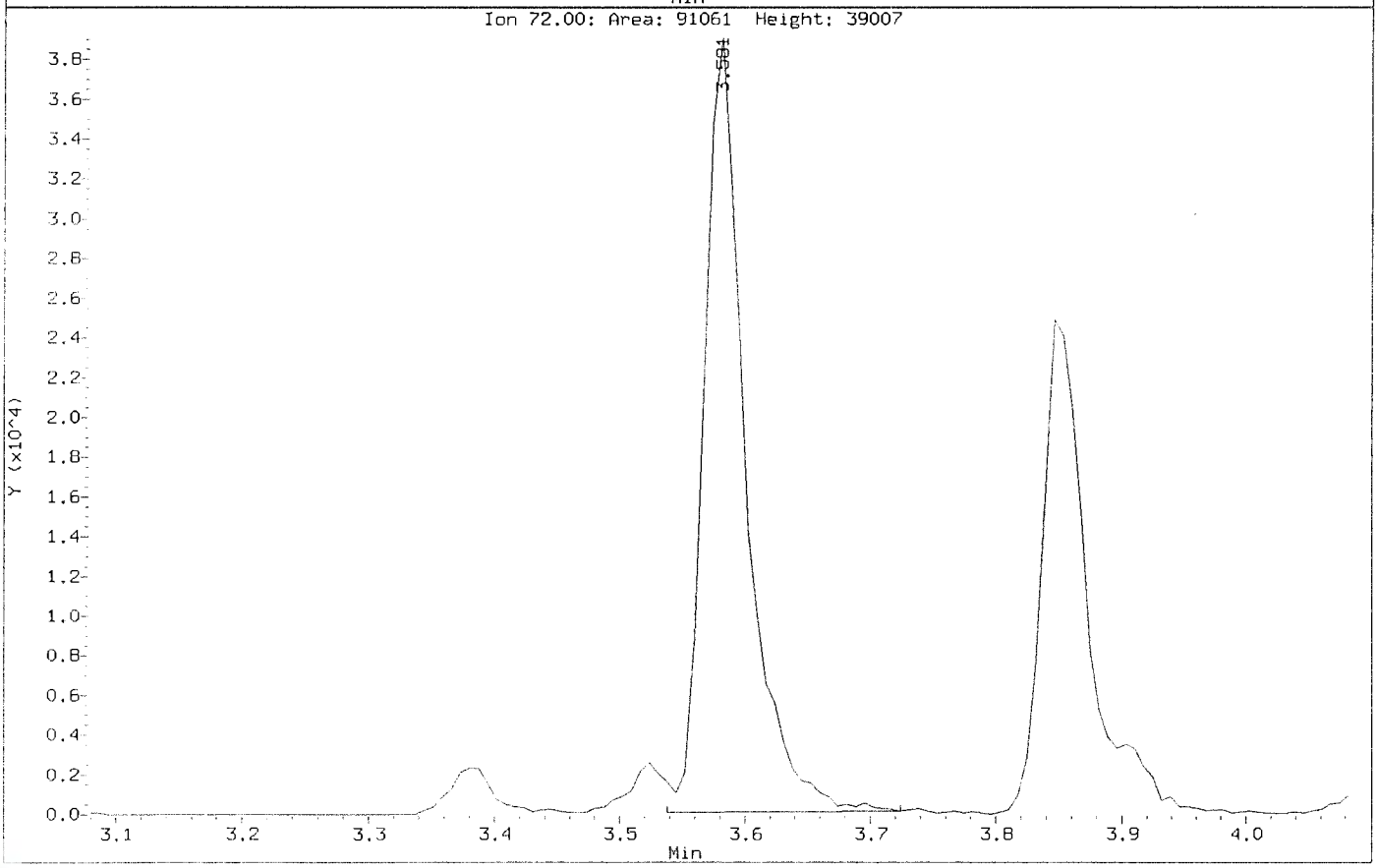
Injection Date: 26-MAY-2021 15:22
Instrument: voa6.i
Client Sample ID: VSTD100

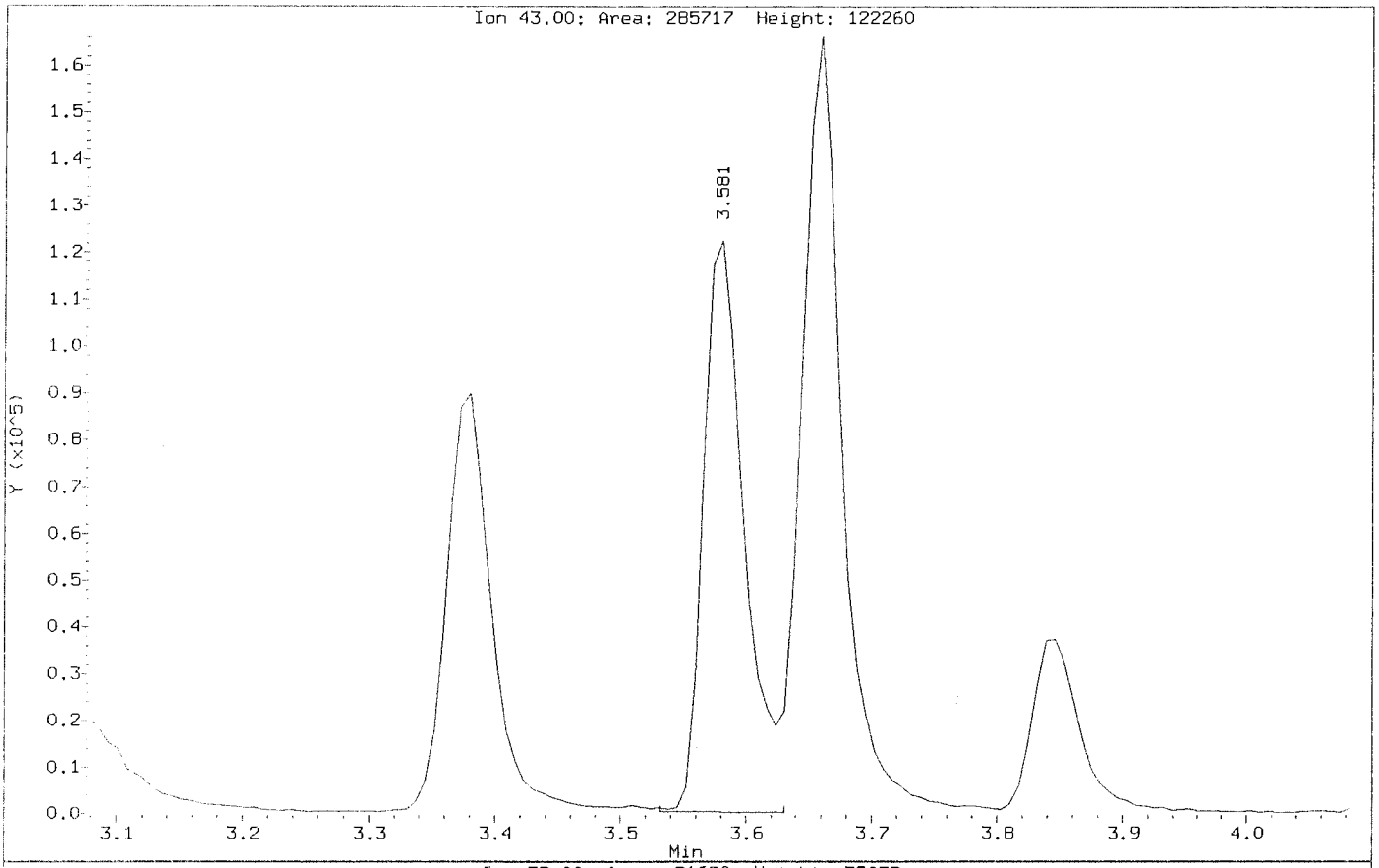
Compound: 2-Butanone
CAS Number: 78-93-3

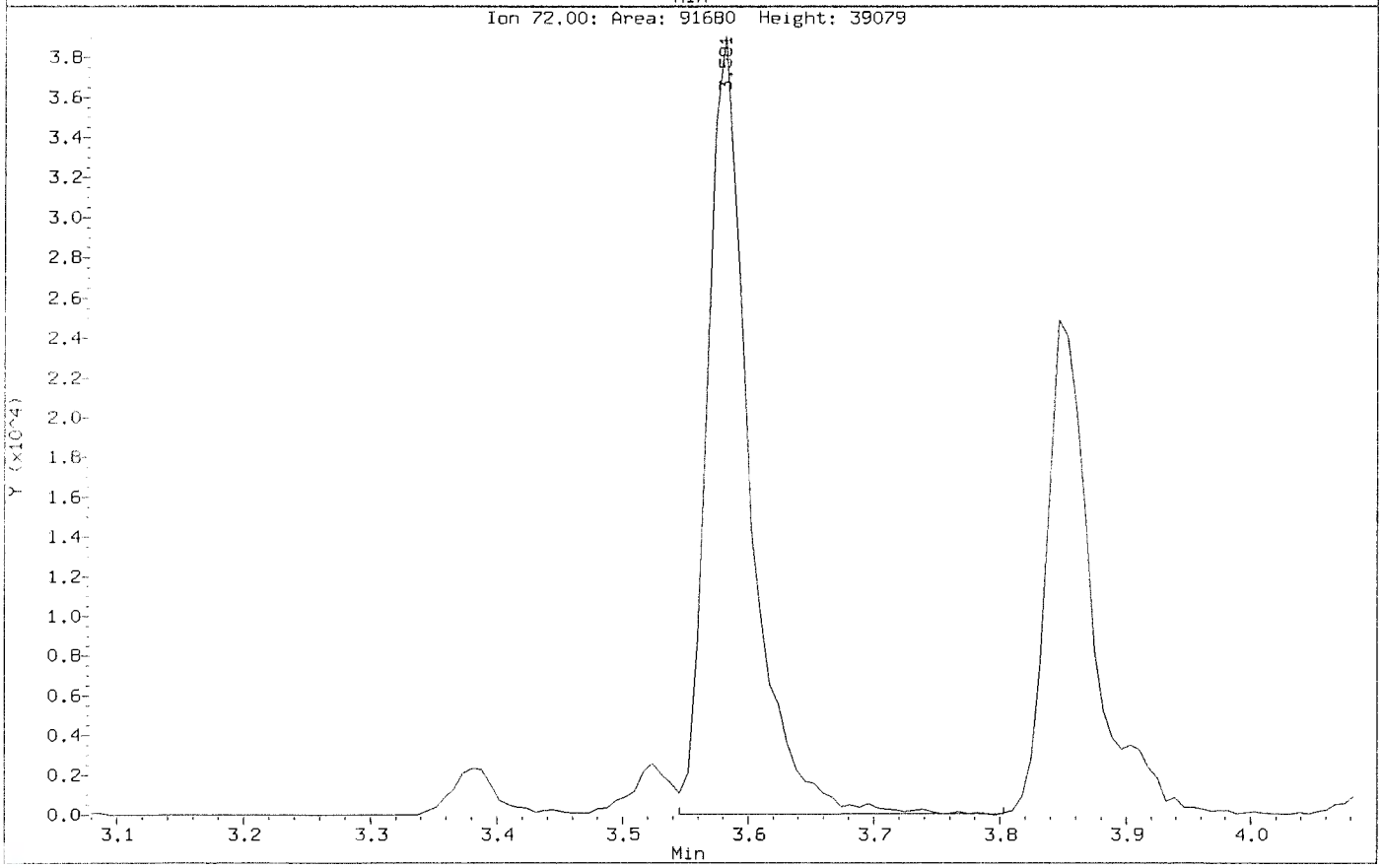




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052609.D
Injection Date: 26-MAY-2021 15:22
Instrument: voa6.i
Client Sample ID: VSTD100

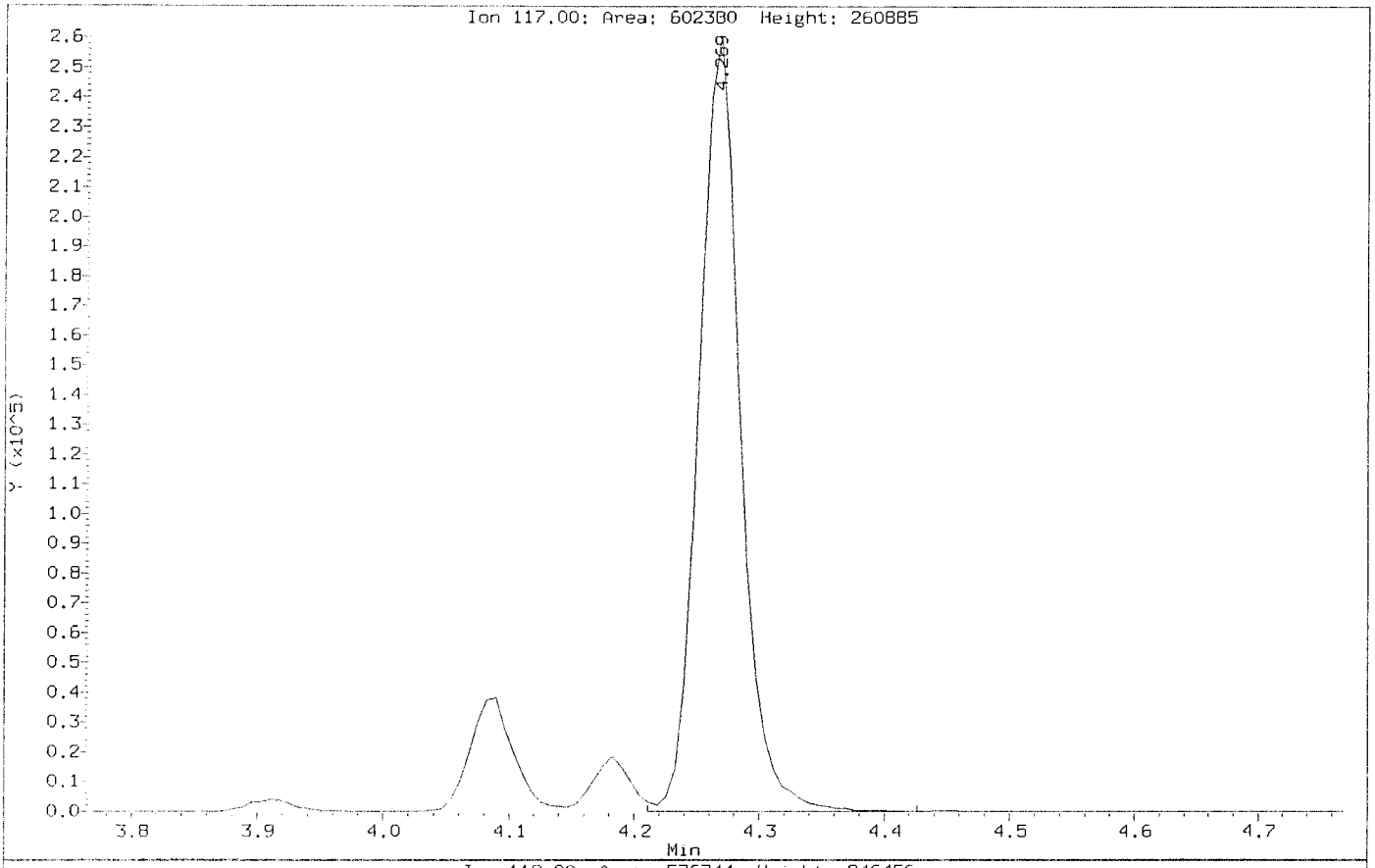
Compound: 2-Butanone
CAS Number: 78-93-3

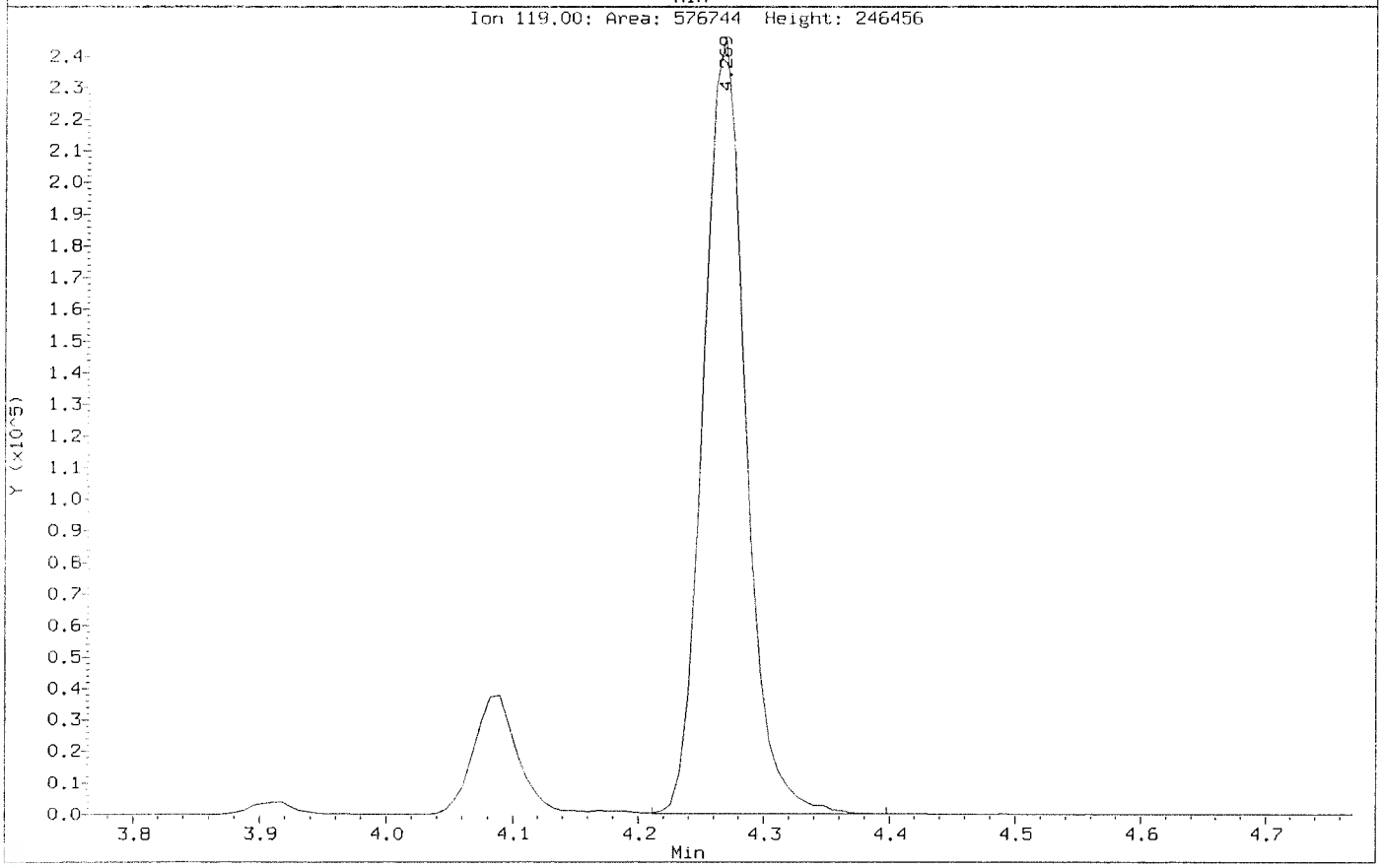




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before2\X052609.D
Injection Date: 26-MAY-2021 15:22
Instrument: voa6.i
Client Sample ID: VSTD100

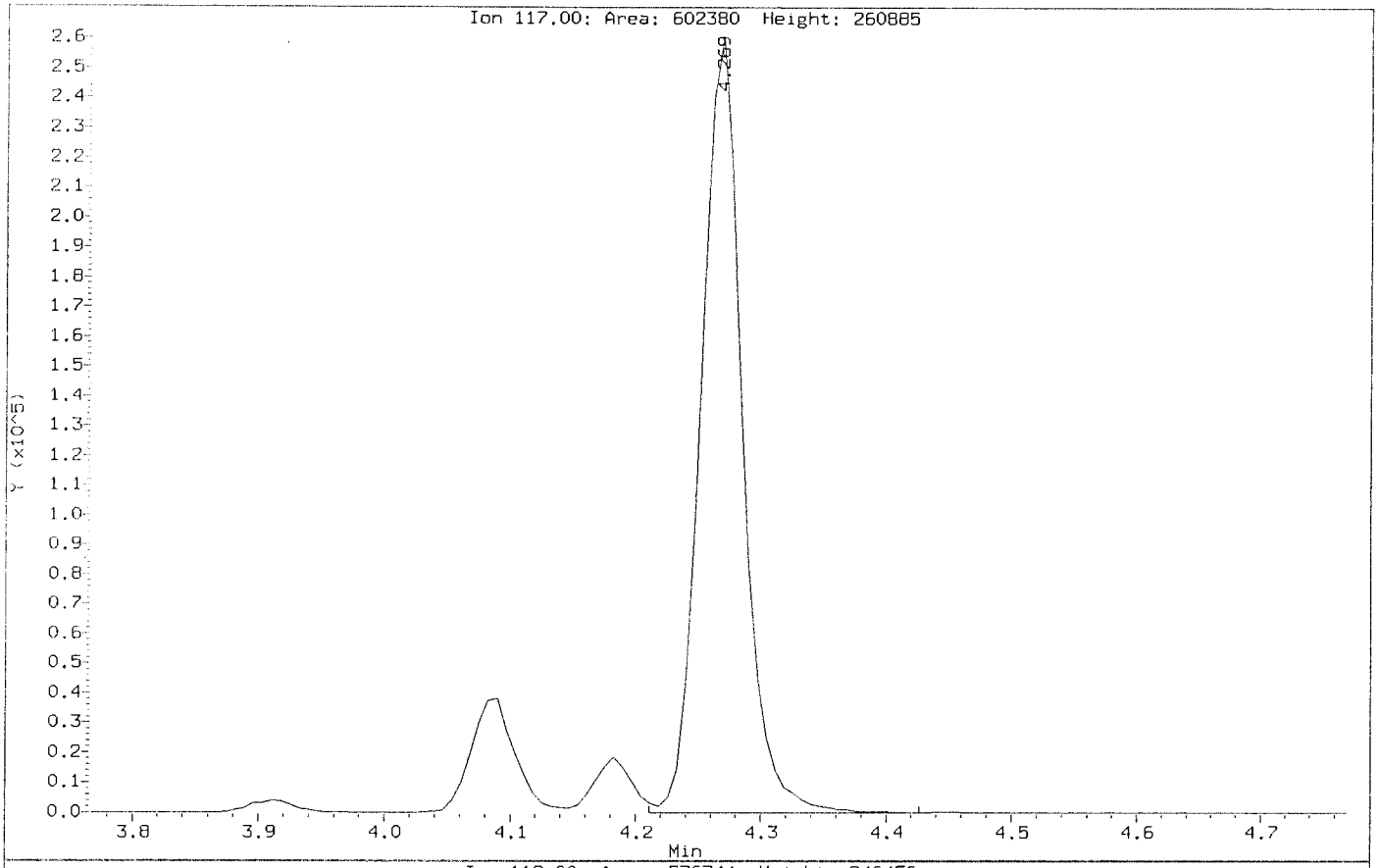
Compound: Carbon Tetrachloride
CAS Number: 56-23-5

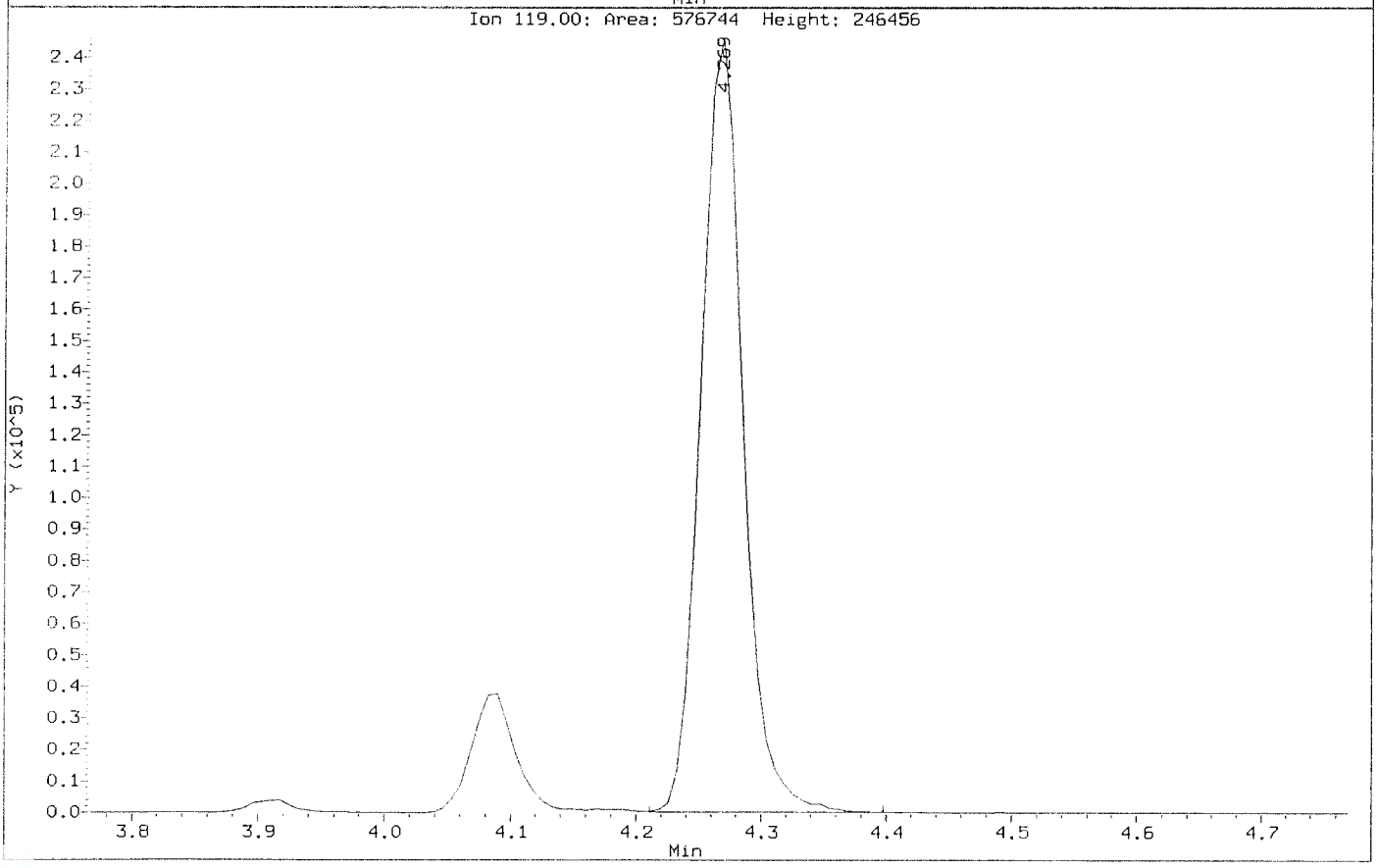




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052609.D
Injection Date: 26-MAY-2021 15:22
Instrument: voa6.i
Client Sample ID: VSTD100

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052610.D
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Inj Date : 26-MAY-2021 15:43
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 30-Jun-2021 18:30 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:22 Cal File: X052609.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

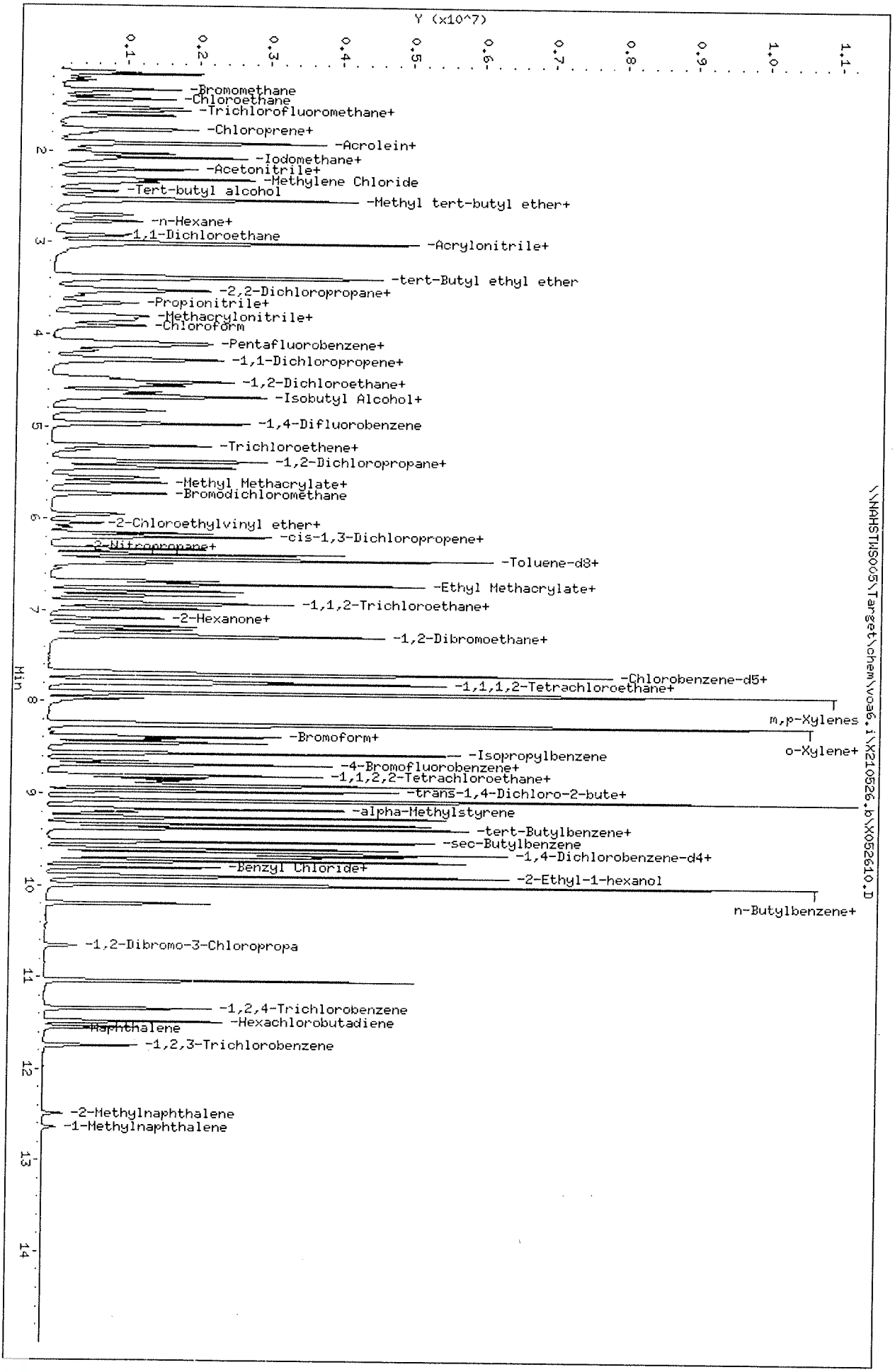
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	496717	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	755988	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	712100	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	415744	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	715769	150.000	146.71
$ 35 1,2-Dichloroethane-d4	65	4.468	4.468	(1.069)	696836	150.000	148.20
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	2408134	150.000	135.76
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	931244	150.000	147.42
60 1,1,1,2-Tetrachloroethane	131	7.778	7.778	(1.014)	784505	150.000	148.96
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	1024526	150.000	139.57
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	832157	150.000	147.15
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	547310	150.000	141.88
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	1041496	150.000	132.62
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	716685	150.000	140.07
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	803649	150.000	138.79
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	385015	150.000	152.97
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	694082	150.000	133.90(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	655214	150.000	161.83
79 1,2,4-Trimethylbenzene	105	9.382	9.382	(0.971)	2691902	150.000	141.96
89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	97075	150.000	146.19
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	745007	150.000	142.10
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	1675583	150.000	148.59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.554	4.554	(0.918)	860786	150.000	142.90
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	625353	150.000	140.52
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	2725713	150.000	144.43
83	1,3-Dichlorobenzene	146	9.604	9.604	(0.994)	1646410	150.000	140.40
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	1072067	150.000	139.76
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	1693050	150.000	138.35
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	926747	150.000	136.37
24	2-Butanone	43	3.580	3.580	(0.856)	418873	300.000	277.17(AH)
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	2094808	150.000	134.61
52	2-Hexanone	43	7.090	7.090	(0.924)	794291	300.000	300.27(A)
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	2610637	150.000	140.87
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	2849522	150.000	148.23
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	1175728	300.000	286.71(A)
10	Acetone	43	1.976	1.976	(0.473)	361295	300.000	295.78(A)
37	Benzene	78	4.511	4.511	(0.909)	2402438	150.000	138.33
74	Bromobenzene	156	8.802	8.802	(0.911)	992332	150.000	143.86
29	Bromochloromethane	128	3.795	3.795	(0.909)	412667	150.000	137.39
39	Bromodichloromethane	83	5.722	5.722	(1.153)	921182	150.000	141.73
66	Bromoform	173	8.408	8.408	(1.096)	649384	150.000	163.53
6	Bromomethane	94	1.331	1.331	(0.318)	786302	150.000	152.94
19	Carbon Disulfide	76	2.069	2.069	(0.495)	3195658	300.000	263.37(A)
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	917973	150.000	146.47(H)
59	Chlorobenzene	112	7.692	7.692	(1.003)	2108986	150.000	142.26
7	Chloroethane	64	1.396	1.396	(0.334)	494207	150.000	144.48
28	Chloroform	83	3.910	3.910	(0.935)	1186262	150.000	135.80
3	Chloromethane	50	1.073	1.073	(0.257)	633860	150.000	146.22
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	727278	150.000	139.69
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	1139309	150.000	148.76
55	Dibromochloromethane	129	7.176	7.176	(0.936)	882492	150.000	150.57
44	Dibromomethane	93	5.550	5.550	(1.118)	476483	150.000	142.48
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	654875	150.000	143.91
61	Ethylbenzene	106	7.799	7.799	(1.017)	1007746	150.000	147.35
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	433230	150.000	150.62
67	Isopropylbenzene	105	8.559	8.559	(1.116)	3224819	150.000	154.32
62	m,p-Xylenes	106	7.907	7.907	(1.031)	2710635	300.000	304.04(A)
17	Methylene Chloride	84	2.305	2.305	(0.551)	646121	150.000	145.92
87	n-Butylbenzene	91	9.991	9.991	(1.034)	2582559	150.000	159.67
73	n-Propylbenzene	91	8.910	8.910	(0.922)	3527326	150.000	136.01
92	Naphthalene	128	11.538	11.538	(1.194)	876476	150.000	147.52
63	o-Xylene	106	8.243	8.243	(1.075)	1321003	150.000	151.95
81	sec-Butylbenzene	105	9.518	9.518	(0.985)	3164362	150.000	144.94
64	Styrene	104	8.258	8.258	(1.077)	2333940	150.000	160.66
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	2327731	150.000	143.87
56	Tetrachloroethene	164	6.925	6.925	(0.903)	689168	150.000	157.21
50	Toluene	91	6.445	6.445	(0.840)	2907224	150.000	139.84
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	633195	150.000	136.52
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	1006695	150.000	152.37
38	Trichloroethene	130	5.206	5.206	(1.049)	743912	150.000	143.37
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	1277632	150.000	142.49
5	Vinyl Chloride	62	1.138	1.138	(0.272)	799846	150.000	136.03

QC Flag Legend

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



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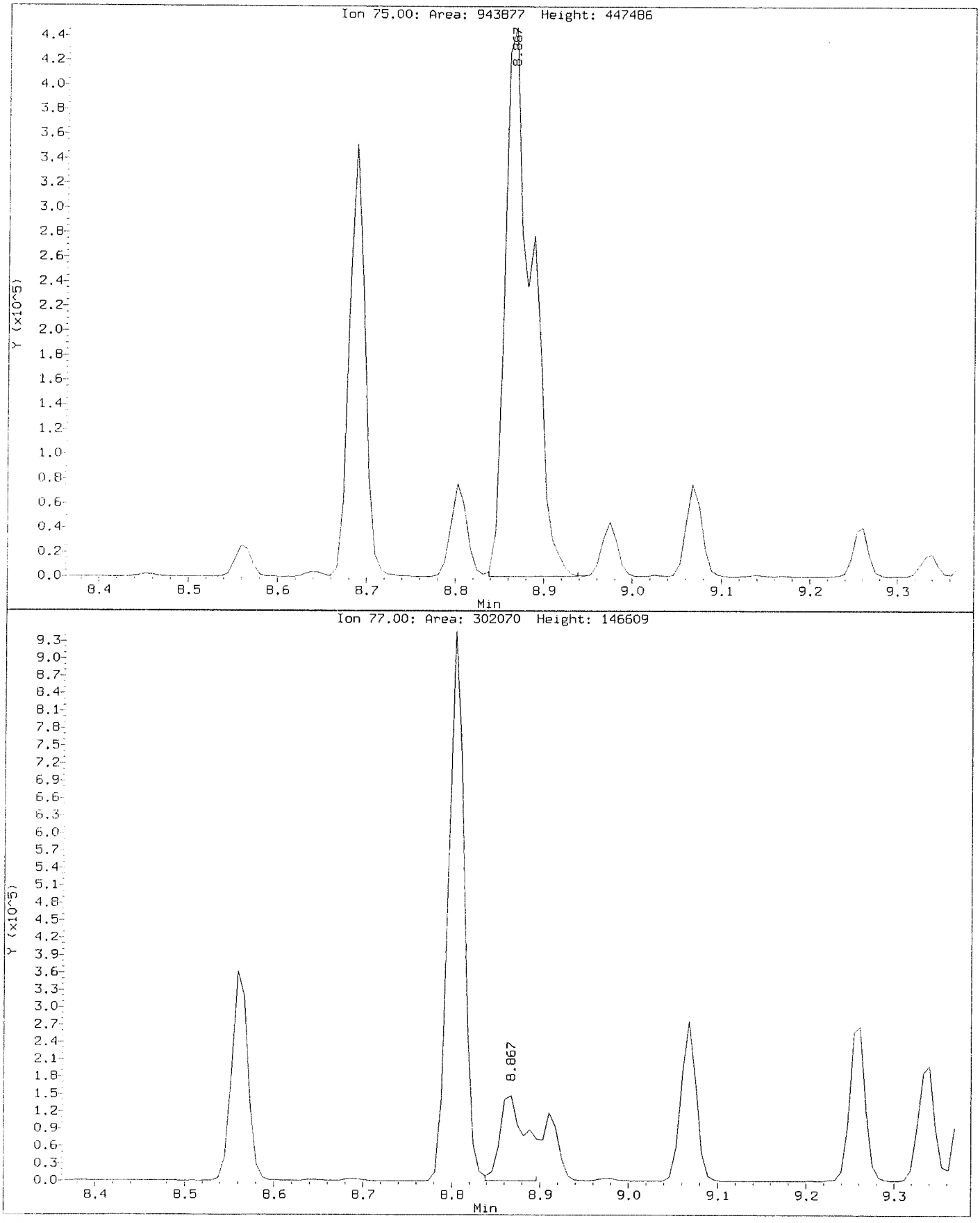
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before2\X052610.D
Injection Date: 26-MAY-2021 15:43
Instrument: voa6.i
Client Sample ID: VSTD150

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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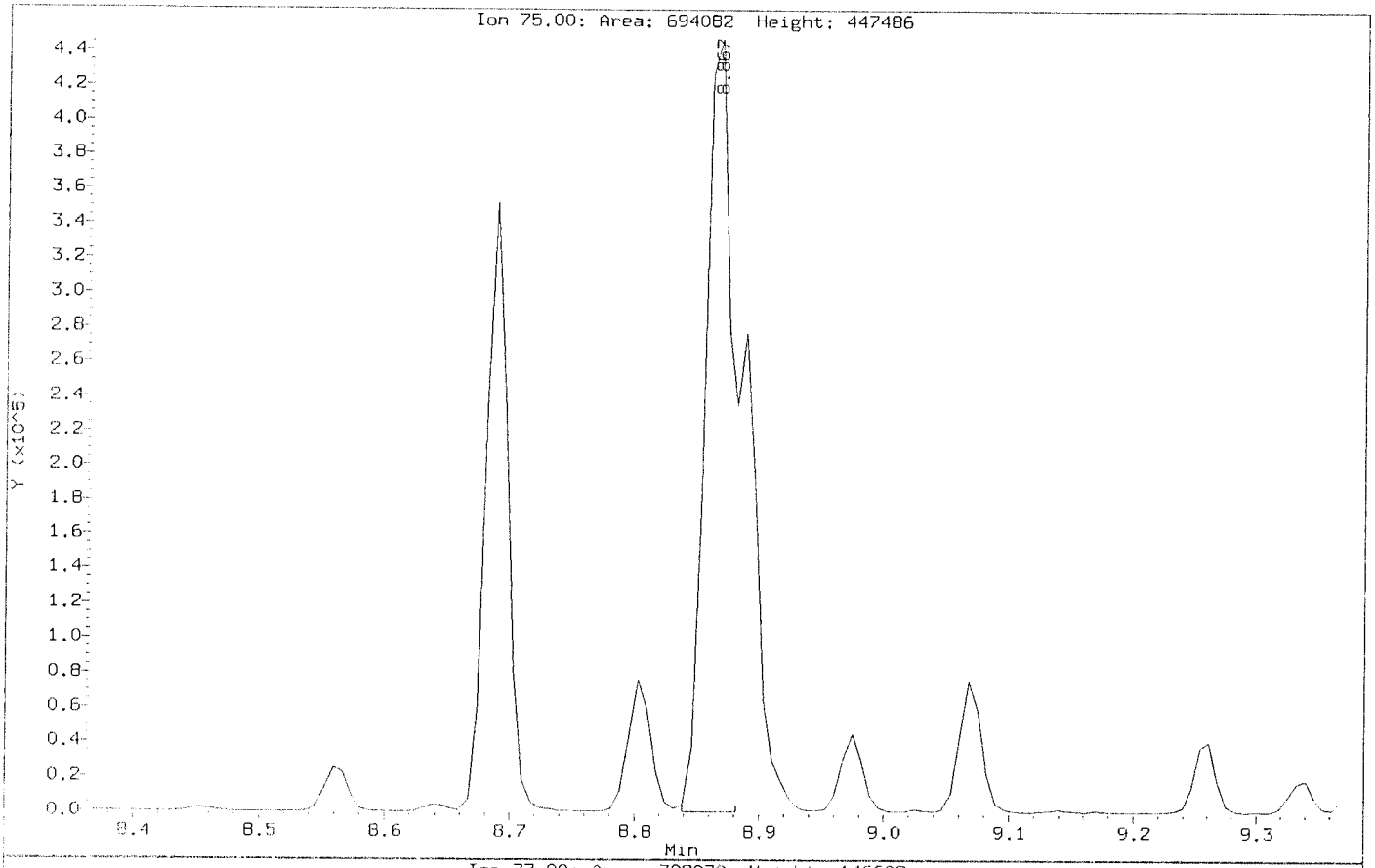
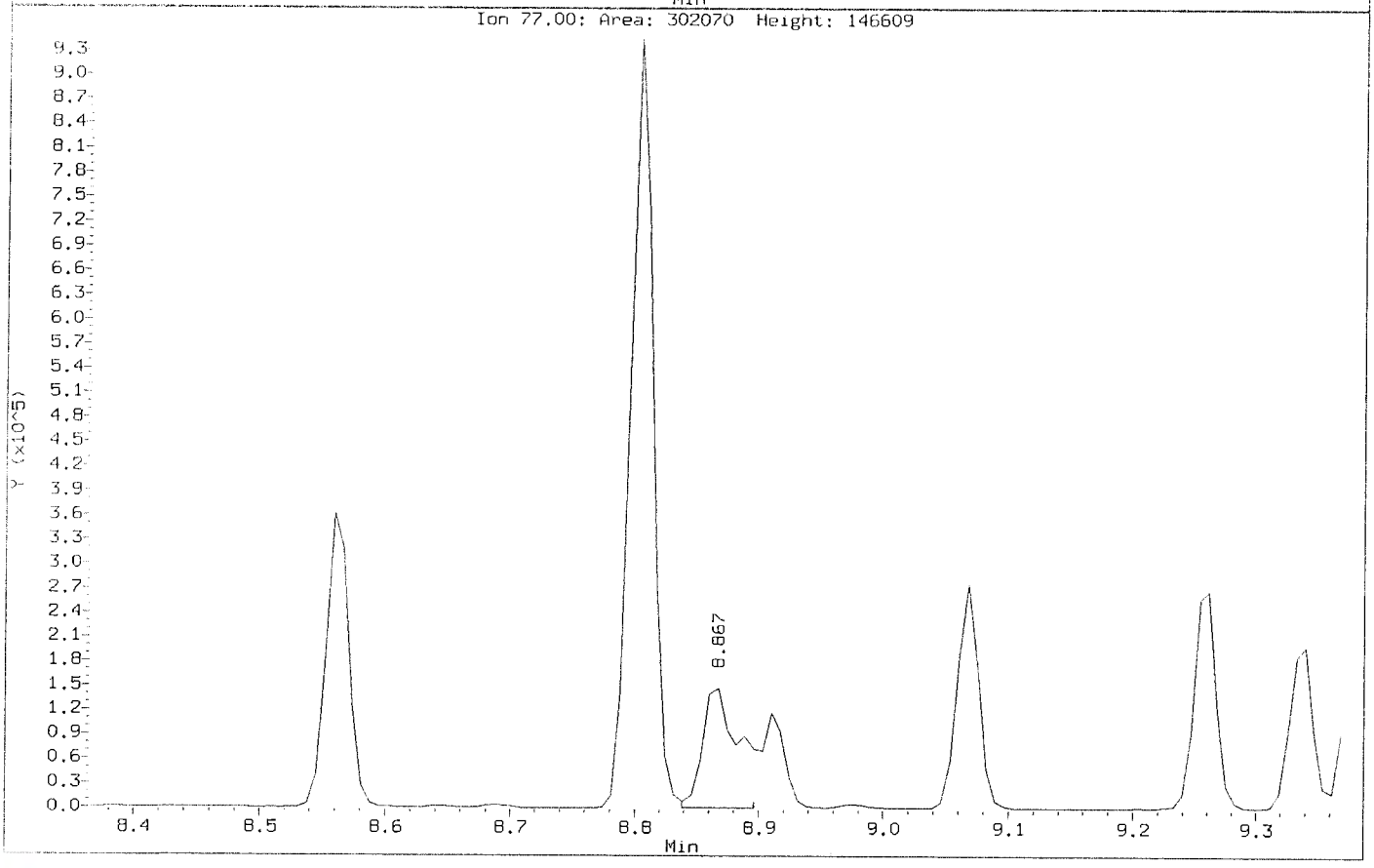
Client Sample ID: VSTD150

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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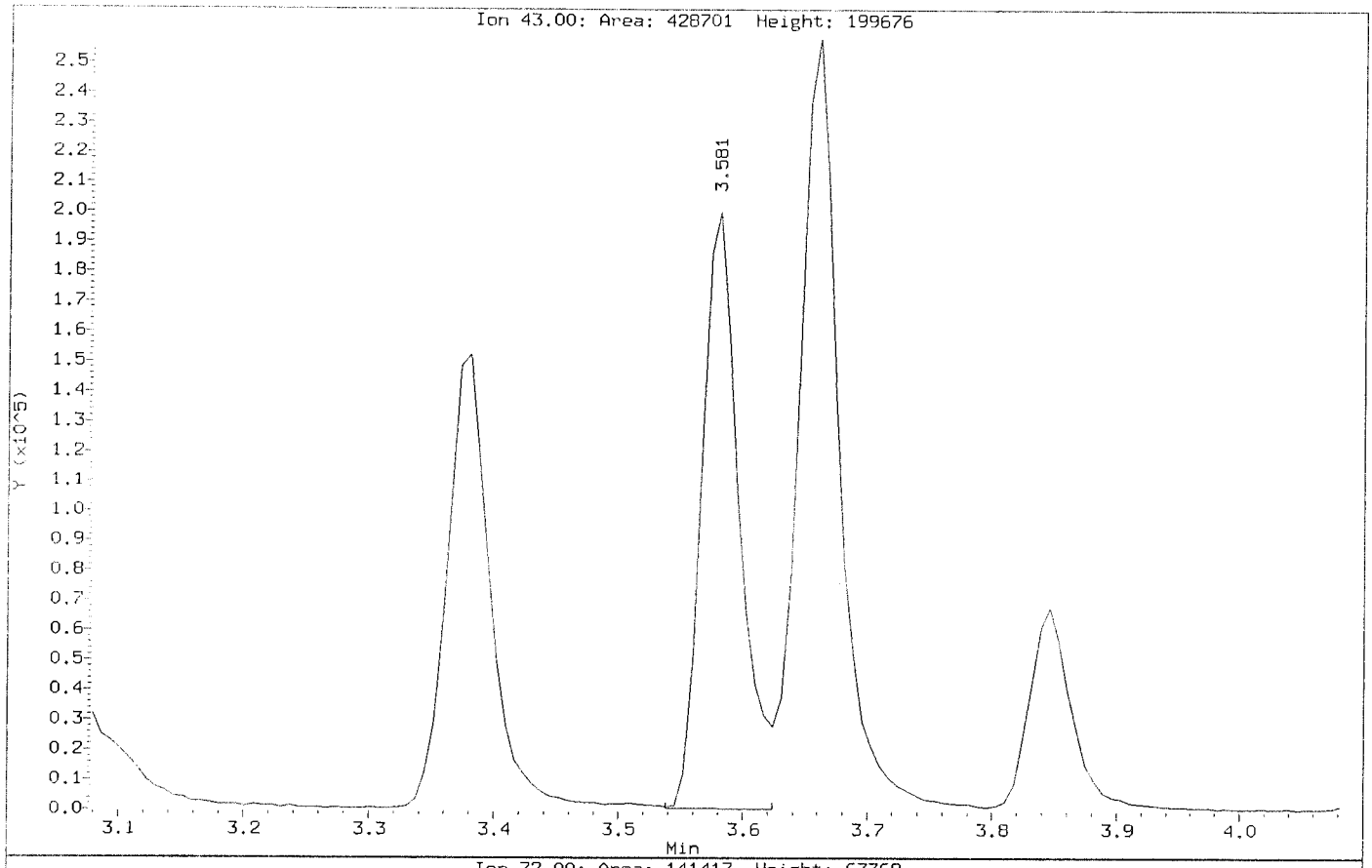
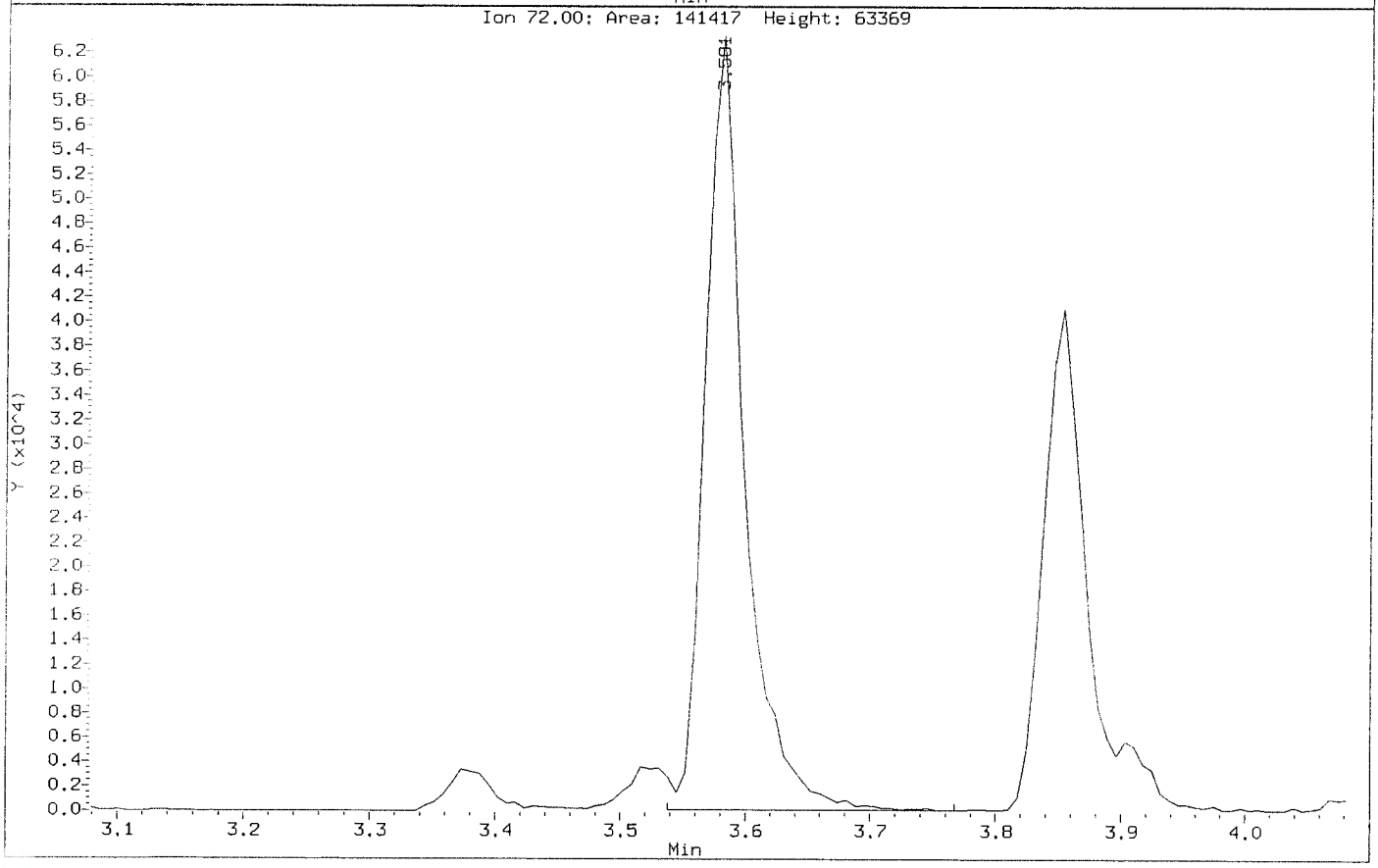
Instrument: voa6.i
Client Sample ID: VSTD150

Compound: 2-Butanone
CAS Number: 78-93-3





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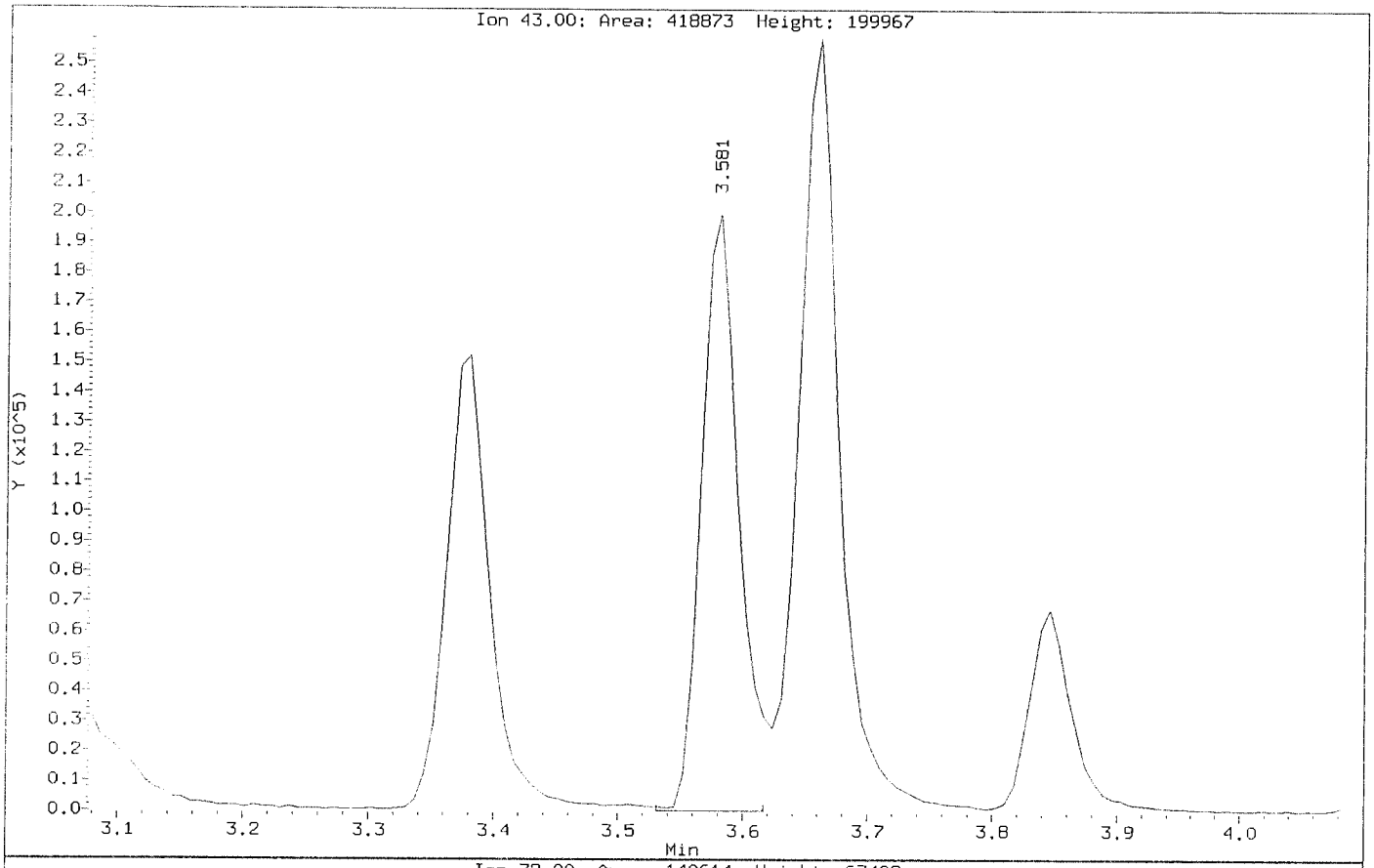
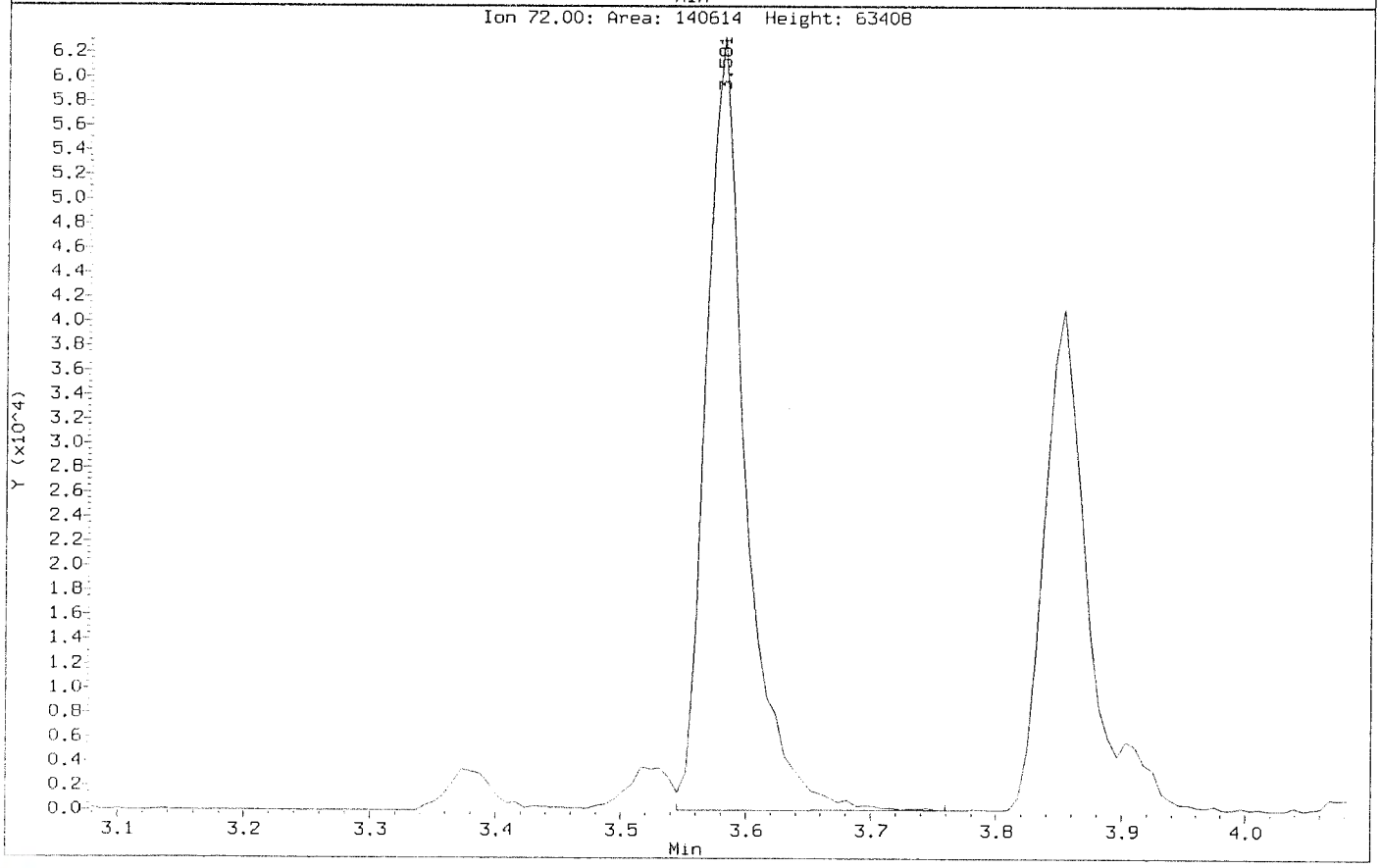
Instrument: voa6.i
Client Sample ID: VSTD150

Compound: 2-Butanone
CAS Number: 78-93-3





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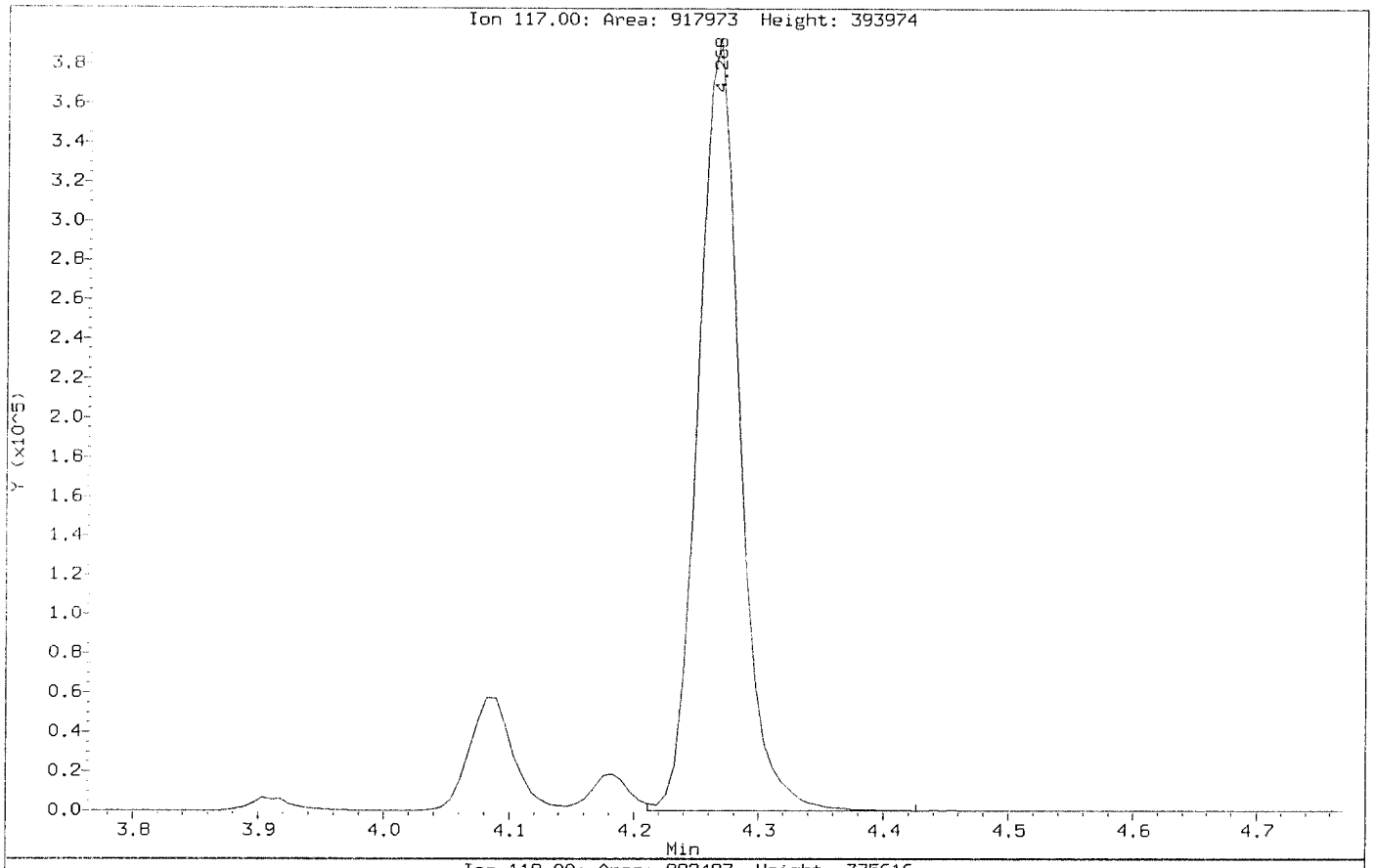
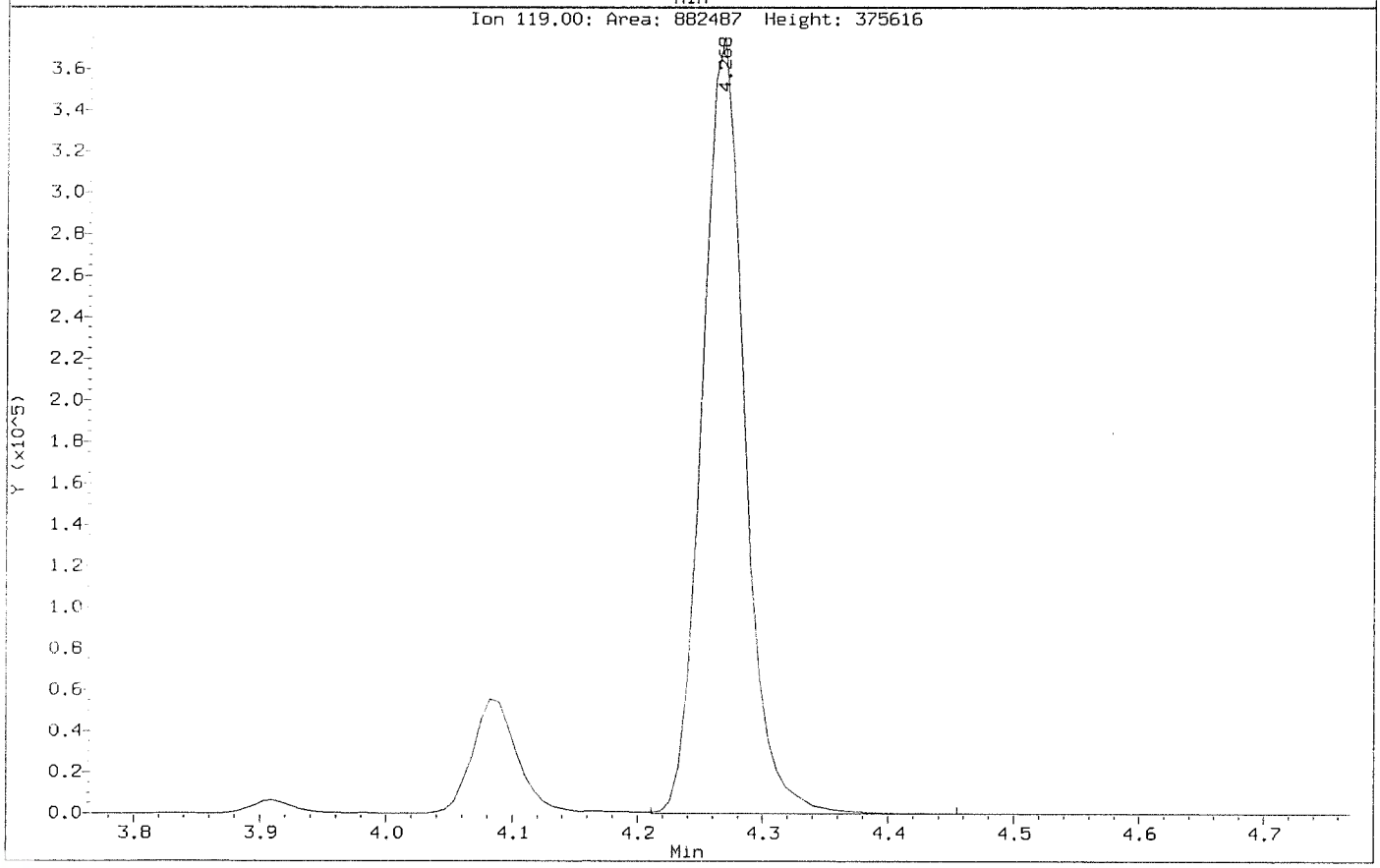
Injection Date: 26-MAY-2021 15:43
Instrument: voa6.i
Client Sample ID: VSTD150

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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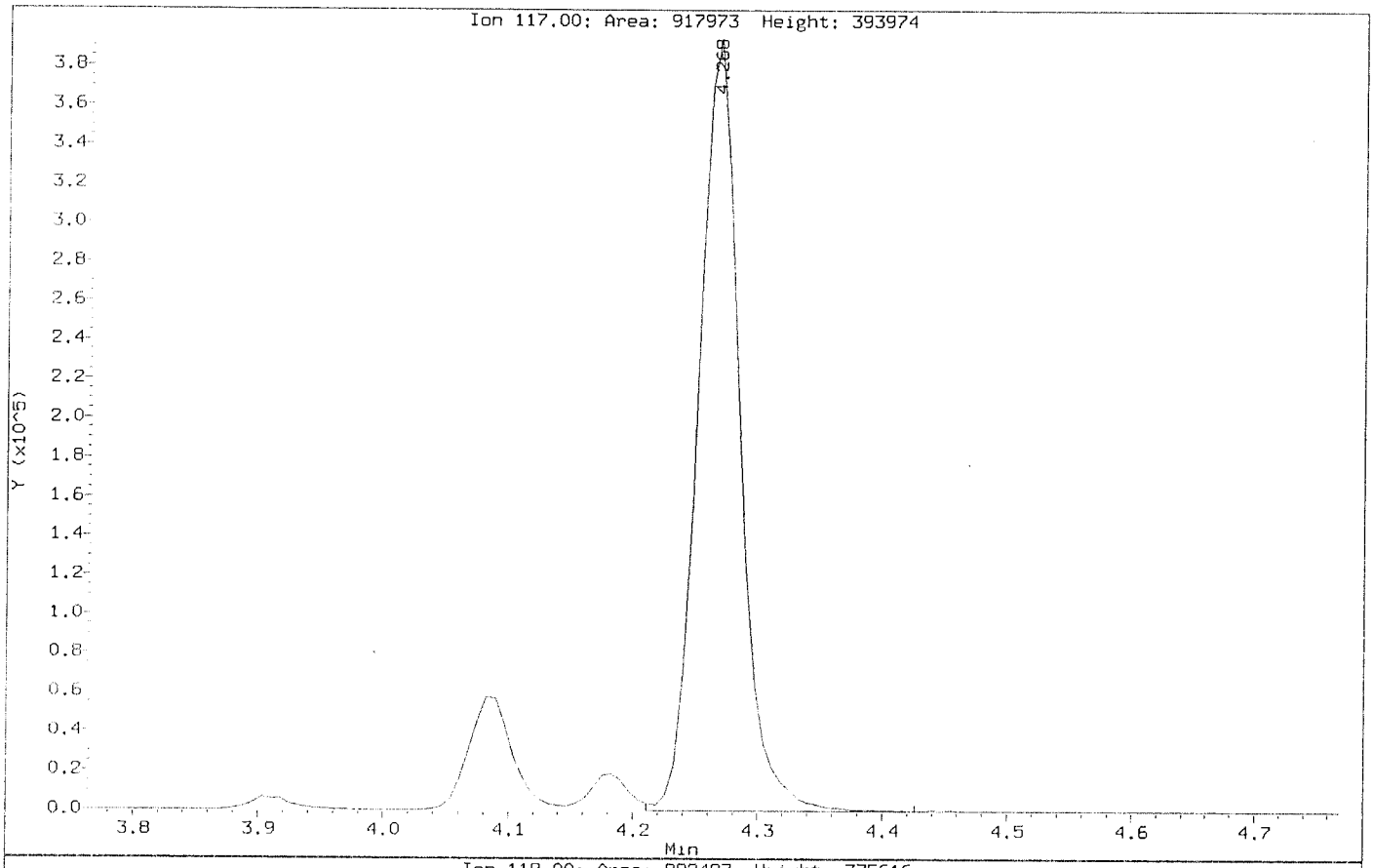
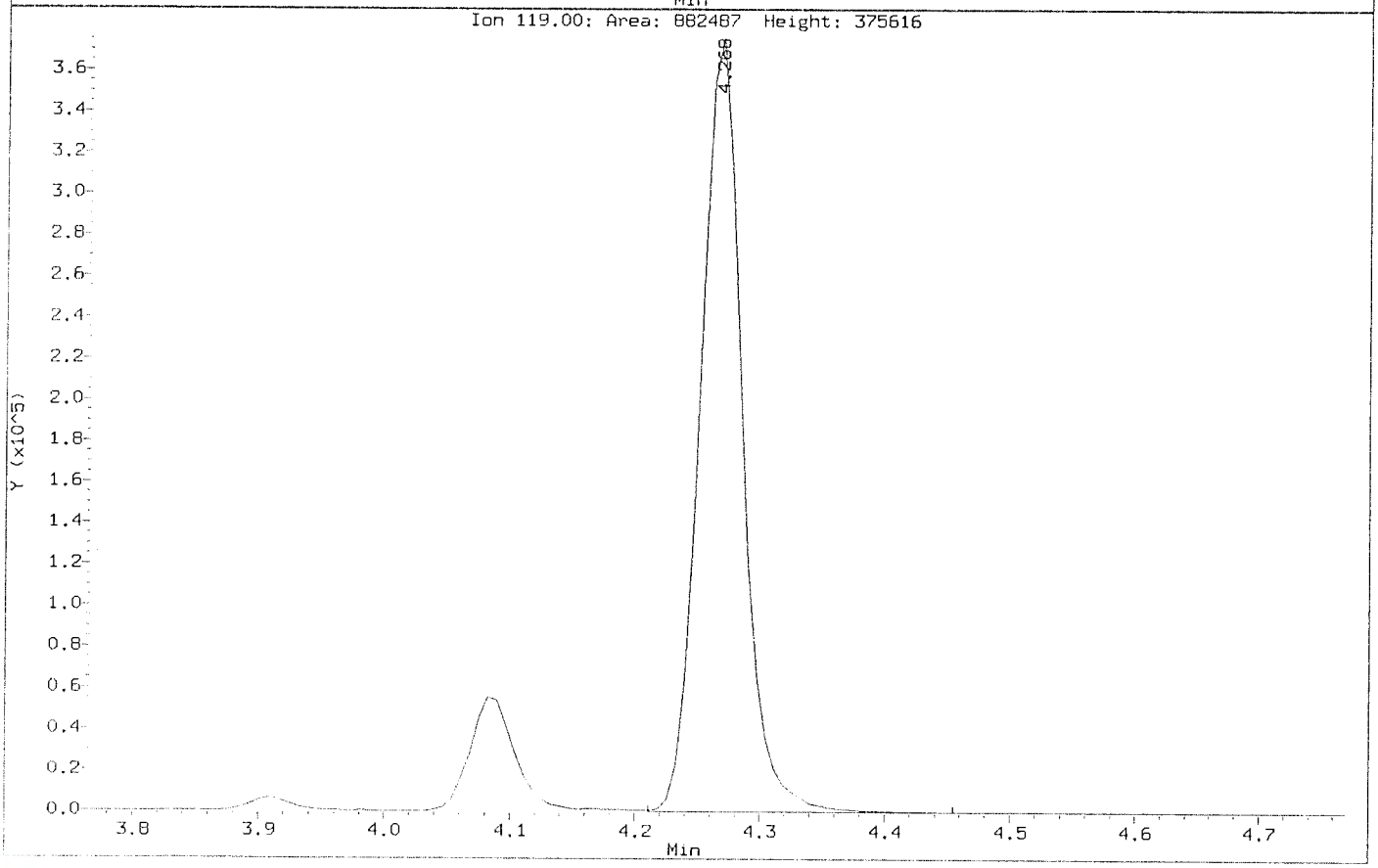
Injection Date: 26-MAY-2021 15:43
Instrument: voa6.i
Client Sample ID: VSTD150

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052611.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 26-MAY-2021 16:04
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 30-Jun-2021 18:30 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:43 Cal File: X052610.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

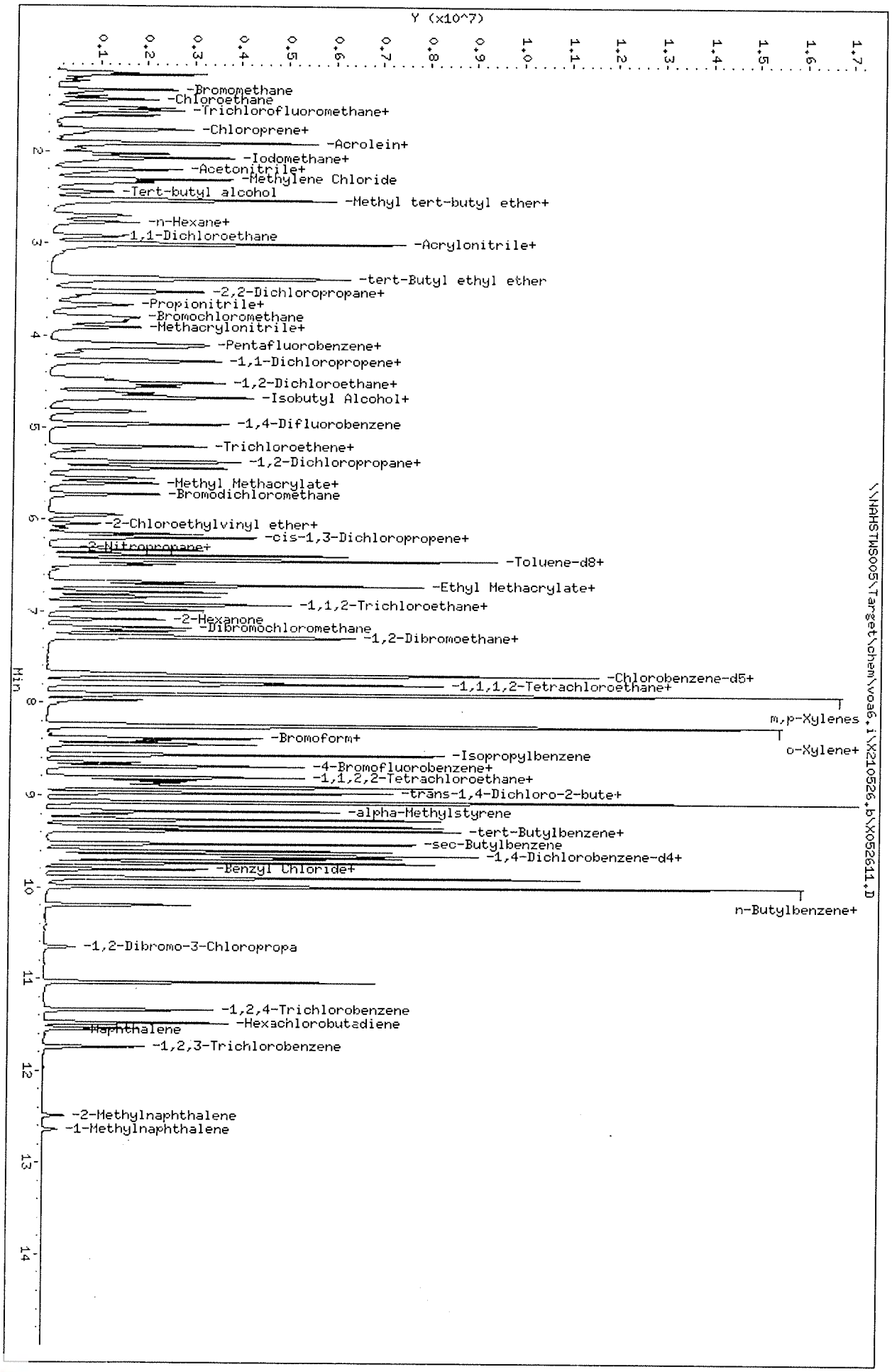
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	527290	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	811816	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	755473	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	445629	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	1043408	200.000	201.53(A)
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	998694	200.000	200.33(A)
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	3611012	200.000	191.88
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	1352939	200.000	201.60(A)
60 1,1,1,2-Tetrachloroethane	131	7.778	7.778	(1.014)	1160674	200.000	207.74(A)
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	1546157	200.000	198.41
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	1217789	200.000	201.34(A)
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	795336	200.000	194.34
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	1553138	200.000	186.31
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	1086071	200.000	199.96
32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	1215669	200.000	195.52
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	587179	200.000	217.65(A)
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	1016225	200.000	182.90(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	1006020	200.000	228.33(A)
79 1,2,4-Trimethylbenzene	105	9.383	9.383	(0.971)	3984770	200.000	196.04
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	144783	200.000	203.21(A)
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	1081620	200.000	194.46
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	2444820	200.000	202.26(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	1287189	200.000	198.99
42 1,2-Dichloropropane	63	5.436	5.436	(1.095)	927936	200.000	194.18
75 1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	4079042	200.000	201.65(A)
83 1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	2476726	200.000	197.04
54 1,3-Dichloropropane	76	6.983	6.983	(0.910)	1564813	200.000	192.29
84 1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	2515937	200.000	191.81
26 2,2-Dichloropropane	77	3.509	3.509	(0.839)	1390015	200.000	192.68
24 2-Butanone	43	3.581	3.581	(0.856)	612469	400.000	381.77(AH)
76 2-Chlorotoluene	91	8.974	8.974	(0.929)	3071832	200.000	184.16
52 2-Hexanone	43	7.090	7.090	(0.924)	1187324	400.000	423.08(A)
77 4-Chlorotoluene	91	9.067	9.067	(0.938)	3896306	200.000	196.15
82 p-Isopropyltoluene	119	9.648	9.648	(0.999)	4264800	200.000	206.97(A)
45 4-Methyl-2-Pentanone	43	6.331	6.331	(0.825)	1734309	400.000	398.65(A)
10 Acetone	43	1.976	1.976	(0.473)	519345	400.000	402.63(A)
37 Benzene	78	4.512	4.512	(0.909)	3517442	200.000	188.60
74 Bromobenzene	156	8.810	8.810	(0.912)	1454241	200.000	196.69
29 Bromochloromethane	128	3.795	3.795	(0.908)	600567	200.000	188.36
39 Bromodichloromethane	83	5.722	5.722	(1.153)	1341462	200.000	192.21
66 Bromoform	173	8.408	8.408	(1.096)	949877	200.000	225.48(A)
6 Bromomethane	94	1.331	1.331	(0.318)	1239498	200.000	227.04(A)
19 Carbon Disulfide	76	2.069	2.069	(0.495)	4795917	400.000	372.34(A)
34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	1378935	200.000	204.90(AH)
59 Chlorobenzene	112	7.692	7.692	(1.003)	3148357	200.000	200.18(A)
7 Chloroethane	64	1.396	1.396	(0.334)	731139	200.000	201.91(A)
28 Chloroform	83	3.910	3.910	(0.935)	1752890	200.000	189.03
3 Chloromethane	50	1.073	1.073	(0.257)	908675	200.000	198.43
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	1076621	200.000	194.80
46 cis-1,3-Dichloropropene	75	6.159	6.159	(1.241)	1661934	200.000	202.08(A)
55 Dibromochloromethane	129	7.176	7.176	(0.936)	1301247	200.000	209.27(A)
44 Dibromomethane	93	5.550	5.550	(1.118)	692444	200.000	192.81
2 Dichlorodifluoromethane	85	0.966	0.966	(0.231)	978413	200.000	202.63(A)
61 Ethylbenzene	106	7.800	7.800	(1.017)	1516023	200.000	208.94(A)
91 Hexachlorobutadiene	225	11.481	11.481	(1.188)	655226	200.000	199.03
67 Isopropylbenzene	105	8.559	8.559	(1.116)	4812871	200.000	217.10(A)
62 m,p-Xylenes	106	7.907	7.907	(1.031)	4076675	400.000	431.01(A)
17 Methylene Chloride	84	2.298	2.298	(0.550)	946394	200.000	201.84(A)
87 n-Butylbenzene	91	9.991	9.991	(1.034)	3888439	200.000	224.29(A)
73 n-Propylbenzene	91	8.910	8.910	(0.922)	5428268	200.000	195.27
92 Naphthalene	128	11.539	11.539	(1.194)	1334488	200.000	209.55(A)
63 o Xylene	106	8.244	8.244	(1.075)	1968239	200.000	213.41(A)
81 sec-Butylbenzene	105	9.526	9.526	(0.986)	4746456	200.000	202.83(A)
64 Styrene	104	8.258	8.258	(1.077)	3480363	200.000	225.83(A)
78 tert-Butylbenzene	119	9.340	9.340	(0.967)	3505119	200.000	202.12(A)
56 Tetrachloroethene	164	6.933	6.933	(0.904)	1043185	200.000	224.30(A)
50 Toluene	91	6.446	6.446	(0.840)	4409516	200.000	195.93
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	939280	200.000	190.77
51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	1486499	200.000	209.53(A)
38 Trichloroethene	130	5.207	5.207	(1.049)	1115378	200.000	200.18(A)
8 Trichlorofluoromethane	101	1.553	1.553	(0.372)	1890285	200.000	198.60
5 Vinyl Chloride	62	1.138	1.138	(0.272)	1189726	200.000	190.61

QC Flag Legend

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

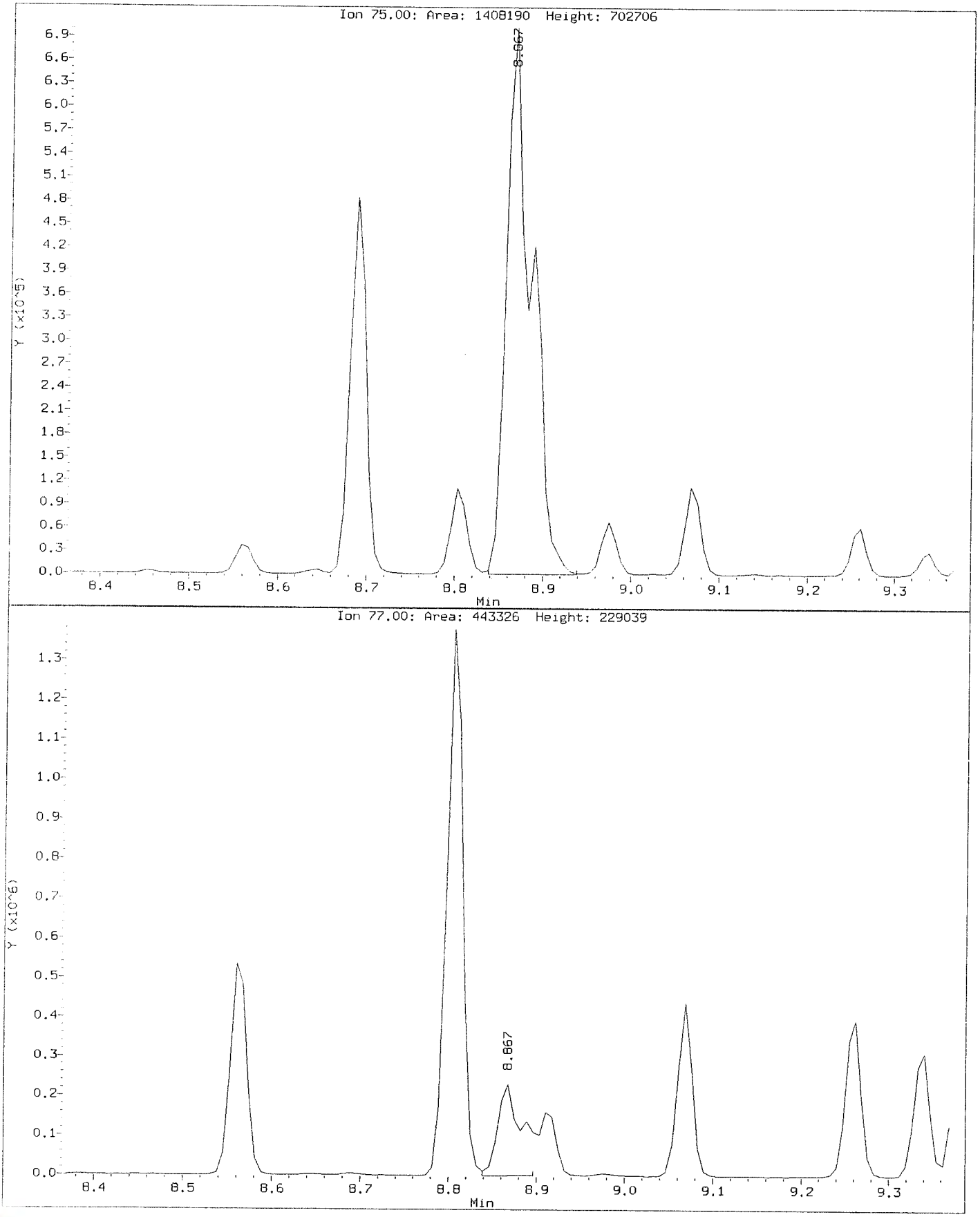


Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052611.D
Date : 26-MAY-2021 16:04
Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before2\X052611.D
Injection Date: 26-MAY-2021 16:04
Instrument: voa6.i
Client Sample ID: VSTD200

Compound: 1.2.3-Trichloropropane
CAS Number: 96-18-4



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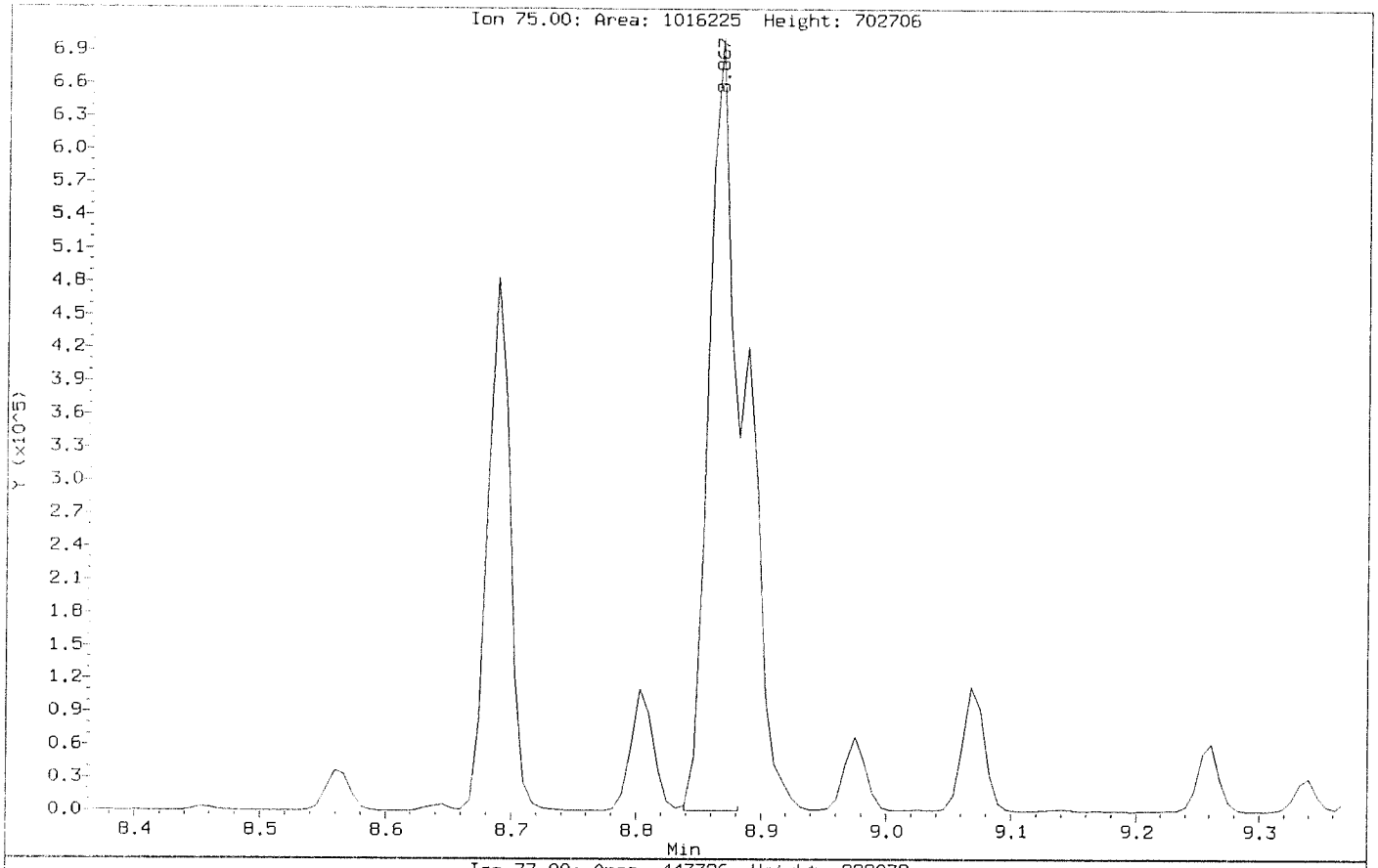
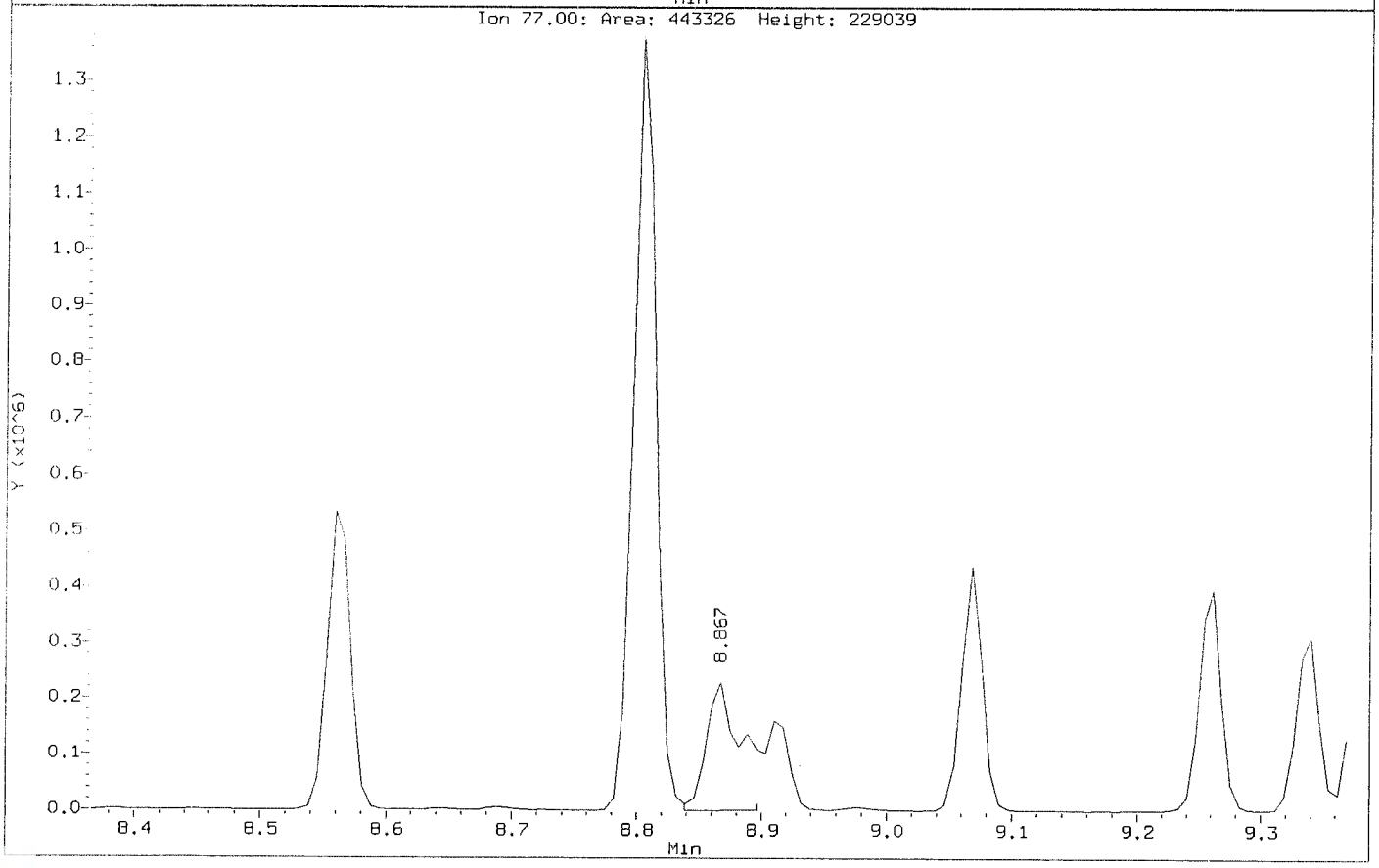
Instrument: voa6.i
Client Sample ID: VSTD200

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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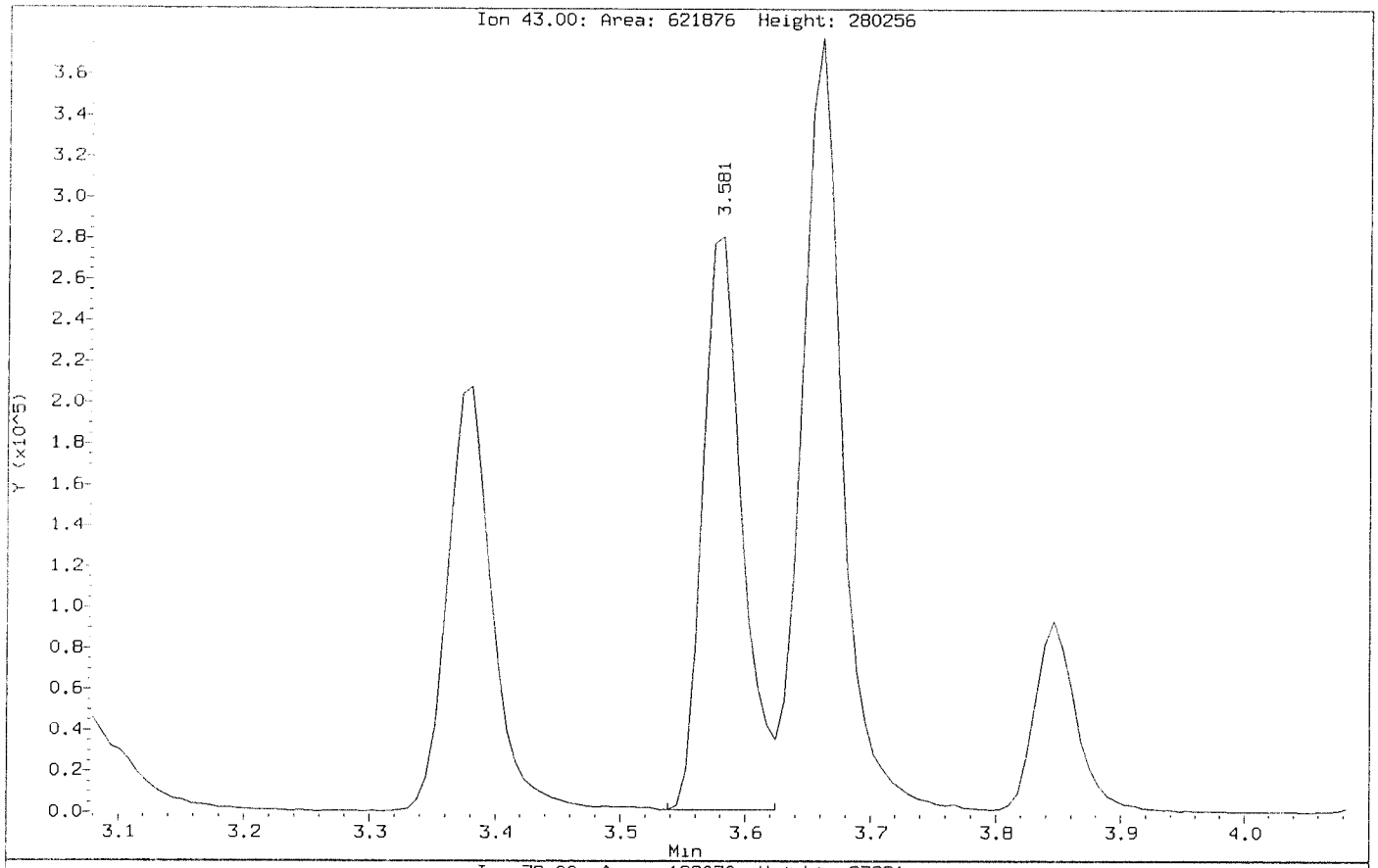
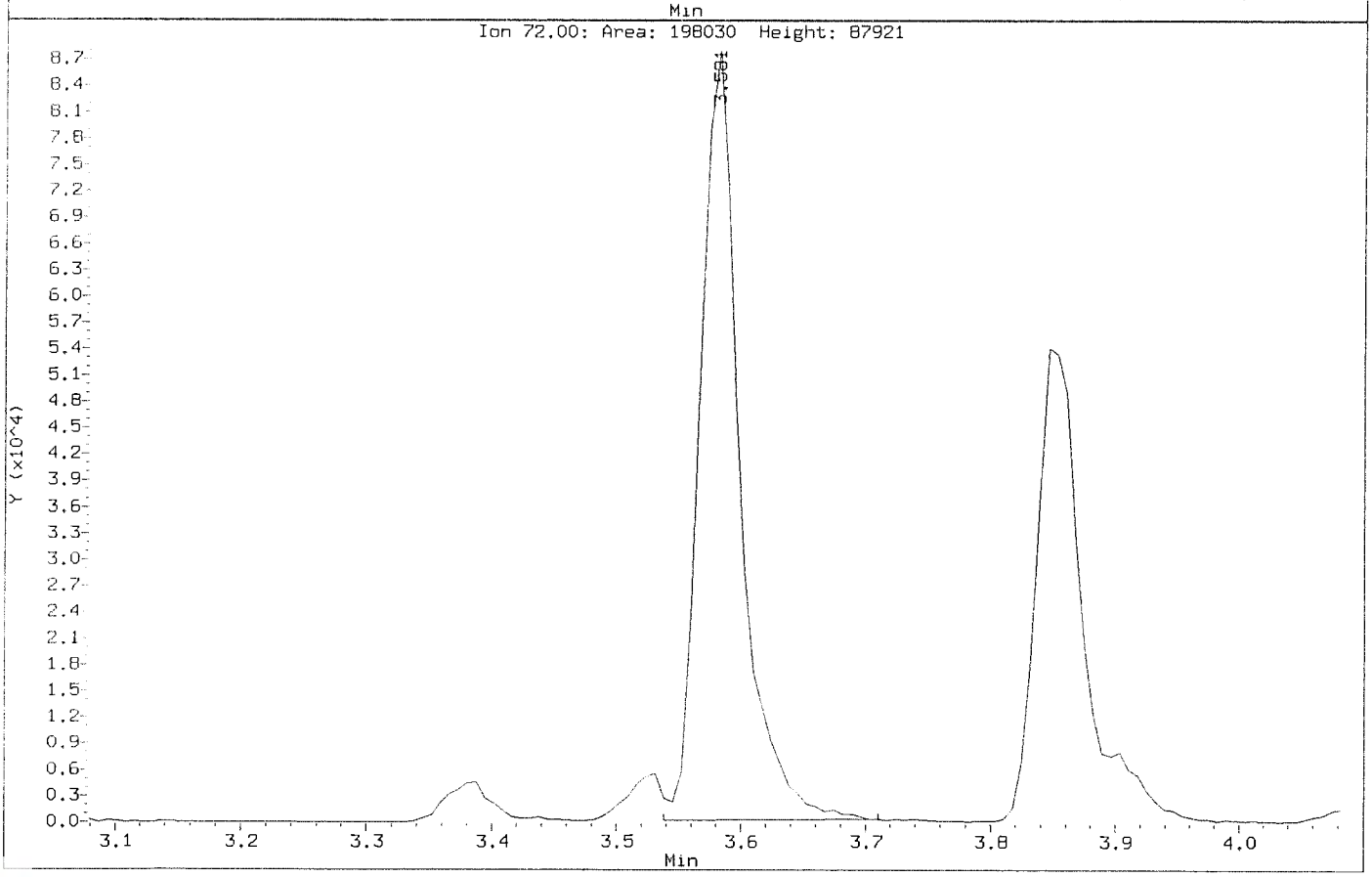
Instrument: voa6.i
Client Sample ID: VSTD200

Compound: 2-Butanone
CAS Number: 78-93-3





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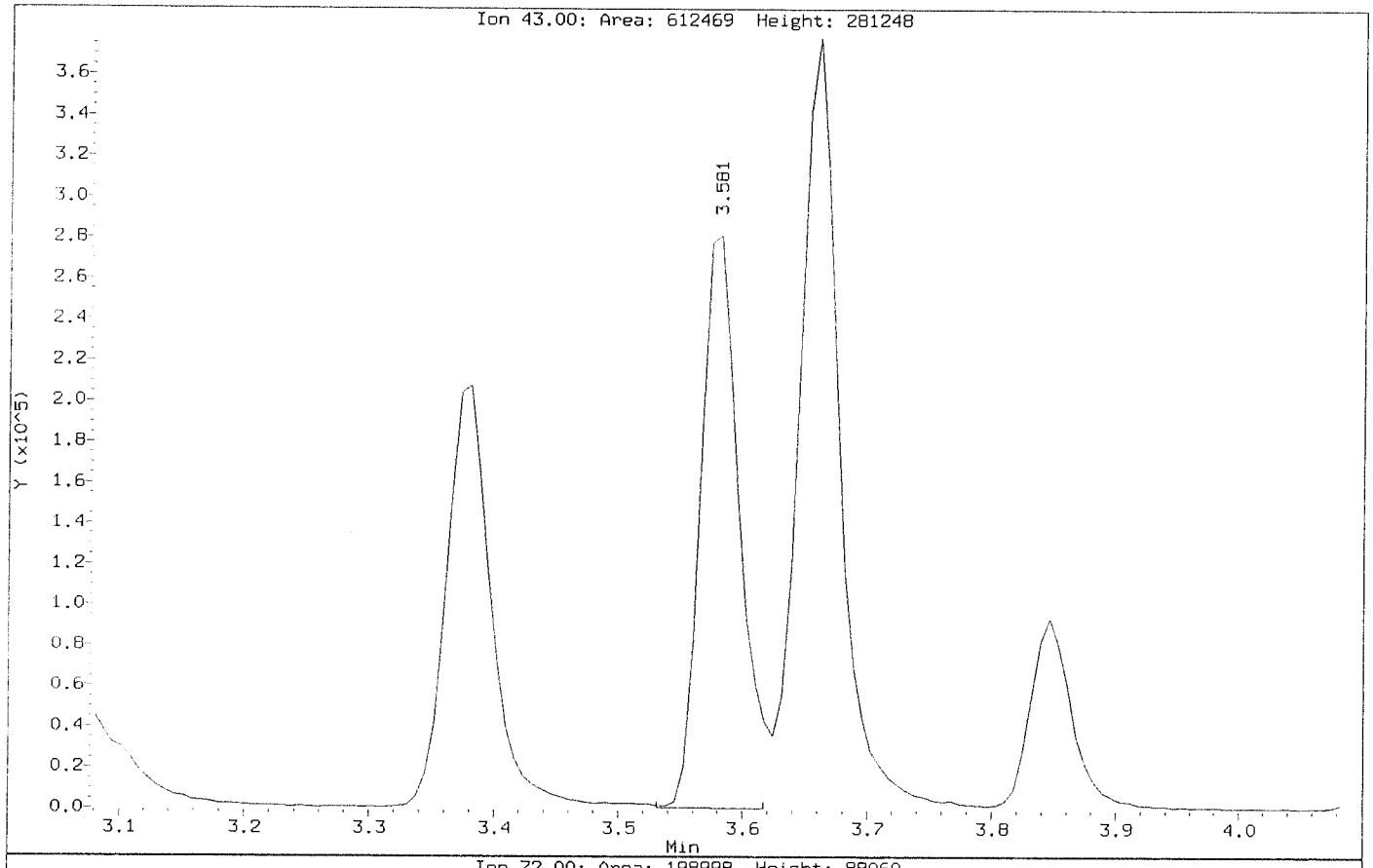
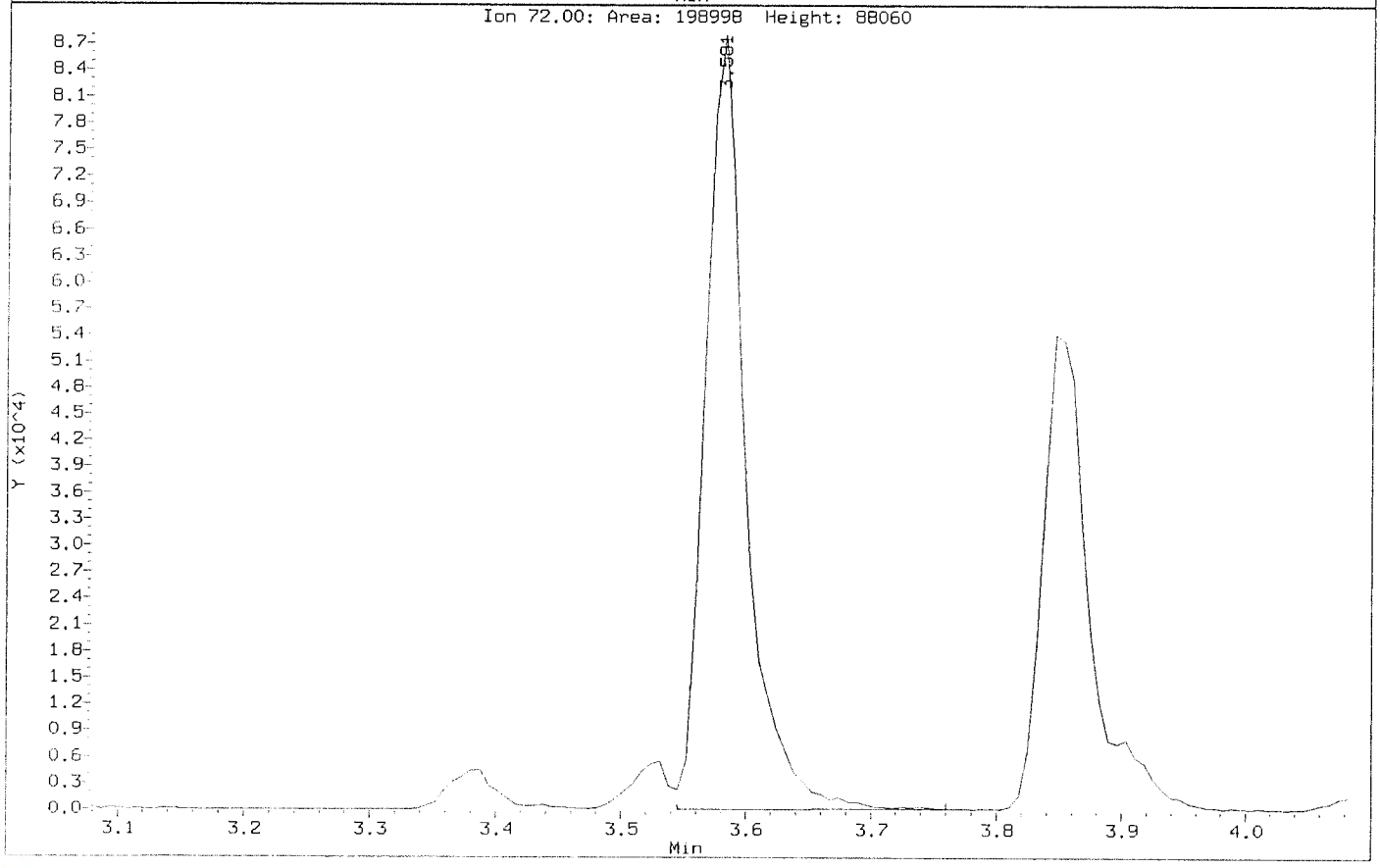
Injection Date: 26-MAY-2021 16:04
Instrument: voa6.i
Client Sample ID: VSTD200

Compound: 2-Butanone
CAS Number: 78-93-3





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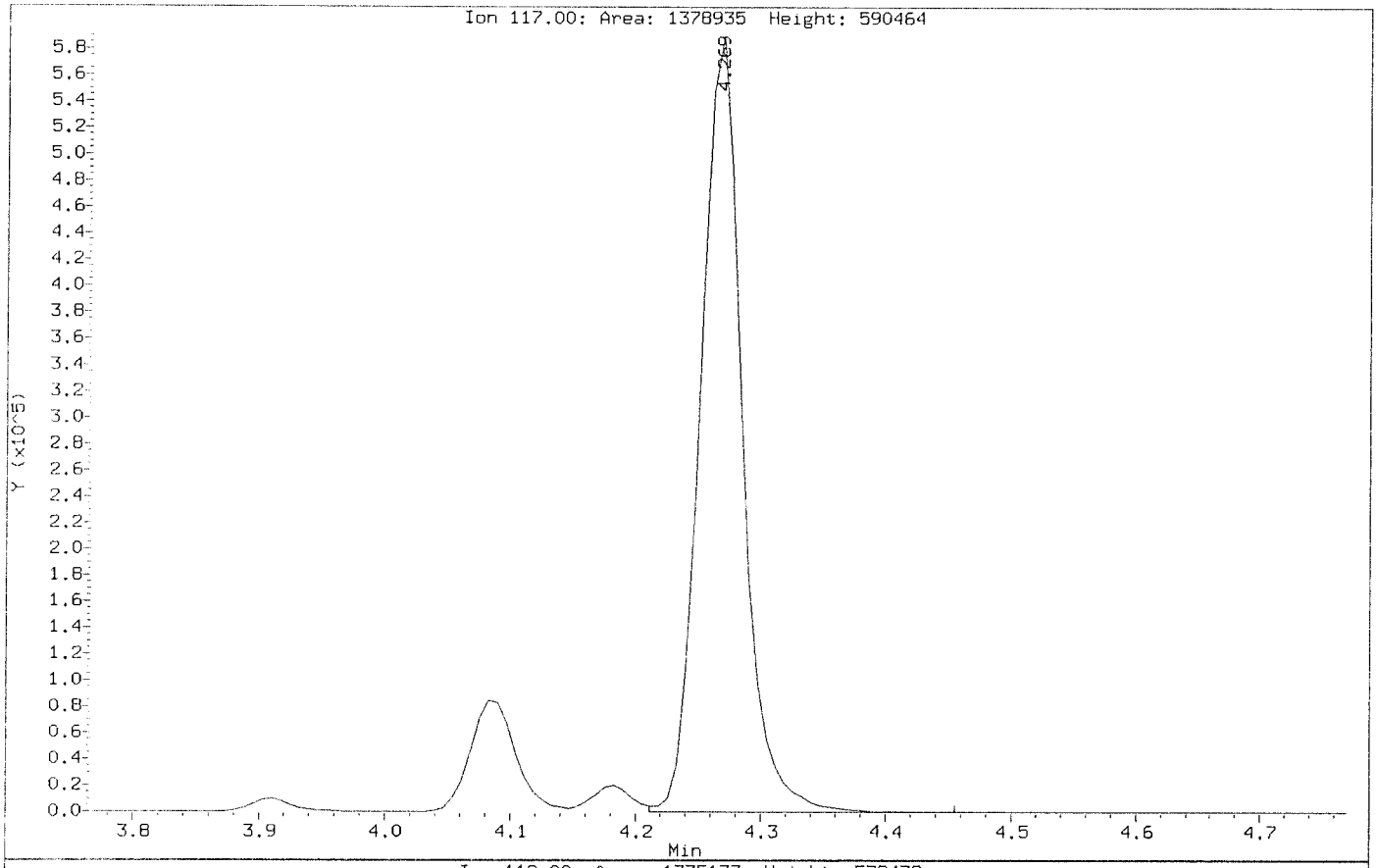
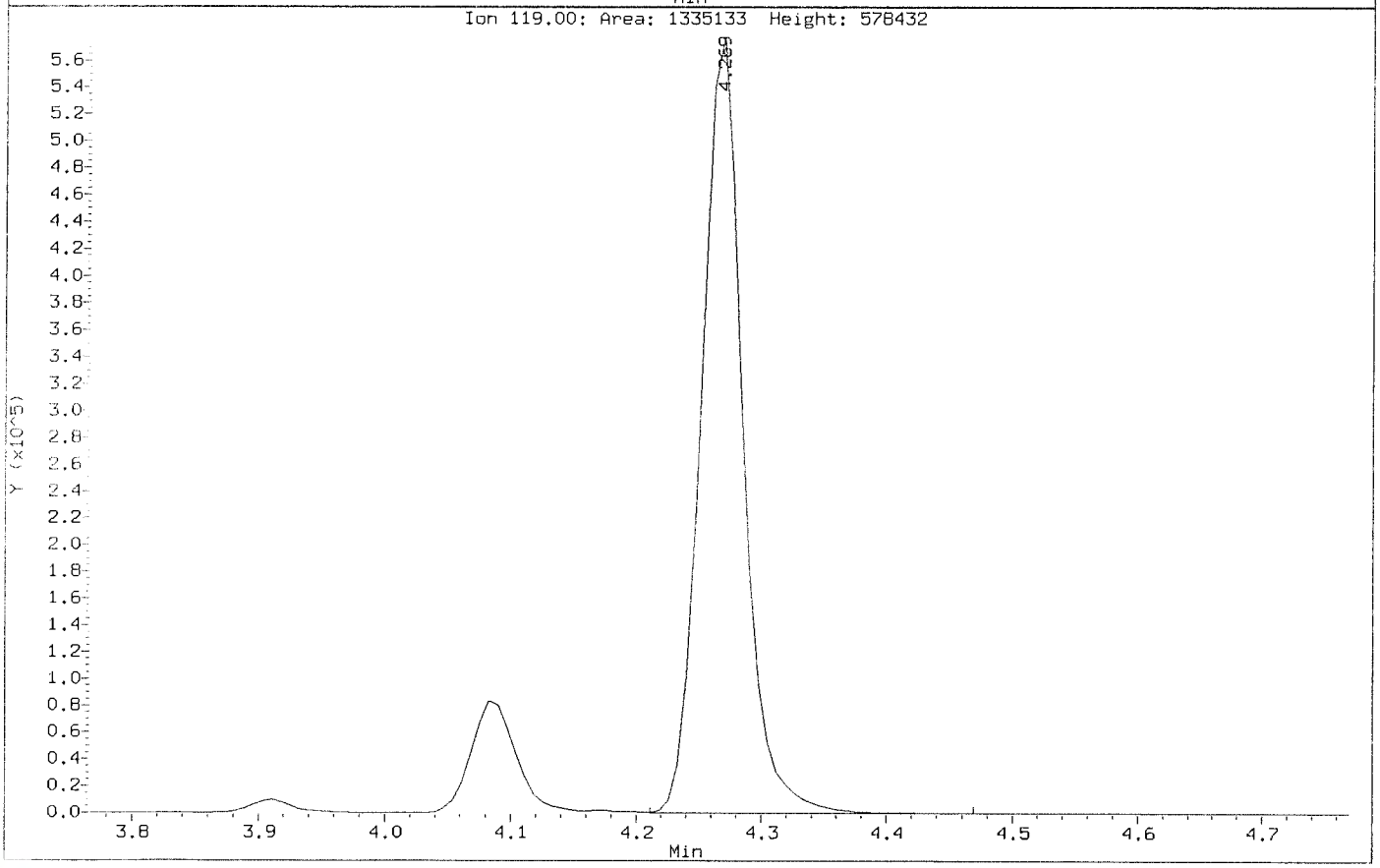
Injection Date: 26-MAY-2021 16:04
Instrument: voa6.i
Client Sample ID: VSTD200

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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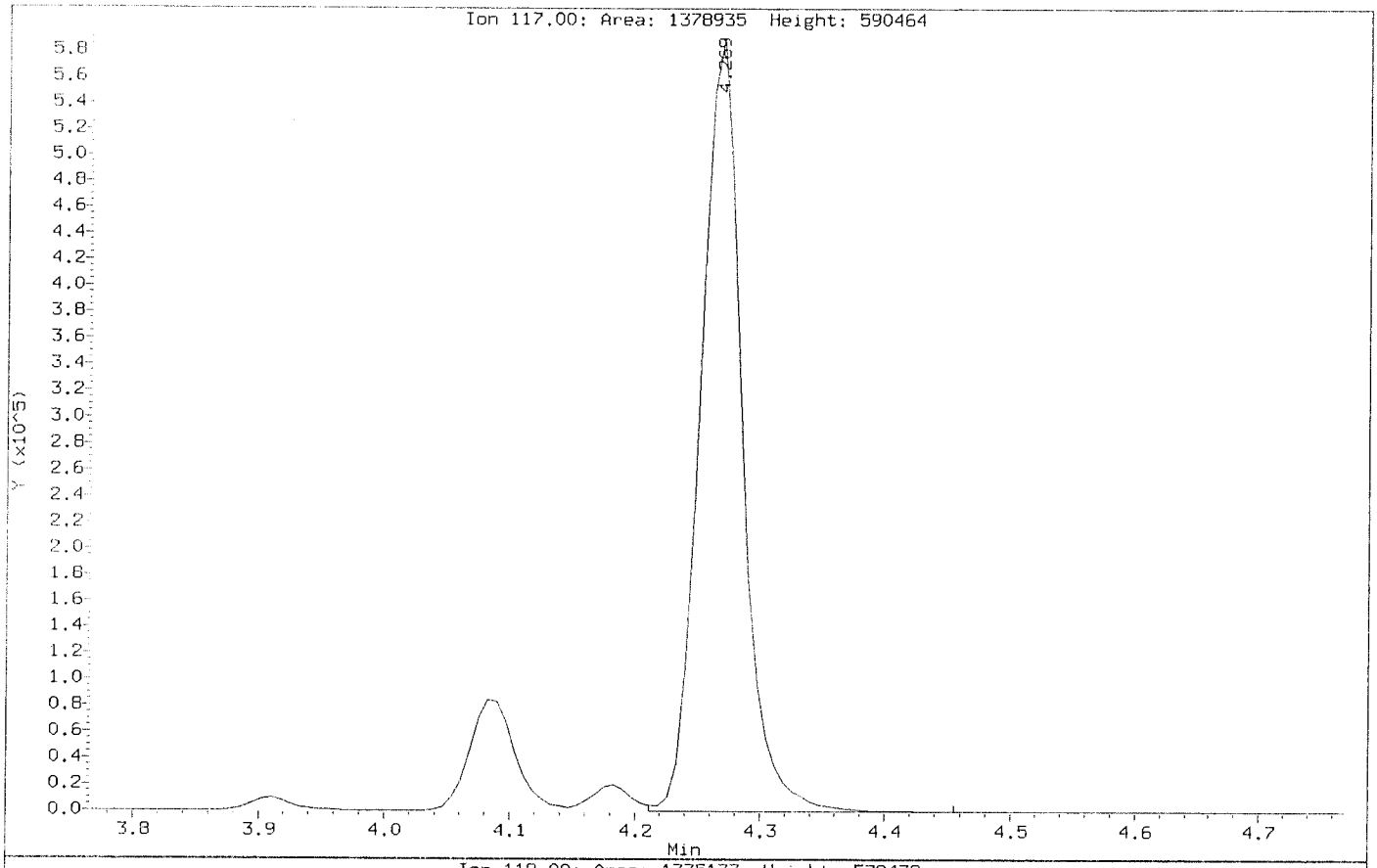
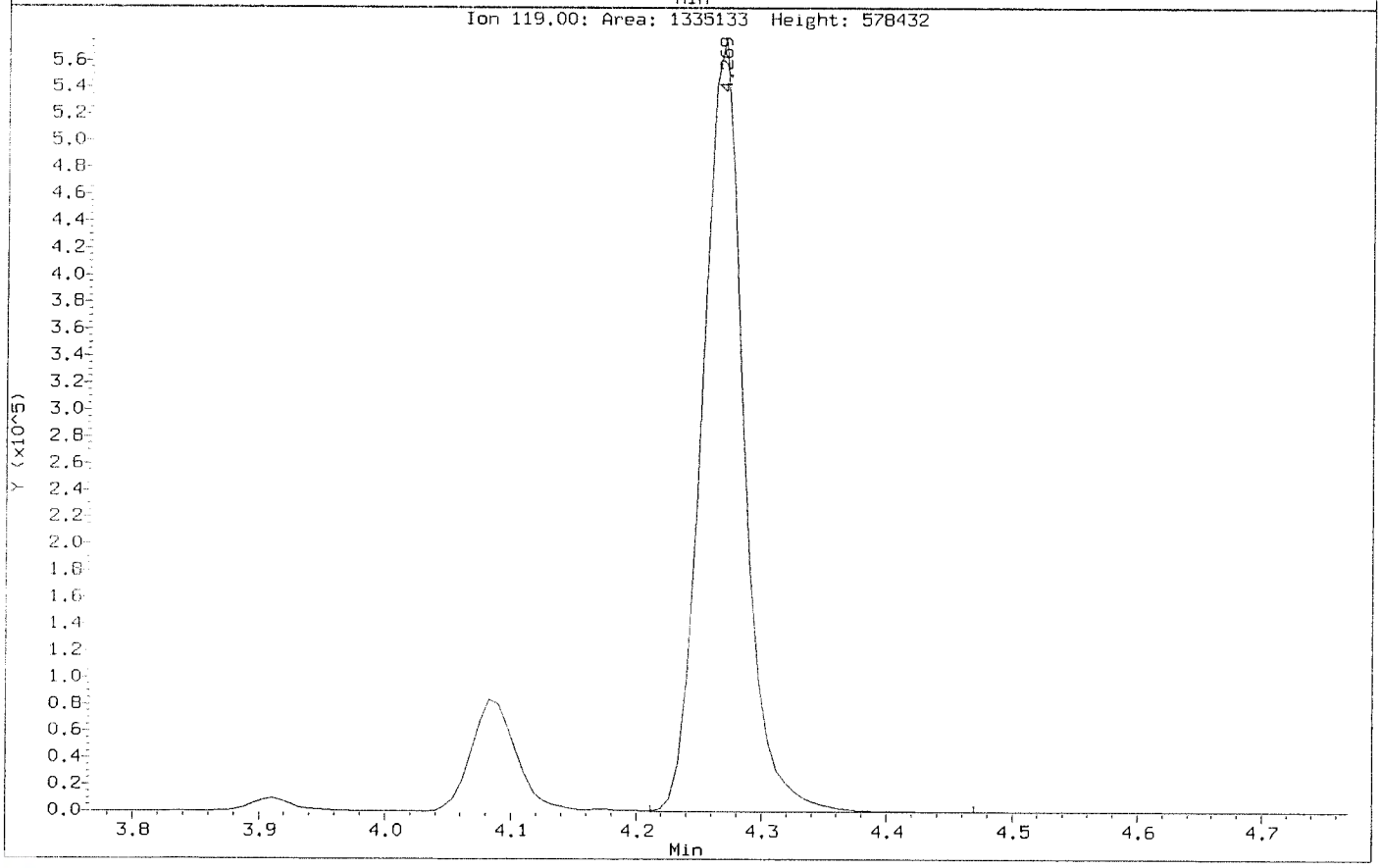
Instrument: voa6.i
Client Sample ID: VSTD200

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





ALS Laboratory Group

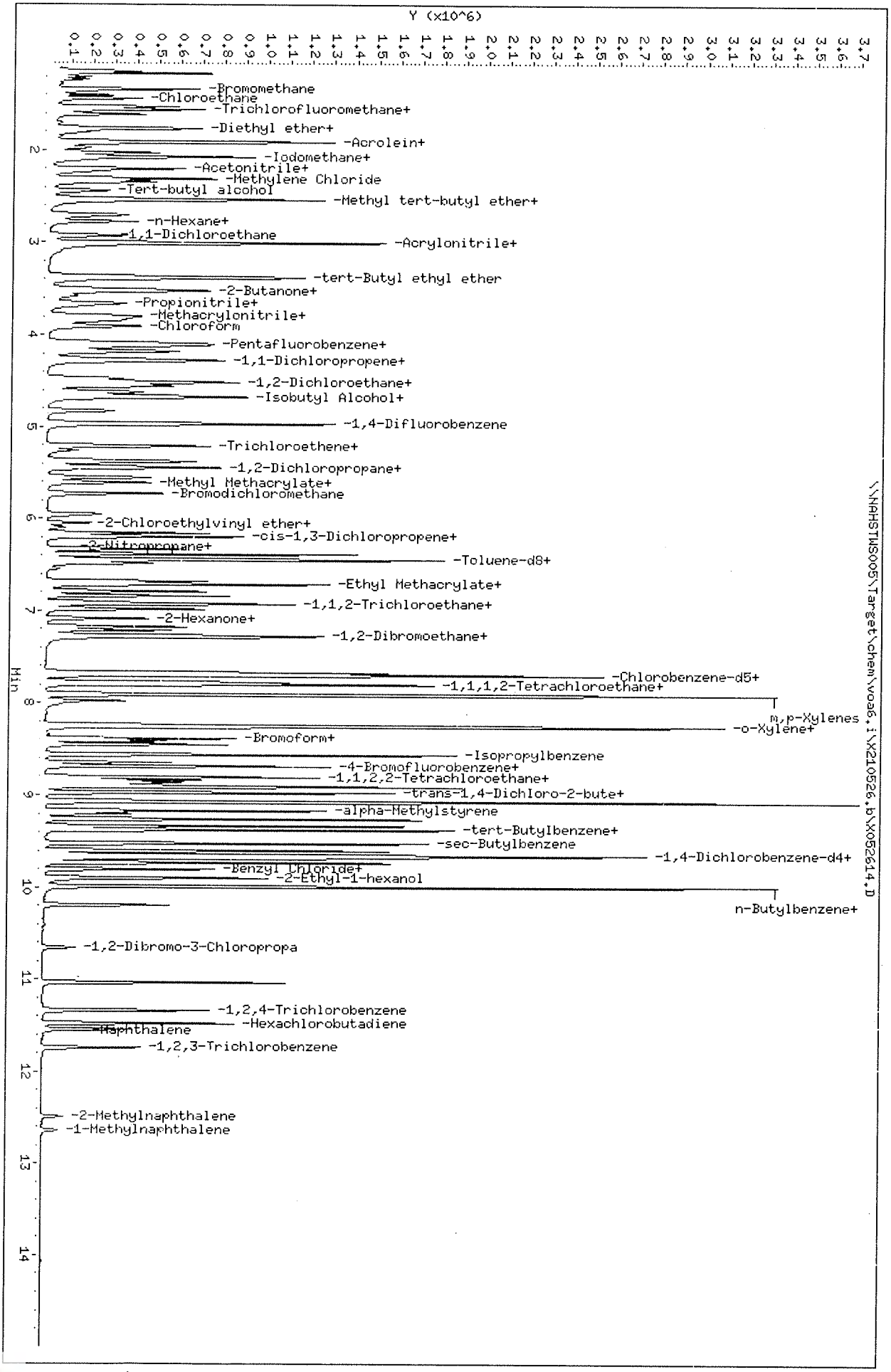
Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052614.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 26-MAY-2021 17:07
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 30-Jun-2021 18:30 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 16:04 Cal File: X052611.D
Als bottle: 15 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	506914	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	749401	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	706349	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	404605	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.096	(0.981)	247247	49.5505	49.55
$	35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	239842	49.5243	49.52
$	48 Toluene-d8	98	6.388	6.388	(0.833)	833853	47.3924	47.39
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	315807	50.8964	50.89
	60 1,1,1,2-Tetrachloroethane	131	7.778	7.778	(1.014)	257281	49.2529	49.25
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	339781	45.3571	45.35
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	270178	48.2956	48.29
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	179104	46.8083	46.80
	22 1,1-Dichloroethane	63	2.921	2.922	(0.699)	347110	43.3136	43.31
	11 1,1-Dichloroethene	96	1.911	1.912	(0.457)	245712	47.0575	47.05
	32 1,1-Dichloropropene	75	4.282	4.283	(0.863)	274032	47.7443	47.74
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	132944	54.2763	54.27
	71 1,2,3-Trichloropropane	75	8.860	8.867	(0.917)	300466	59.5639	59.56
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	217548	54.3834	54.38
	79 1,2,4-Trimethylbenzene	105	9.375	9.383	(0.970)	872205	47.2632	47.26
	89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	32977	51.3630	51.36
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	239375	46.0296	46.02
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	528355	48.1444	48.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	289734	48.5232	48.52
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	207974	47.1466	47.14
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	895653	48.7678	48.76
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	551654	48.3386	48.33
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	347121	45.6229	45.62
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	560227	47.0431	47.04
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	322832	46.5498	46.54
24	2-Butanone	43	3.580	3.581	(0.856)	137219	88.9725	88.97
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	698906	46.1501	46.15
52	2-Hexanone	43	7.090	7.090	(0.924)	245058	93.3955	93.39
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	852569	47.2731	47.27
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	926735	49.5363	49.53
45	4-Methyl-2-Pentanone	43	6.324	6.331	(0.824)	353755	86.9700	86.96
10	Acetone	43	1.976	1.976	(0.473)	135713	105.102	105.10
37	Benzene	78	4.512	4.512	(0.909)	815678	47.3793	47.37
74	Bromobenzene	156	8.802	8.810	(0.911)	325168	48.4391	48.43
29	Bromochloromethane	128	3.795	3.795	(0.908)	138143	45.0694	45.06
39	Bromodichloromethane	83	5.722	5.722	(1.153)	302319	46.9256	46.92
66	Bromoform	173	8.408	8.408	(1.096)	199211	50.5771	50.57
6	Bromomethane	94	1.338	1.331	(0.320)	290943	55.5502	55.55
19	Carbon Disulfide	76	2.069	2.069	(0.495)	1117790	90.2714	90.27
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	303364	48.8328	48.83
59	Chlorobenzene	112	7.692	7.692	(1.003)	679625	46.2195	46.21
7	Chloroethane	64	1.403	1.396	(0.336)	180947	50.9274	50.92
28	Chloroform	83	3.910	3.910	(0.935)	393929	44.1902	44.19
3	Chloromethane	50	1.073	1.073	(0.257)	234438	51.2462	51.24
27	cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	247214	46.5287	46.52
46	cis-1,3-Dichloropropene	75	6.152	6.159	(1.240)	374428	49.3216	49.32
55	Dibromochloromethane	129	7.176	7.176	(0.936)	278310	47.8716	47.87
44	Dibromomethane	93	5.550	5.550	(1.118)	156126	47.0960	47.09
2	Dichlorodifluoromethane	85	0.973	0.966	(0.233)	239483	51.4356	51.43
61	Ethylbenzene	106	7.800	7.800	(1.017)	342336	50.4646	50.46
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	150526	59.5954	59.59
67	Isopropylbenzene	105	8.559	8.559	(1.116)	1042060	50.2754	50.27
62	m,p-Xylenes	106	7.907	7.907	(1.031)	869159	98.2848	98.28
17	Methylene Chloride	84	2.305	2.298	(0.551)	219481	47.6850	47.68
87	n-Butylbenzene	91	9.991	9.991	(1.034)	805502	51.1747	51.17
73	n-Propylbenzene	91	8.910	8.910	(0.922)	1192846	47.2628	47.26
92	Naphthalene	128	11.546	11.539	(1.195)	300951	52.0501	52.05
63	o-Xylene	106	8.244	8.244	(1.075)	420555	48.7708	48.77
81	sec-Butylbenzene	105	9.519	9.526	(0.985)	1015061	47.7769	47.77
64	Styrene	104	8.258	8.258	(1.077)	730776	50.7156	50.71
78	tert-Butylbenzene	119	9.340	9.340	(0.967)	757897	48.1351	48.13
56	Tetrachloroethene	164	6.926	6.933	(0.903)	224904	51.7220	51.72
50	Toluene	91	6.446	6.446	(0.840)	948186	45.9813	45.98
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	214846	45.3913	45.39
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	327047	49.9385	49.93
38	Trichloroethene	130	5.206	5.207	(1.049)	255360	49.6477	49.64
8	Trichlorofluoromethane	101	1.560	1.553	(0.373)	451809	49.3770	49.37
5	Vinyl Chloride	62	1.138	1.138	(0.272)	282225	47.0343	47.03



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052614.D
Date : 26-MAY-2021 17:07
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

MSVOA06 -Logbook

Batch: 45168 **Analyst:** Presenta Cabascango

Date: 06-15-2021 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	06-15-2021 10:55 am	1.00	50 mL	50 mL	X061501.D	Liquid	Y	NA
2	CCV	CCV	06-15-2021 11:16 am	1.00	50 mL	50 mL	X061502.D	Liquid	Y	NA
3	BLANK	SAMP	06-15-2021 11:37 am	1.00	50 mL	50 mL	X061503.D	Liquid	Y	NA
4	CCB	SAMP	06-15-2021 11:58 am	1.00	50 mL	50 mL	X061504.D	Liquid	Y	NA
5	CCB	SAMP	06-15-2021 12:19 pm	1.00	50 mL	50 mL	X061505.D	Liquid	Y	NA
6	VLCSW-210615	LCS	06-15-2021 12:40 pm	1.00	50 mL	50 mL	X061506.D	Liquid	Y	NA
7	BLANK	SAMP	06-15-2021 01:02 pm	1.00	50 mL	50 mL	X061507.D	Liquid	Y	NA
8	VBLKW-210615	MBLK	06-15-2021 01:23 pm	1.00	50 mL	50 mL	X061508.D	Liquid	Y	NA
9	HS21060700-03	SAMP	06-15-2021 01:44 pm	1.00	50 mL	50 mL	X061509.D	Liquid	Y	NA
10	HS21060700-01	SAMP	06-15-2021 02:05 pm	1.00	50 mL	50 mL	X061510.D	Liquid	Y	NA
11	HS21060700-02	SAMP	06-15-2021 02:26 pm	10.00	5 mL	50 mL	X061511.D	Liquid	Y	NA
12	HS21060700-02	SAMP	06-15-2021 02:47 pm	100.0(	500 µL	50 mL	X061512.D	Liquid	Y	NA
13	HS21060700-02MS	MS	06-15-2021 03:08 pm	100.0(	500 µL	50 mL	X061513.D	Liquid	Y	NA
14	HS21060700-02MSD	MSD	06-15-2021 03:29 pm	100.0(	500 µL	50 mL	X061514.D	Liquid	Y	NA
15	HS21060655-01	SAMP	06-15-2021 03:50 pm	1000.0	50 µL	50 mL	X061515.D	Liquid	Y	NA
16	HS21060700-01	SAMP	06-15-2021 04:11 pm	10.00	5 mL	50 mL	X061516.D	Liquid	Y	NA
17	HS21060700-25	SAMP	06-15-2021 04:32 pm	1.00	50 mL	50 mL	X061517.D	Liquid	Y	NA
18	HS21060700-17	SAMP	06-15-2021 04:53 pm	1.00	50 mL	50 mL	X061518.D	Liquid	Y	NA
19	HS21060700-18	SAMP	06-15-2021 05:14 pm	1.00	50 mL	50 mL	X061519.D	Liquid	Y	NA
20	HS21060700-19	SAMP	06-15-2021 05:35 pm	1.00	50 mL	50 mL	X061520.D	Liquid	Y	NA
21	HS21060700-20	SAMP	06-15-2021 05:56 pm	1.00	50 mL	50 mL	X061521.D	Liquid	Y	NA
22	HS21060700-21	SAMP	06-15-2021 06:17 pm	1.00	50 mL	50 mL	X061522.D	Liquid	Y	NA
23	HS21060700-04	SAMP	06-15-2021 06:38 pm	5.00	10 mL	50 mL	X061523.D	Liquid	Y	NA
24	HS21060700-04	SAMP	06-15-2021 06:59 pm	50.00	1 mL	50 mL	X061524.D	Liquid	Y	NA
25	HS21060700-05	SAMP	06-15-2021 07:20 pm	5.00	10 mL	50 mL	X061525.D	Liquid	Y	NA
26	HS21060700-05	SAMP	06-15-2021 07:41 pm	50.00	1 mL	50 mL	X061526.D	Liquid	Y	NA
27	HS21060700-06	SAMP	06-15-2021 08:03 pm	10.00	5 mL	50 mL	X061527.D	Liquid	Y	NA
28	HS21060700-06	SAMP	06-15-2021 08:24 pm	100.0(	500 µL	50 mL	X061528.D	Liquid	Y	NA
29	HS21060700-12	SAMP	06-15-2021 08:45 pm	25.00	2 mL	50 mL	X061529.D	Liquid	Y	NA
30	HS21060700-12	SAMP	06-15-2021 09:06 pm	250.0(	200 µL	50 mL	X061530.D	Liquid	Y	NA
31	CCV-END	CCV	06-15-2021 09:27 pm	1.00	50 mL	50 mL	X061531.D	Liquid	Y	NA
32	BLANK	SAMP	06-15-2021 09:48 pm	1.00	50 mL	50 mL	X061532.D	Liquid	Y	NA

FORM 2

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 #	SMC3 (TOL) #	OTHER #	TOT OUT
01	VLCSW-210615	105	97	96	101	0
02	VBLKW-210615	93	90	104	98	0
03	HS21060700-03	93	90	104	97	0
04	HS21060700-01	92	90	103	100	0
05	HS21060700-02	92	89	102	96	0
06	HS21060700-02	93	91	103	99	0
07	HS21060700-02MS	94	90	104	99	0
08	HS21060700-02MSD	93	89	102	100	0
09	HS21060700-01	93	90	106	96	0
10	HS21060700-25	94	90	104	98	0
11	HS21060700-17	93	89	102	96	0
12	HS21060700-18	94	89	104	98	0
13	HS21060700-19	93	89	103	99	0
14	HS21060700-20	93	90	104	98	0
15	HS21060700-21	93	89	104	93	0
16	HS21060700-04	92	89	102	99	0
17	HS21060700-04	90	88	105	94	0
18	HS21060700-05	93	89	104	98	0
19	HS21060700-05	91	88	103	97	0
20	HS21060700-06	92	90	102	93	0
21	HS21060700-06	92	89	105	94	0
22	HS21060700-12	90	88	102	97	0
23	HS21060700-12	89	90	104	92	0
24						
25						
26						
27						
28						

		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(0-130)
SMC2	= Dibromofluoromethane	(0-130)
SMC3 (TOL)	= Toluene-d8	(0-130)
OTHER	= 4-Bromofluorobenzene	(0-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKW-210615

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID: X061508 Lab Sample ID: VBLKW-210615

Date Analyzed: 06/15/21 Time Analyzed: 1323

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCSW-210615	VLCSW-210615	X061506	1240
02	HS21060700-03	HS21060700-03	X061509	1344
03	HS21060700-01	HS21060700-01	X061510	1405
04	HS21060700-02	HS21060700-02	X061511	1426
05	HS21060700-02	HS21060700-02	X061512	1447
06	HS21060700-02MS	HS21060700-02MS	X061513	1508
07	HS21060700-02MSD	HS21060700-02MSD	X061514	1529
08	HS21060700-01	HS21060700-01	X061516	1611
09	HS21060700-25	HS21060700-25	X061517	1632
10	HS21060700-17	HS21060700-17	X061518	1653
11	HS21060700-18	HS21060700-18	X061519	1714
12	HS21060700-19	HS21060700-19	X061520	1735
13	HS21060700-20	HS21060700-20	X061521	1756
14	HS21060700-21	HS21060700-21	X061522	1817
15	HS21060700-04	HS21060700-04	X061523	1838
16	HS21060700-04	HS21060700-04	X061524	1859
17	HS21060700-05	HS21060700-05	X061525	1920
18	HS21060700-05	HS21060700-05	X061526	1941
19	HS21060700-06	HS21060700-06	X061527	2003
20	HS21060700-06	HS21060700-06	X061528	2024
21	HS21060700-12	HS21060700-12	X061529	2045
22	HS21060700-12	HS21060700-12	X061530	2106
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID: X061501 BFB Injection Date: 06/15/21

Instrument ID: VOA6 BFB Injection Time: 1055

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.3
75	30.0 - 60.0% of mass 95	46.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	1.2 (1.1)1
174	Greater than 50.0% of mass 95	102.1
175	5.0 - 9.0% of mass 174	7.3 (7.1)1
176	95.0 - 101.0% of mass 174	102.7 (100.5)1
177	5.0 - 9.0% of mass 176	6.4 (6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV	CCV	X061502	06/15/21	1116
02	VLCSW-210615	VLCSW-210615	X061506	06/15/21	1240
03	VBLKW-210615	VBLKW-210615	X061508	06/15/21	1323
04	HS21060700-03	HS21060700-03	X061509	06/15/21	1344
05	HS21060700-01	HS21060700-01	X061510	06/15/21	1405
06	HS21060700-02	HS21060700-02	X061511	06/15/21	1426
07	HS21060700-02	HS21060700-02	X061512	06/15/21	1447
08	HS21060700-02MS	HS21060700-02MS	X061513	06/15/21	1508
09	HS21060700-02MSD	HS21060700-02MSD	X061514	06/15/21	1529
10	HS21060700-01	HS21060700-01	X061516	06/15/21	1611
11	HS21060700-25	HS21060700-25	X061517	06/15/21	1632
12	HS21060700-17	HS21060700-17	X061518	06/15/21	1653
13	HS21060700-18	HS21060700-18	X061519	06/15/21	1714
14	HS21060700-19	HS21060700-19	X061520	06/15/21	1735
15	HS21060700-20	HS21060700-20	X061521	06/15/21	1756
16	HS21060700-21	HS21060700-21	X061522	06/15/21	1817
17	HS21060700-04	HS21060700-04	X061523	06/15/21	1838
18	HS21060700-04	HS21060700-04	X061524	06/15/21	1859
19	HS21060700-05	HS21060700-05	X061525	06/15/21	1920
20	HS21060700-05	HS21060700-05	X061526	06/15/21	1941
21	HS21060700-06	HS21060700-06	X061527	06/15/21	2003
22	HS21060700-06	HS21060700-06	X061528	06/15/21	2024

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID: X061501 BFB Injection Date: 06/15/21

Instrument ID: VOA6 BFB Injection Time: 1055

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.3
75	30.0 - 60.0% of mass 95	46.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	1.2 (1.1)1
174	Greater than 50.0% of mass 95	102.1
175	5.0 - 9.0% of mass 174	7.3 (7.1)1
176	95.0 - 101.0% of mass 174	102.7 (100.5)1
177	5.0 - 9.0% of mass 176	6.4 (6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	HS21060700-12	HS21060700-12	X061529	06/15/21	2045
02	HS21060700-12	HS21060700-12	X061530	06/15/21	2106
03	CCV-END	CCV-END	X061531	06/15/21	2127
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Instrument ID: VOA6 Calibration Date: 06/15/21 Time: 1116

Lab File ID: X061502 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
cis-1,3-Dichloropropene	0.5060000	0.5323733	0.5323733	0.2	-5.21	20.00	AVRG	
trans-1,3-Dichloropropene	0.4370000	0.4668807	0.4668807	0.1	-6.84	20.00	AVRG	
1,3-Dichlorobenzene	1.4100000	1.4311578	1.4311578	0.6	-1.50	20.00	AVRG	
2,2-Dichloropropane	0.6840000	0.6687549	0.6687549	0.1	2.23	20.00	AVRG	
1,1-Dichloropropene	0.3830000	0.3998127	0.3998127	0.1	-4.39	20.00	AVRG	
Dibromomethane	0.2210000	0.2174355	0.2174355	0.1	1.61	20.00	AVRG	
1,2-Dibromoethane	0.3680000	0.3677726	0.3677726	0.1	0.06	20.00	AVRG	
trans-1,2-Dichloroethene	0.4670000	0.4222453	0.4222453	0.1	9.58	20.00	AVRG	
1,1,1,2-Tetrachloroethane	0.3700000	0.3852173	0.3852173	0.1	-4.11	20.00	AVRG	
1,1,1-Trichloroethane	0.7390000	0.6982333	0.6982333	0.1	5.52	20.00	AVRG	
1,1,2,2-Tetrachloroethane	56.006394	50.000000	0.7717892	0.3	-12.01	20.00	LINR	
1,1,2-Trichloroethane	0.2710000	0.2683269	0.2683269	0.1	0.99	20.00	AVRG	
1,1-Dichloroethane	0.7900000	0.7083464	0.7083464	0.2	10.34	20.00	AVRG	
1,1-Dichloroethene	0.5150000	0.4502665	0.4502665	0.1	12.57	20.00	AVRG	
Trichloroethene	0.3430000	0.3629964	0.3629964	0.2	-5.83	20.00	AVRG	
1,2,3-Trichlorobenzene	0.3030000	0.3849421	0.3849421	0.01	-27.04	20.00	AVRG	<-
Trichlorofluoromethane	0.9020000	0.8089211	0.8089211	0.1	10.32	20.00	AVRG	
1,2,4-Trichlorobenzene	0.4940000	0.6234153	0.6234153	0.1	-26.20	20.00	AVRG	<-
1,2,4-Trimethylbenzene	2.2800000	2.2980754	2.2980754	0.1	-0.79	20.00	AVRG	
Tetrachloroethene	0.3080000	0.3325795	0.3325795	0.2	-7.98	20.00	AVRG	
1,2-Dichlorobenzene	1.3560000	1.3719646	1.3719646	0.4	-1.18	20.00	AVRG	
1,2-Dichloroethane	0.3980000	0.4005413	0.4005413	0.1	-0.64	20.00	AVRG	
1,2-Dichloropropane	0.2940000	0.2900804	0.2900804	0.1	1.33	20.00	AVRG	
1,3,5-Trimethylbenzene	2.2700000	2.3004954	2.3004954	0.1	-1.34	20.00	AVRG	
1,3-Dichloropropane	0.5390000	0.5297071	0.5297071	0.1	1.72	20.00	AVRG	
1,4-Dichlorobenzene	1.4720000	1.4556116	1.4556116	0.4	1.11	20.00	AVRG	
Toluene	1.4600000	1.3858331	1.3858331	0.4	5.08	20.00	AVRG	
2-Butanone	0.1520000	0.1562921	0.1562921	0.1	-2.82	20.00	AVRG	
2-Chlorotoluene	1.8720000	1.8574265	1.8574265	0.1	0.78	20.00	AVRG	
2-Hexanone	0.1860000	0.1996930	0.1996930	0.1	-7.36	20.00	AVRG	
4-Chlorotoluene	2.2280000	2.1827535	2.1827535	0.1	2.03	20.00	AVRG	
tert-Butylbenzene	1.9460000	2.0207293	2.0207293	0.1	-3.84	20.00	AVRG	
4-Methyl-2-Pentanone	0.2880000	0.2881738	0.2881738	0.1	-0.06	20.00	AVRG	
Acetone	106.35699	100.00000	0.1353751	0.1	-6.36	20.00	LINR	
Benzene	1.1480000	1.1462654	1.1462654	0.5	0.15	20.00	AVRG	
Bromobenzene	0.8300000	0.8492787	0.8492787	0.1	-2.32	20.00	AVRG	
Bromochloromethane	0.3020000	0.2859390	0.2859390	0.1	5.32	20.00	AVRG	
Bromodichloromethane	0.4300000	0.4264788	0.4264788	0.2	0.82	20.00	AVRG	
Bromoform	0.2790000	0.2998849	0.2998849	0.1	-7.48	20.00	AVRG	
Bromomethane	42.276000	50.000000	0.4364209	0.1	15.45	20.00	LINR	
Carbon Disulfide	1.2210000	1.0409222	1.0409222	0.1	14.75	20.00	AVRG	
Carbon Tetrachloride	0.4140000	0.4369215	0.4369215	0.1	-5.54	20.00	AVRG	

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS2106070

Instrument ID: VOA6 Calibration Date: 06/15/21 Time: 1116

Lab File ID: X061502 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chlorobenzene	1.0410000	0.9876404	0.9876404	0.5	5.12	20.00	AVRG	
Chloroethane	48.565117	50.000000	0.3408486	0.1	2.87	20.00	LINR	
Chloroform	0.8790000	0.7906250	0.7906250	0.2	10.05	20.00	AVRG	
Chloromethane	48.503878	50.000000	0.4389897	0.1	2.99	20.00	LINR	
cis-1,2-Dichloroethene	0.5240000	0.4893601	0.4893601	0.1	6.61	20.00	AVRG	
Dibromochloromethane	0.4120000	0.4274124	0.4274124	0.1	-3.74	20.00	AVRG	
Dichlorodifluoromethane	53.893899	50.000000	0.4949203	0.1	-7.79	20.00	LINR	
Ethylbenzene	0.4800000	0.5072184	0.5072184	0.1	-5.67	20.00	AVRG	
Hexachlorobutadiene	67.052655	50.000000	0.4221637	0.1	-34.10	20.00	2RDR	<-
Isopropylbenzene	1.4670000	1.5250349	1.5250349	0.1	-3.96	20.00	AVRG	
m,p-Xylenes	0.6260000	0.6316230	0.6316230	0.1	-0.90	20.00	AVRG	
Methylene Chloride	48.079463	50.000000	0.4364595	0.1	3.84	20.00	LINR	
n-Butylbenzene	1.9450000	2.1399931	2.1399931	0.5	-10.02	20.00	AVRG	
n-Propylbenzene	3.1190000	3.2259099	3.2259099	0.1	-3.43	20.00	AVRG	
Naphthalene	0.7140000	0.8773922	0.8773922	0.2	-22.88	20.00	AVRG	<-
o-Xylene	0.6100000	0.6118414	0.6118414	0.3	-0.30	20.00	AVRG	
sec-Butylbenzene	2.6250000	2.7599324	2.7599324	0.1	-5.14	20.00	AVRG	
Styrene	1.0200000	1.0435544	1.0435544	0.3	-2.31	20.00	AVRG	
Vinyl Chloride	0.5920000	0.5411007	0.5411007	0.1	8.60	20.00	AVRG	
1,2,3-Trichloropropane	0.6230000	0.6490493	0.6490493	0.1	-4.18	20.00	AVRG	
p-Isopropyltoluene	2.3120000	2.4562975	2.4562975	0.1	-6.24	20.00	AVRG	
1,2-Dibromo-3-Chloropropane	59.819519	50.000000	9.51e-002	0.05	-19.64	20.00	LINR	
1,2-Dichloroethane-d4	49.239670	50.000000	0.4704598	0.1	1.52	20.00	LINR	
Dibromofluoromethane	47.245477	50.000000	0.4651350	0.1	5.51	20.00	LINR	
Toluene-d8	1.2450000	1.1859401	1.1859401	0.1	4.74	20.00	AVRG	
4-Bromofluorobenzene	51.232123	50.000000	0.4500913	0.1	-2.46	20.00	LINR	

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Instrument ID: VOA6 Calibration Date: 06/15/21 Time: 2127

Lab File ID: X061531 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
cis-1,3-Dichloropropene	0.5060000	0.4479035	0.4479035	0.2	11.48	50.00	AVRG
trans-1,3-Dichloropropene	0.4370000	0.3928960	0.3928960	0.1	10.09	50.00	AVRG
1,3-Dichlorobenzene	1.4100000	1.2150110	1.2150110	0.6	13.83	50.00	AVRG
2,2-Dichloropropane	0.6840000	0.4596304	0.4596304	0.1	32.80	50.00	AVRG
1,1-Dichloropropene	0.3830000	0.3183612	0.3183612	0.1	16.88	50.00	AVRG
Dibromomethane	0.2210000	0.1975975	0.1975975	0.1	10.59	50.00	AVRG
1,2-Dibromoethane	0.3680000	0.3196556	0.3196556	0.1	13.14	50.00	AVRG
trans-1,2-Dichloroethene	0.4670000	0.3775971	0.3775971	0.1	19.14	50.00	AVRG
1,1,1,2-Tetrachloroethane	0.3700000	0.3391964	0.3391964	0.1	8.32	50.00	AVRG
1,1,1-Trichloroethane	0.7390000	0.6068134	0.6068134	0.1	17.89	50.00	AVRG
1,1,2,2-Tetrachloroethane	47.574448	50.000000	0.6580245	0.3	4.85	50.00	LINR
1,1,2-Trichloroethane	0.2710000	0.2366884	0.2366884	0.1	12.66	50.00	AVRG
1,1-Dichloroethane	0.7900000	0.6375176	0.6375176	0.2	19.30	50.00	AVRG
1,1-Dichloroethene	0.5150000	0.3875587	0.3875587	0.1	24.74	50.00	AVRG
Trichloroethene	0.3430000	0.3256480	0.3256480	0.2	5.06	50.00	AVRG
1,2,3-Trichlorobenzene	0.3030000	0.2675204	0.2675204	0.01	11.71	50.00	AVRG
Trichlorofluoromethane	0.9020000	0.6828145	0.6828145	0.1	24.30	50.00	AVRG
1,2,4-Trichlorobenzene	0.4940000	0.4452621	0.4452621	0.1	9.86	50.00	AVRG
1,2,4-Trimethylbenzene	2.2800000	1.8608724	1.8608724	0.1	18.38	50.00	AVRG
Tetrachloroethene	0.3080000	0.2622240	0.2622240	0.2	14.86	50.00	AVRG
1,2-Dichlorobenzene	1.3560000	1.1642714	1.1642714	0.4	14.14	50.00	AVRG
1,2-Dichloroethane	0.3980000	0.3601189	0.3601189	0.1	9.52	50.00	AVRG
1,2-Dichloropropane	0.2940000	0.2588056	0.2588056	0.1	11.97	50.00	AVRG
1,3,5-Trimethylbenzene	2.2700000	1.8137640	1.8137640	0.1	20.10	50.00	AVRG
1,3-Dichloropropane	0.5390000	0.4646037	0.4646037	0.1	13.80	50.00	AVRG
1,4-Dichlorobenzene	1.4720000	1.2469491	1.2469491	0.4	15.29	50.00	AVRG
Toluene	1.4600000	1.1857663	1.1857663	0.4	18.78	50.00	AVRG
2-Butanone	0.1520000	0.1265484	0.1265484	0.1	16.74	50.00	AVRG
2-Chlorotoluene	1.8720000	1.5441160	1.5441160	0.1	17.52	50.00	AVRG
2-Hexanone	0.1860000	0.1596033	0.1596033	0.1	14.19	50.00	AVRG
4-Chlorotoluene	2.2280000	1.8256904	1.8256904	0.1	18.06	50.00	AVRG
tert-Butylbenzene	1.9460000	1.5212074	1.5212074	0.1	21.83	50.00	AVRG
4-Methyl-2-Pentanone	0.2880000	0.2367309	0.2367309	0.1	17.80	50.00	AVRG
Acetone	80.022319	100.00000	0.1036347	0.1	19.98	50.00	LINR
Benzene	1.1480000	0.9927032	0.9927032	0.5	13.53	50.00	AVRG
Bromobenzene	0.8300000	0.7493524	0.7493524	0.1	9.72	50.00	AVRG
Bromochloromethane	0.3020000	0.2662692	0.2662692	0.1	11.83	50.00	AVRG
Bromodichloromethane	0.4300000	0.3796904	0.3796904	0.2	11.70	50.00	AVRG
Bromoform	0.2790000	0.2597249	0.2597249	0.1	6.91	50.00	AVRG
Bromomethane	40.407782	50.000000	0.4170651	0.1	19.18	50.00	LINR
Carbon Disulfide	1.2210000	0.9172587	0.9172587	0.1	24.88	50.00	AVRG
Carbon Tetrachloride	0.4140000	0.3480991	0.3480991	0.1	15.92	50.00	AVRG

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS2106070

Instrument ID: VOA6 Calibration Date: 06/15/21 Time: 2127

Lab File ID: X061531 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Chlorobenzene	1.0410000	0.8656824	0.8656824	0.5	16.84	50.00	AVRG
Chloroethane	53.449787	50.000000	0.3741596	0.1	-6.90	50.00	LINR
Chloroform	0.8790000	0.7334634	0.7334634	0.2	16.56	50.00	AVRG
Chloromethane	41.103915	50.000000	0.3756013	0.1	17.79	50.00	LINR
cis-1,2-Dichloroethene	0.5240000	0.4518977	0.4518977	0.1	13.76	50.00	AVRG
Dibromochloromethane	0.4120000	0.3746509	0.3746509	0.1	9.06	50.00	AVRG
Dichlorodifluoromethane	40.770603	50.000000	0.3748741	0.1	18.46	50.00	LINR
Ethylbenzene	0.4800000	0.4226710	0.4226710	0.1	11.94	50.00	AVRG
Hexachlorobutadiene	41.733114	50.000000	0.2546983	0.1	16.53	50.00	2RDR
Isopropylbenzene	1.4670000	1.2017397	1.2017397	0.1	18.08	50.00	AVRG
m,p-Xylenes	0.6260000	0.5296461	0.5296461	0.1	15.39	50.00	AVRG
Methylene Chloride	43.966664	50.000000	0.4001279	0.1	12.07	50.00	LINR
n-Butylbenzene	1.9450000	1.4388605	1.4388605	0.5	26.02	50.00	AVRG
n-Propylbenzene	3.1190000	2.4423464	2.4423464	0.1	21.69	50.00	AVRG
Naphthalene	0.7140000	0.5708226	0.5708226	0.2	20.05	50.00	AVRG
o-Xylene	0.6100000	0.5264607	0.5264607	0.3	13.69	50.00	AVRG
sec-Butylbenzene	2.6250000	2.0090456	2.0090456	0.1	23.46	50.00	AVRG
Styrene	1.0200000	0.9099502	0.9099502	0.3	10.79	50.00	AVRG
Vinyl Chloride	0.5920000	0.4676605	0.4676605	0.1	21.00	50.00	AVRG
1,2,3-Trichloropropane	0.6230000	0.5475966	0.5475966	0.1	12.10	50.00	AVRG
p-Isopropyltoluene	2.3120000	1.8026661	1.8026661	0.1	22.03	50.00	AVRG
1,2-Dibromo-3-Chloropropane	44.758332	50.000000	7.09e-002	0.05	10.48	50.00	LINR
1,2-Dichloroethane-d4	50.786071	50.000000	0.4850297	0.1	-1.57	50.00	LINR
Dibromofluoromethane	49.960108	50.000000	0.4917678	0.1	0.08	50.00	LINR
Toluene-d8	1.2450000	1.1606141	1.1606141	0.1	6.78	50.00	AVRG
4-Bromofluorobenzene	50.401077	50.000000	0.4426817	0.1	-0.80	50.00	LINR

FORM VII VOA

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID (Standard): X061502 Date Analyzed: 06/15/21

Instrument ID: VOA6 Time Analyzed: 1116

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	704797	7.67	745214	4.96	386362	9.66
	UPPER LIMIT	1409594	8.17	1490428	5.46	772724	10.16
	LOWER LIMIT	352399	7.17	372607	4.46	193181	9.16
	CLIENT SAMPLE NO.						
01	VLCSW-210615	665805	7.67	709840	4.96	366226	9.66
02	VBLKW-210615	705291	7.67	812607	4.96	359692	9.66
03	HS21060700-03	687645	7.67	788841	4.96	337655	9.66
04	HS21060700-01	699056	7.67	796607	4.96	363024	9.66
05	HS21060700-02	710154	7.67	802004	4.96	351765	9.66
06	HS21060700-02	702697	7.67	800364	4.96	367262	9.66
07	HS21060700-02MS	697269	7.67	795505	4.96	361445	9.66
08	HS21060700-02MSD	742877	7.67	835764	4.96	388507	9.66
09	HS21060700-01	691231	7.67	804566	4.96	336390	9.66
10	HS21060700-25	682043	7.67	789660	4.96	346052	9.66
11	HS21060700-17	716513	7.67	807102	4.96	368402	9.66
12	HS21060700-18	681656	7.67	784141	4.96	341928	9.66
13	HS21060700-19	693981	7.67	793665	4.96	359685	9.66
14	HS21060700-20	681066	7.67	785347	4.96	346986	9.66
15	HS21060700-21	675241	7.67	783677	4.96	337397	9.66
16	HS21060700-04	690270	7.67	781112	4.96	355767	9.66
17	HS21060700-04	659116	7.67	770590	4.96	317168	9.66
18	HS21060700-05	692337	7.67	790471	4.96	359168	9.66
19	HS21060700-05	682882	7.67	777996	4.96	352488	9.66
20	HS21060700-06	680894	7.67	773488	4.96	341074	9.66

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID (Standard): X061502 Date Analyzed: 06/15/21

Instrument ID: VOA6 Time Analyzed: 1116

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(DCB) AREA #	RT #
	12 HOUR STD	704797	7.67	745214	4.96	386362	9.66
	UPPER LIMIT	1409594	8.17	1490428	5.46	772724	10.16
	LOWER LIMIT	352399	7.17	372607	4.46	193181	9.16
	CLIENT SAMPLE NO.						
01	HS21060700-06	651506	7.67	756432	4.96	302558	9.66
02	HS21060700-12	668996	7.67	766779	4.96	343027	9.66
03	HS21060700-12	657895	7.67	757272	4.96	318422	9.66
04							
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IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID (Standard): X061502 Date Analyzed: 06/15/21

Instrument ID: VOA6 Time Analyzed: 1116

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	518142	4.18				
	UPPER LIMIT	1036284	4.68				
	LOWER LIMIT	259071	3.68				
	CLIENT SAMPLE NO.						
01	VLCSW-210615	489337	4.18				
02	VBLKW-210615	588580	4.18				
03	HS21060700-03	574789	4.18				
04	HS21060700-01	580486	4.18				
05	HS21060700-02	589302	4.18				
06	HS21060700-02	579945	4.18				
07	HS21060700-02MS	582742	4.18				
08	HS21060700-02MSD	614491	4.18				
09	HS21060700-01	590788	4.18				
10	HS21060700-25	576058	4.18				
11	HS21060700-17	588044	4.18				
12	HS21060700-18	575578	4.18				
13	HS21060700-19	578144	4.18				
14	HS21060700-20	573848	4.18				
15	HS21060700-21	568449	4.18				
16	HS21060700-04	570514	4.18				
17	HS21060700-04	572001	4.18				
18	HS21060700-05	572669	4.18				
19	HS21060700-05	572158	4.18				
20	HS21060700-06	564323	4.18				

IS4 = Pentafluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID (Standard): X061502 Date Analyzed: 06/15/21

Instrument ID: VOA6 Time Analyzed: 1116

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	518142	4.18				
	UPPER LIMIT	1036284	4.68				
	LOWER LIMIT	259071	3.68				
	CLIENT SAMPLE NO.						
01	HS21060700-06	558081	4.18				
02	HS21060700-12	564787	4.18				
03	HS21060700-12	558802	4.18				
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 = Pentafluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061501.D

Date : 15-JUN-2021 10:55

Client ID: BFB

Instrument: voa6.i

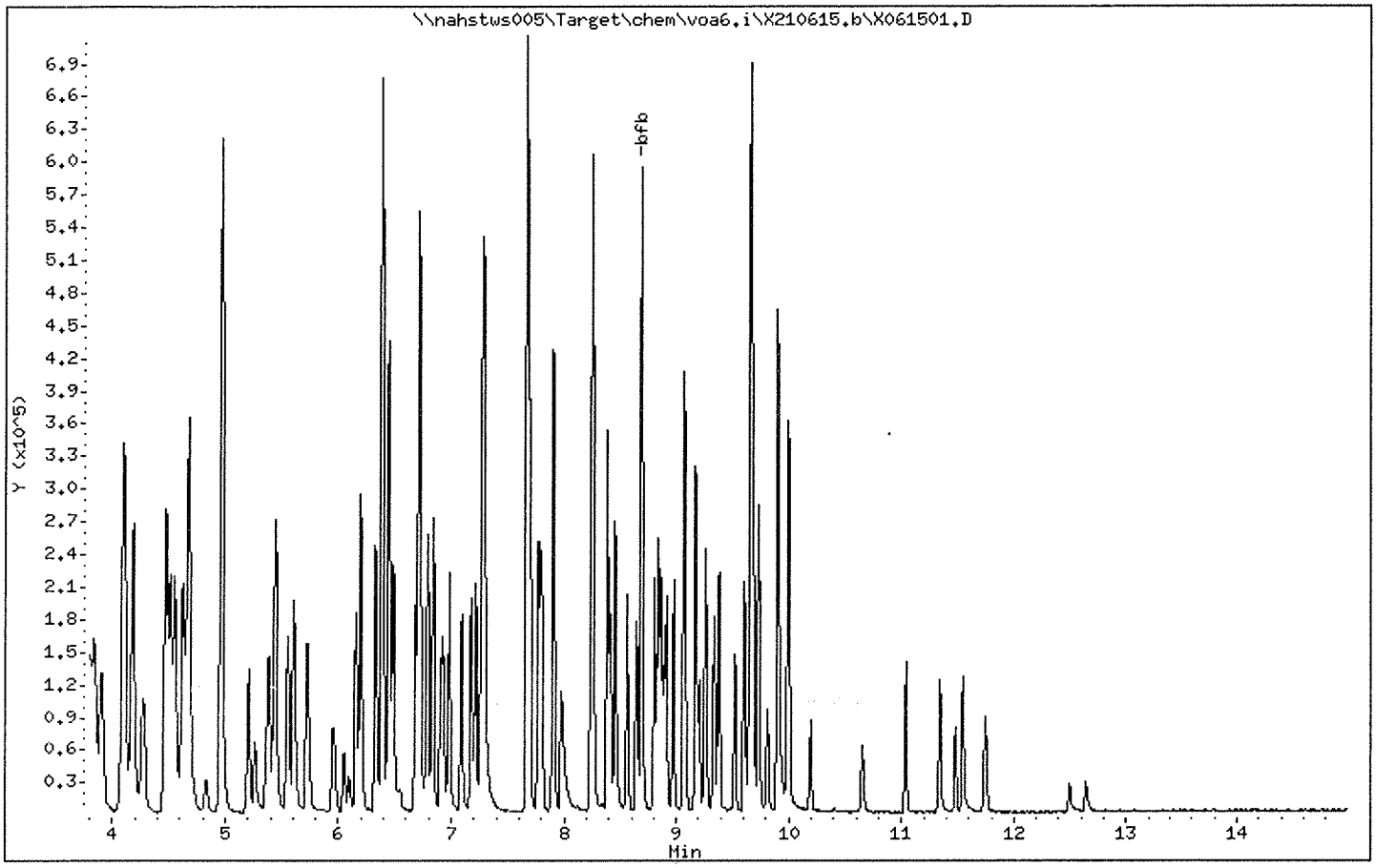
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061501.D

Date : 15-JUN-2021 10:55

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

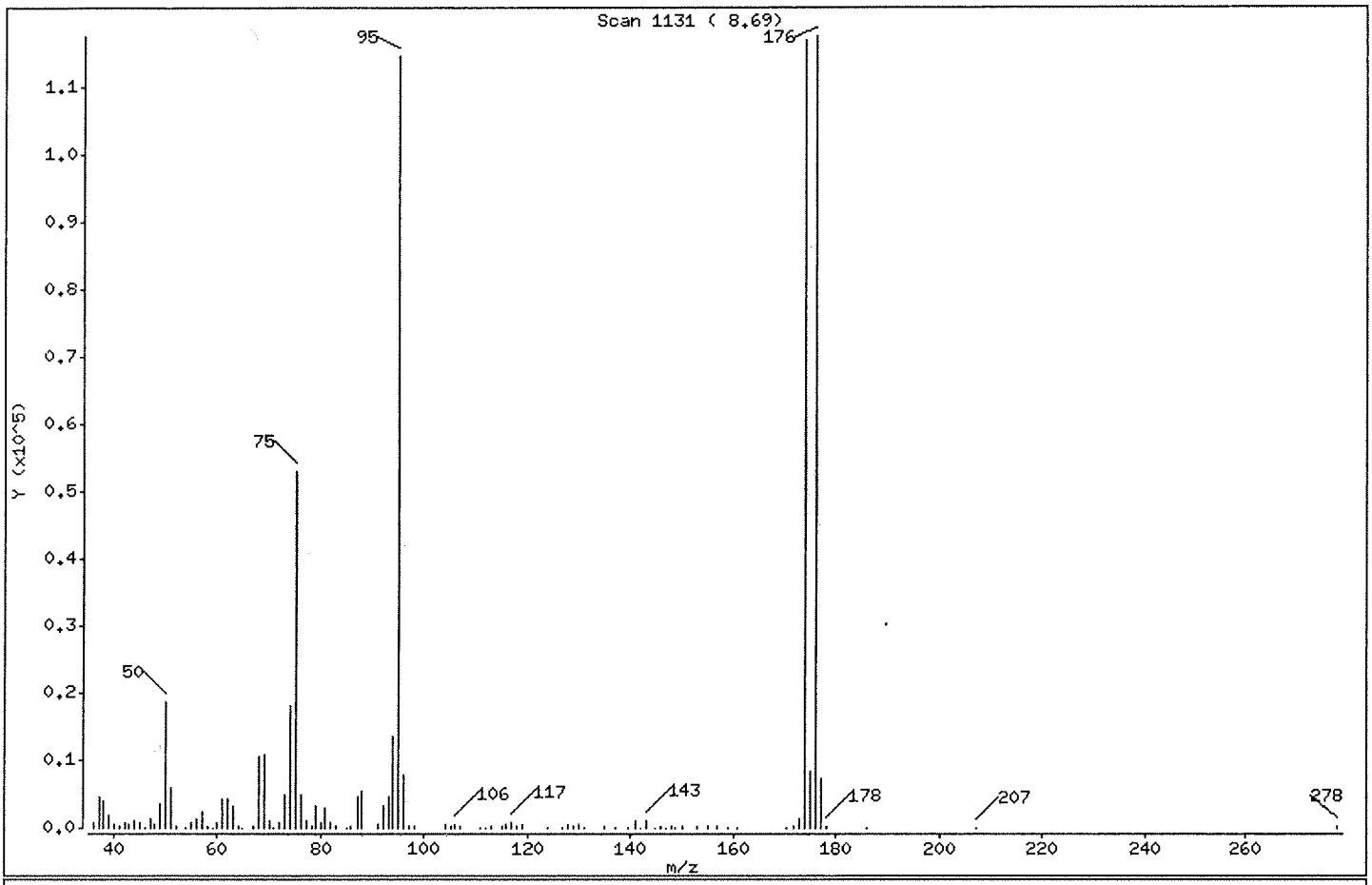
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

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	16.29
75	30.00 - 60.00% of mass 95	46.38
96	5.00 - 9.00% of mass 95	6.84
173	Less than 2.00% of mass 174	1.15 (1.13)
174	Greater than 50.00% of mass 95	102.12
175	5.00 - 9.00% of mass 174	7.30 (7.14)
176	95.00 - 101.00% of mass 174	102.68 (100.55)
177	5.00 - 9.00% of mass 176	6.42 (6.25)

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061501.D

Date : 15-JUN-2021 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: X061501.D
Spectrum: Scan 1131 (8.69)
Location of Maximum: 175.90
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	831	64.10	293	95.00	114480	142.90	1082
37.10	4551	64.90	67	96.00	7828	144.90	72
38.10	4167	67.00	291	97.00	286	146.00	220
39.00	1824	68.00	10499	98.10	270	147.00	75
40.00	553	69.00	10811	104.00	511	148.00	337
41.00	160	70.00	1082	105.10	216	148.80	104
42.10	679	70.90	83	105.80	649	150.00	159
43.00	510	72.00	767	106.90	166	152.90	139
44.00	1080	73.00	4787	110.90	95	155.00	339
45.10	944	74.00	18024	112.00	72	157.00	254
46.10	86	75.00	53096	113.00	154	158.90	103
47.00	1353	76.10	4744	115.00	208	160.90	117
48.00	510	77.10	986	115.80	406	170.50	93
49.00	3435	78.20	360	116.90	730	171.90	245
50.10	18648	78.90	3131	117.90	389	172.90	1322
51.00	6009	80.00	907	**119.00**	569	173.90	116912
52.10	380	80.90	2943	**123.90**	52	174.90	8353
54.00	50	81.90	786	**126.80**	64	175.90	117552
55.00	907	82.90	145	127.90	529	176.90	7344
56.00	1470	84.90	62	129.00	153	178.10	150
57.10	2439	85.80	158	129.80	470	186.00	113
58.00	272	87.00	4571	131.00	125	207.00	56
59.20	76	87.90	5409	134.80	235	278.00	179
60.00	900	90.90	406	136.90	67		
61.00	4256	92.00	3333	139.70	56		
62.00	4335	93.00	4712	140.80	1079		
63.00	3345	94.00	13523	141.90	127		

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061502.D Page 1
Report Date: 26-Jul-2021 14:34

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061502.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 15-JUN-2021 11:16
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:34 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

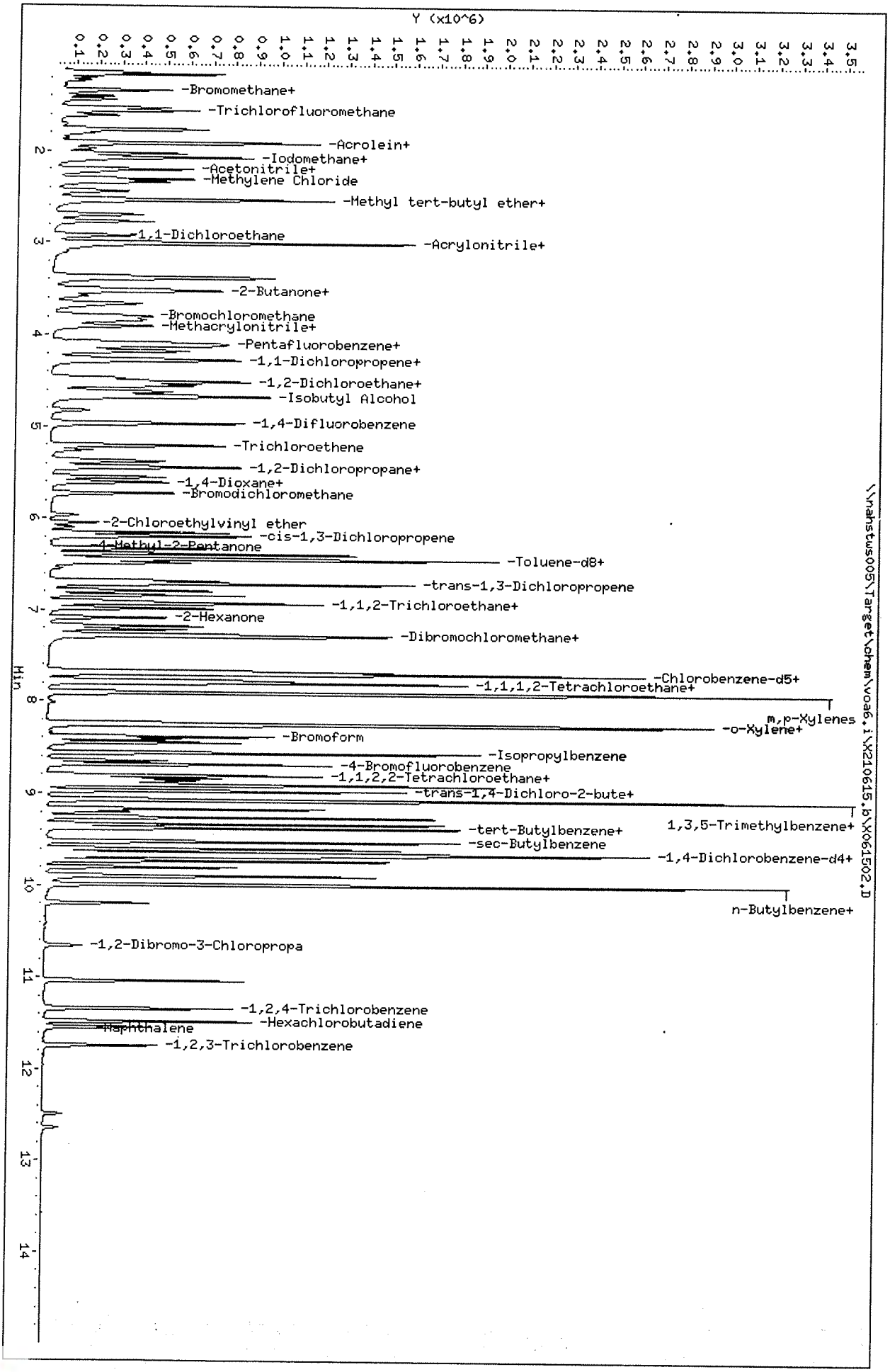
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	518142	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	745214	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	704797	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386362	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	241006	50.0000	47.24
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	243765	50.0000	49.23
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	835847	50.0000	47.61
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	317223	50.0000	51.23
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	271500	50.0000	52.08
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	361784	50.0000	47.24
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	298190	50.0000	56.00
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	189116	50.0000	49.53
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	367024	50.0000	44.80
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	233302	50.0000	43.71
32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	297946	50.0000	52.20
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	148727	50.0000	63.58
71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	250768	50.0000	52.05(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	240864	50.0000	63.05
79 1,2,4-Trimethylbenzene	105	9.383	9.383	(0.971)	887889	50.0000	50.38
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	36727	50.0000	59.81(M)
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	259205	50.0000	49.95
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	530075	50.0000	50.58

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061502.D Page 2
Report Date: 26-Jul-2021 14:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	298489	50.0000	50.27
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	216172	50.0000	49.28
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	888824	50.0000	50.68
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	552945	50.0000	50.73
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	373336	50.0000	49.17
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	562393	50.0000	49.45
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	346510	50.0000	48.88
24	2-Butanone	43	3.581	3.581	(0.856)	161963	100.000	102.74
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	717639	50.0000	49.62
52	2-Hexanone	43	7.083	7.083	(0.923)	281486	100.000	107.51
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	843333	50.0000	48.96
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	949020	50.0000	53.12
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	406208	100.000	100.08
10	Acetone	43	1.976	1.976	(0.473)	140287	100.000	106.35
37	Benzene	78	4.512	4.512	(0.909)	854213	50.0000	49.89
74	Bromobenzene	156	8.802	8.802	(0.911)	328129	50.0000	51.18
29	Bromochloromethane	128	3.795	3.795	(0.908)	148157	50.0000	47.28
39	Bromodichloromethane	83	5.729	5.729	(1.154)	317818	50.0000	49.60
66	Bromoform	173	8.408	8.408	(1.096)	211358	50.0000	53.77
6	Bromomethane	94	1.339	1.339	(0.320)	226128	50.0000	42.27
19	Carbon Disulfide	76	2.069	2.069	(0.495)	1078691	100.000	85.22
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	325600	50.0000	52.70
59	Chlorobenzene	112	7.692	7.692	(1.003)	696086	50.0000	47.44
7	Chloroethane	64	1.403	1.403	(0.336)	176608	50.0000	48.56
28	Chloroform	83	3.910	3.910	(0.935)	409656	50.0000	44.95
3	Chloromethane	50	1.074	1.074	(0.257)	227459	50.0000	48.50
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	253558	50.0000	46.68
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	396732	50.0000	52.55
55	Dibromochloromethane	129	7.176	7.176	(0.936)	301239	50.0000	51.92
44	Dibromomethane	93	5.550	5.550	(1.118)	162036	50.0000	49.15
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	256439	50.0000	53.89
61	Ethylbenzene	106	7.800	7.800	(1.017)	357486	50.0000	52.81
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	163108	50.0000	67.05
67	Isopropylbenzene	105	8.559	8.559	(1.116)	1074840	50.0000	51.97
62	m,p-Xylenes	106	7.900	7.900	(1.030)	890332	100.000	100.90
17	Methylene Chloride	84	2.298	2.298	(0.550)	226148	50.0000	48.07
87	n-Butylbenzene	91	9.991	9.991	(1.034)	826812	50.0000	55.00
73	n-Propylbenzene	91	8.910	8.910	(0.922)	1246369	50.0000	51.71
92	Naphthalene	128	11.539	11.539	(1.194)	338991	50.0000	61.39
63	o-Xylene	106	8.244	8.244	(1.075)	431224	50.0000	50.11
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1066333	50.0000	52.56
64	Styrene	104	8.258	8.258	(1.077)	735494	50.0000	51.15
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	780733	50.0000	51.92
56	Tetrachloroethene	164	6.926	6.926	(0.903)	234401	50.0000	54.02
50	Toluene	91	6.446	6.446	(0.840)	976731	50.0000	47.46
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	218783	50.0000	45.22
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	347926	50.0000	53.42
38	Trichloroethene	130	5.207	5.207	(1.049)	270510	50.0000	52.88
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	419136	50.0000	44.81
5	Vinyl Chloride	62	1.138	1.138	(0.272)	280367	50.0000	45.71

QC Flag Legend

M - Compound response manually integrated.



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Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

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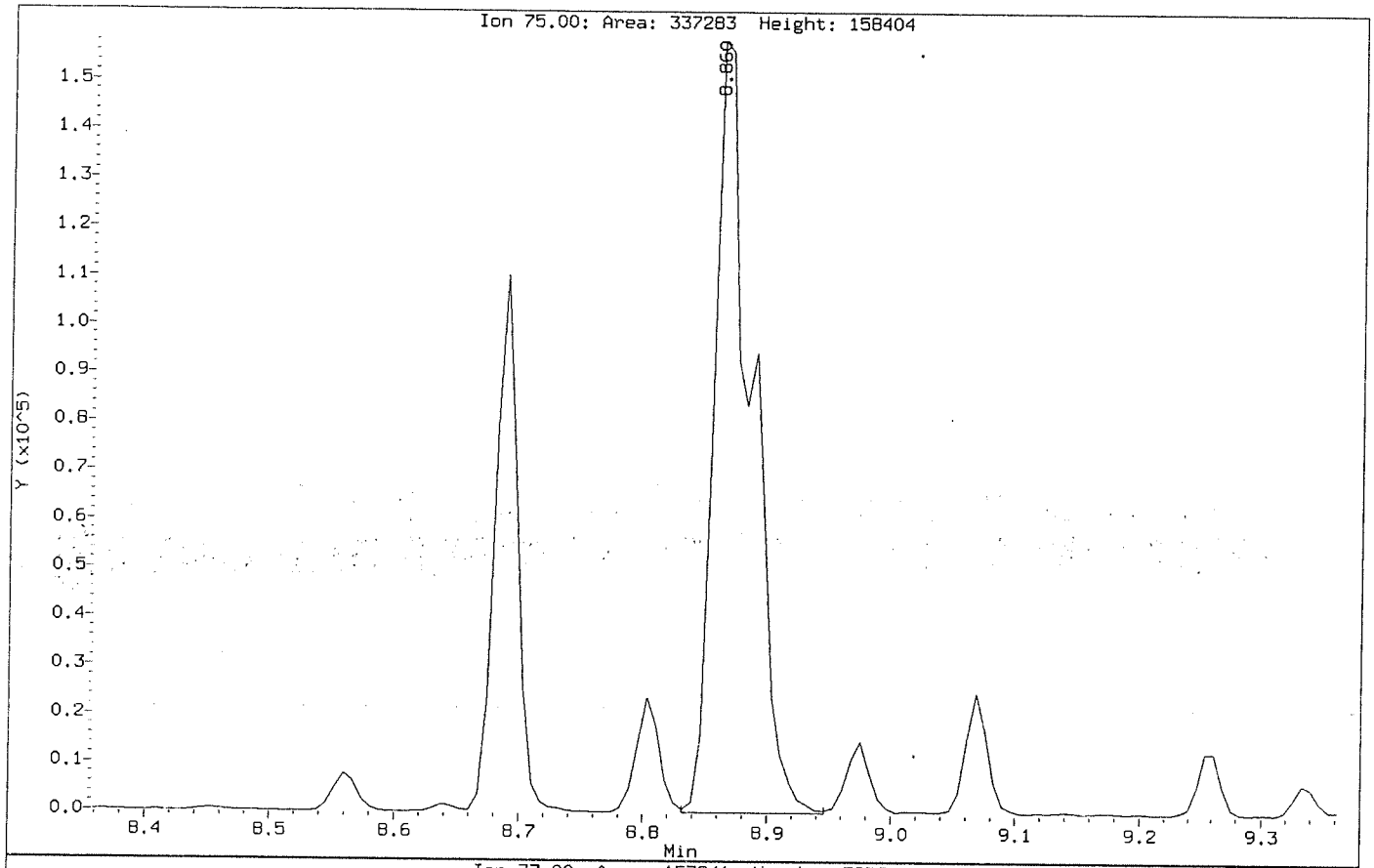
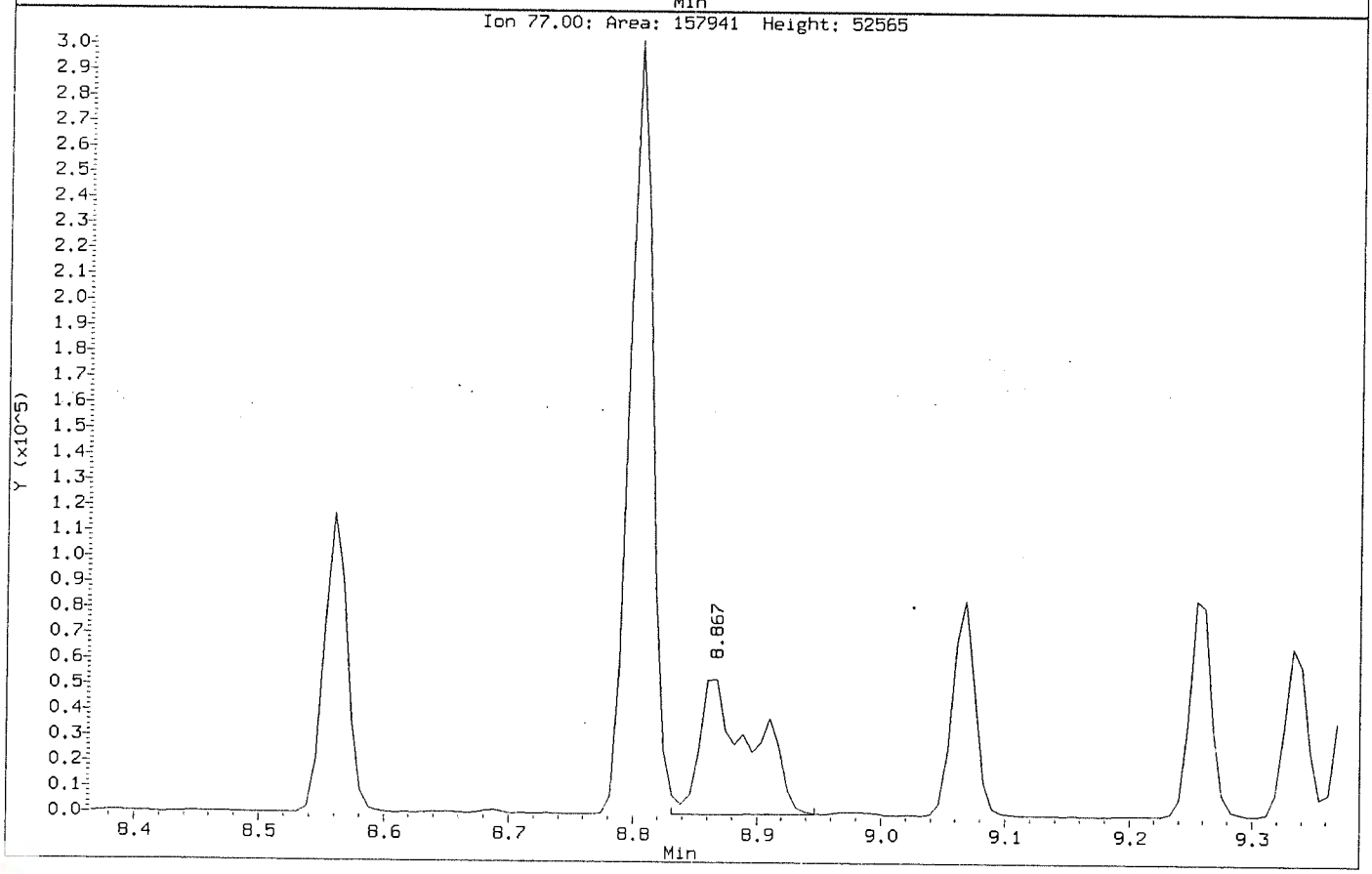
Injection Date: 15-JUN-2021 11:16
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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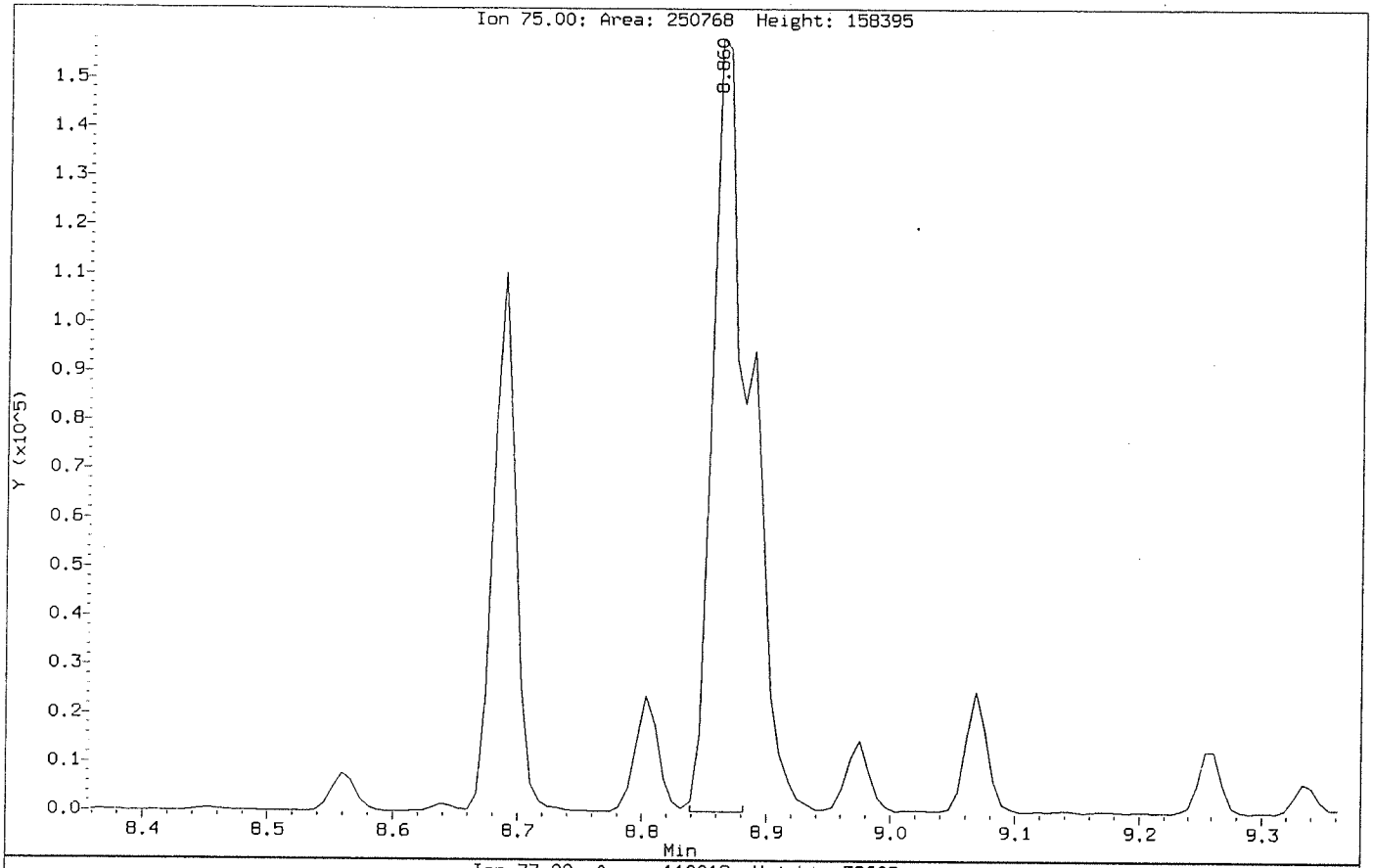
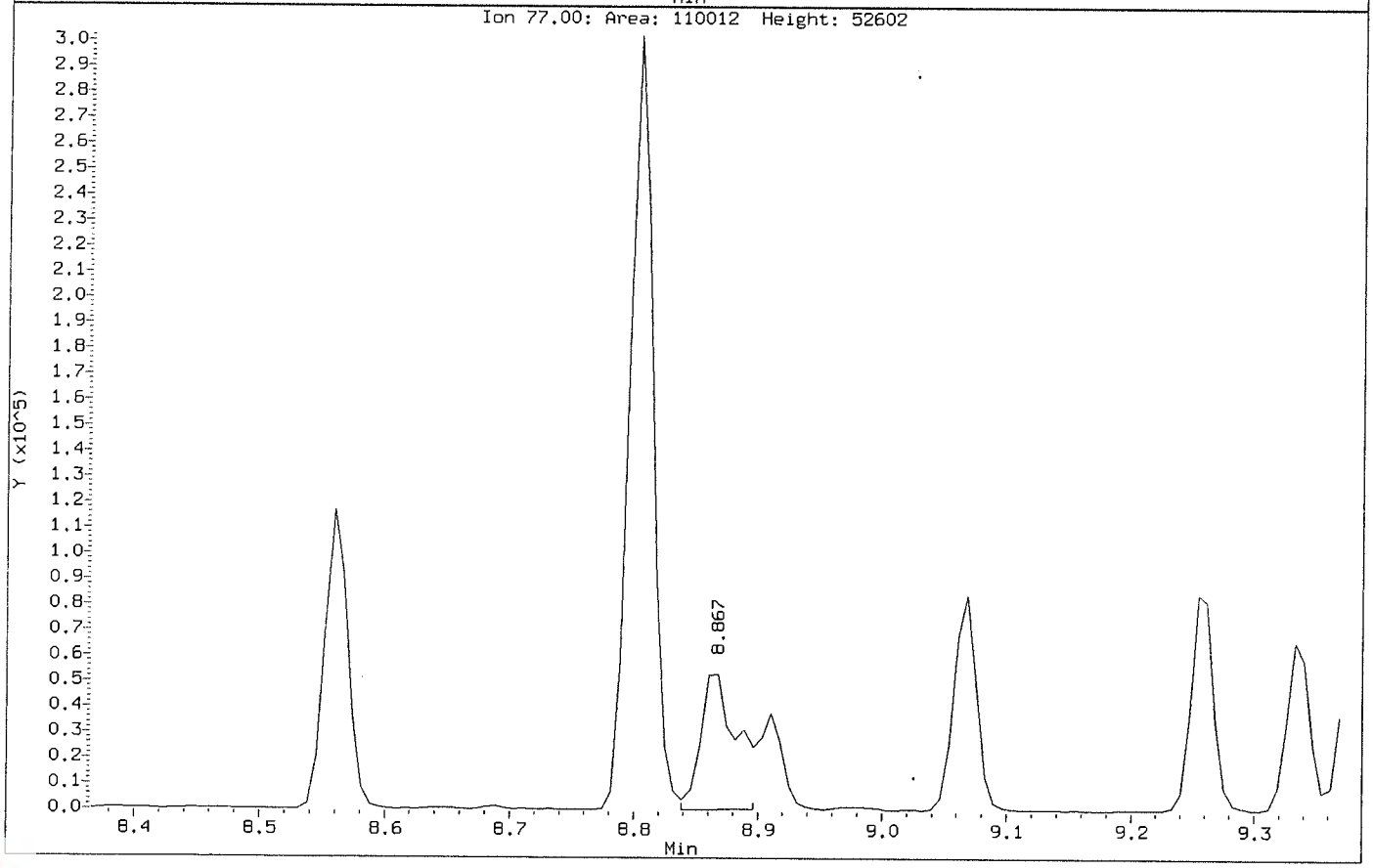
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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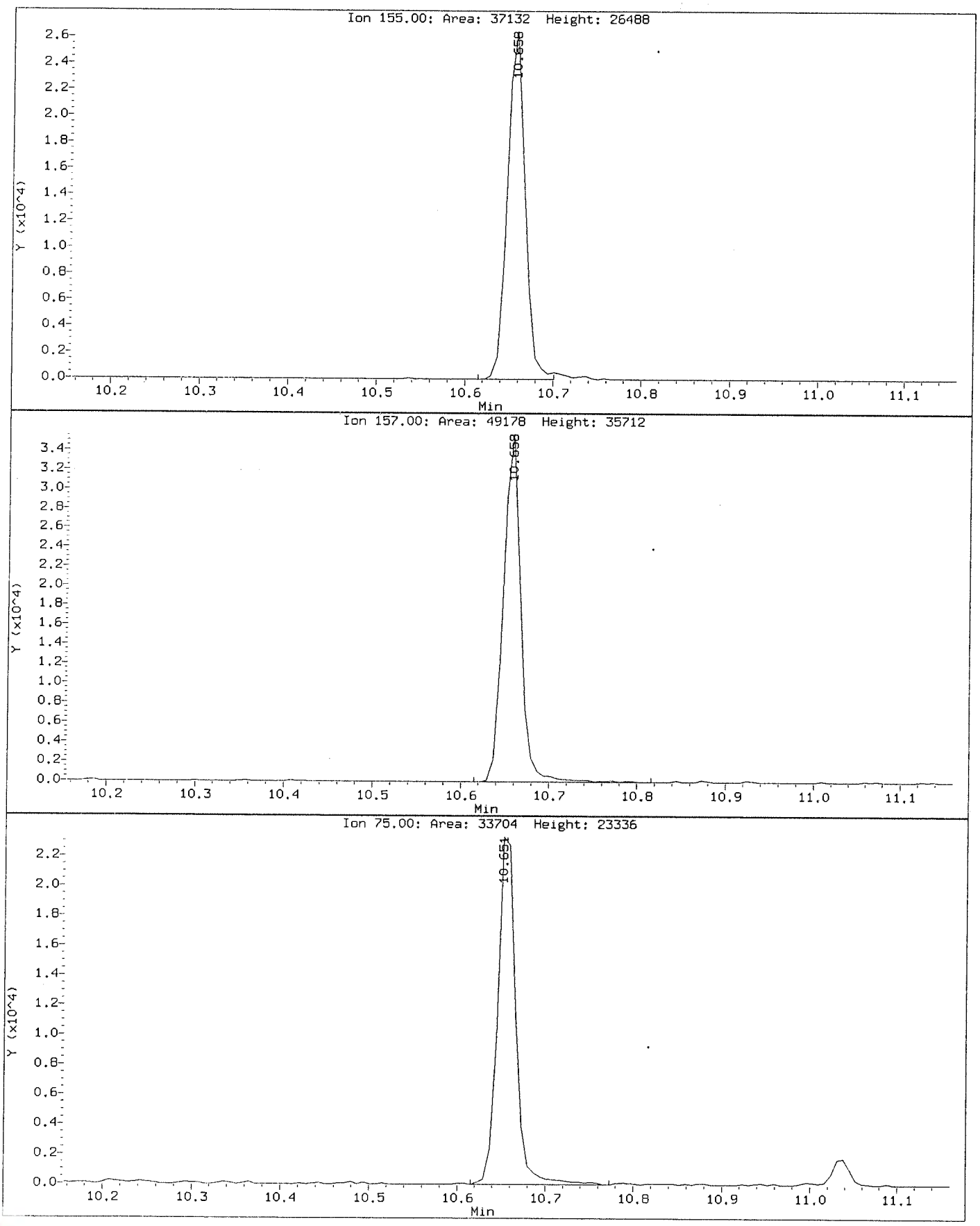
Injection Date: 15-JUN-2021 11:16
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8



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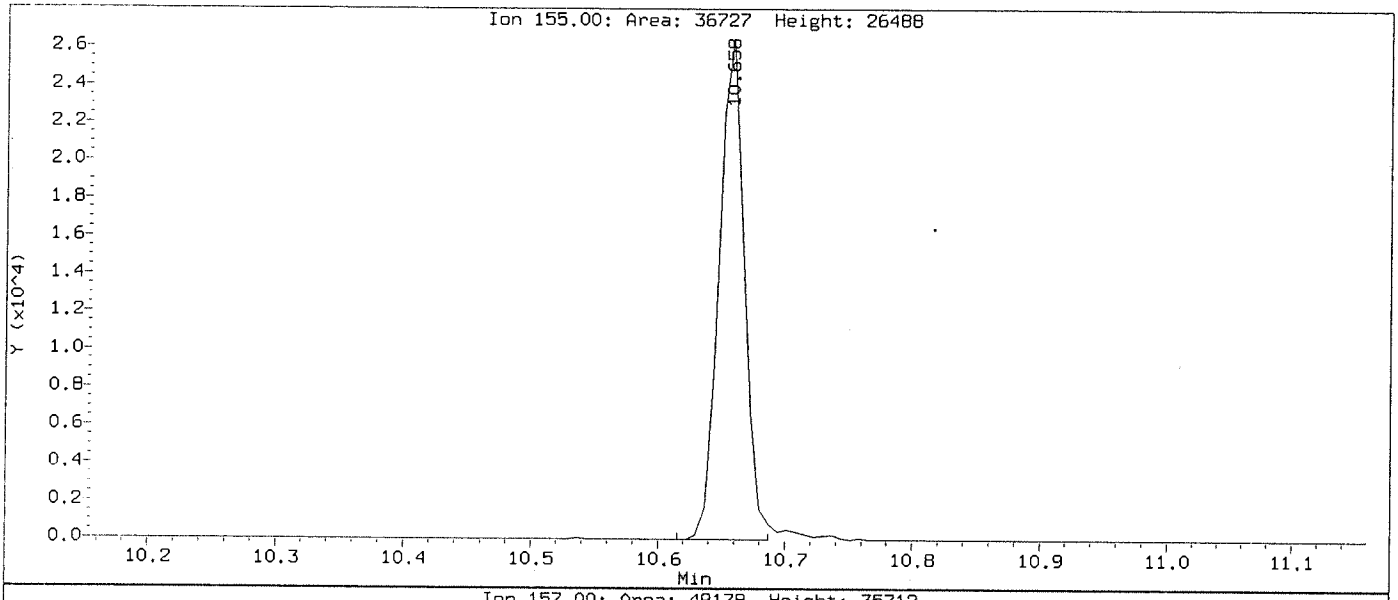
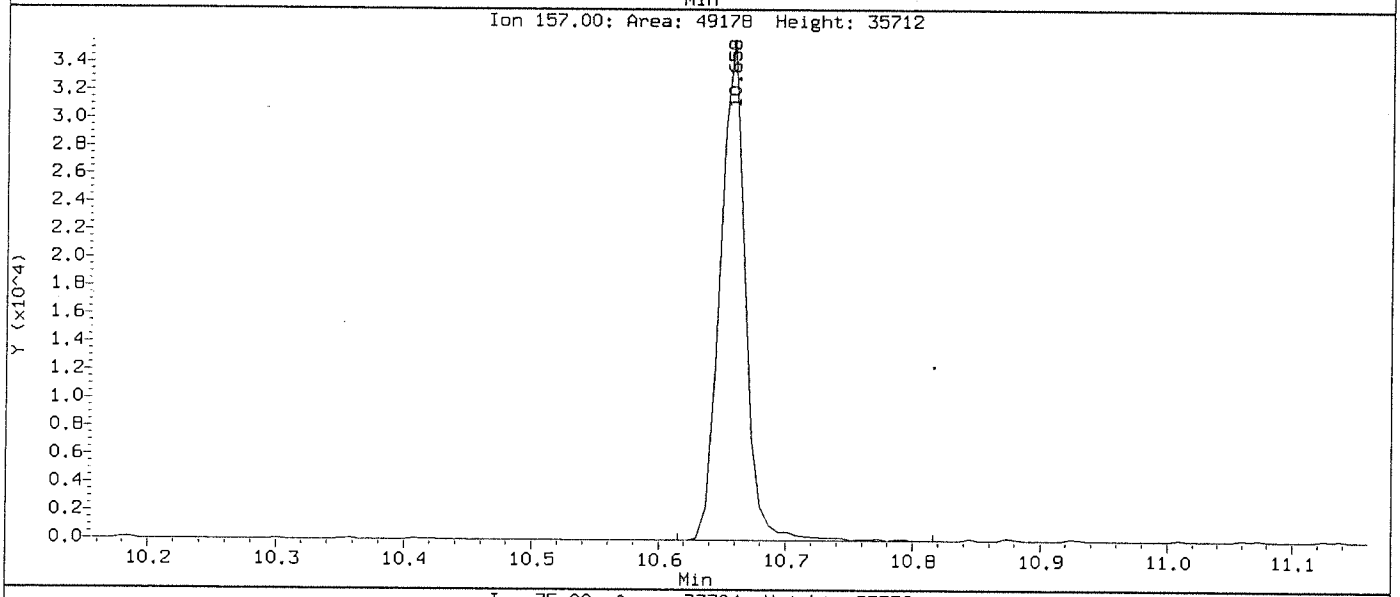
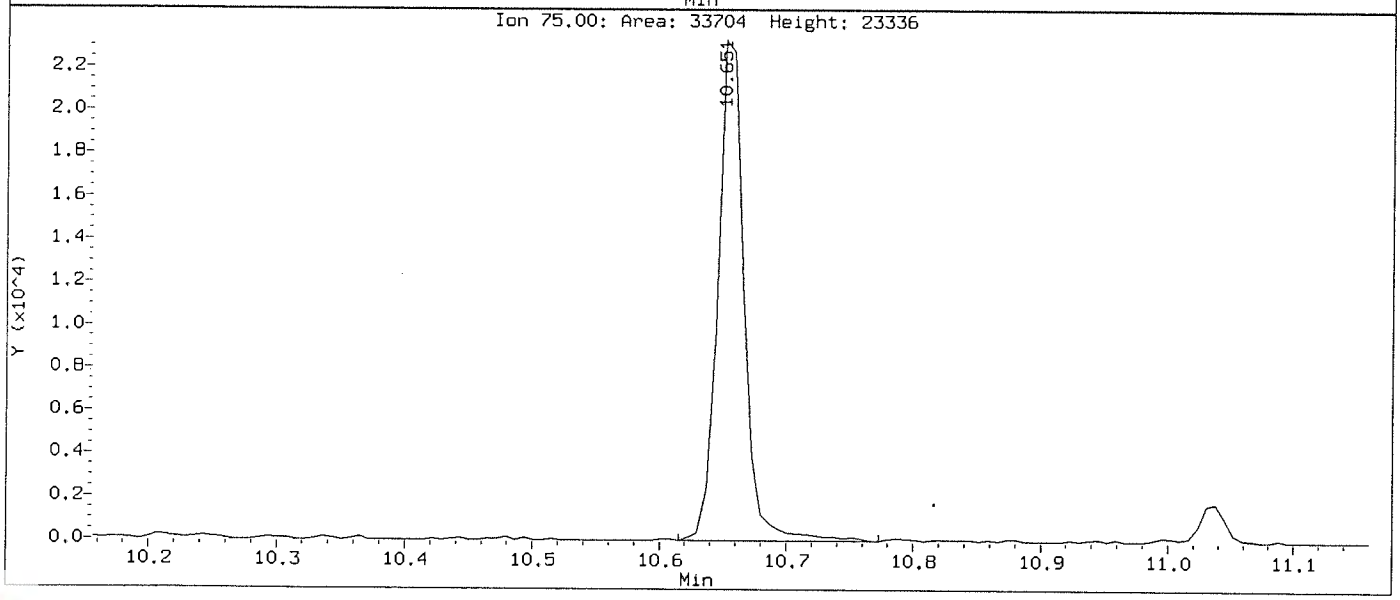
Client Sample ID: CCV

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8







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Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061506.D
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Inj Date : 15-JUN-2021 12:40
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-210615;VLCSW-210615;3;;LCS
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:34 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

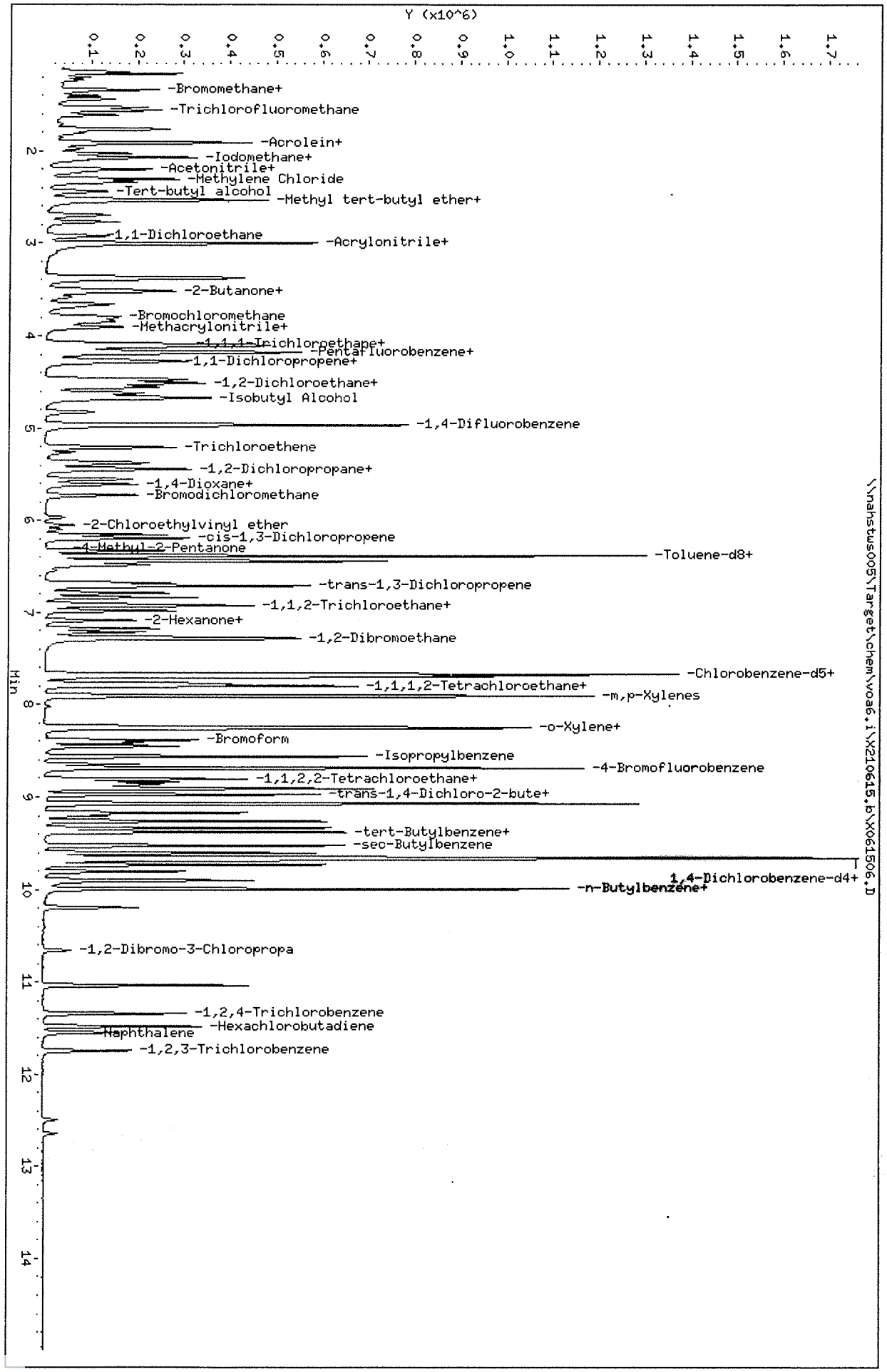
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	489337	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	709840	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	665805	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	366226	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	234152	48.6086	48.60
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	245034	52.4542	52.45
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	791936	47.7509	47.75
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	295420	50.5157	50.51
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	99118	20.1302	20.13
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	133854	18.5099	18.50
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	114565	21.9892	21.98
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	71852	19.9218	19.92
22 1,1-Dichloroethane	63	2.921	2.922	(0.699)	140488	18.1603	18.16
11 1,1-Dichloroethene	96	1.911	1.912	(0.457)	85086	16.8805	16.88
32 1,1-Dichloropropene	75	4.282	4.283	(0.863)	110443	20.3148	20.31
93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	62735	28.2965	28.29
71 1,2,3-Trichloropropane	75	8.867	8.860	(0.918)	93447	20.4661	20.46 (M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	91852	25.3678	25.36
79 1,2,4-Trimethylbenzene	105	9.383	9.383	(0.971)	325025	19.4582	19.45
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	14110	24.5503	24.55
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	96202	19.6252	19.62
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	195412	19.6722	19.67

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061506.D Page 2
Report Date: 26-Jul-2021 14:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	115366	20.3977	20.39
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	81936	19.6096	19.60
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	325854	19.6019	19.60
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	205146	19.8597	19.85
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	142128	19.8177	19.81
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	208211	19.3160	19.31
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	129372	19.3245	19.32
24	2-Butanone	43	3.580	3.581	(0.856)	60350	40.5364	40.53
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	272851	19.9050	19.90
52	2-Hexanone	43	7.090	7.083	(0.924)	107330	43.3961	43.39
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	312362	19.1348	19.13
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	346893	20.4854	20.48
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	157278	41.0211	41.02
10	Acetone	43	1.976	1.976	(0.473)	56497	41.9340	41.93
37	Benzene	78	4.512	4.512	(0.909)	318889	19.5552	19.55
74	Bromobenzene	156	8.802	8.802	(0.911)	121122	19.9339	19.93
29	Bromochloromethane	128	3.795	3.795	(0.908)	55766	18.8473	18.84
39	Bromodichloromethane	83	5.729	5.729	(1.154)	120500	19.7463	19.74
66	Bromoform	173	8.408	8.408	(1.096)	76540	20.6159	20.61
6	Bromomethane	94	1.338	1.339	(0.320)	101099	20.0942	20.09
19	Carbon Disulfide	76	2.069	2.069	(0.495)	401921	33.6246	33.62
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	119547	20.3161	20.31
59	Chlorobenzene	112	7.692	7.692	(1.003)	259758	18.7412	18.74
7	Chloroethane	64	1.403	1.403	(0.336)	79136	22.2981	22.29
28	Chloroform	83	3.910	3.910	(0.935)	155811	18.1064	18.10
3	Chloromethane	50	1.073	1.074	(0.257)	84833	17.4946	17.49
27	cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	96217	18.7597	18.75
46	cis-1,3-Dichloropropene	75	6.159	6.152	(1.241)	143633	19.9745	19.97
55	Dibromochloromethane	129	7.176	7.176	(0.936)	109551	19.9912	19.99
44	Dibromomethane	93	5.550	5.550	(1.118)	64138	20.4258	20.42
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	92527	20.4606	20.46
61	Ethylbenzene	106	7.800	7.800	(1.017)	130953	20.4796	20.47
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	61711	28.2468	28.24
67	Isopropylbenzene	105	8.559	8.559	(1.116)	392813	20.1058	20.10
62	m,p-Xylenes	106	7.907	7.900	(1.031)	328992	39.4680	39.46
17	Methylene Chloride	84	2.305	2.298	(0.551)	87799	18.9826	18.98
87	n-Butylbenzene	91	9.991	9.991	(1.034)	297415	20.8754	20.87
73	n-Propylbenzene	91	8.910	8.910	(0.922)	451933	19.7830	19.78
92	Naphthalene	128	11.546	11.539	(1.195)	133743	25.5552	25.55
63	o-Xylene	106	8.244	8.244	(1.075)	158266	19.4714	19.47
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	390794	20.3215	20.32
64	Styrene	104	8.258	8.258	(1.077)	265166	19.5230	19.52
78	tert-Butylbenzene	119	9.340	9.332	(0.967)	282167	19.7989	19.79
56	Tetrachloroethene	164	6.926	6.926	(0.903)	87455	21.3371	21.33
50	Toluene	91	6.446	6.446	(0.840)	367691	18.9166	18.91
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	81759	17.8940	17.89
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	127199	20.5051	20.50
38	Trichloroethene	130	5.206	5.207	(1.049)	102538	21.0468	21.04
8	Trichlorofluoromethane	101	1.560	1.561	(0.373)	153324	17.3582	17.35
5	Vinyl Chloride	62	1.138	1.138	(0.272)	104547	18.0492	18.04

QC Flag Legend

M - Compound response manually integrated.



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Sample Info: VLCSW-210615;VLCSW-210615;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

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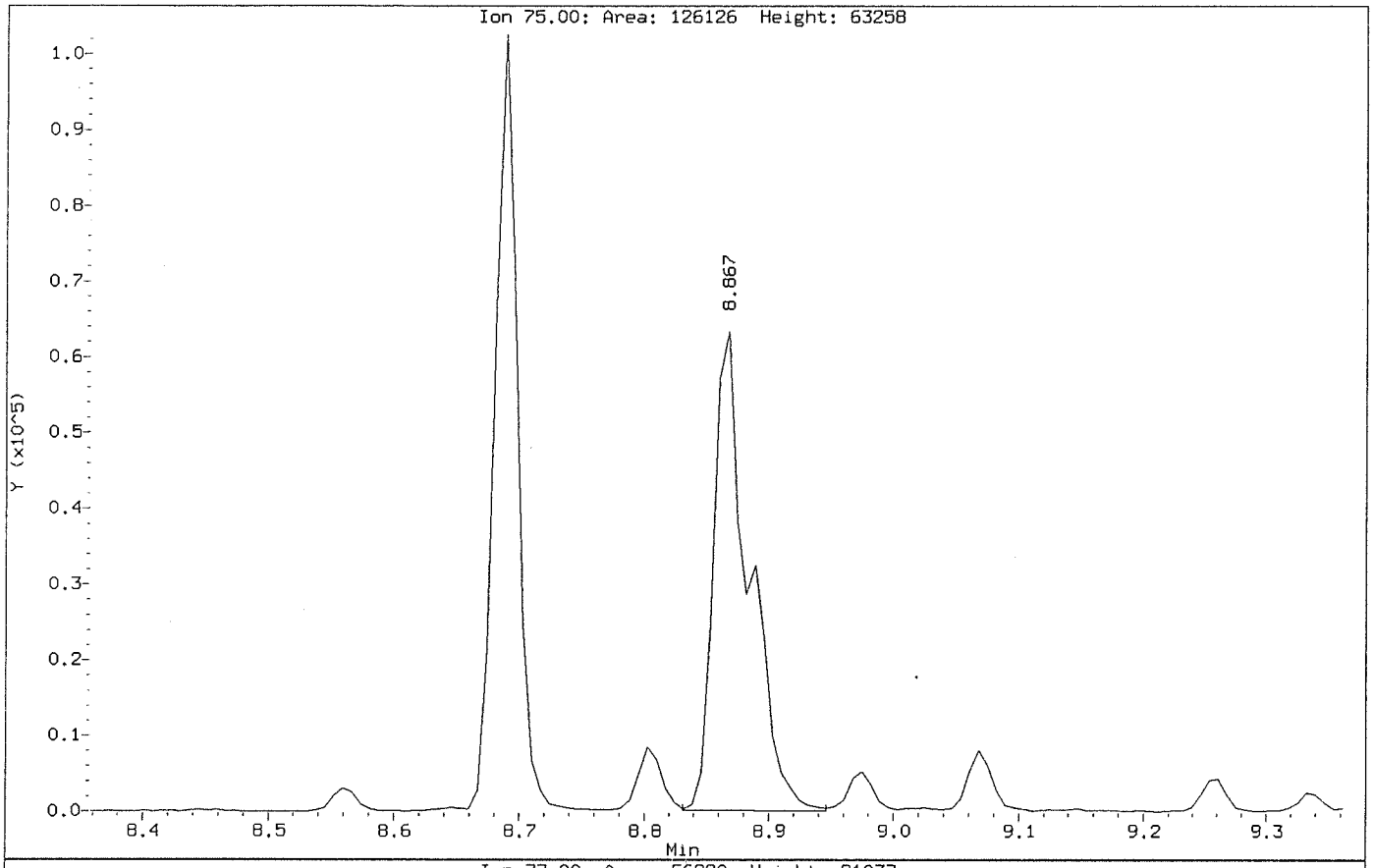
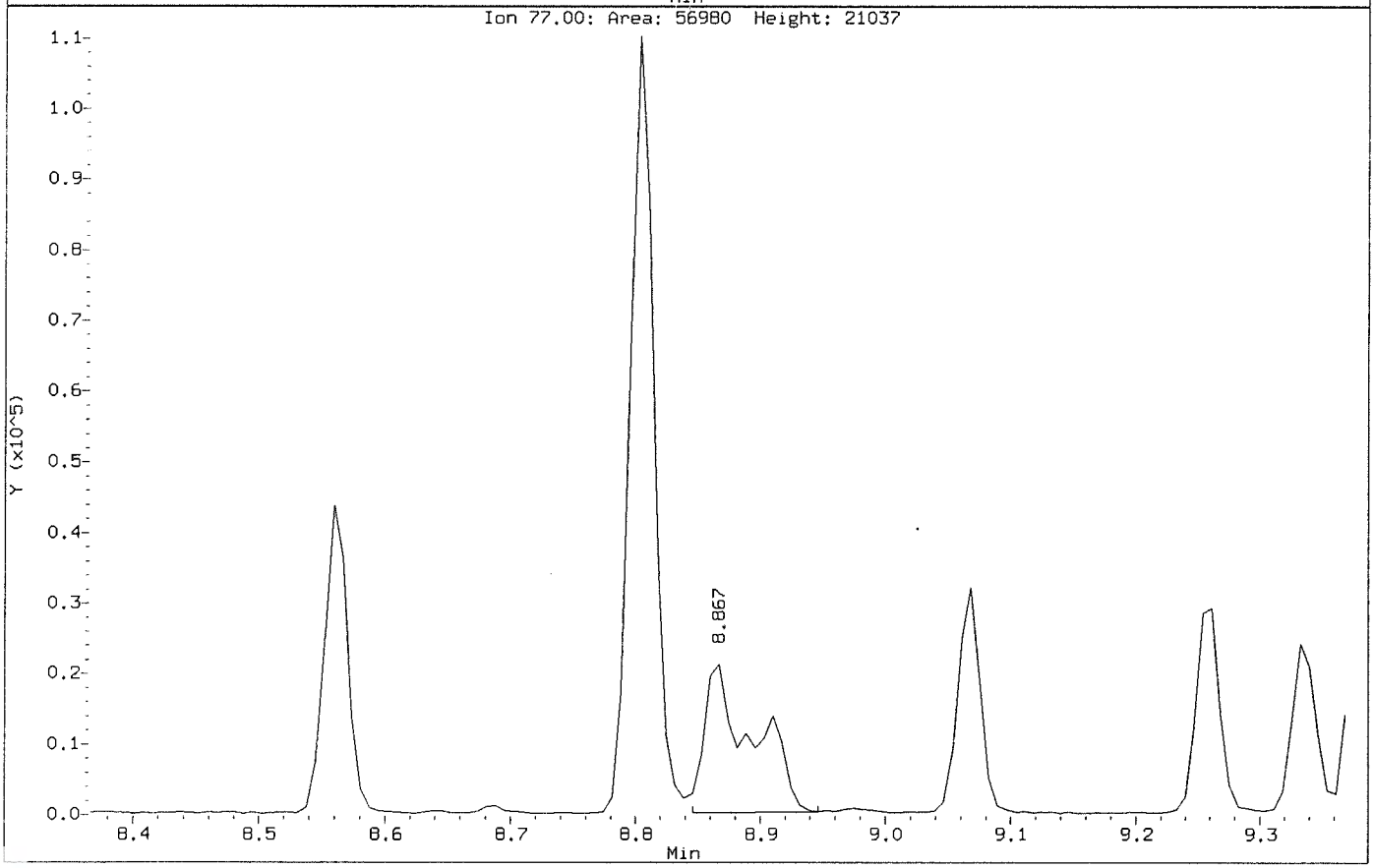
Injection Date: 15-JUN-2021 12:40
Instrument: voa6.i
Client Sample ID: VLCSW-210615

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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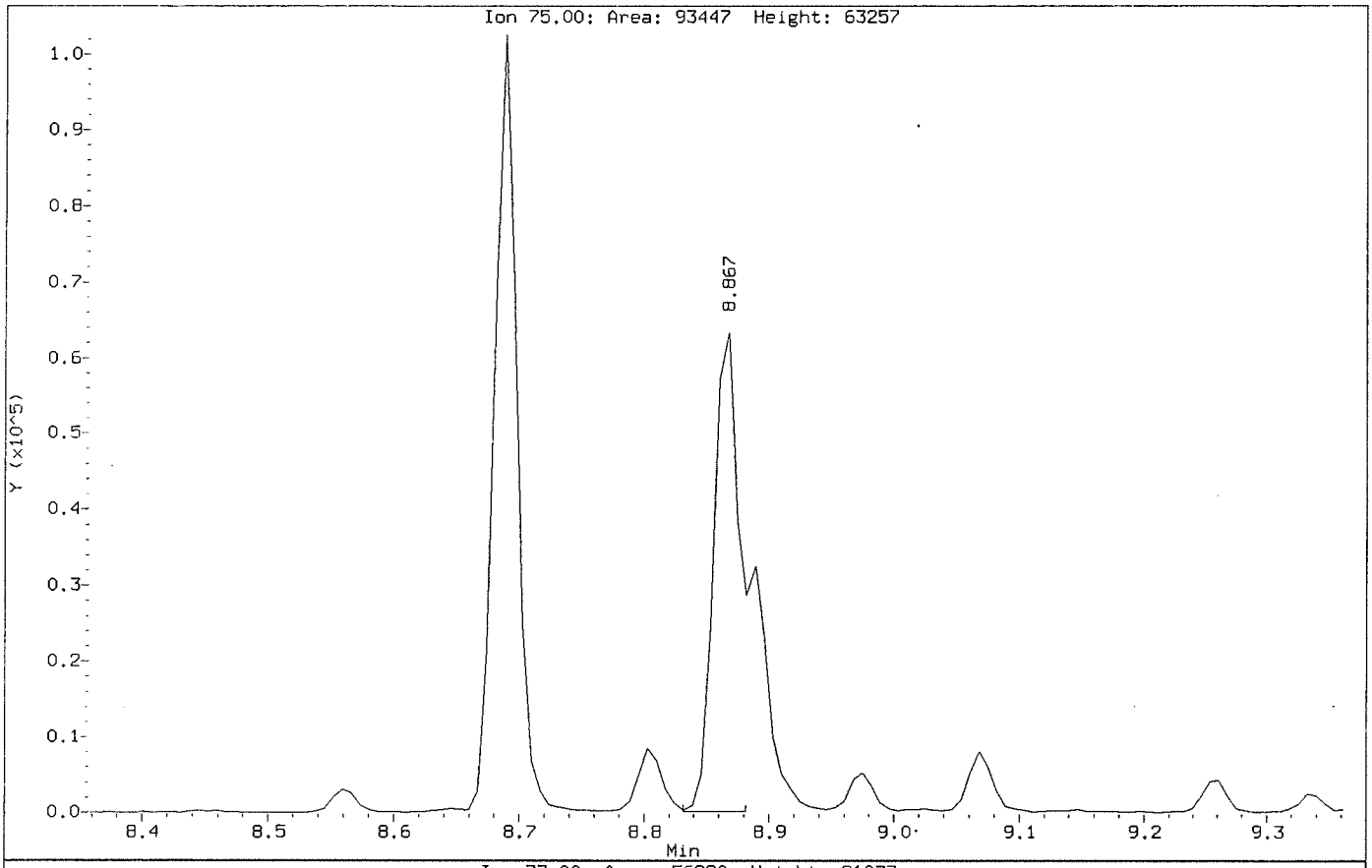
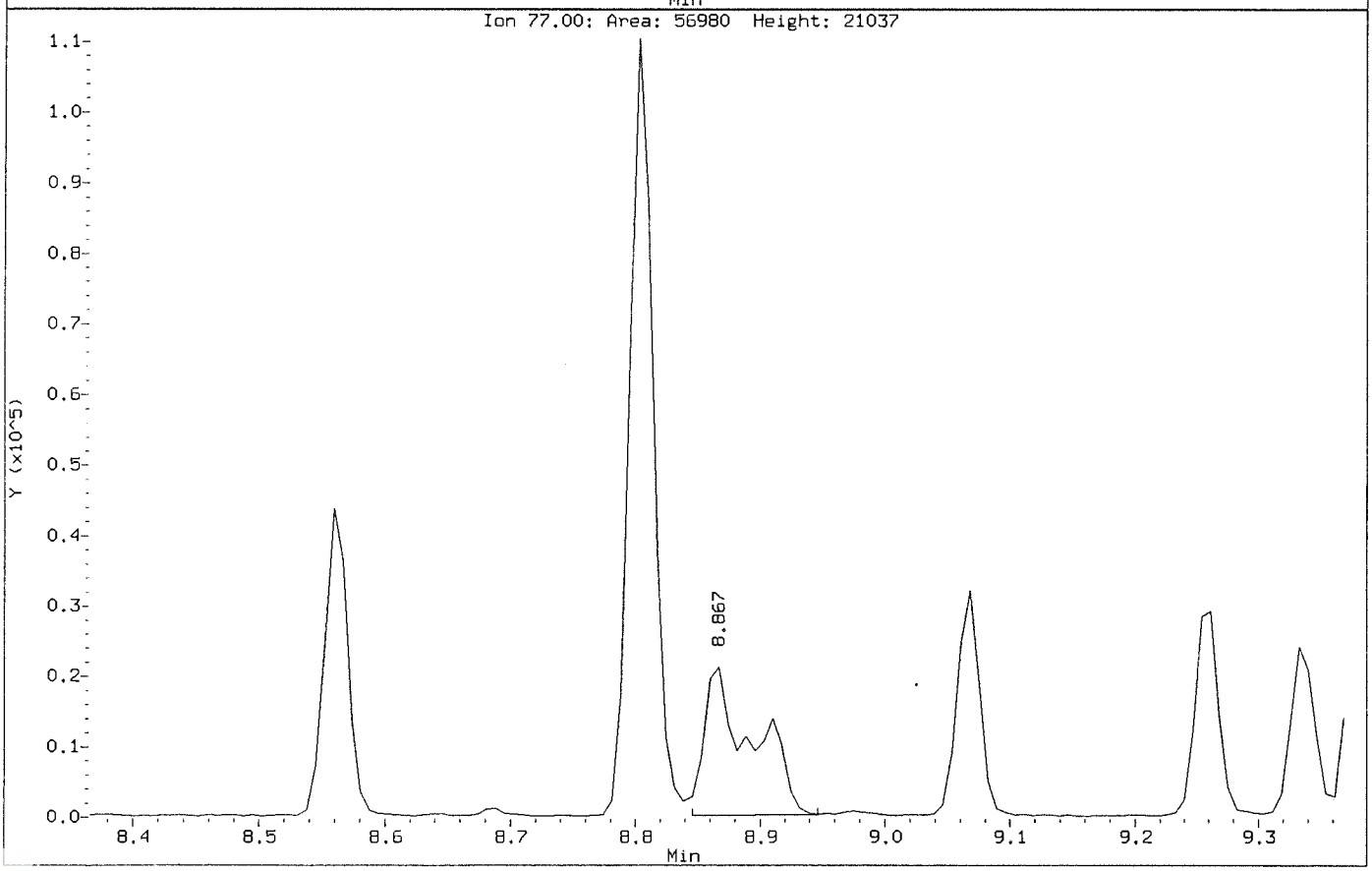
Client Sample ID: VLCSW-210615

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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Inj Date : 15-JUN-2021 13:23
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-210615;VBLKW-210615;3;;BLANK
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:34 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

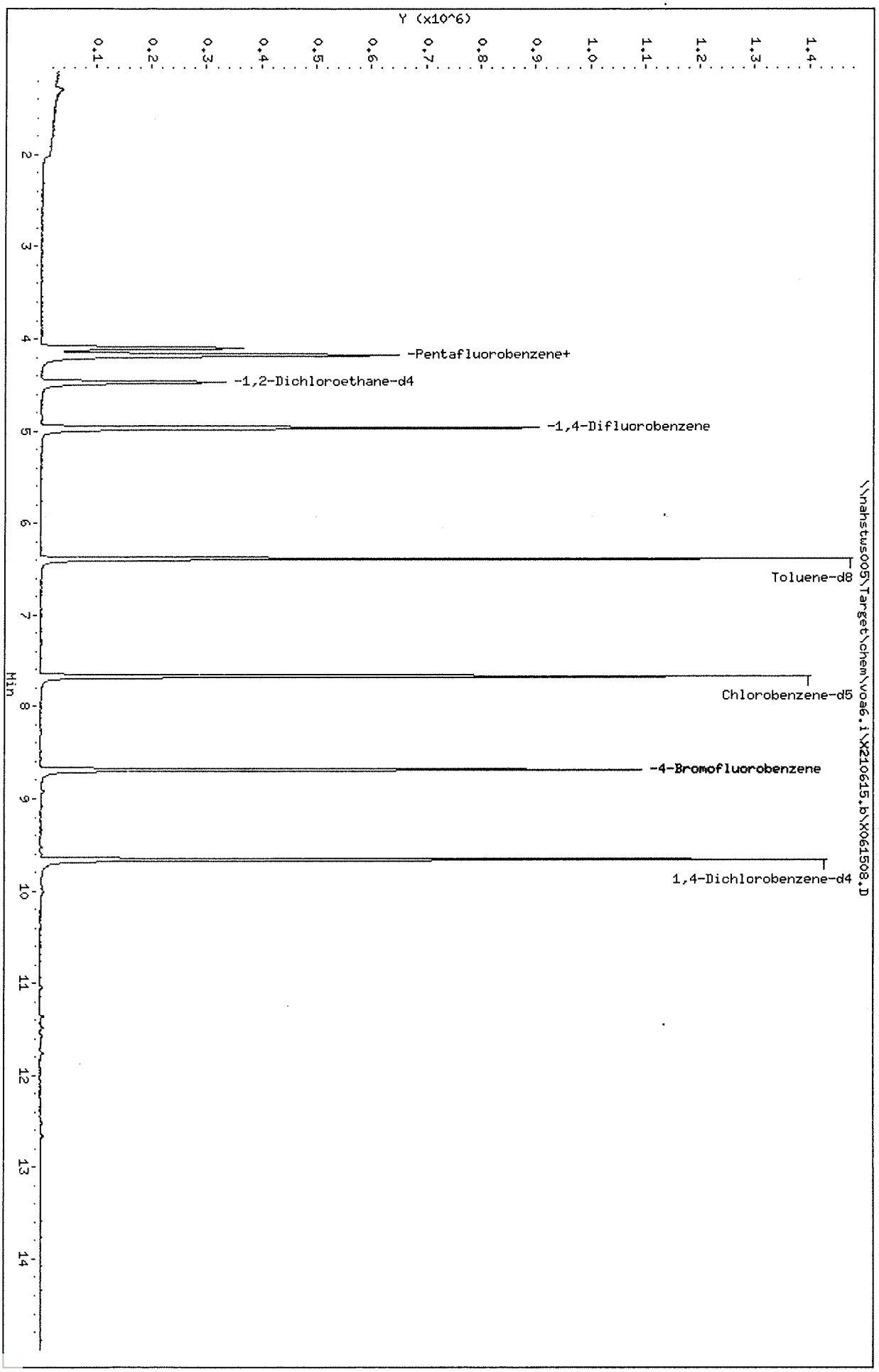
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	588580	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	812607	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	705291	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	359692	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	261421	45.1071	45.10
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	261346	46.4343	46.43
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	914125	52.0326	52.03
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	304910	49.2387	49.23

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061508.D
Date : 15-JUN-2021 13:23
Client ID: VBLKW-210615
Sample Info: VBLKW-210615;VBLKW-210615;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

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



ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061509.D
Lab Smp Id: HS21060700-03 Client Smp ID: HS21060700-03
Inj Date : 15-JUN-2021 13:44
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-03;HS21060700-03;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

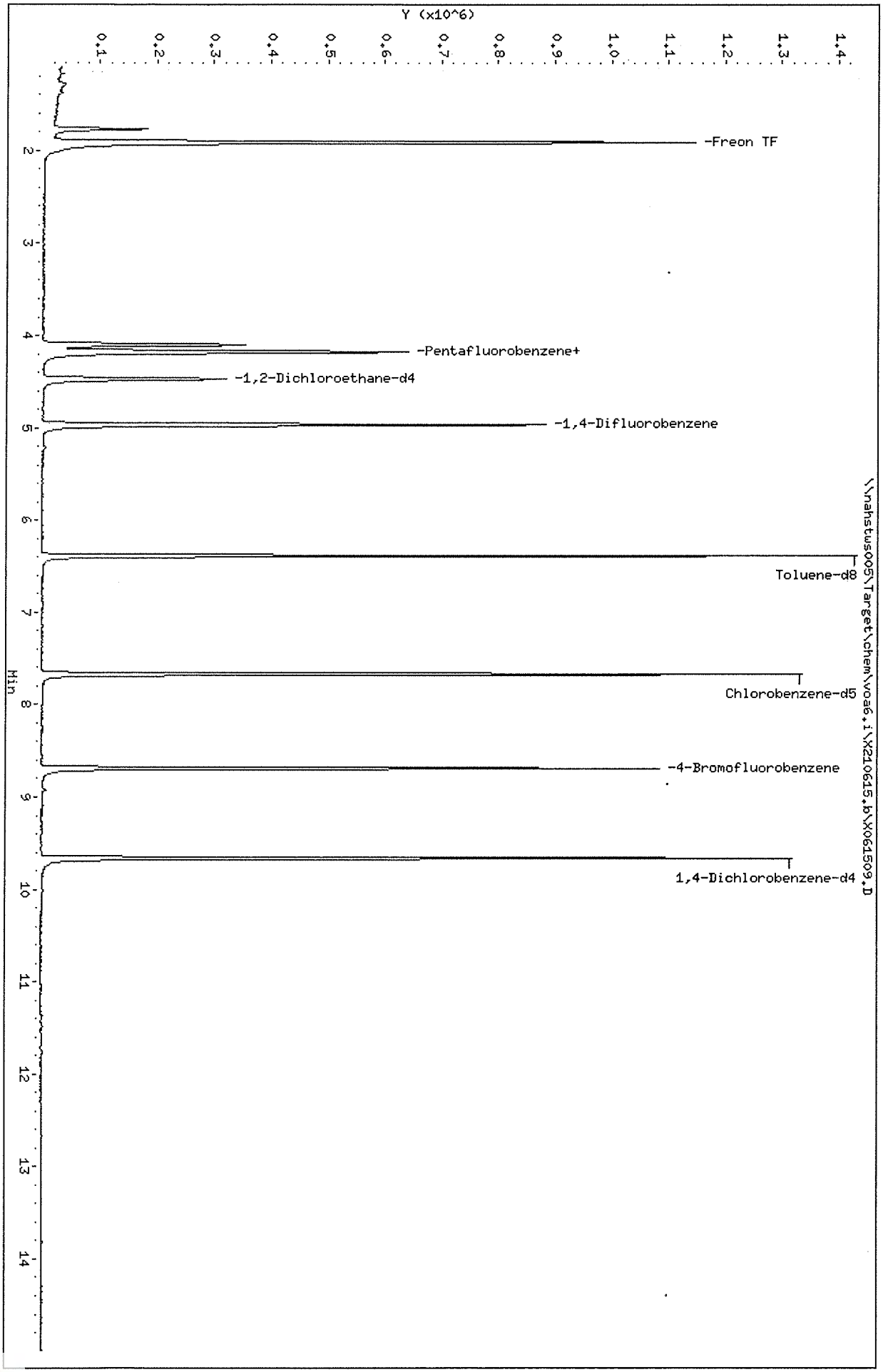
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	574789	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	788841	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	687645	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	337655	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	253296	44.7525	44.75
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	256883	46.7409	46.74
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	889634	51.9380	51.93
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	292386	48.4402	48.44

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061509.D
Date : 15-JUN-2021 13:44
Client ID: HS21060700-03
Sample Info: HS21060700-03;HS21060700-03;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D Page 1
Report Date: 26-Jul-2021 14:24

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D
Lab Smp Id: HS21060700-01 Client Smp ID: HS21060700-01
Inj Date : 15-JUN-2021 14:05
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-01;HS21060700-01;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

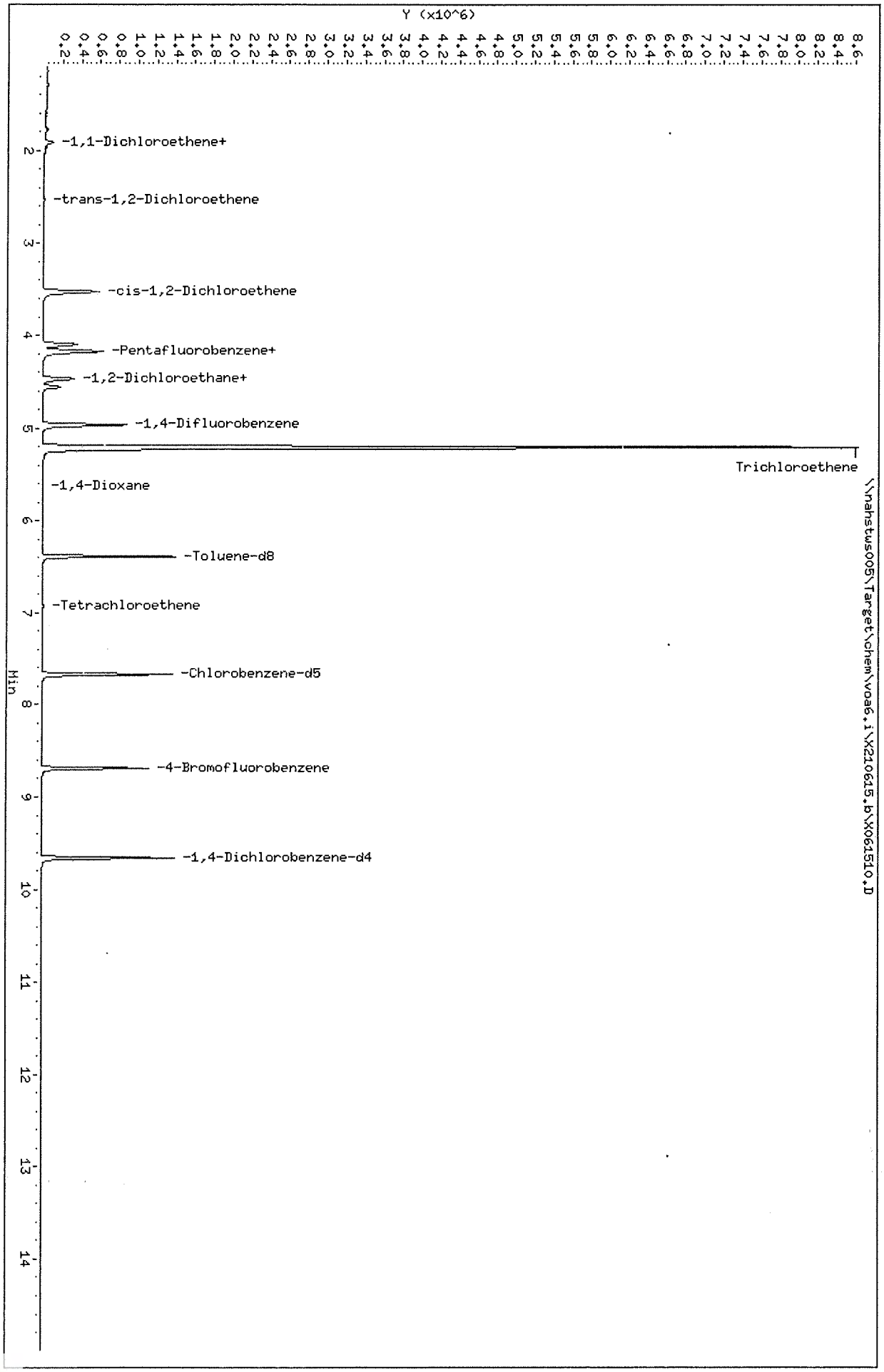
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	580486	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	796607	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	699056	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	363024	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	256607	44.8930	44.89
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	256044	46.1220	46.12
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	895393	51.4210	51.42
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	305742	49.8047	49.80
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	10618	1.77577	1.77(a)
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	169840	26.7584	26.75
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	332498	54.6487	54.64
56 Tetrachloroethene	164	6.933	6.926	(0.904)	3941	0.91578	0.91(a)
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	5623	1.03742	1.03(a)
38 Trichloroethene	130	5.207	5.207	(1.049)	2944287	538.514	538.51(A)
5 Vinyl Chloride	62	1.138	1.138	(0.272)	12247	1.78234	1.78(a)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D
Date : 15-JUN-2021 14:05
Client ID: HS21060700-01
Sample Info: HS21060700-01;HS21060700-01;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D

Date : 15-JUN-2021 14:05

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

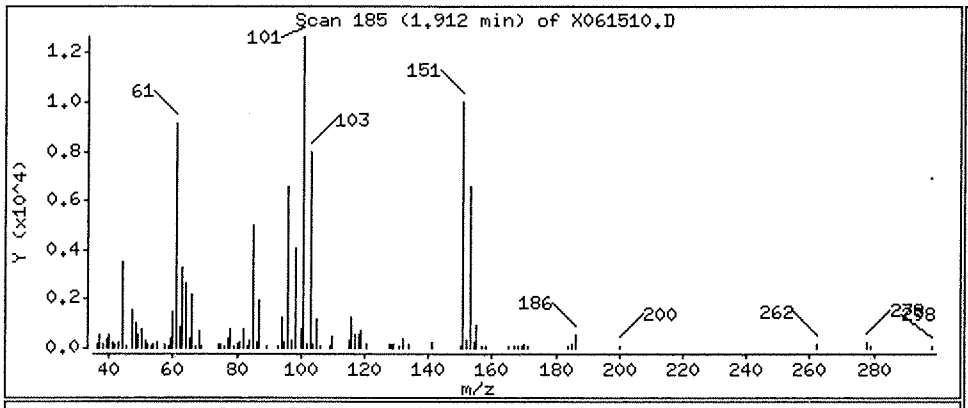
Operator: PC

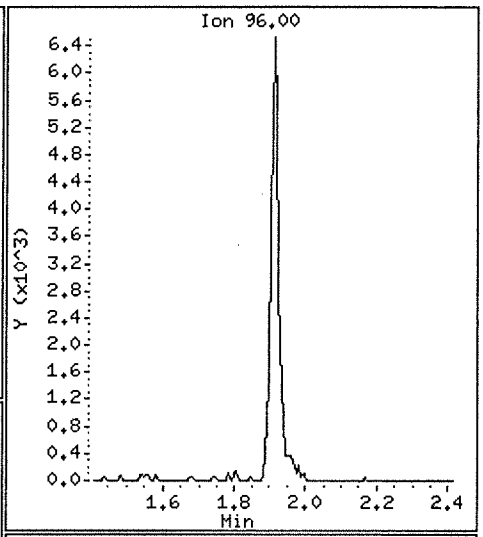
Column phase: DB624

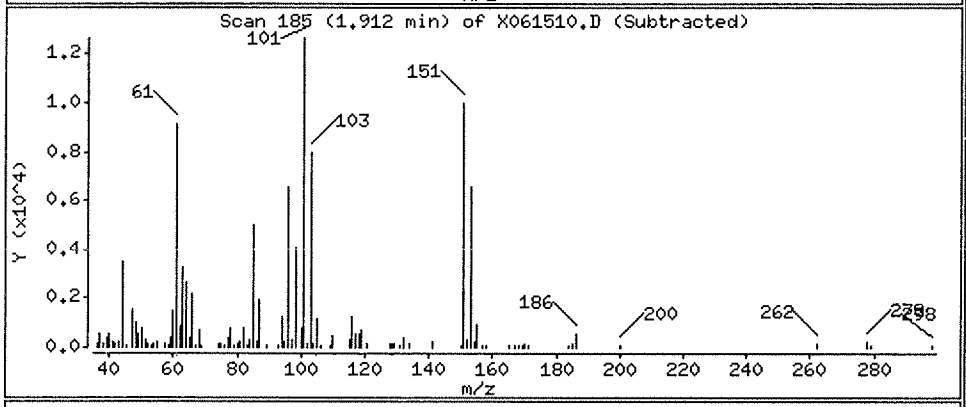
Column diameter: 0.18

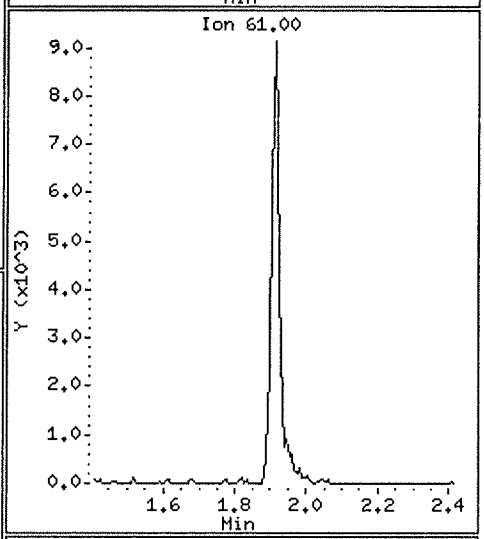
11 1,1-Dichloroethene

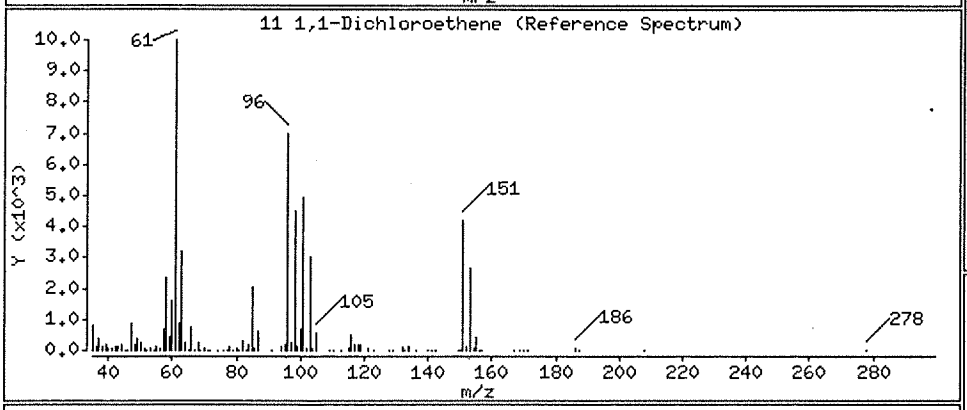
Concentration: 1.77 ug/l

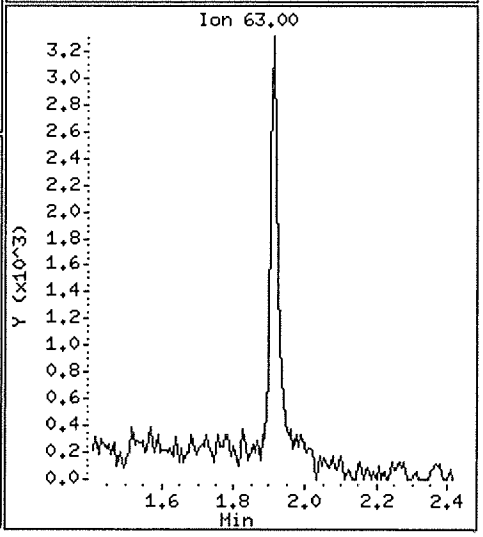


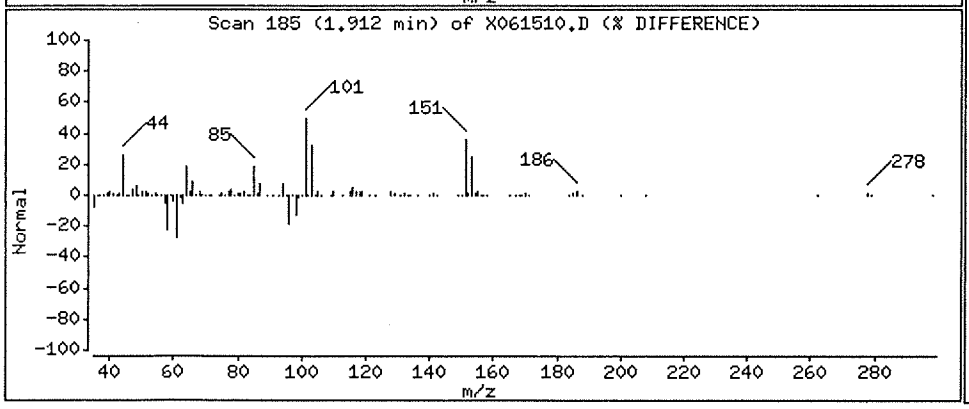












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D

Date : 15-JUN-2021 14:05

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

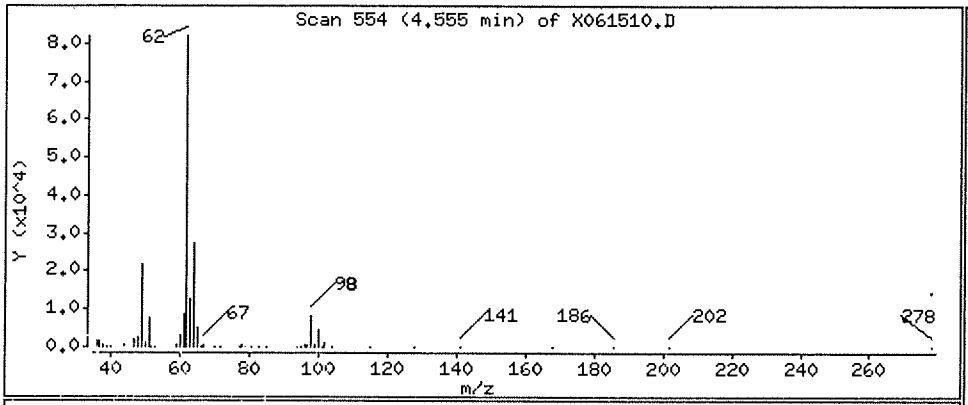
Operator: PC

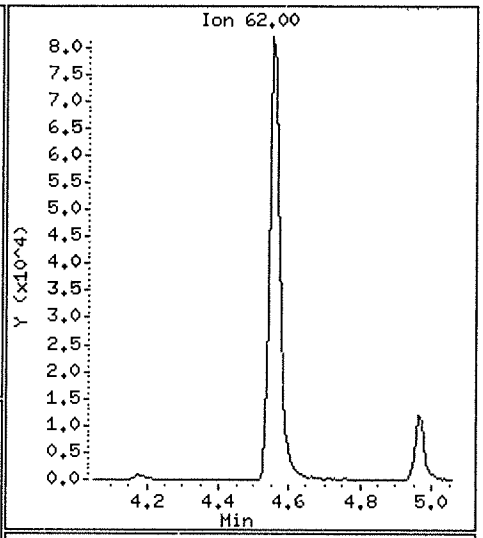
Column phase: DB624

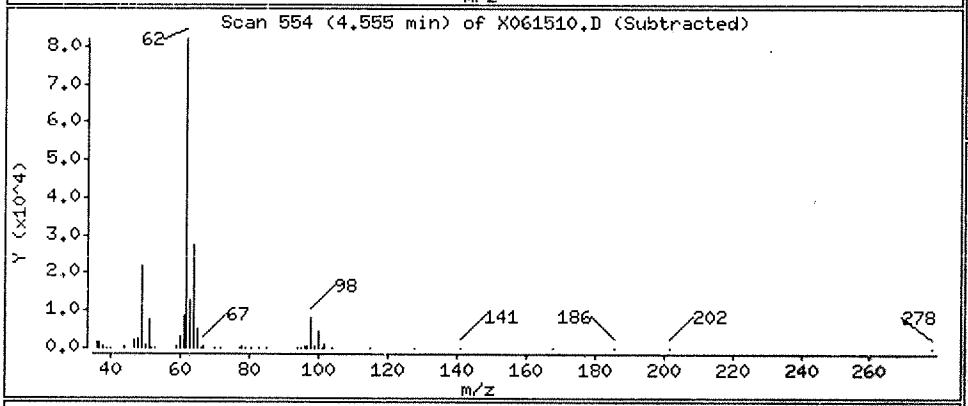
Column diameter: 0.18

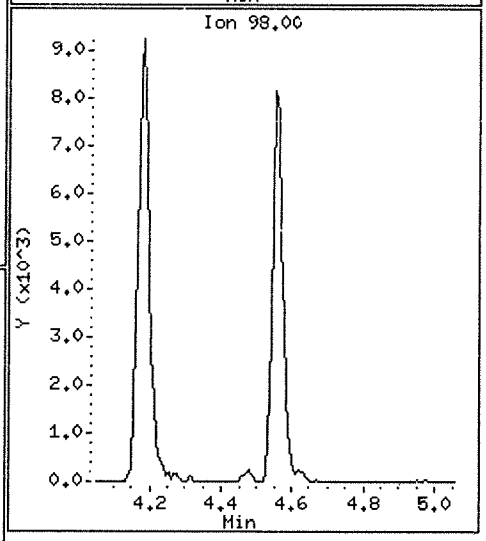
33 1,2-Dichloroethane

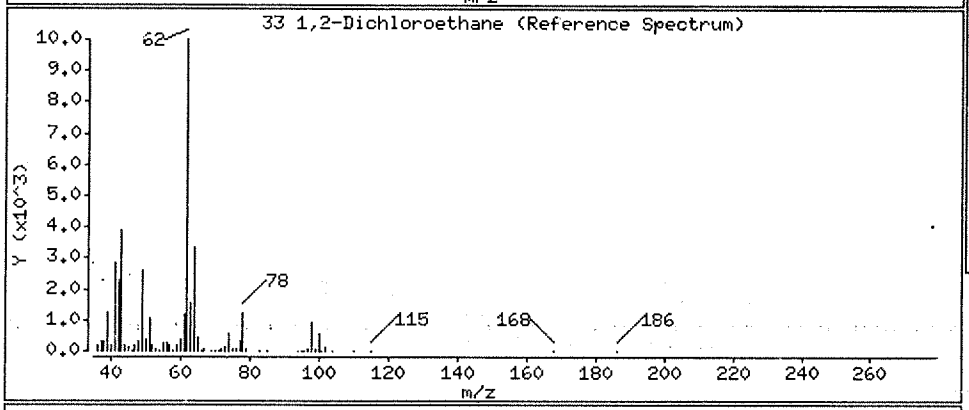
Concentration: 26.75 ug/l

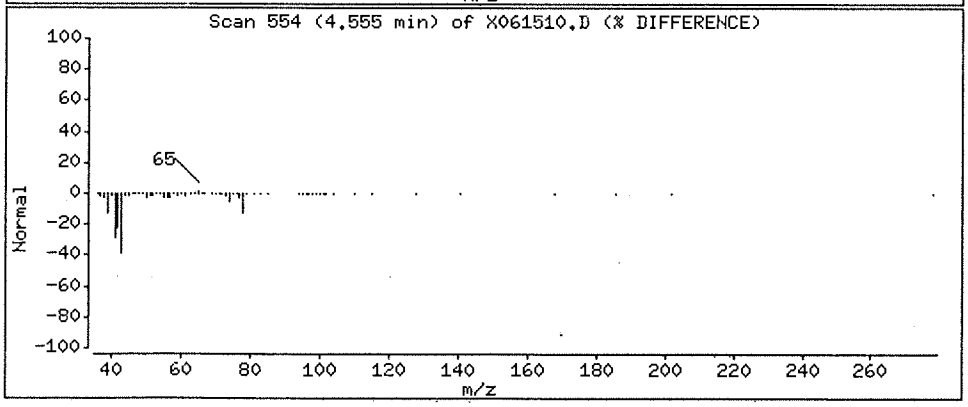












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D

Date : 15-JUN-2021 14:05

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

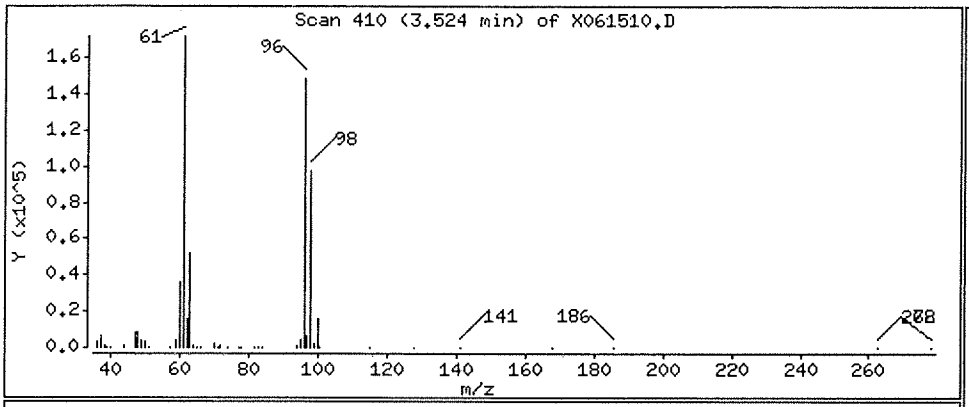
Operator: PC

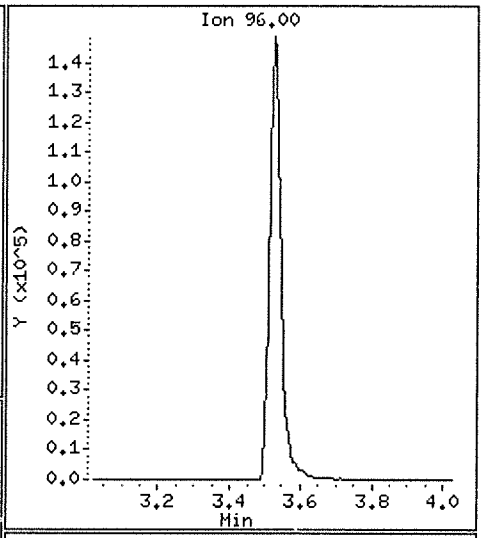
Column phase: DB624

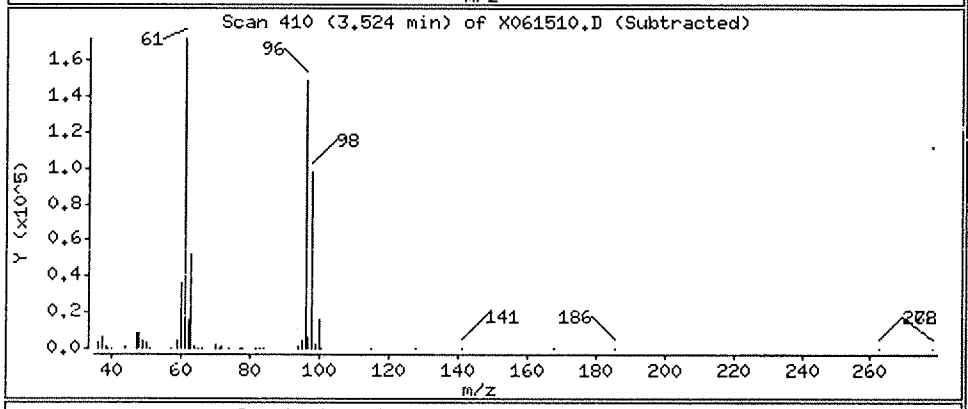
Column diameter: 0.18

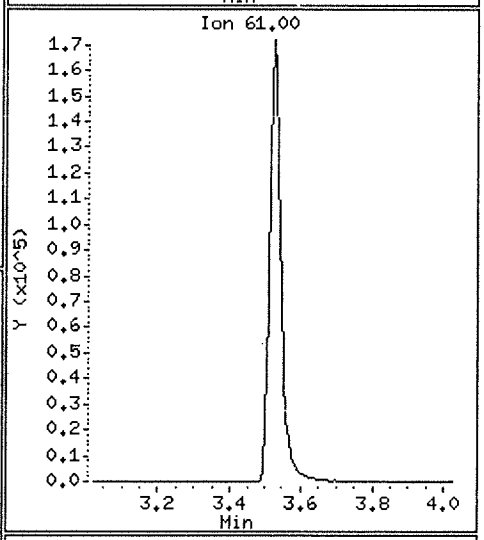
27 cis-1,2-Dichloroethene

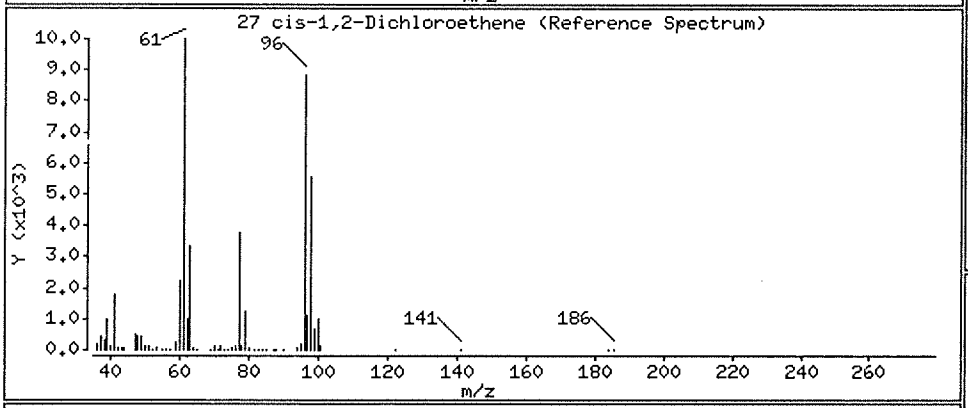
Concentration: 54.64 ug/l

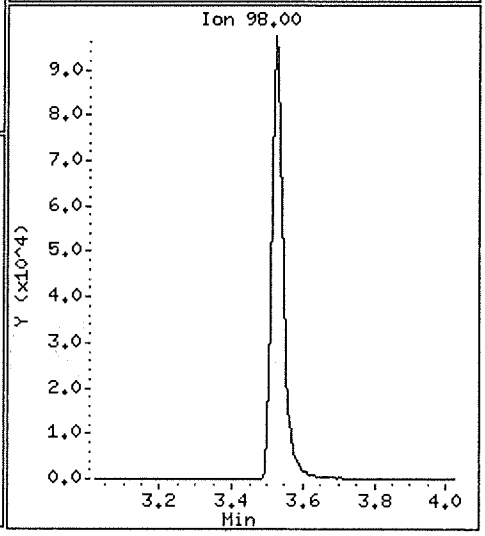


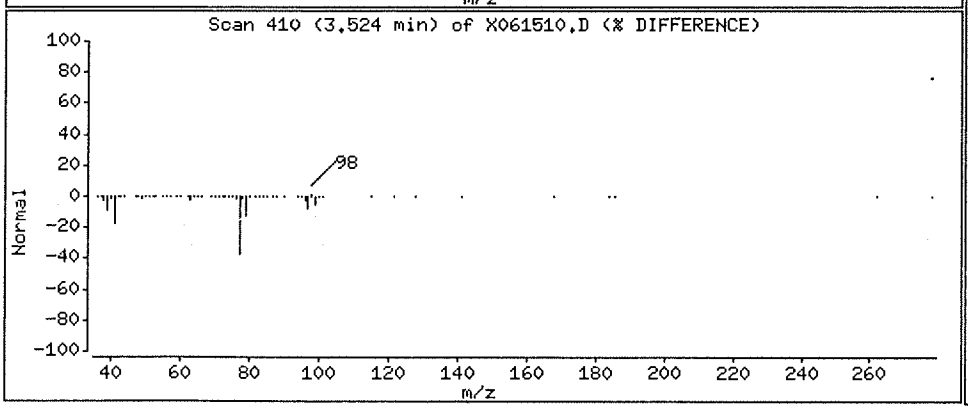












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D

Date : 15-JUN-2021 14:05

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

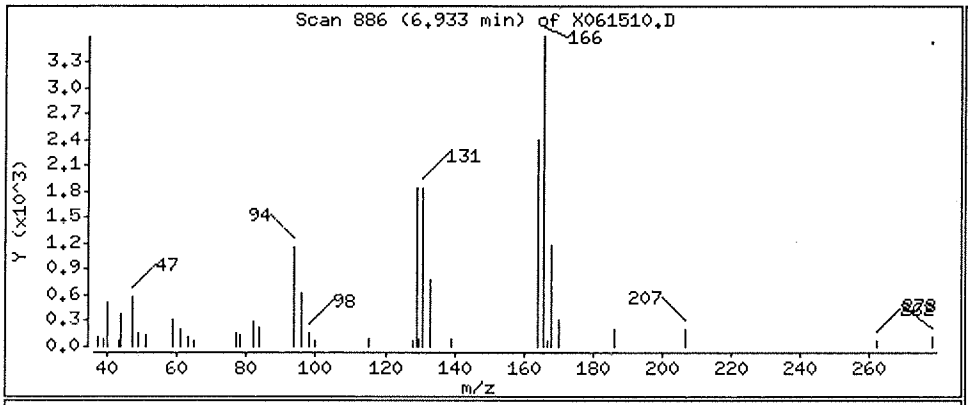
Operator: PC

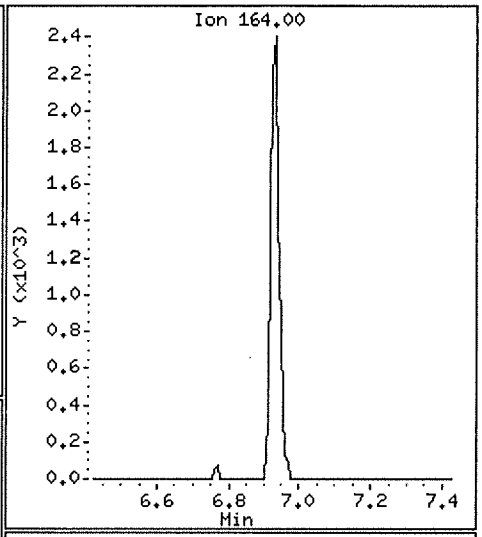
Column phase: DB624

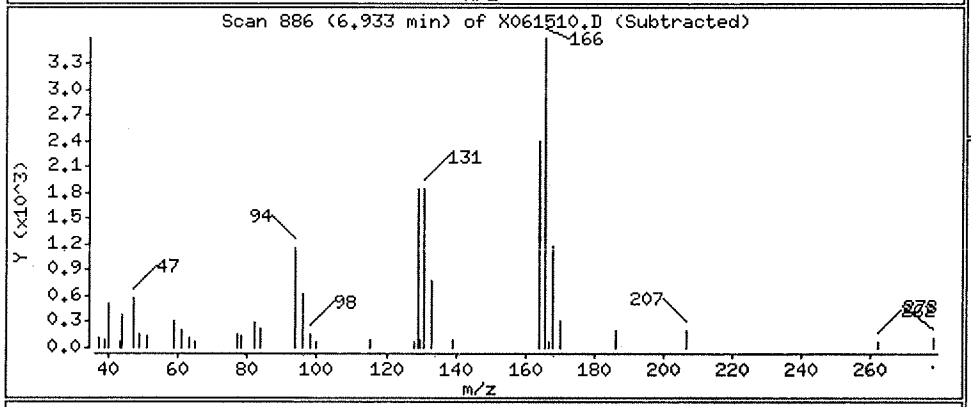
Column diameter: 0.18

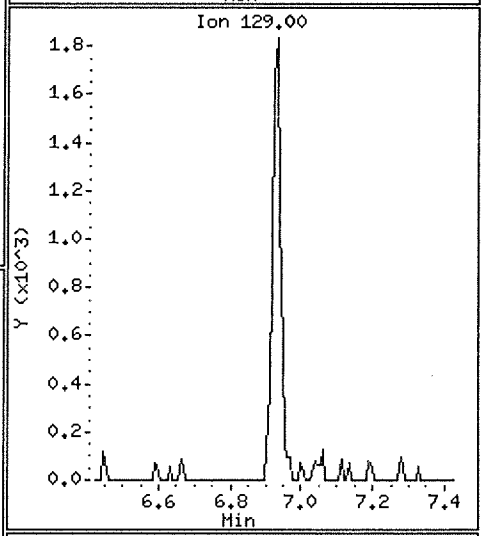
56 Tetrachloroethene

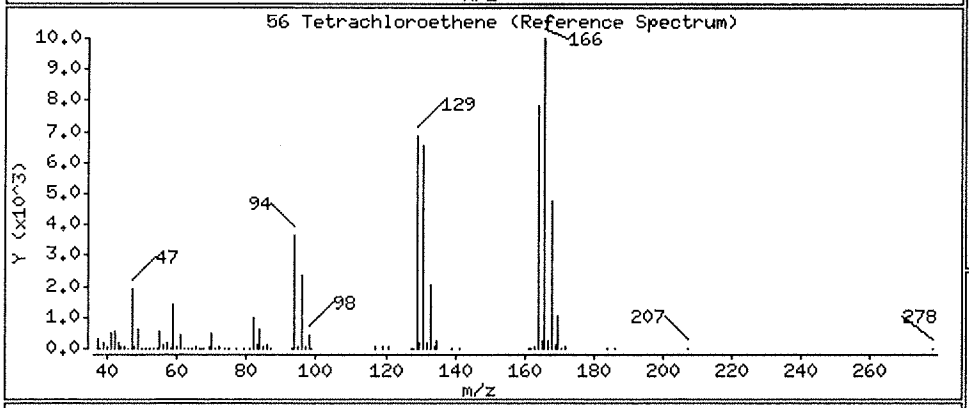
Concentration: 0.91 ug/l

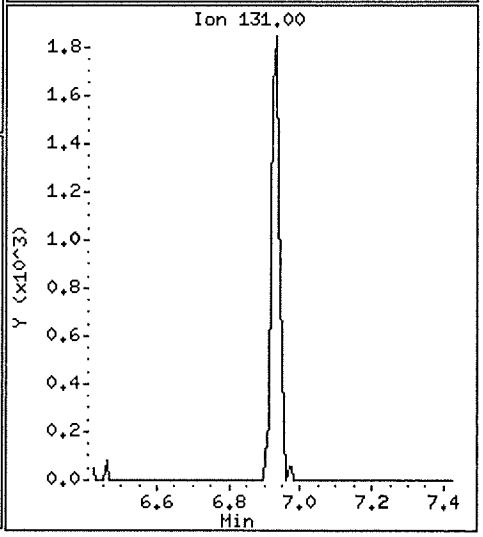


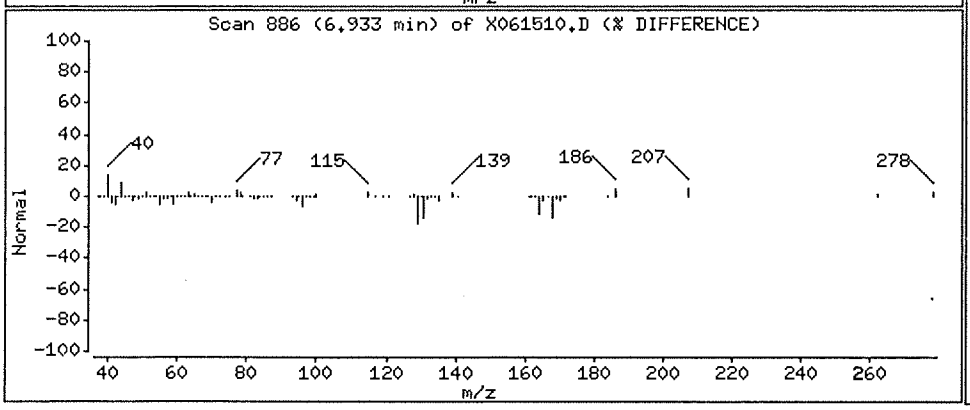












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D

Date : 15-JUN-2021 14:05

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

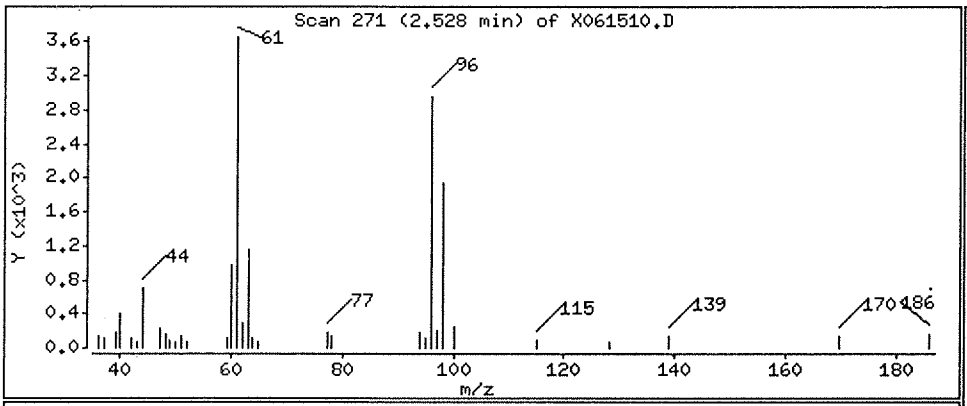
Operator: PC

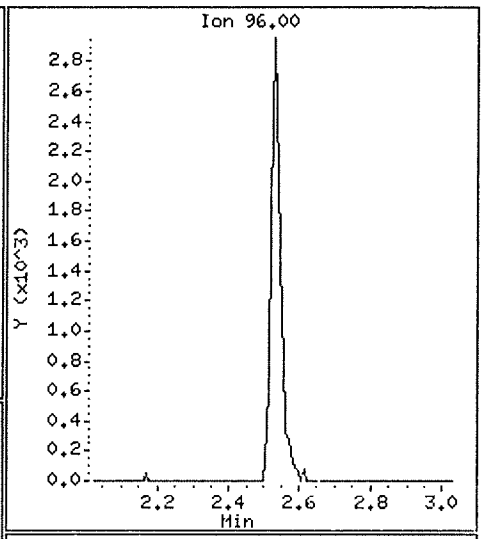
Column phase: DB624

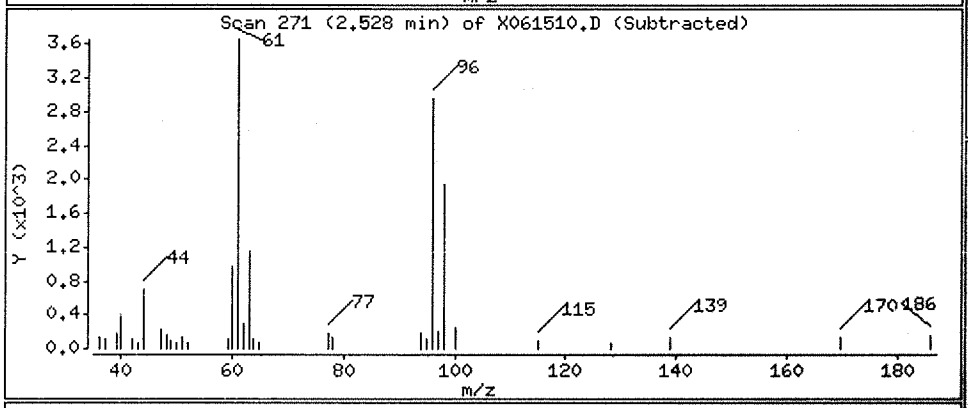
Column diameter: 0.18

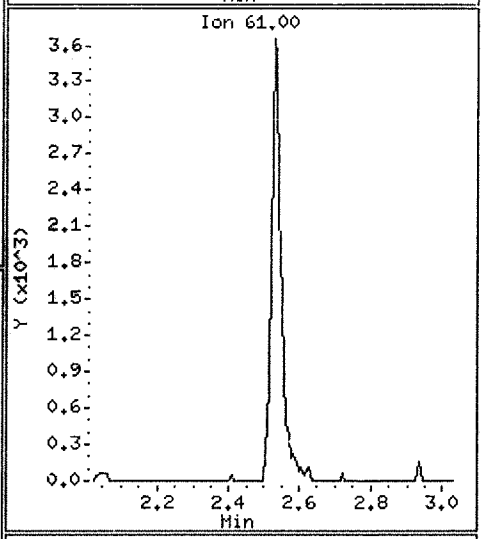
20 trans-1,2-Dichloroethene

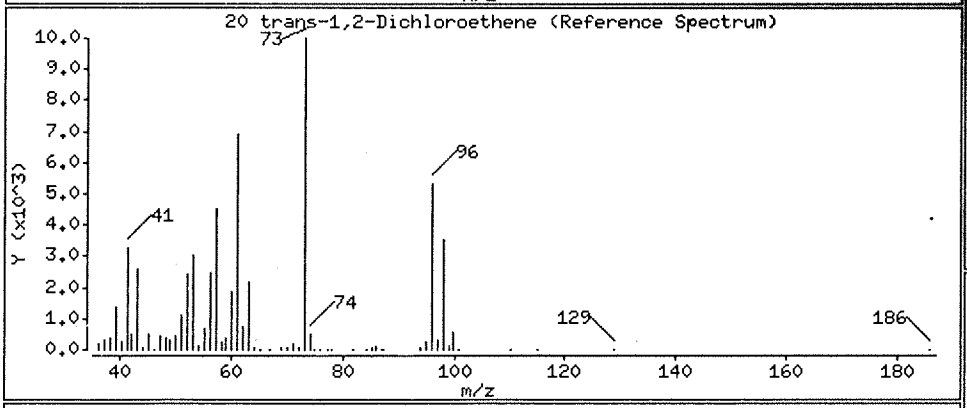
Concentration: 1.03 ug/l

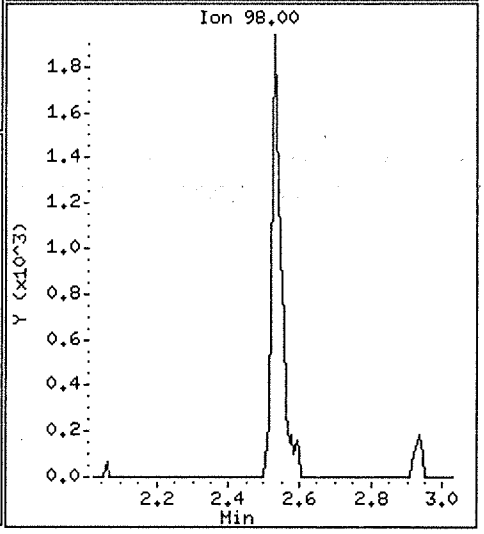


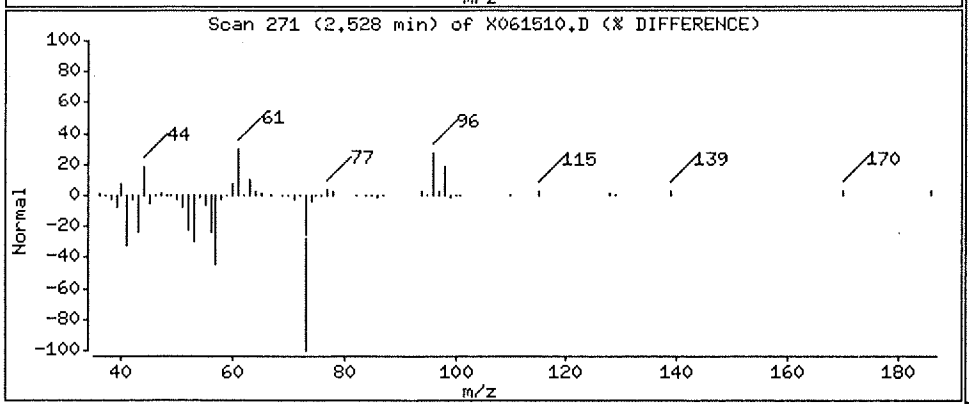












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D

Date : 15-JUN-2021 14:05

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

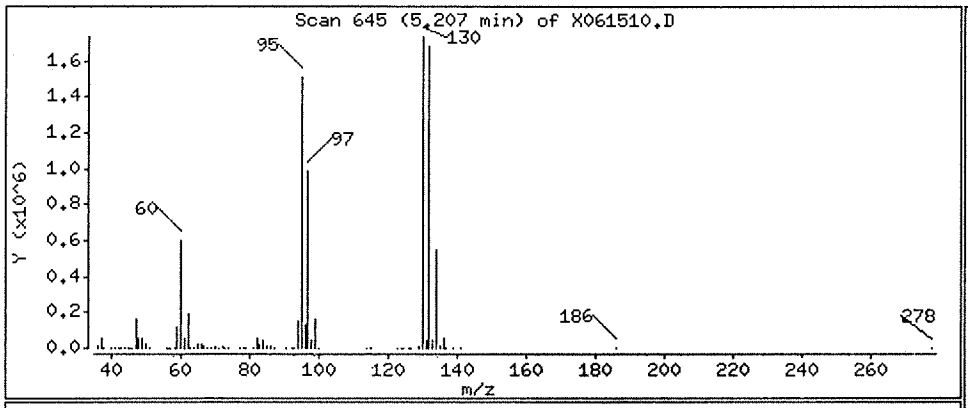
Operator: PC

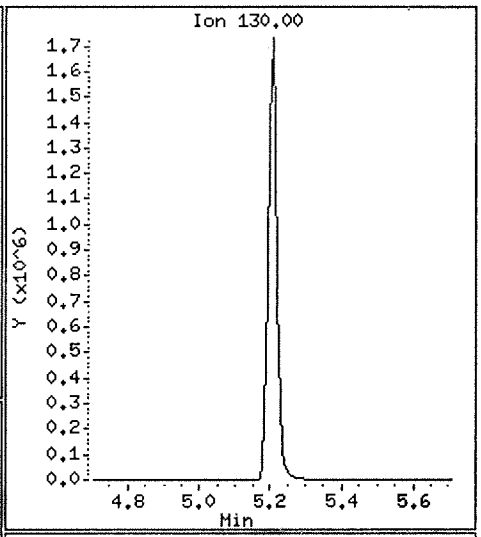
Column phase: DB624

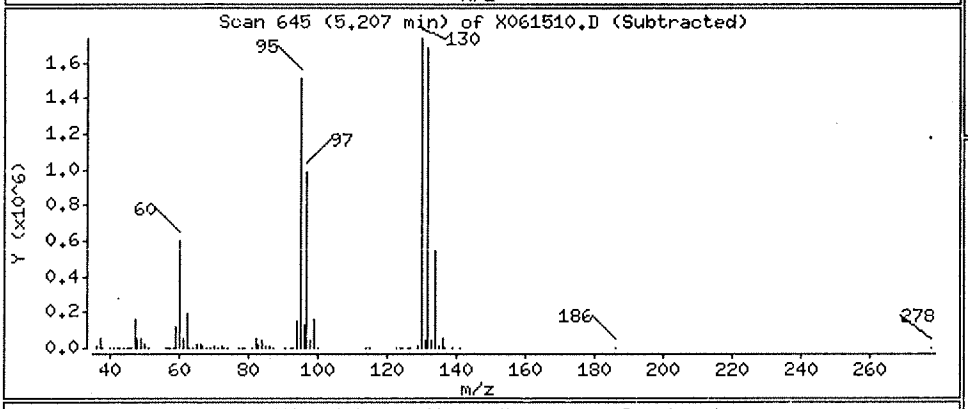
Column diameter: 0.18

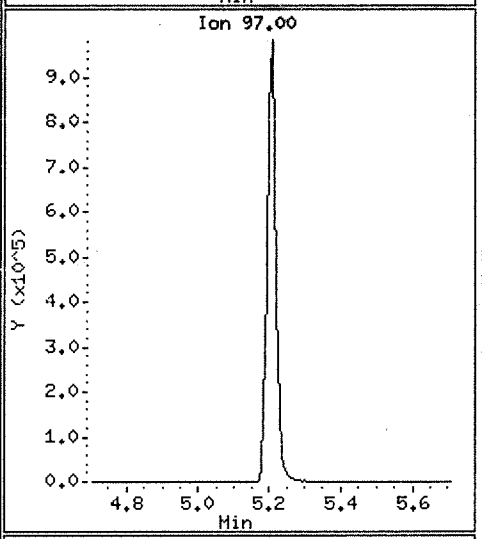
38 Trichloroethene

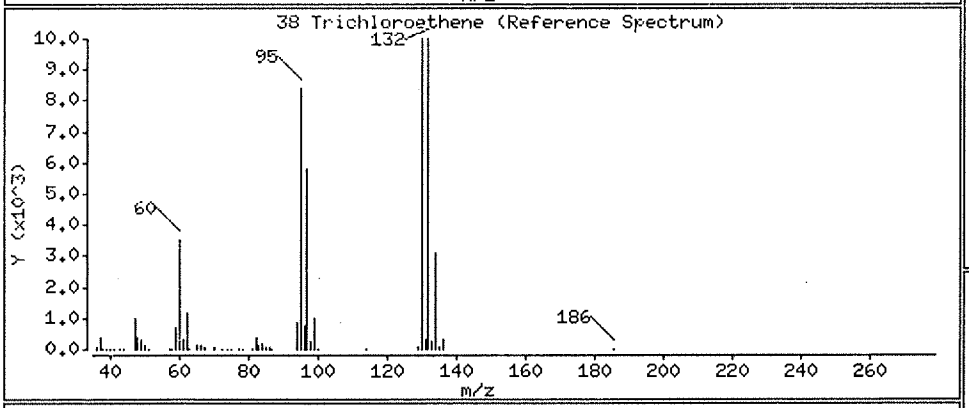
Concentration: 538.51 ug/l

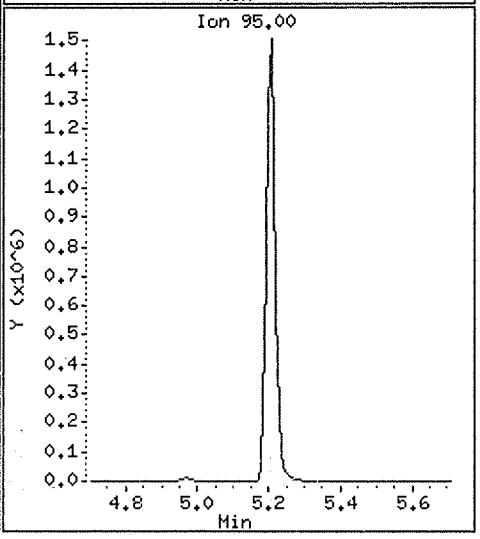


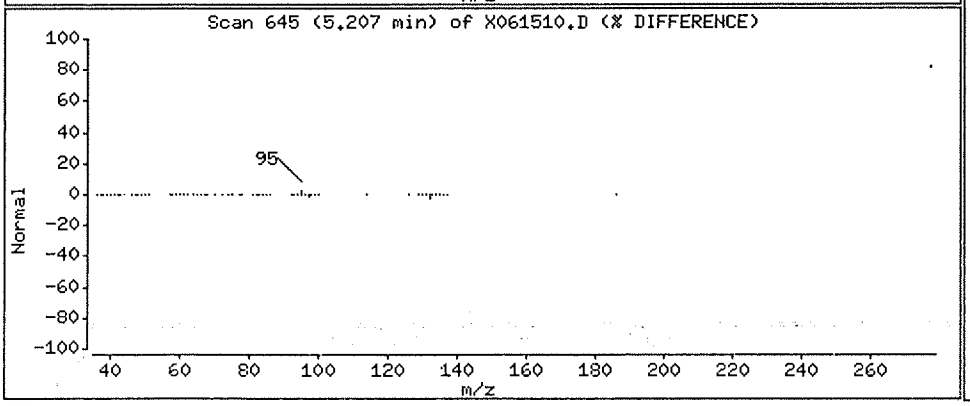












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061510.D

Date : 15-JUN-2021 14:05

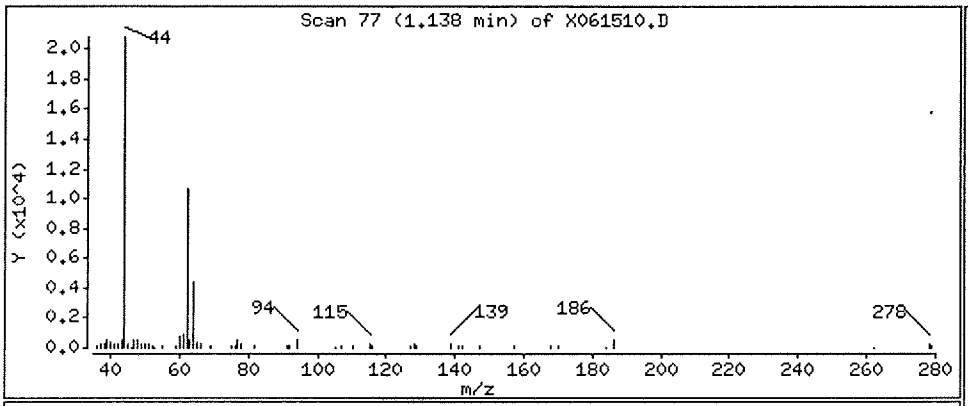
Client ID: HS21060700-01 Instrument: voa6.i

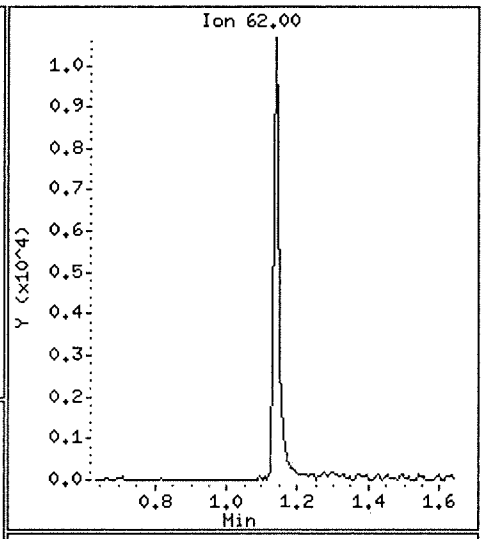
Sample Info: HS21060700-01;HS21060700-01;;;

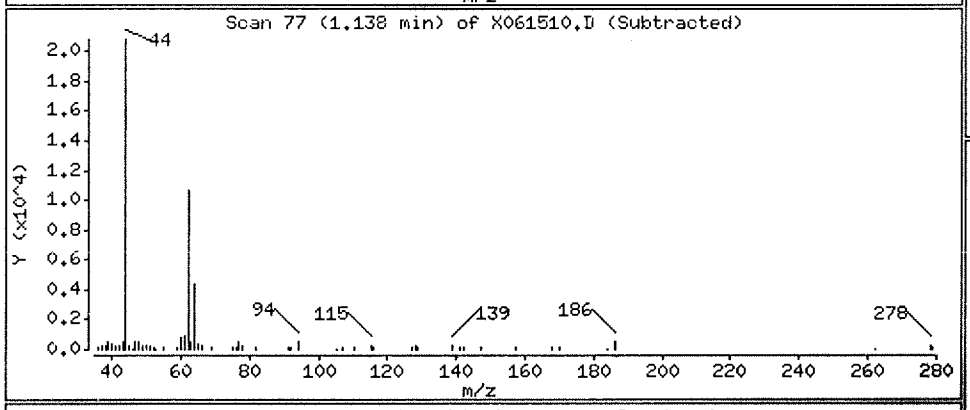
Purge Volume: 5.0 Operator: PC

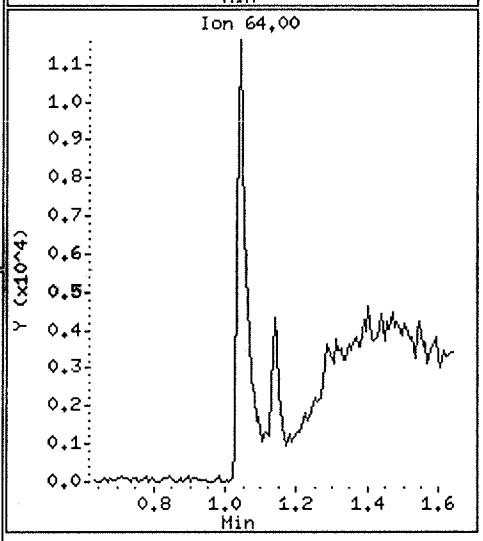
Column phase: DB624 Column diameter: 0.18

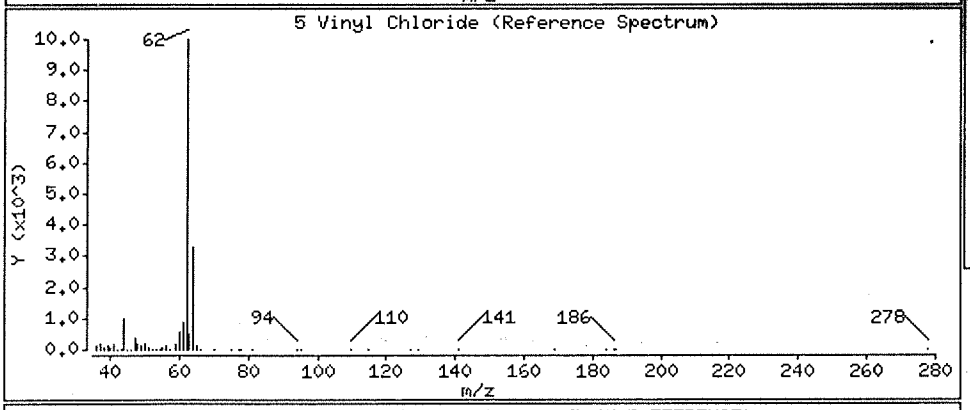
5 Vinyl Chloride Concentration: 1.78 ug/l

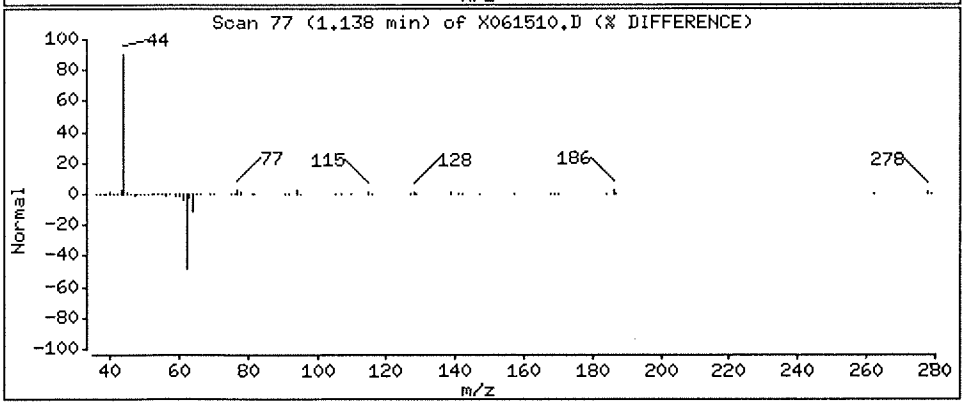












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061511.D
Lab Smp Id: HS21060700-02 Client Smp ID: HS21060700-02
Inj Date : 15-JUN-2021 14:26
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-02;HS21060700-02;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 11
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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

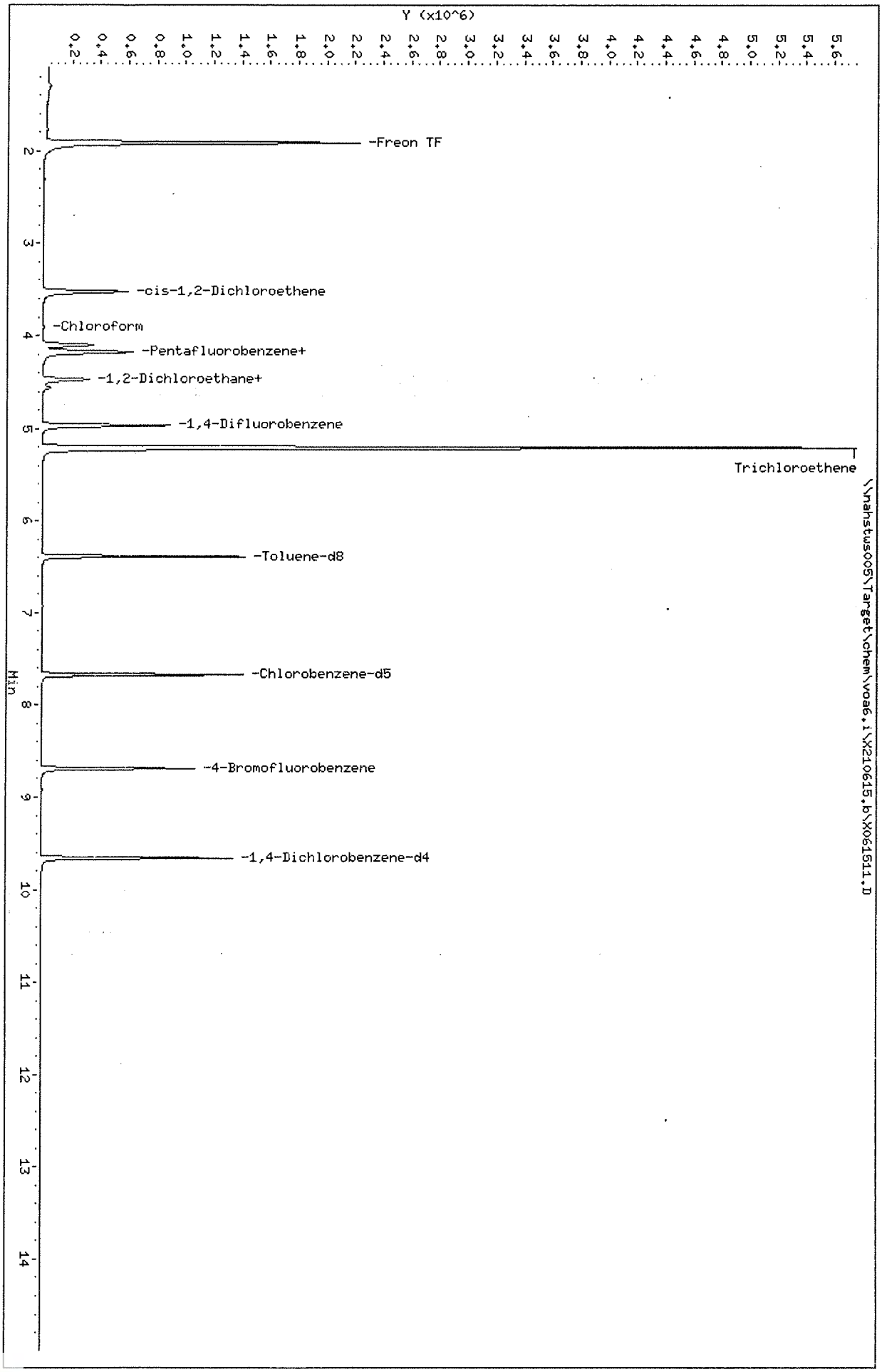
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	589302	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	802004	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	710154	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	351765	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	257937	44.4490	44.44
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	259632	46.0678	46.06
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	898020	50.7659	50.76
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	300445	48.2015	48.20
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	49873	7.80464	78.04
28 Chloroform	83	3.910	3.910	(0.935)	6282	0.60618	6.06(a)
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	332905	53.8970	538.97
38 Trichloroethene	130	5.207	5.207	(1.049)	1996343	362.676	3626.76(A)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061511.D
Date : 15-JUN-2021 14:26
Client ID: HS21060700-02
Sample Info: HS21060700-02*HS21060700-02;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061511.D

Date : 15-JUN-2021 14:26

Client ID: HS21060700-02

Instrument: voa6.i

Sample Info: HS21060700-02;HS21060700-02;;;

Purge Volume: 5.0

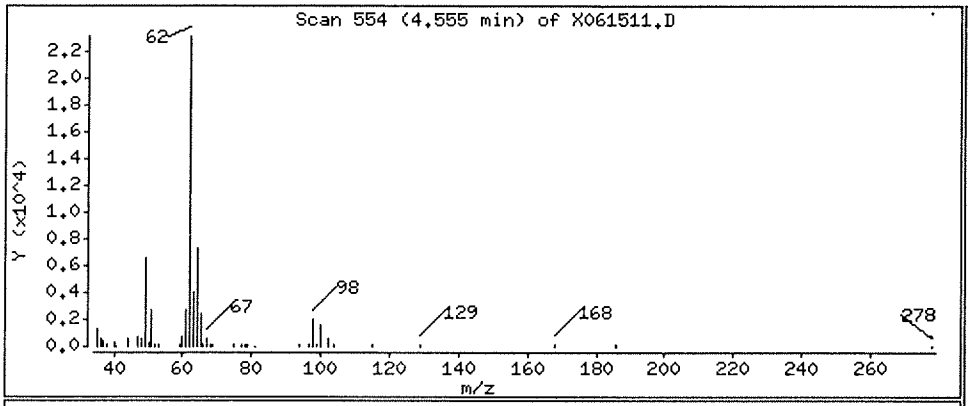
Operator: PC

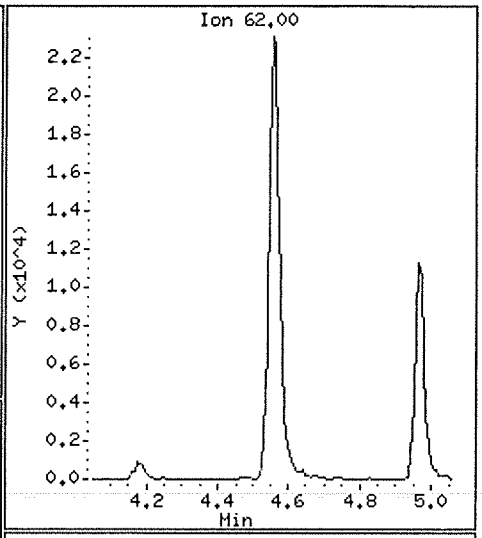
Column phase: DB624

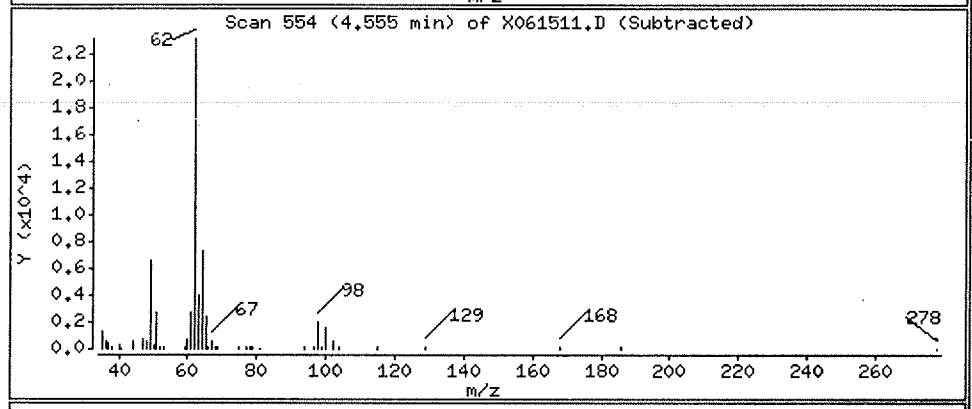
Column diameter: 0.18

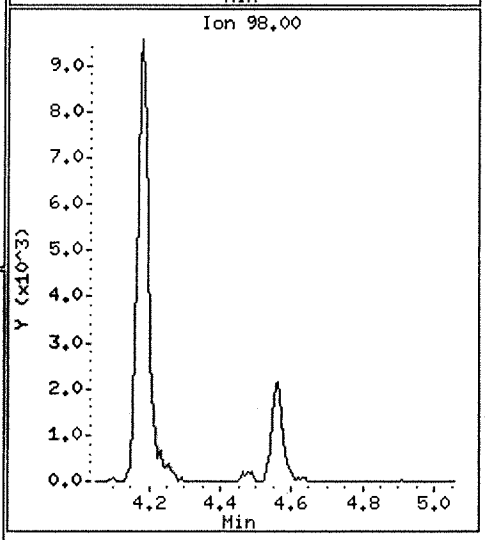
33 1,2-Dichloroethane

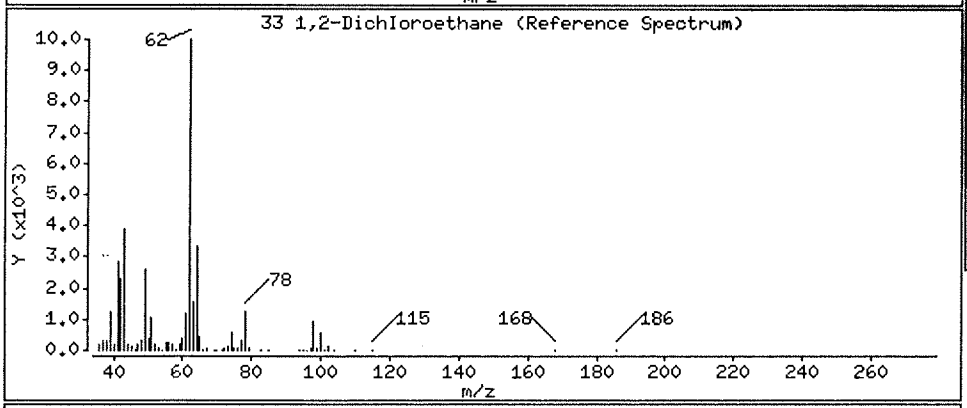
Concentration: 78.04 ug/l

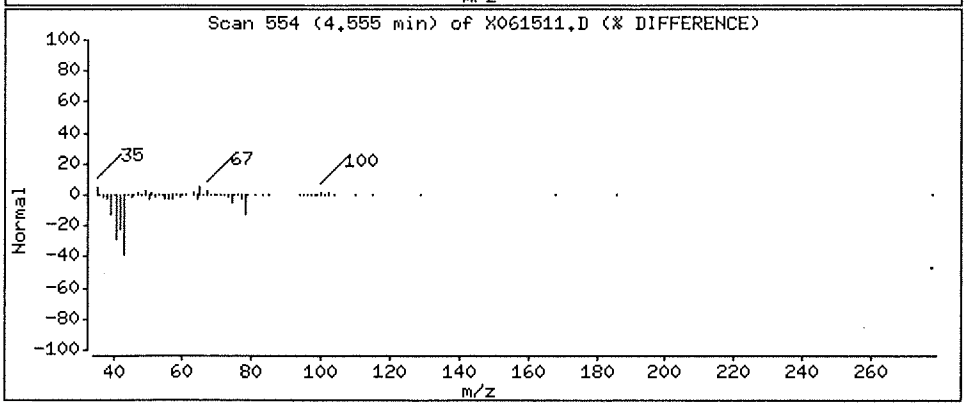












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061511.D

Date : 15-JUN-2021 14:26

Client ID: HS21060700-02

Instrument: voa6.i

Sample Info: HS21060700-02;HS21060700-02;;;

Purge Volume: 5.0

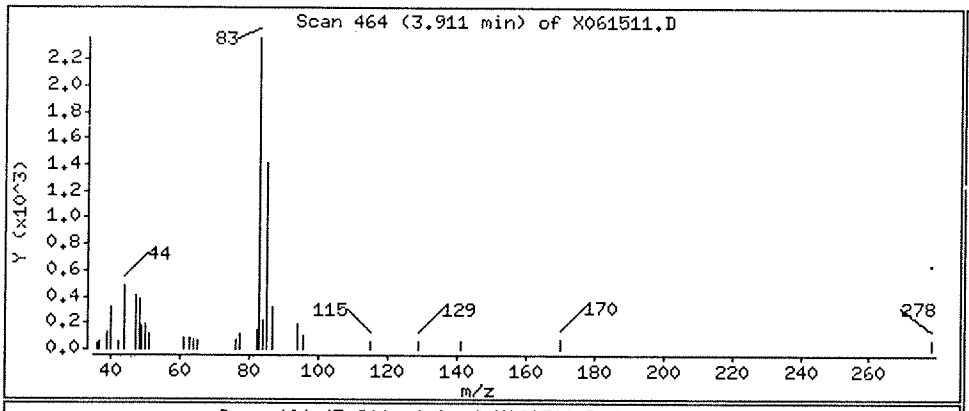
Operator: PC

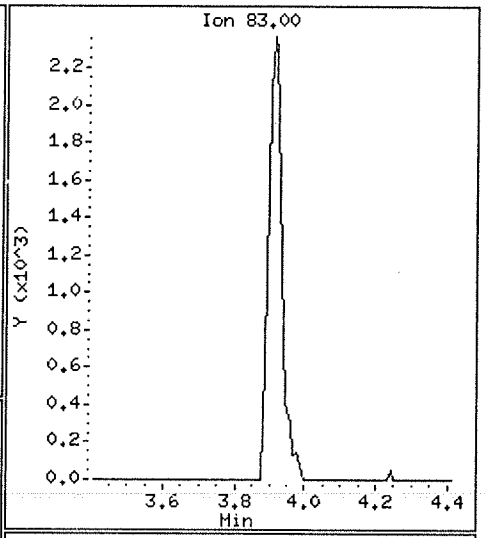
Column phase: DB624

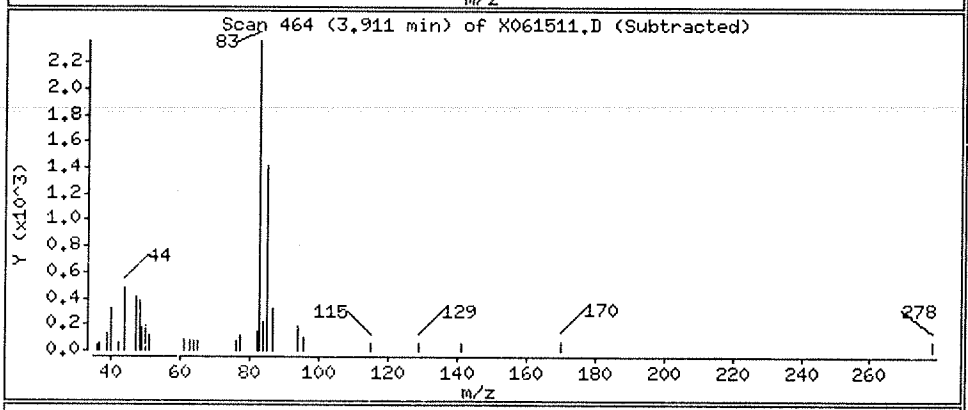
Column diameter: 0.18

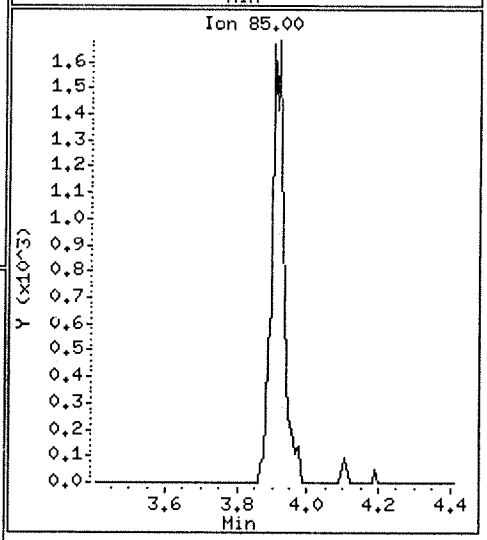
28 Chloroform

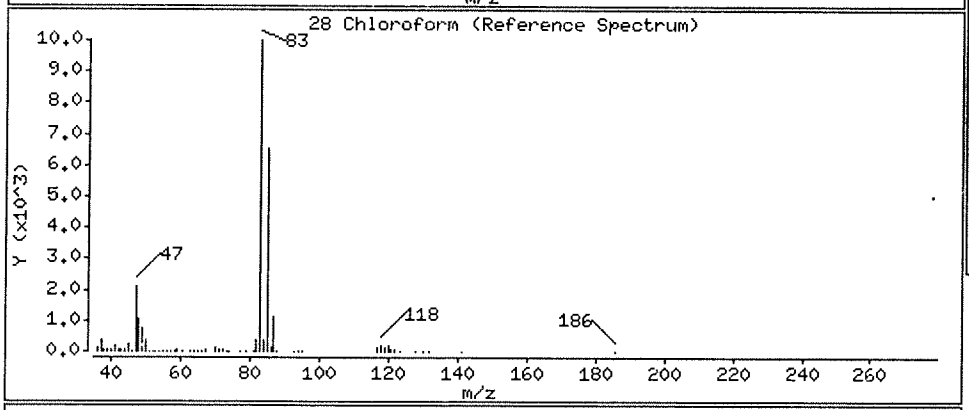
Concentration: 6.06 ug/l

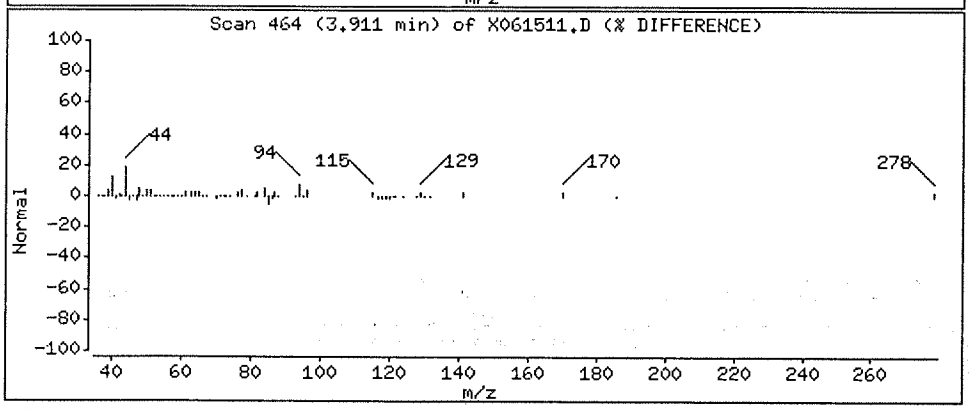












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061511.D

Date : 15-JUN-2021 14:26

Client ID: HS21060700-02

Instrument: voa6.i

Sample Info: HS21060700-02;HS21060700-02;;;

Purge Volume: 5.0

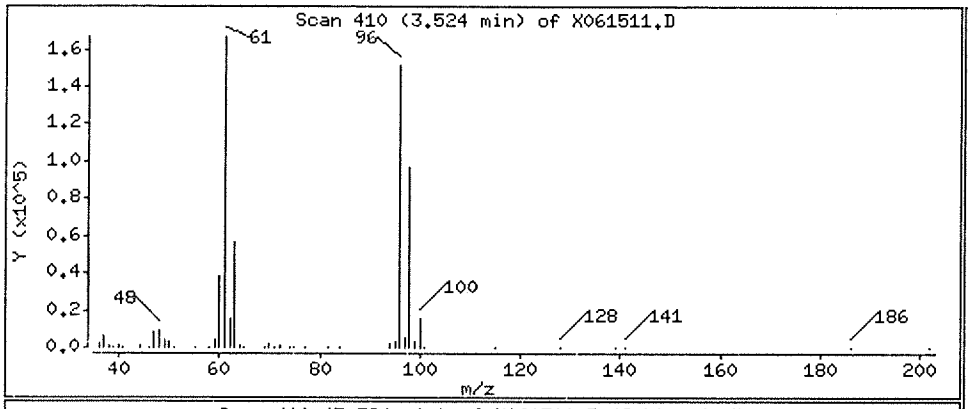
Operator: PC

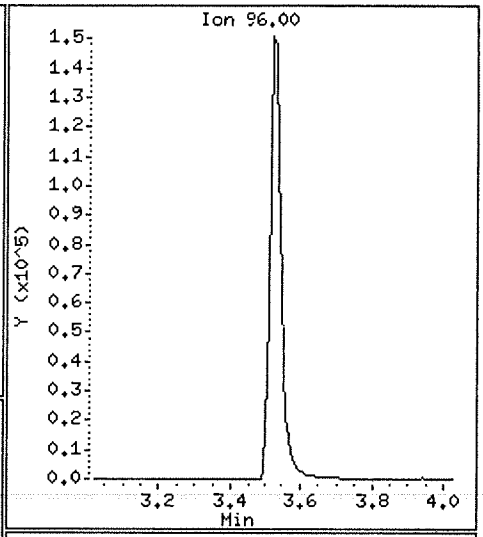
Column phase: DB624

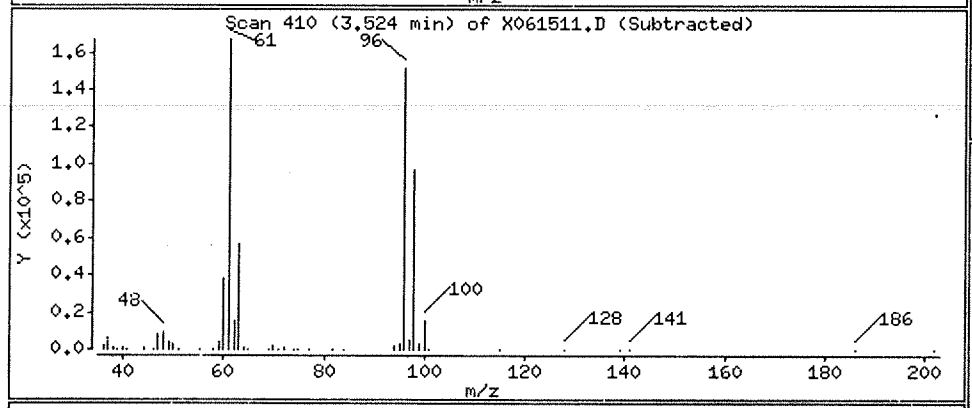
Column diameter: 0.18

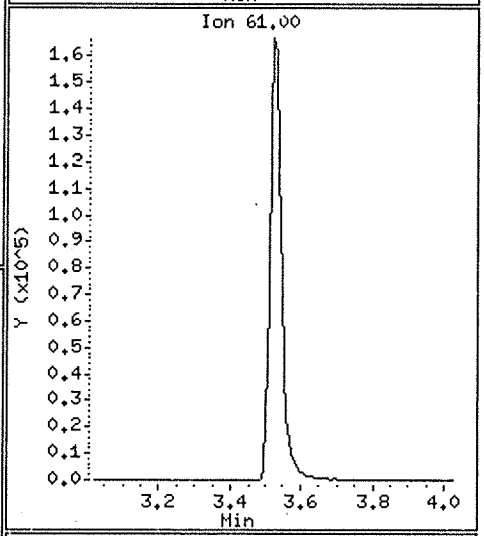
27 cis-1,2-Dichloroethene

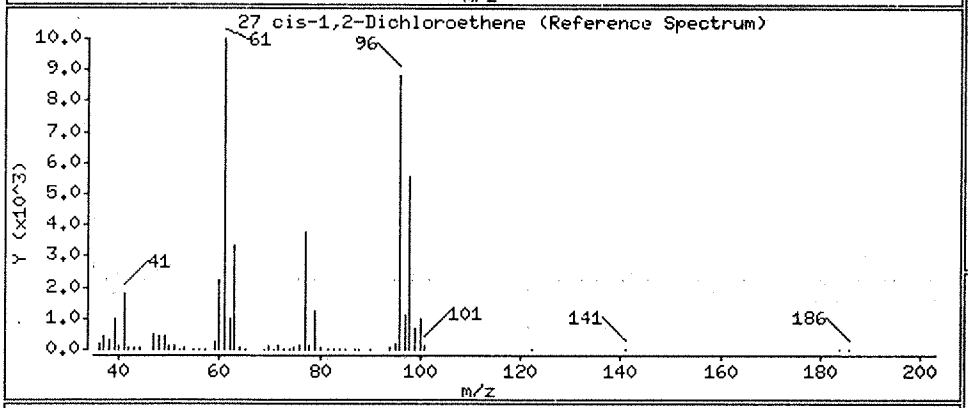
Concentration: 538.97 ug/l

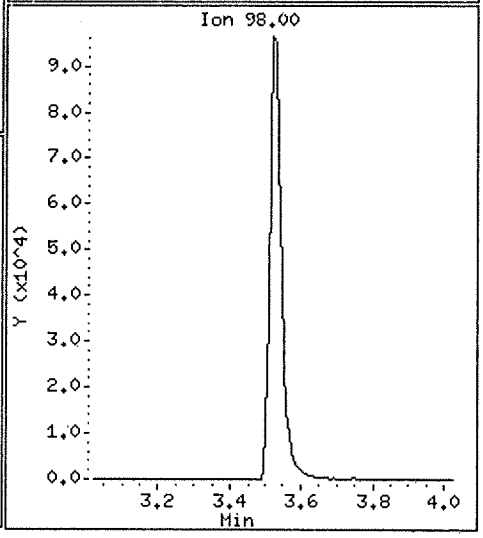


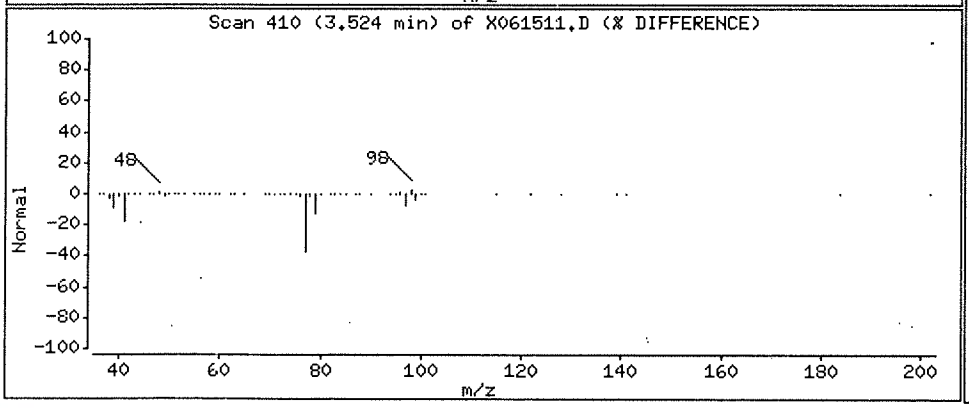












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061511.D

Date : 15-JUN-2021 14:26

Client ID: HS21060700-02

Instrument: voa6.i

Sample Info: HS21060700-02;HS21060700-02;;;

Purge Volume: 5.0

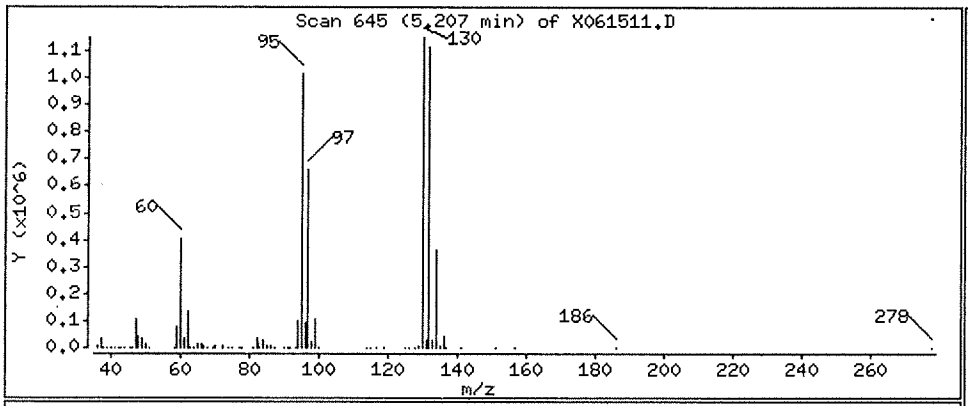
Operator: PC

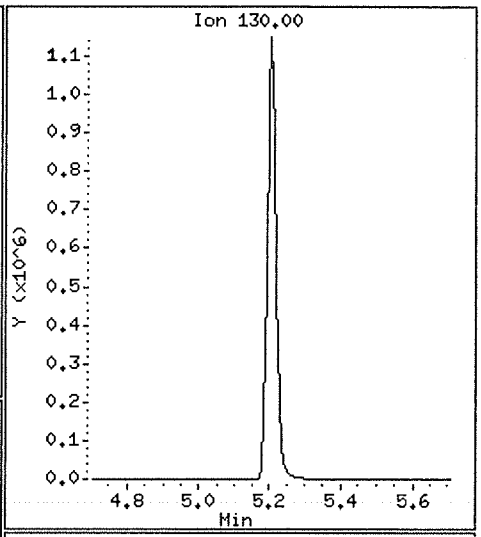
Column phase: DB624

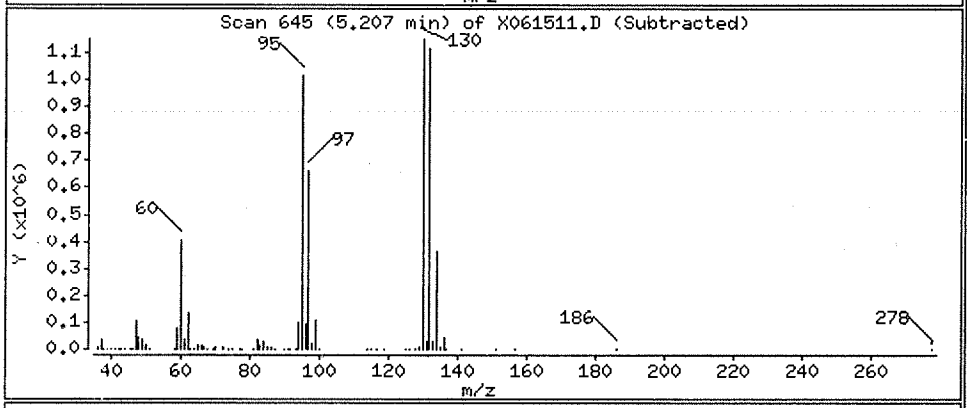
Column diameter: 0.18

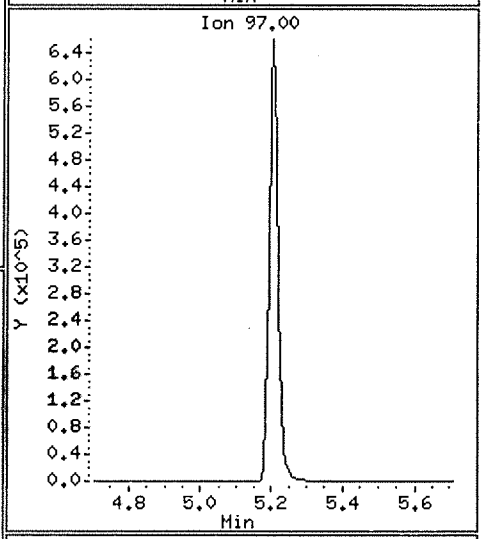
38 Trichloroethene

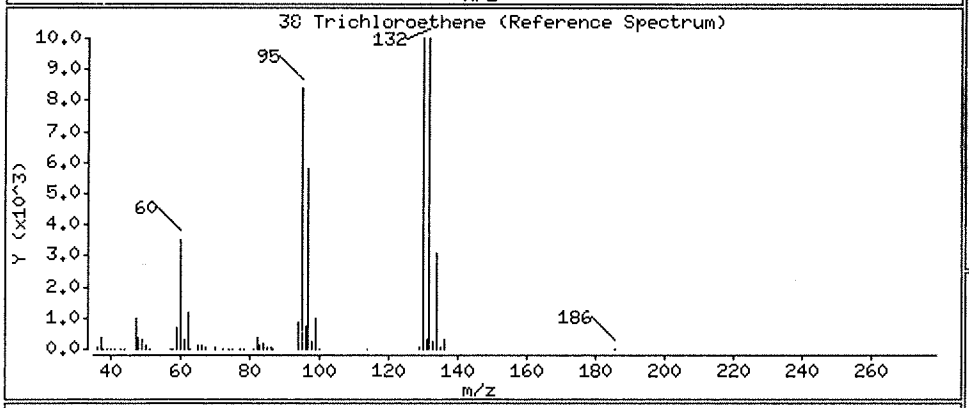
Concentration: 3626.76 ug/l

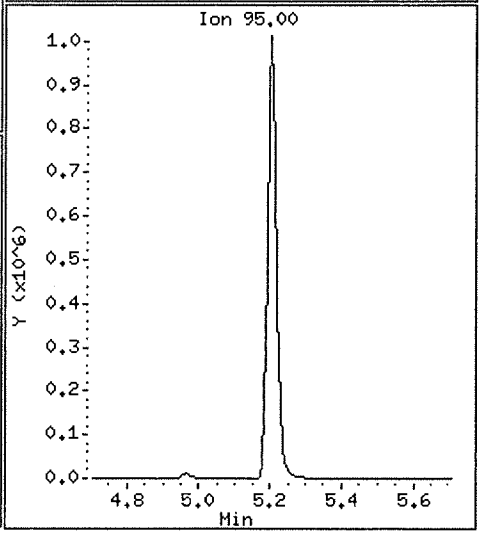


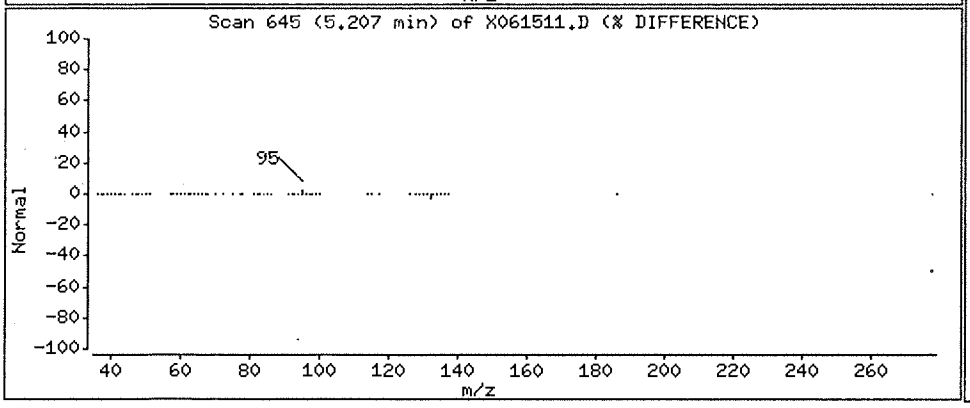












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061512.D
Lab Smp Id: HS21060700-02 Client Smp ID: HS21060700-02
Inj Date : 15-JUN-2021 14:47
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-02;HS21060700-02;;;
Misc Info : HS18090001;WATER;0;100;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 12
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

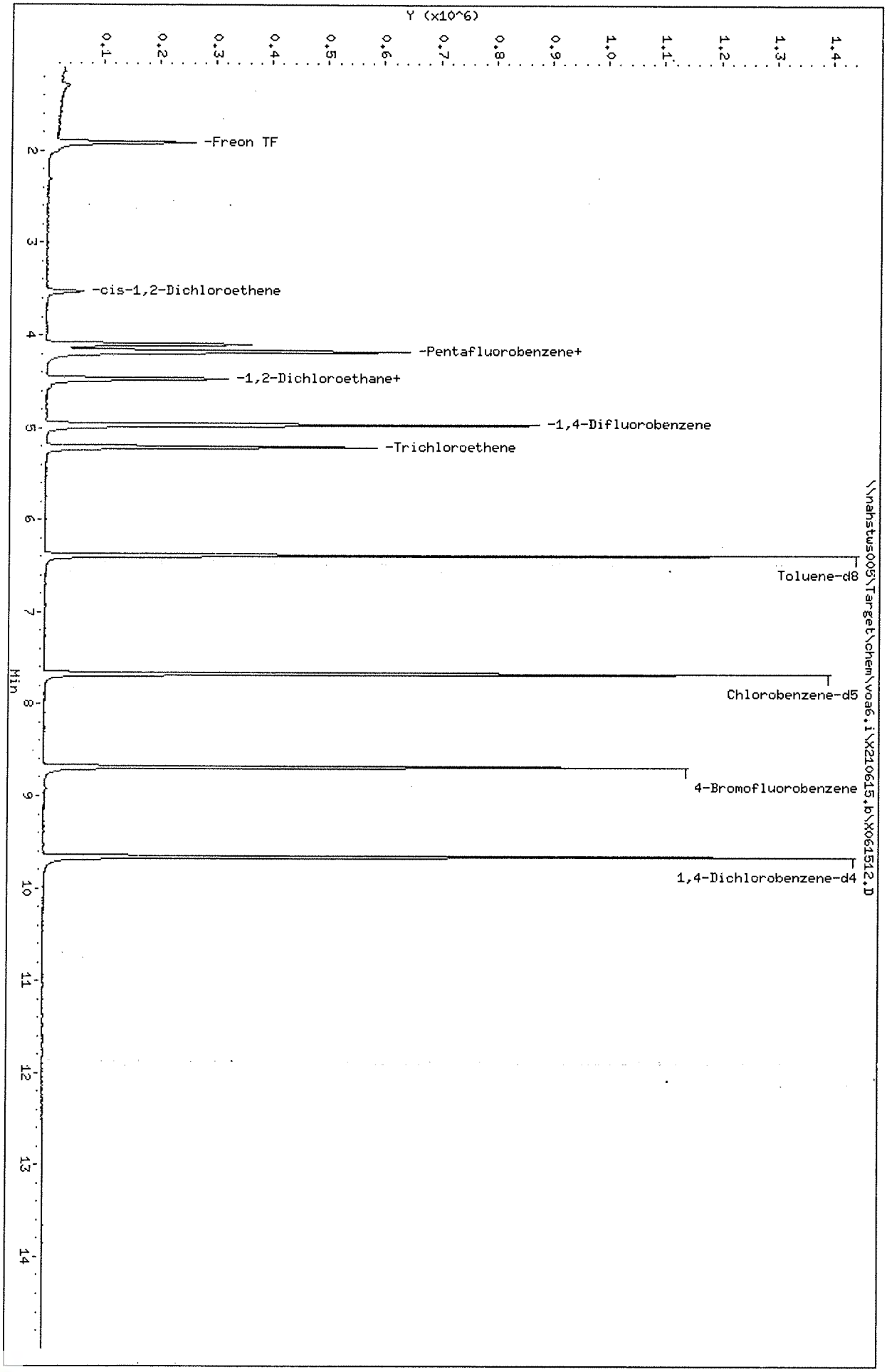
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	579945	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	800364	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	702697	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	367262	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	259351	45.4173	45.41
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	258127	46.5469	46.54
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	898613	51.3385	51.33
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	305048	49.4397	49.43
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	5882	0.92236	92.23(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	36556	6.01387	601.38
38 Trichloroethene	130	5.206	5.207	(1.049)	206412	37.5758	3757.57

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061512.D
Date : 15-JUN-2021 14:47
Client ID: HS21060700-02
Sample Info: HS21060700-02;HS21060700-02;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061512.D

Date : 15-JUN-2021 14:47

Client ID: HS21060700-02

Instrument: voa6.i

Sample Info: HS21060700-02;HS21060700-02;;;

Purge Volume: 5.0

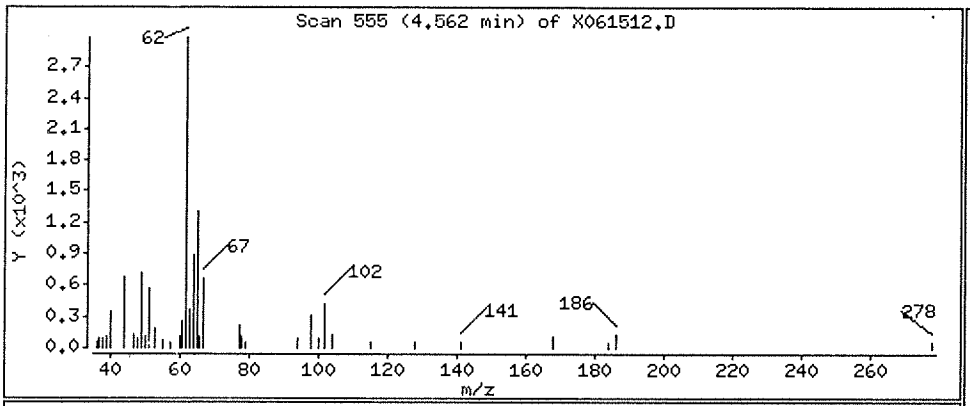
Operator: PC

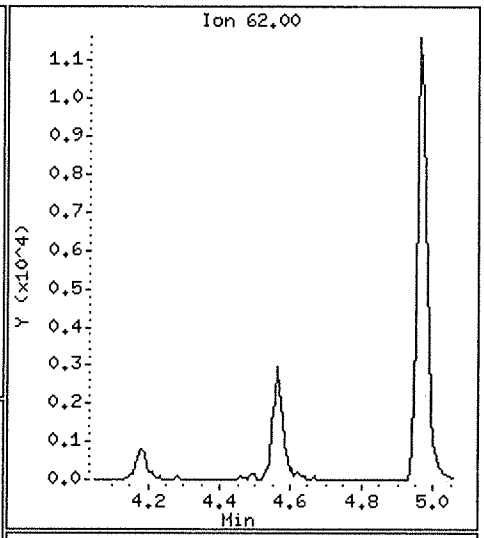
Column phase: DB624

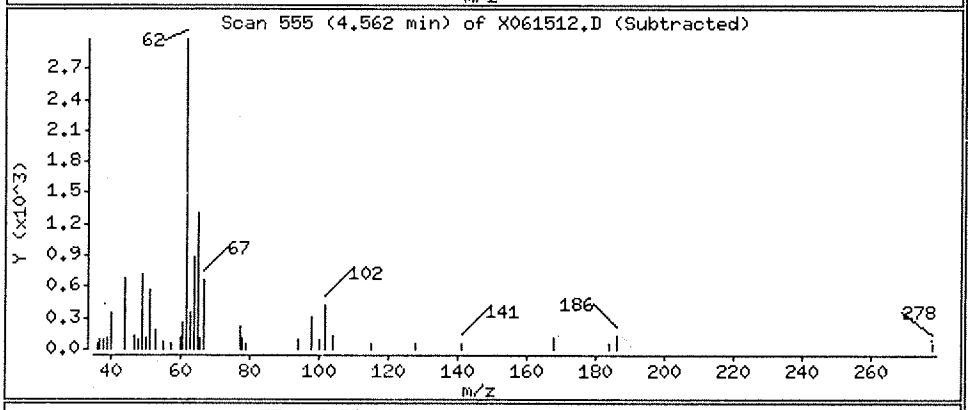
Column diameter: 0.18

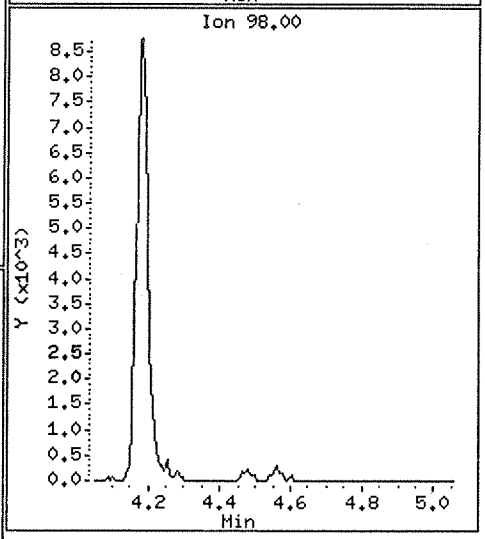
33 1,2-Dichloroethane

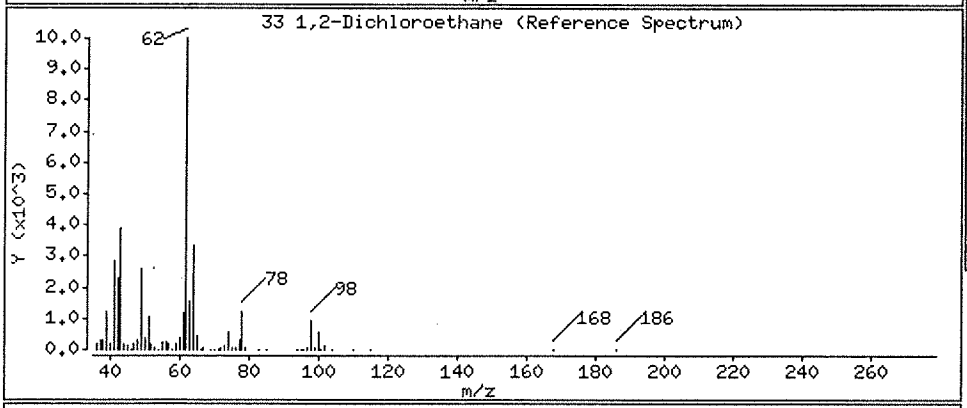
Concentration: 92.23 ug/l

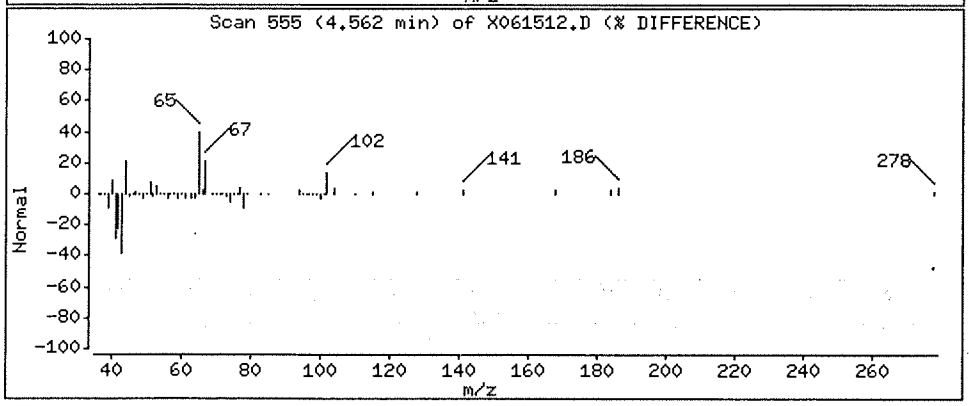












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061512.D

Date : 15-JUN-2021 14:47

Client ID: HS21060700-02

Instrument: voa6.i

Sample Info: HS21060700-02;HS21060700-02;;;

Purge Volume: 5.0

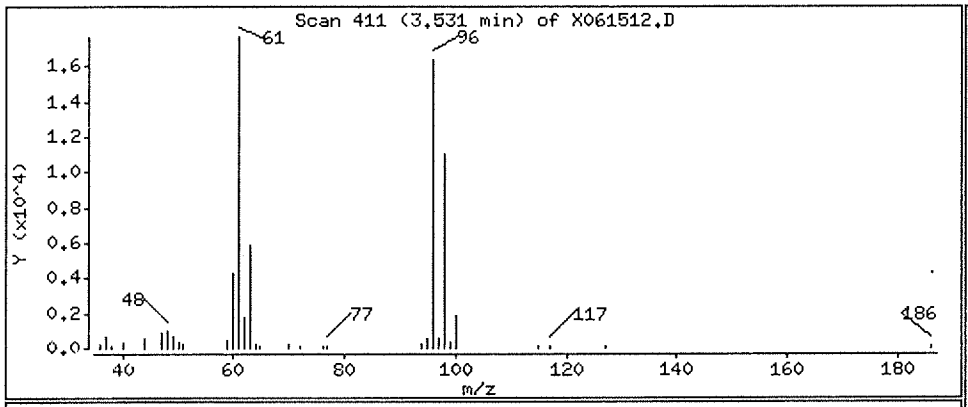
Operator: PC

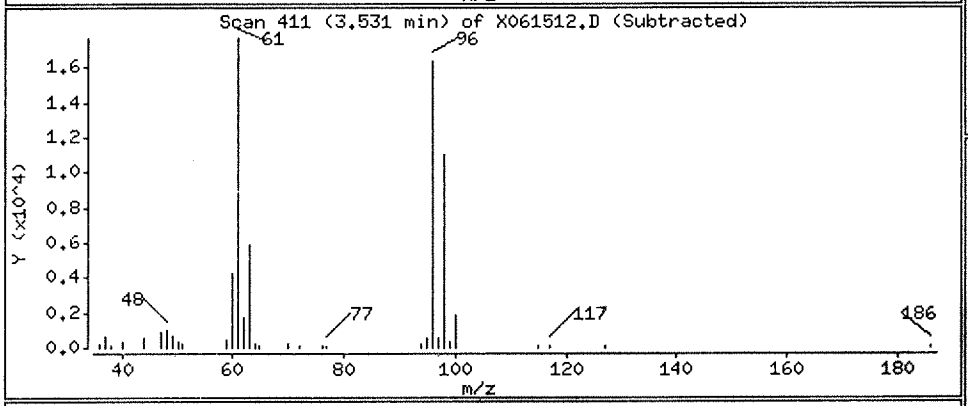
Column phase: DB624

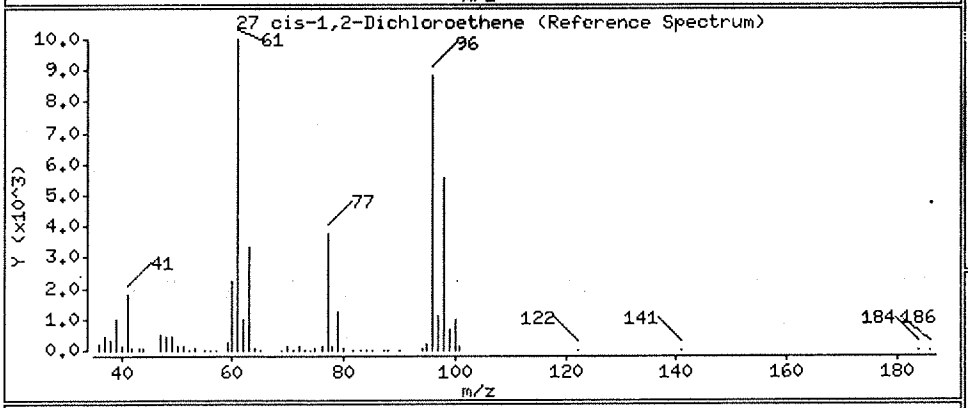
Column diameter: 0.18

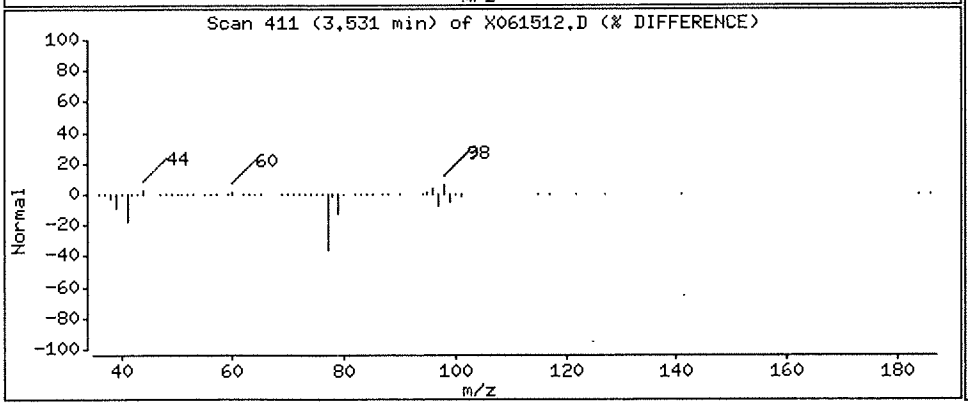
27 cis-1,2-Dichloroethene

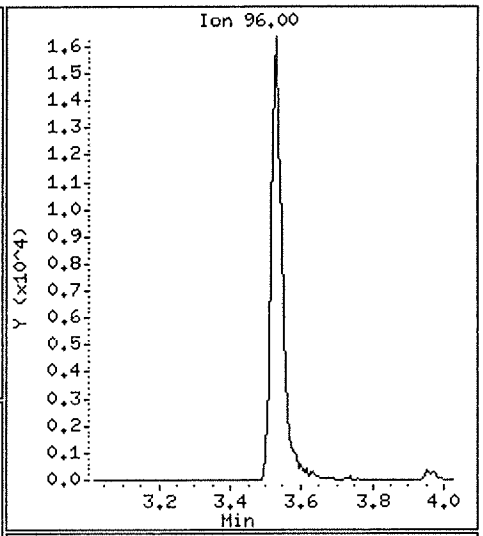
Concentration: 601.38 ug/l

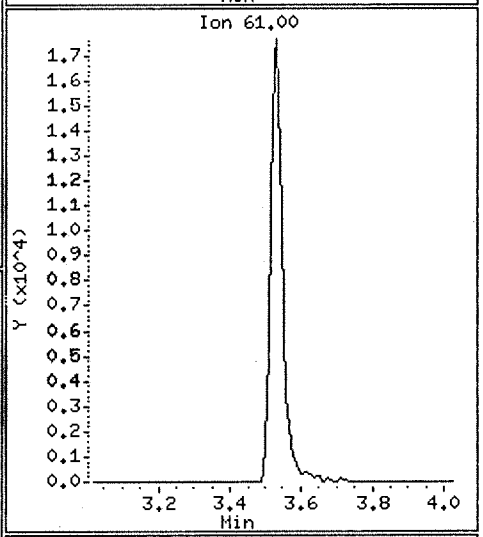


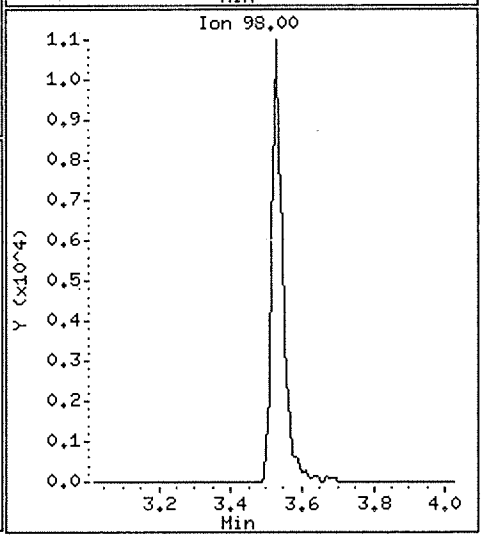












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061512.D

Date : 15-JUN-2021 14:47

Client ID: HS21060700-02

Instrument: voa6.i

Sample Info: HS21060700-02;HS21060700-02;;;

Purge Volume: 5.0

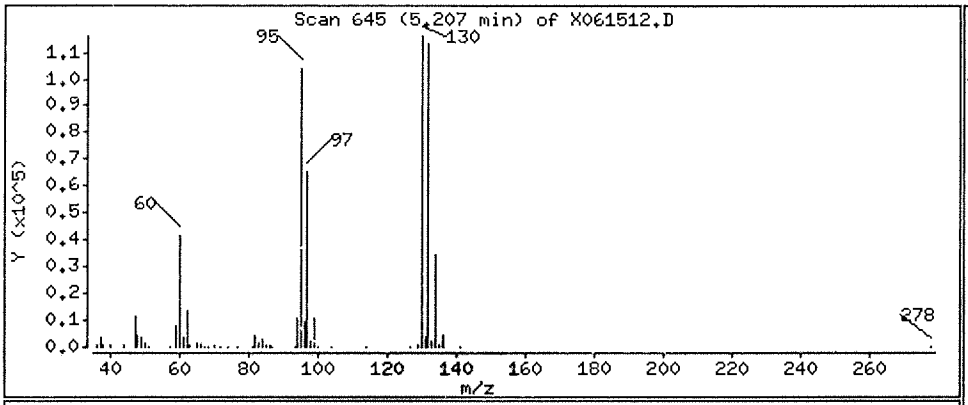
Operator: PC

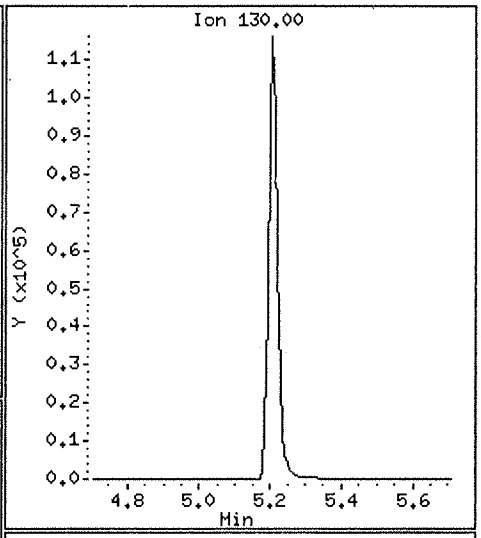
Column phase: DB624

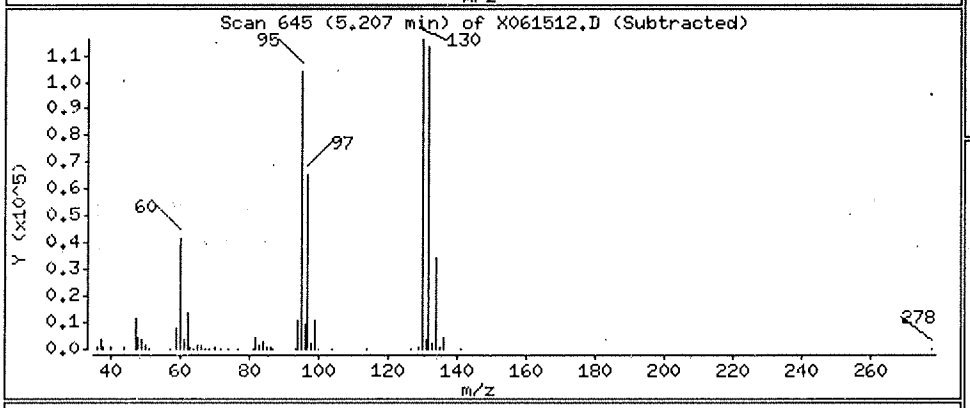
Column diameter: 0.18

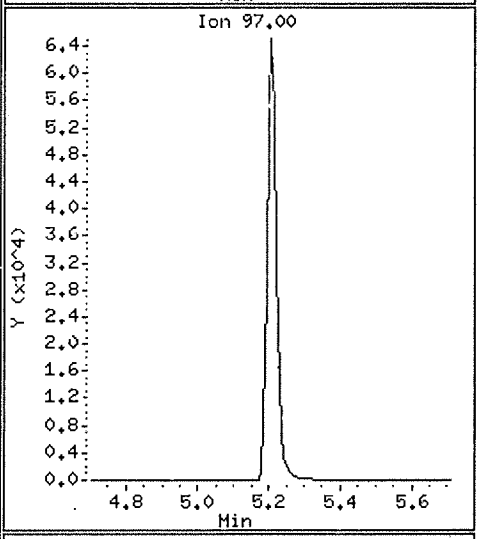
38 Trichloroethene

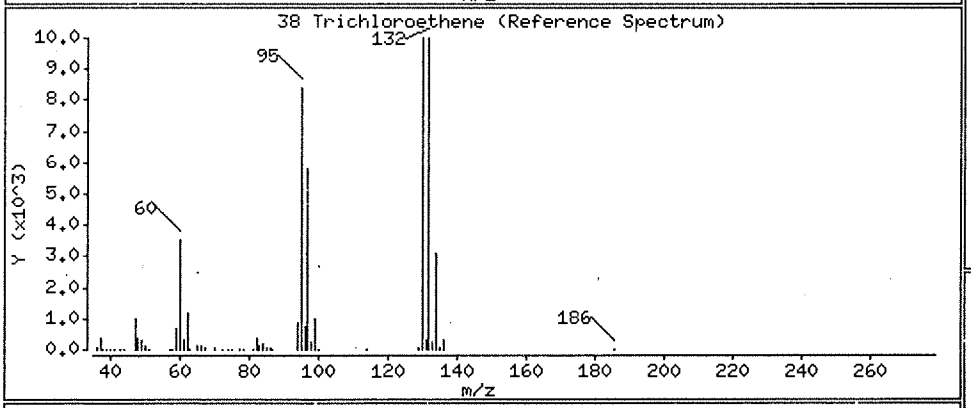
Concentration: 3757.57 ug/l

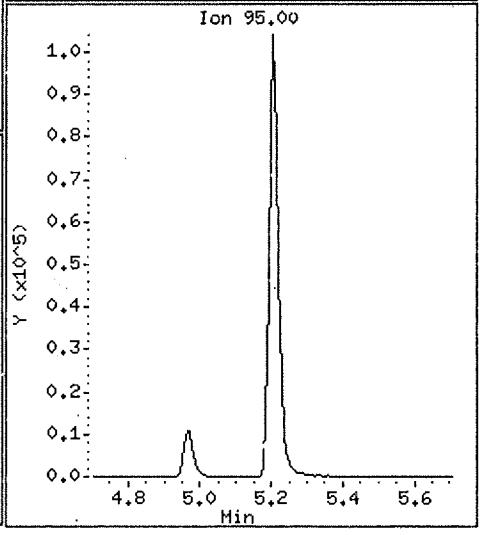


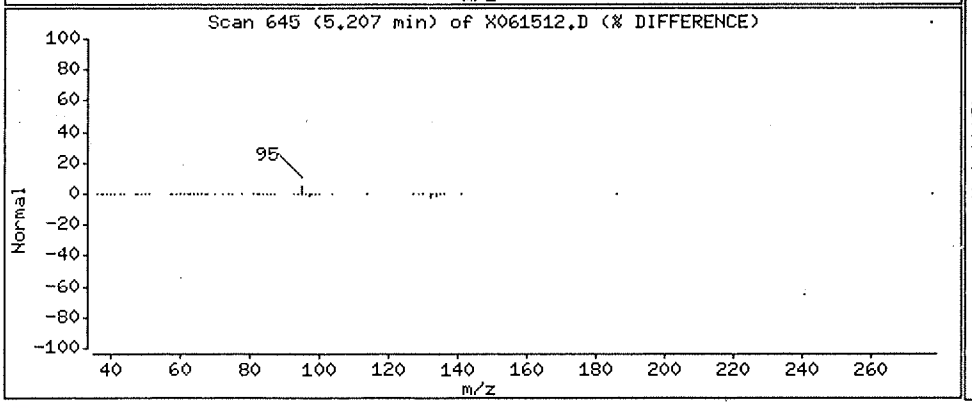












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061513.D
Lab Smp Id: HS21060700-02MS Client Smp ID: HS21060700-02MS
Inj Date : 15-JUN-2021 15:08
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-02MS;HS21060700-02MS;3;;MS
Misc Info : HS18090001;WATER;0;100;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:34 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 13 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

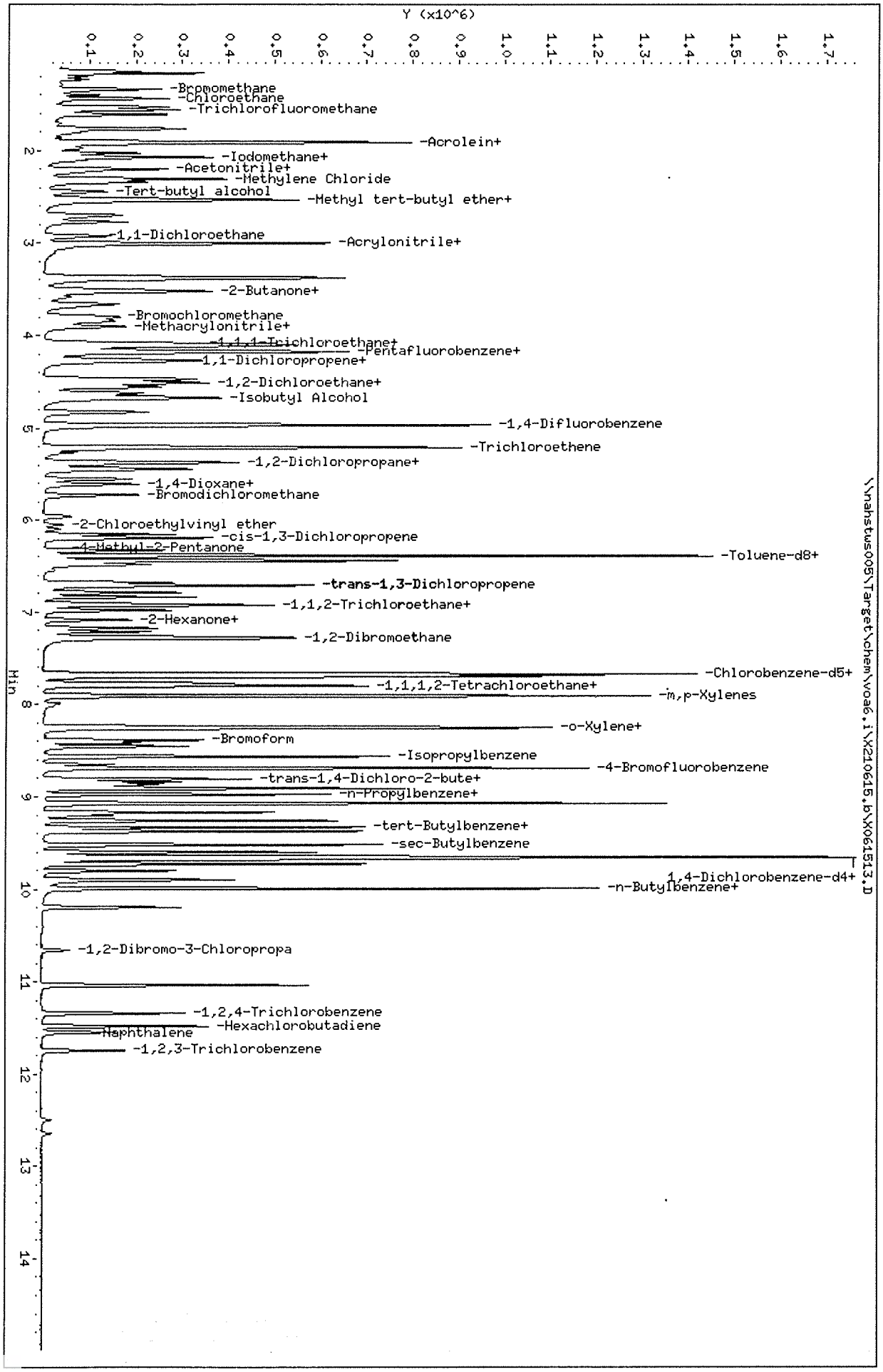
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	582742	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	795505	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	697269	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	361445	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	259893	45.2933	45.29
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	263214	47.2466	47.24
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	900729	51.8600	51.85
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	302948	49.4810	49.48
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	100422	19.4747	1947.47
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	146992	17.0686	1706.86
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	116578	22.7087	2270.86
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	71349	18.8897	1888.96
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	144556	15.6910	1569.10
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	98694	16.4419	1644.18
32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	122828	20.1599	2015.99
93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	60529	27.6627	2766.26
71 1,2,3-Trichloropropane	75	8.867	8.860	(0.918)	93548	20.7592	2075.92(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	92828	25.9764	2597.64
79 1,2,4-Trimethylbenzene	105	9.375	9.383	(0.970)	339808	20.6123	2061.23
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	13956	24.6024	2460.23
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	99000	19.2847	1928.47
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	198498	20.2472	2024.72

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061513.D Page 2
Report Date: 26-Jul-2021 14:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	122461	19.3205	1932.05
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	83009	17.7271	1772.70
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	343518	20.9378	2093.78
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	210651	20.6624	2066.23
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	140893	18.7590	1875.90
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	214422	20.1554	2015.53
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	135552	17.0022	1700.22
24	2-Butanone	43	3.581	3.581	(0.856)	58254	32.8568	3285.67
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	282472	20.8794	2087.94
52	2-Hexanone	43	7.090	7.083	(0.924)	105222	40.6240	4062.40
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	317516	19.7078	1970.78
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	369951	22.1361	2213.61
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	155857	38.8161	3881.61
10	Acetone	43	1.976	1.976	(0.473)	50370	29.8952	2989.52
37	Benzene	78	4.512	4.512	(0.909)	332109	18.1728	1817.27
74	Bromobenzene	156	8.802	8.802	(0.911)	126870	21.1561	2115.61
29	Bromochloromethane	128	3.795	3.795	(0.908)	55632	15.7883	1578.83
39	Bromodichloromethane	83	5.722	5.729	(1.153)	123218	18.0173	1801.73
66	Bromoform	173	8.408	8.408	(1.096)	76645	19.7126	1971.25
6	Bromomethane	94	1.339	1.339	(0.320)	109550	18.2976	1829.75
19	Carbon Disulfide	76	2.069	2.069	(0.495)	454354	31.9185	3191.84
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	135917	20.6107	2061.06
59	Chlorobenzene	112	7.692	7.692	(1.003)	269103	18.5393	1853.93
7	Chloroethane	64	1.396	1.403	(0.334)	86914	20.4542	2045.42
28	Chloroform	83	3.910	3.910	(0.935)	161682	15.7771	1577.71
3	Chloromethane	50	1.074	1.074	(0.257)	89052	15.0959	1509.58
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	134201	21.9716	2197.16
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	148179	18.3877	1838.76
55	Dibromochloromethane	129	7.176	7.176	(0.936)	110978	19.3377	1933.77
44	Dibromomethane	93	5.550	5.550	(1.118)	63122	17.9375	1793.74
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	105790	19.6354	1963.53
61	Ethylbenzene	106	7.800	7.800	(1.017)	140210	20.9378	2093.78
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	64106	29.6466	2964.65
67	Isopropylbenzene	105	8.559	8.559	(1.116)	426556	20.8477	2084.76
62	m,p-Xylenes	106	7.900	7.900	(1.030)	345339	39.5596	3955.95
17	Methylene Chloride	84	2.306	2.298	(0.551)	89556	16.0684	1606.83
87	n-Butylbenzene	91	9.991	9.991	(1.034)	316597	22.5157	2251.56
73	n-Propylbenzene	91	8.910	8.910	(0.922)	481385	21.3509	2135.09
92	Naphthalene	128	11.546	11.539	(1.195)	129687	25.1079	2510.79
63	o-Xylene	106	8.244	8.244	(1.075)	162947	19.1427	1914.26
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	427377	22.5178	2251.77
64	Styrene	104	8.258	8.258	(1.077)	269740	18.9636	1896.36
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	307638	21.8716	2187.16
56	Tetrachloroethene	164	6.926	6.926	(0.903)	97316	22.6715	2267.15
50	Toluene	91	6.446	6.446	(0.840)	381965	18.7642	1876.42
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	88301	16.2282	1622.81
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	129953	18.6932	1869.31
38	Trichloroethene	130	5.207	5.207	(1.049)	321445	58.8741	5887.41
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	178645	16.9832	1698.31
5	Vinyl Chloride	62	1.138	1.138	(0.272)	122658	17.7817	1778.16

QC Flag Legend

M - Compound response manually integrated.

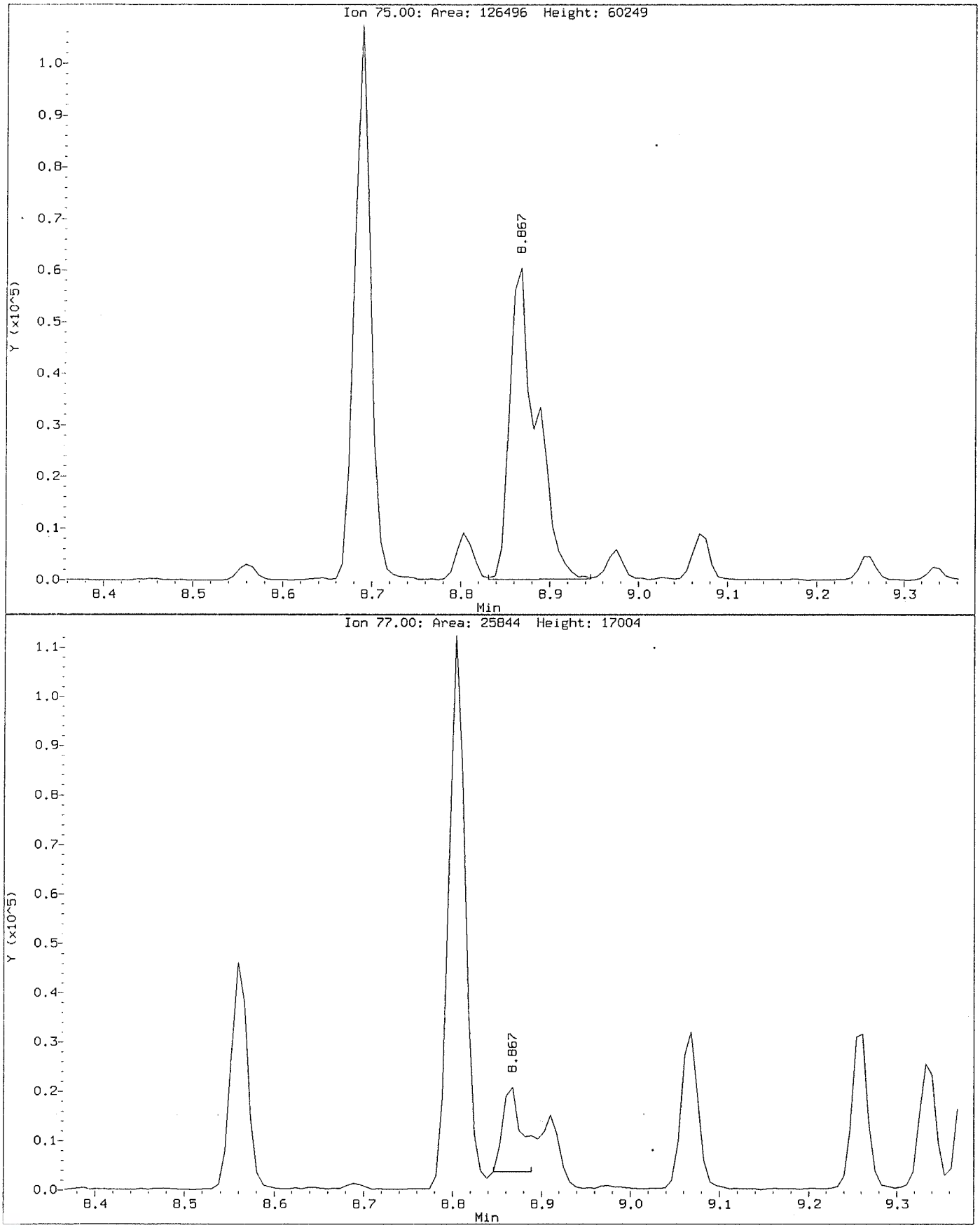


Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061513.D
Date : 15-JUN-2021 15:08
Client ID: HS21060700-02HS
Sample Info: HS21060700-02HS;HS21060700-02HS;3;;HS
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\Before\X061513.D
Injection Date: 15-JUN-2021 15:08
Instrument: voa6.i
Client Sample ID: HS21060700-02MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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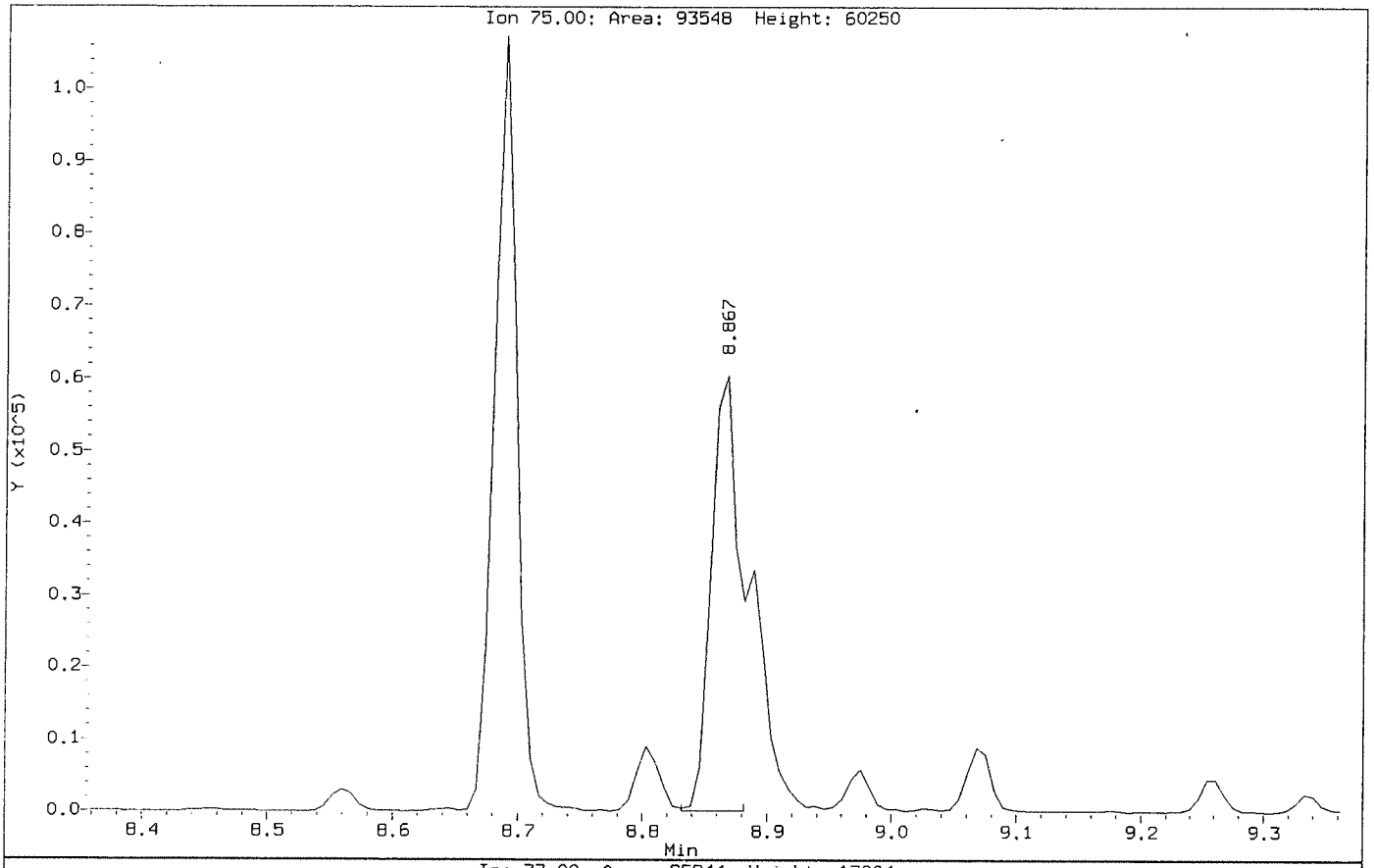
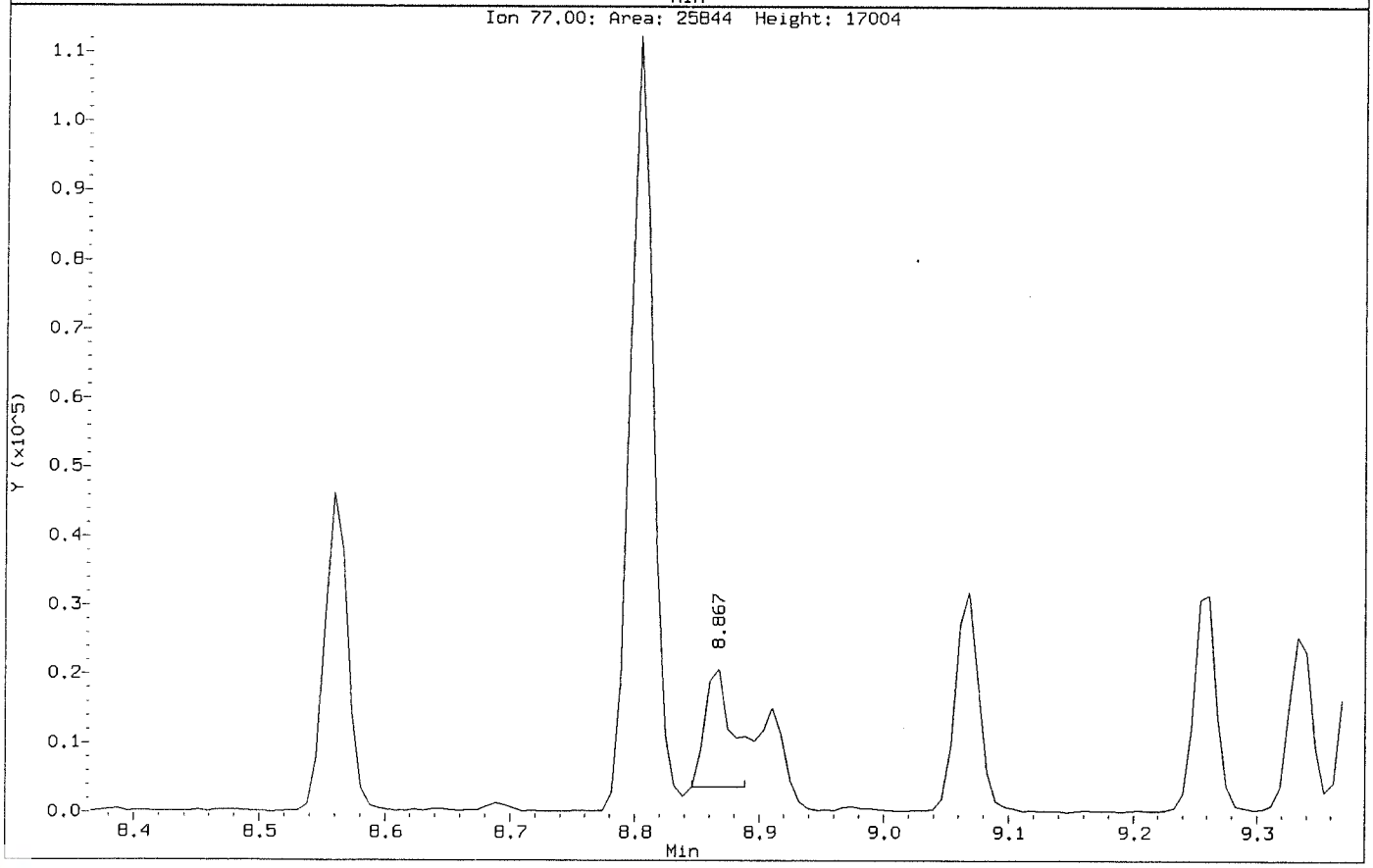
Injection Date: 15-JUN-2021 15:08
Instrument: voa6.i
Client Sample ID: HS21060700-02MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061514.D Page 1
Report Date: 26-Jul-2021 14:34

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061514.D
Lab Smp Id: HS21060700-02MSD Client Smp ID: HS21060700-02MSD
Inj Date : 15-JUN-2021 15:29
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-02MSD;HS21060700-02MSD;3;;MSD
Misc Info : HS18090001;WATER;0;100;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:34 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 13 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

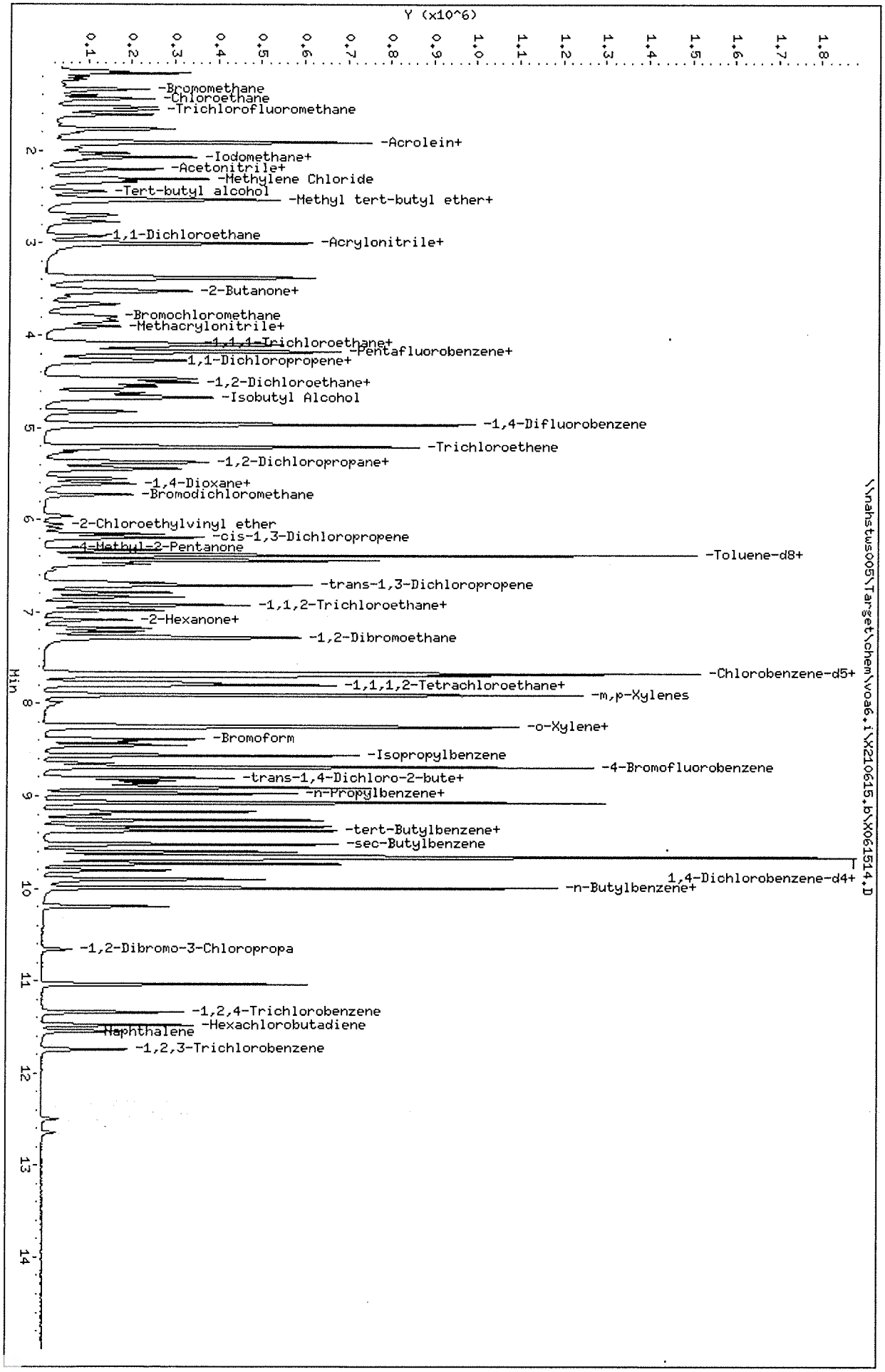
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	614491	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	835764	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	742877	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	388507	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.096	(0.981)	269951	44.6130	44.61
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	272113	46.3068	46.30
$	48 Toluene-d8	98	6.388	6.388	(0.833)	947117	51.1829	51.18
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	325174	49.8449	49.84
	60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	100845	18.3561	1835.61
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	142903	15.7364	1573.64
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	117821	21.2807	2128.06
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	71746	17.8286	1782.86
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	141103	14.5249	1452.48
	11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	92605	14.6304	1463.03
	32 1,1-Dichloropropene	75	4.282	4.283	(0.863)	115549	18.0516	1805.16
	93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	63008	26.7898	2678.98
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	97772	20.1853	2018.52(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	96824	25.2073	2520.73
	79 1,2,4-Trimethylbenzene	105	9.375	9.383	(0.970)	334889	18.8990	1889.89
	89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	14639	24.0212	2402.12
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	98482	18.0060	1800.60
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	198605	18.8470	1884.70

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061514.D Page 2
Report Date: 26-Jul-2021 14:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	120640	18.1164	1811.63
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	83311	16.9346	1693.45
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	333136	18.8907	1889.06
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	208034	18.9843	1898.42
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	142767	17.8415	1784.15
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	211600	18.5046	1850.46
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	128099	15.2372	1523.72
24	2-Butanone	43	3.588	3.581	(0.858)	60107	32.1503	3215.03
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	273875	18.8338	1883.38
52	2-Hexanone	43	7.090	7.083	(0.924)	110203	39.9349	3993.49
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	315066	18.1936	1819.35
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	359435	20.0088	2000.87
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	156345	36.5471	3654.71
10	Acetone	43	1.976	1.976	(0.473)	49183	27.2412	2724.12
37	Benzene	78	4.512	4.512	(0.909)	328032	17.0851	1708.50
74	Bromobenzene	156	8.802	8.802	(0.911)	122452	18.9971	1899.70
29	Bromochloromethane	128	3.795	3.795	(0.908)	55580	14.9586	1495.85
39	Bromodichloromethane	83	5.729	5.729	(1.154)	119966	16.6968	1669.68
66	Bromoform	173	8.408	8.408	(1.096)	78993	19.0692	1906.91
6	Bromomethane	94	1.338	1.339	(0.320)	100145	15.8828	1588.28
19	Carbon Disulfide	76	2.069	2.069	(0.495)	439767	29.2975	2929.75
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	129555	18.6996	1869.96
59	Chlorobenzene	112	7.692	7.692	(1.003)	259269	16.7652	1676.52
7	Chloroethane	64	1.403	1.403	(0.336)	71920	15.7461	1574.61
28	Chloroform	83	3.910	3.910	(0.935)	159053	14.7187	1471.86
3	Chloromethane	50	1.073	1.074	(0.257)	92460	14.8216	1482.15
27	cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	133041	20.6563	2065.62
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	145173	17.1469	1714.68
55	Dibromochloromethane	129	7.176	7.176	(0.936)	110993	18.1530	1815.29
44	Dibromomethane	93	5.550	5.550	(1.118)	63244	17.1064	1710.64
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	98020	17.2277	1722.77
61	Ethylbenzene	106	7.800	7.800	(1.017)	136545	19.1387	1913.86
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	62868	27.1878	2718.77
67	Isopropylbenzene	105	8.559	8.559	(1.116)	411317	18.8687	1886.87
62	m,p-Xylenes	106	7.900	7.900	(1.030)	334729	35.9901	3599.00
17	Methylene Chloride	84	2.298	2.298	(0.550)	89315	15.1251	1512.51
87	n-Butylbenzene	91	9.991	9.991	(1.034)	310366	20.5350	2053.50
73	n-Propylbenzene	91	8.910	8.910	(0.922)	470428	19.4116	1941.15
92	Naphthalene	128	11.546	11.539	(1.195)	147726	26.6082	2660.81
63	o-Xylene	106	8.244	8.244	(1.075)	160195	17.6640	1766.39
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	406485	19.9252	1992.51
64	Styrene	104	8.258	8.258	(1.077)	265831	17.5415	1754.14
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	298218	19.7250	1972.50
56	Tetrachloroethene	164	6.926	6.926	(0.903)	94213	20.6011	2060.11
50	Toluene	91	6.446	6.446	(0.840)	373120	17.2044	1720.43
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	84524	14.7314	1473.14
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	127130	17.4062	1740.61
38	Trichloroethene	130	5.207	5.207	(1.049)	304238	53.0384	5303.84
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	169131	15.2480	1524.79
5	Vinyl Chloride	62	1.138	1.138	(0.272)	113798	15.6449	1564.48

QC Flag Legend

M - Compound response manually integrated.



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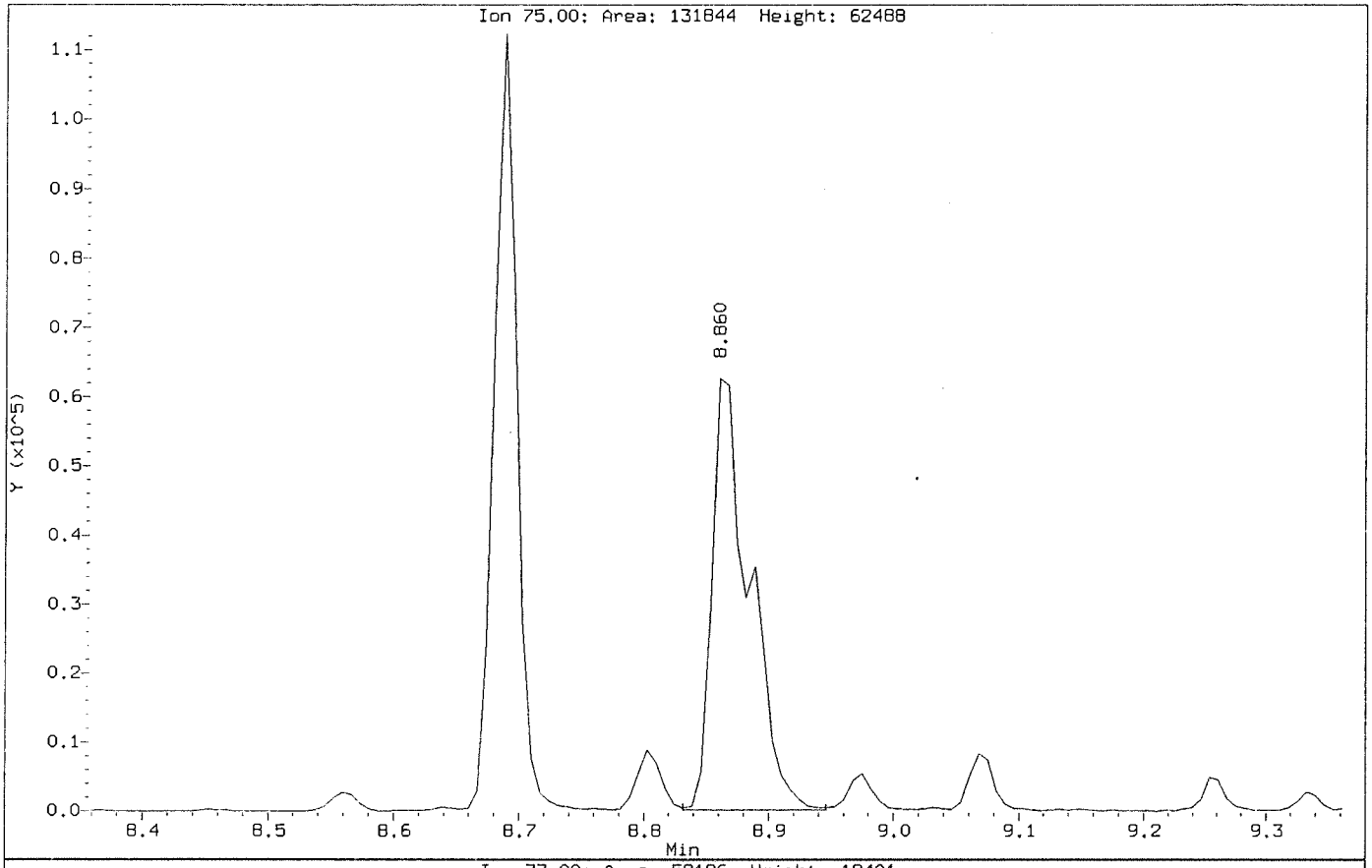
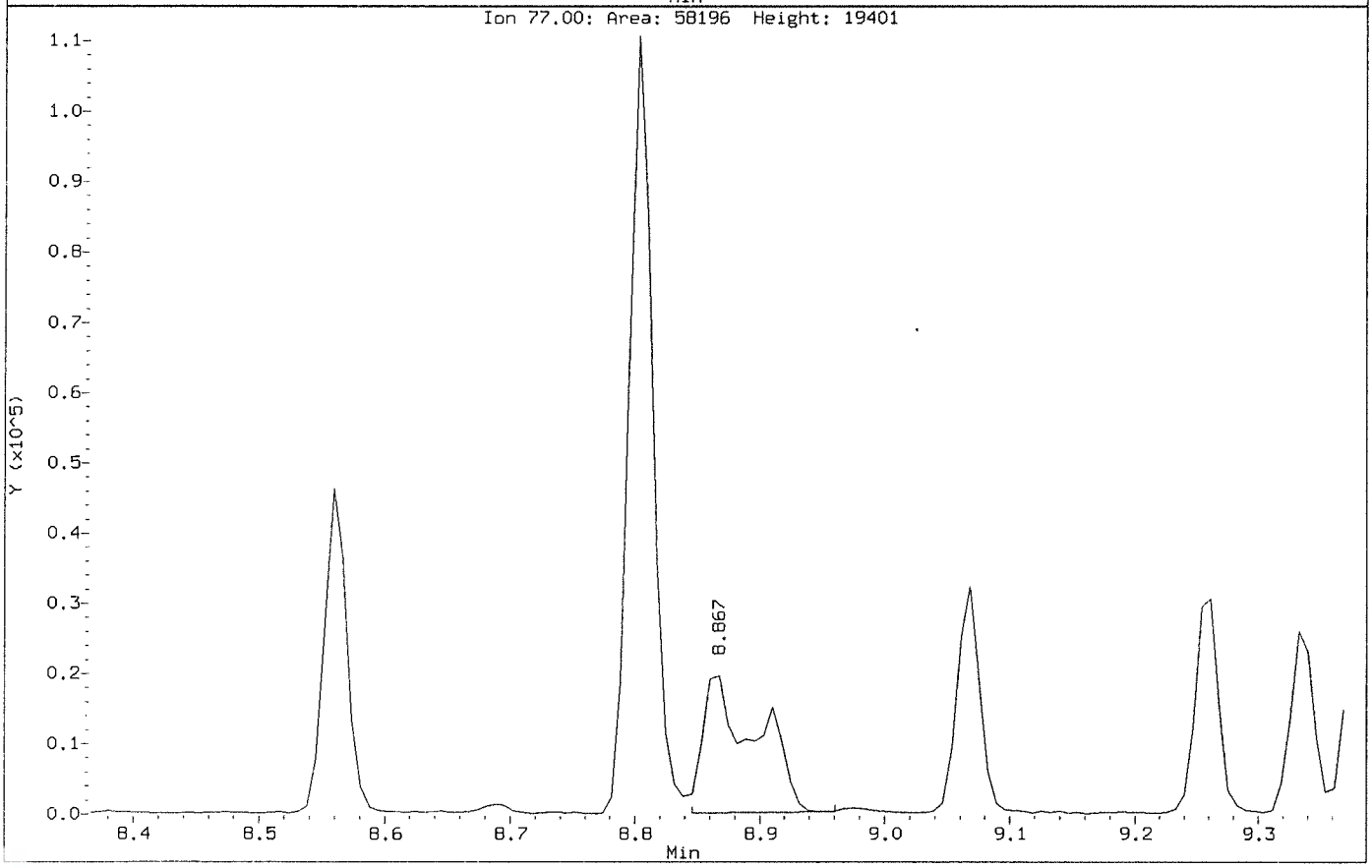
Client ID: HS21060700-02HSD
Sample Info: HS21060700-02HSD;HS21060700-02HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\Before\X061514.D
Injection Date: 15-JUN-2021 15:29
Instrument: voa6.i
Client Sample ID: HS21060700-02MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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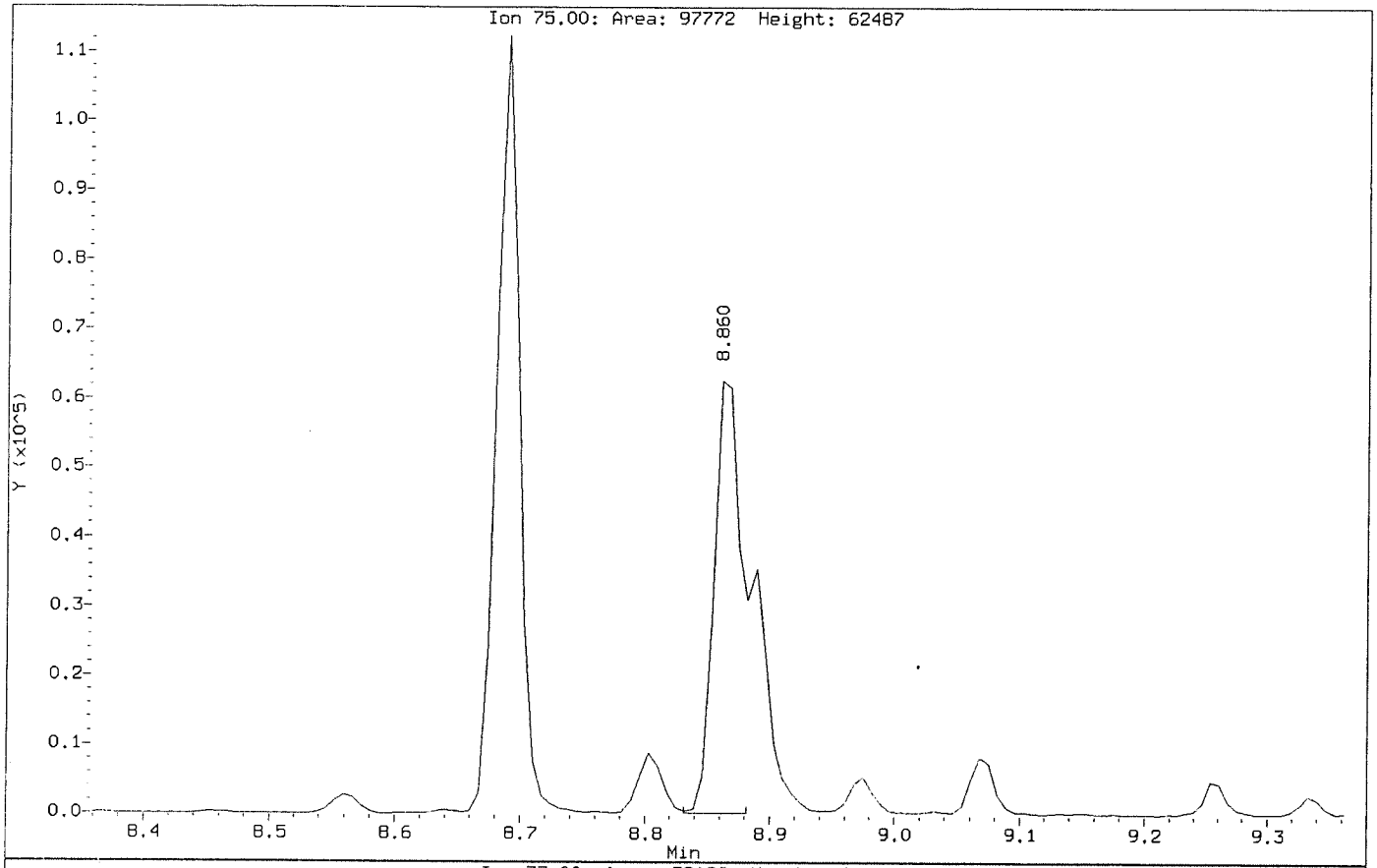
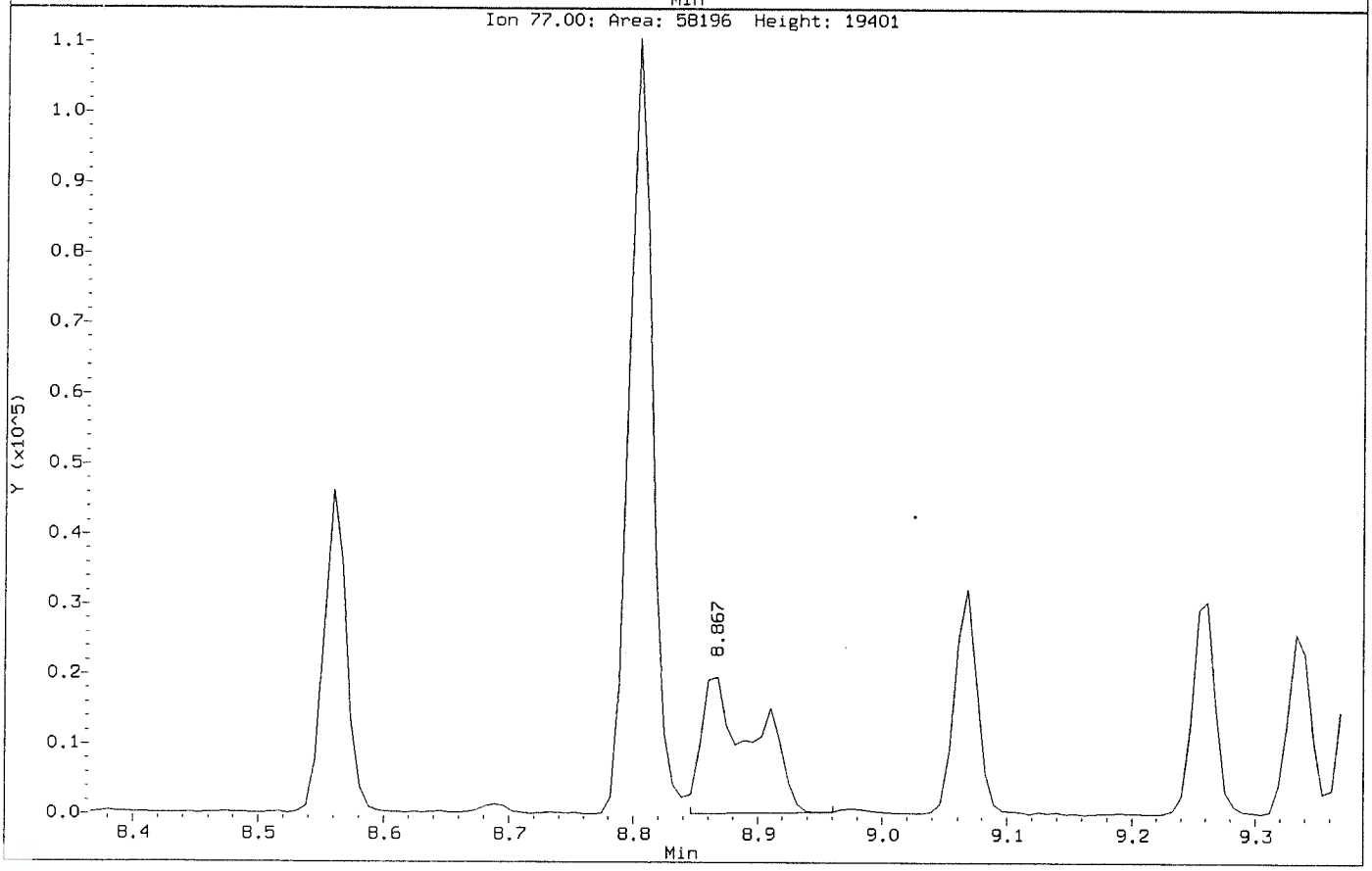
Injection Date: 15-JUN-2021 15:29
Instrument: voa6.i
Client Sample ID: HS21060700-02MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061516.D
Lab Smp Id: HS21060700-01 Client Smp ID: HS21060700-01
Inj Date : 15-JUN-2021 16:11
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-01;HS21060700-01;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 15
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

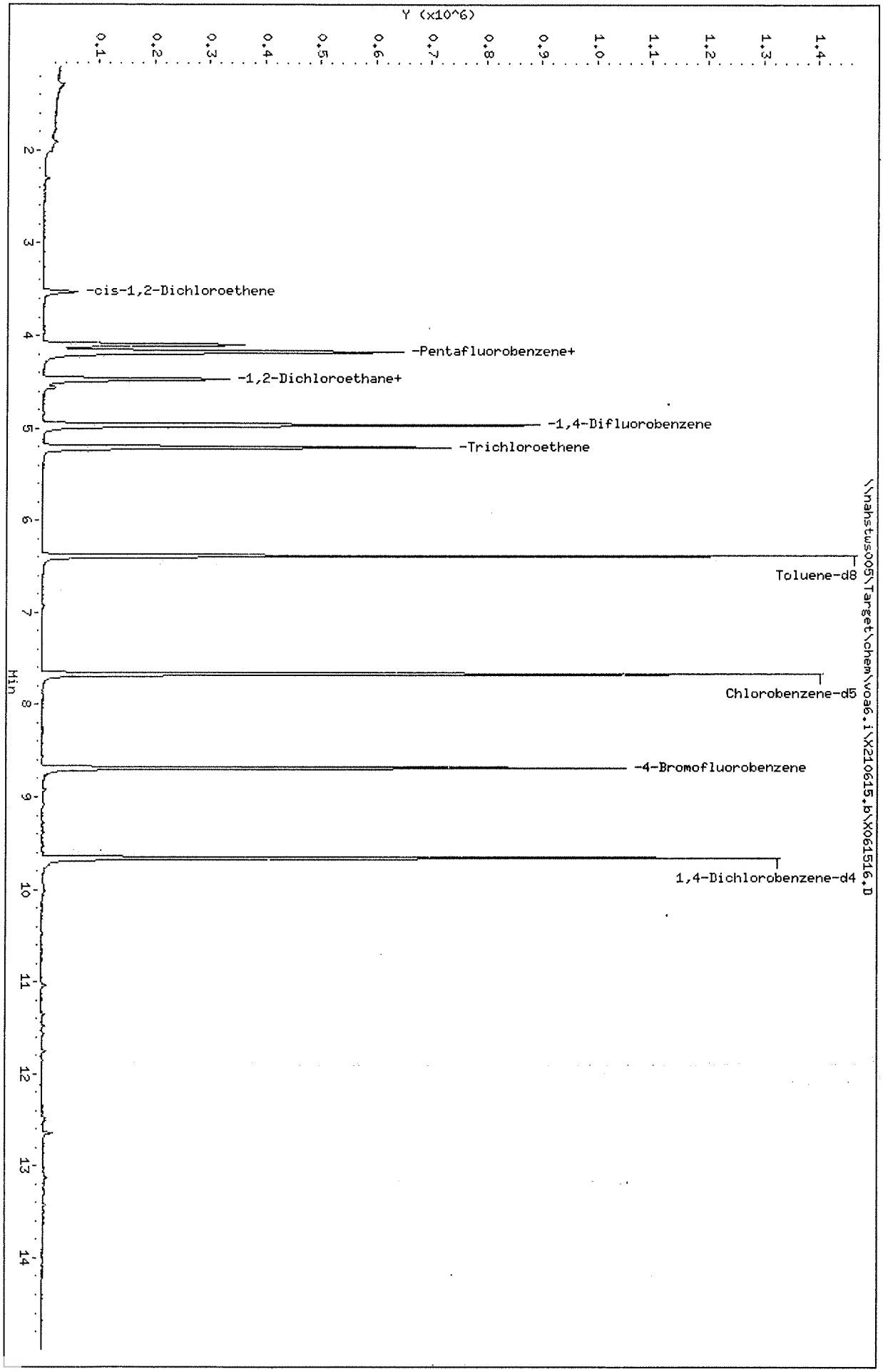
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	590788	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	804566	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	691231	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	336390	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	260942	44.8552	44.85
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	262818	46.5226	46.52
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	908903	52.7877	52.78
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	292103	48.1469	48.14
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	17599	2.74530	27.45(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	33601	5.42629	54.26
38 Trichloroethene	130	5.206	5.207	(1.049)	260355	47.1482	471.48

QC Flag Legend

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



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Date : 15-JUN-2021 16:11
Client ID: HS21060700-01
Sample Info: HS21060700-01;HS21060700-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061516.D

Date : 15-JUN-2021 16:11

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

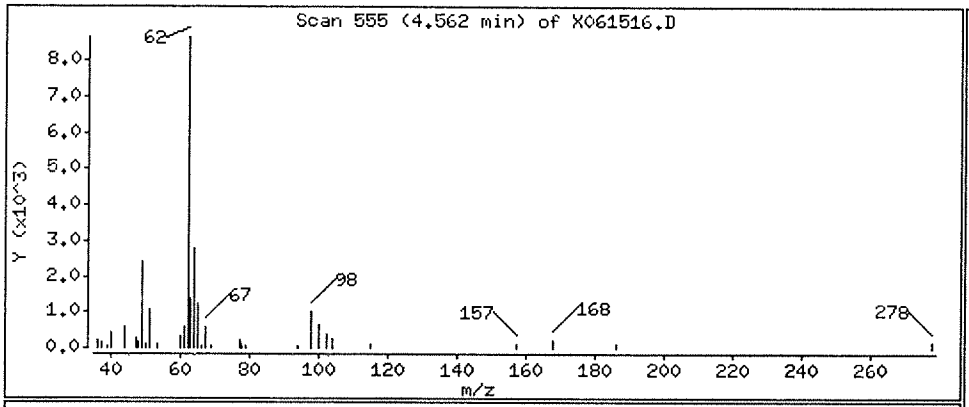
Operator: PC

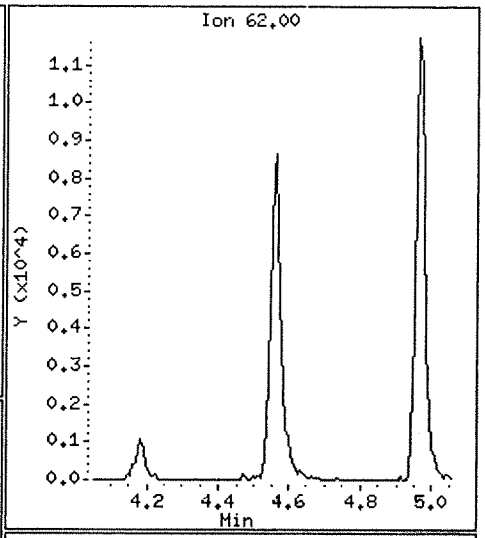
Column phase: DB624

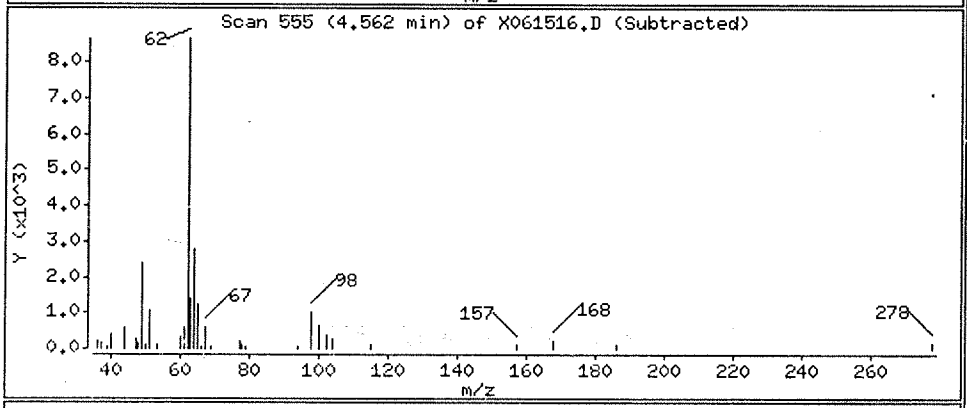
Column diameter: 0.18

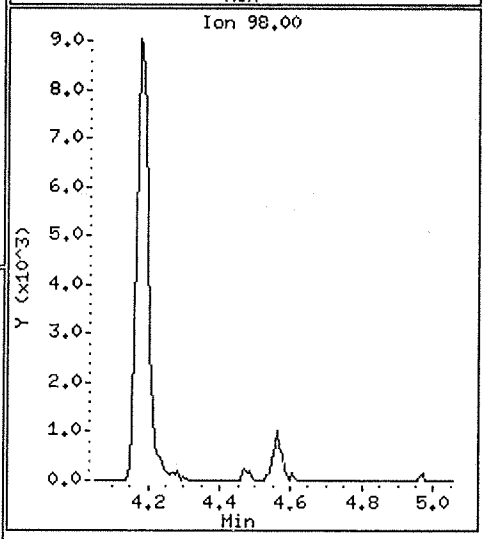
33 1,2-Dichloroethane

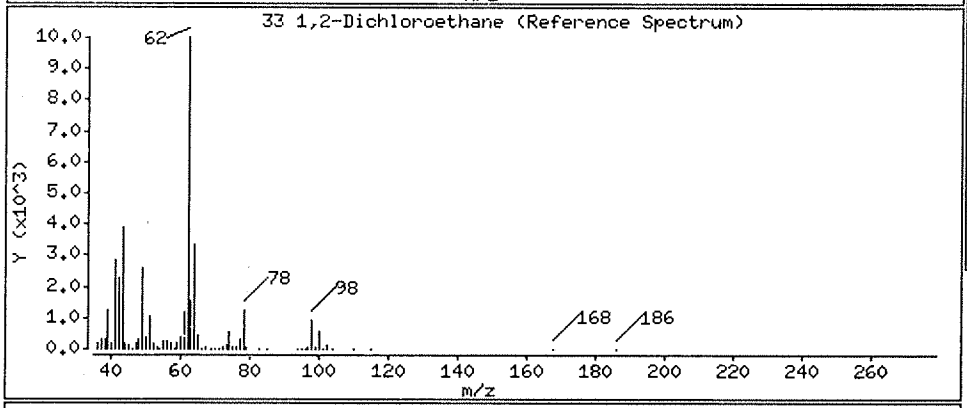
Concentration: 27.45 ug/l

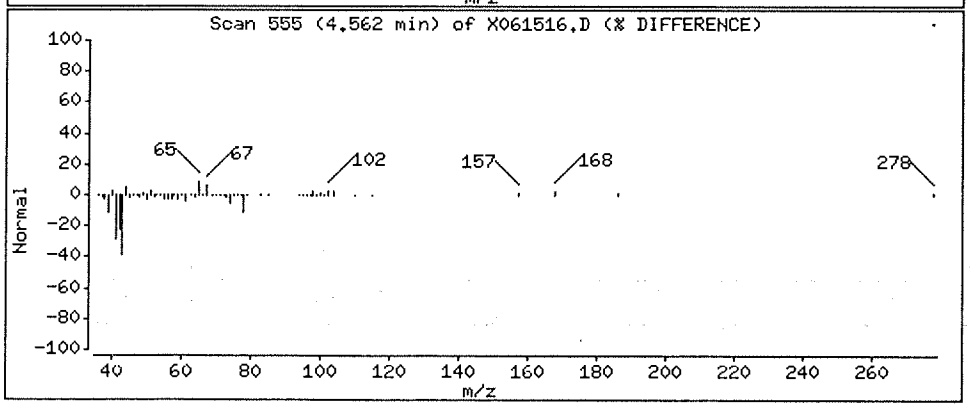












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061516.D

Date : 15-JUN-2021 16:11

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

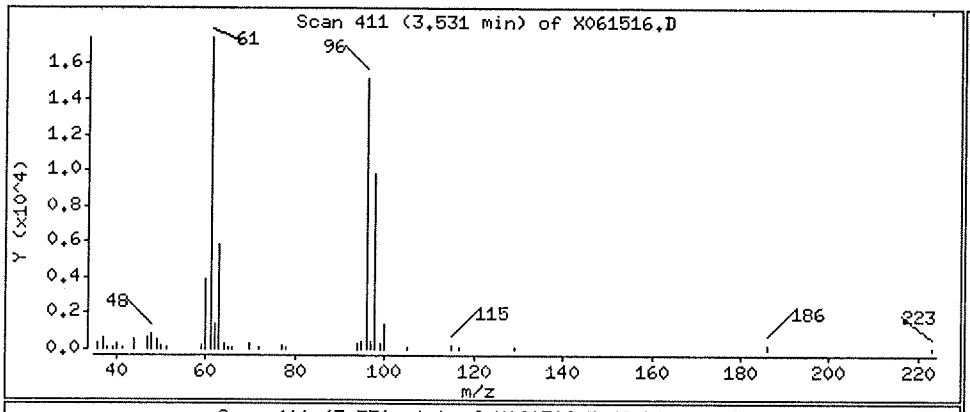
Operator: PC

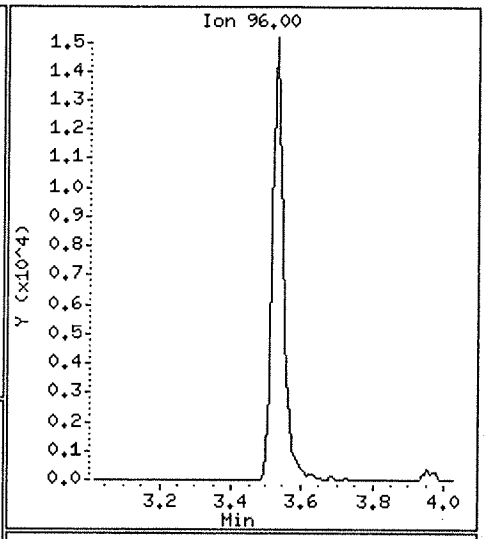
Column phase: DB624

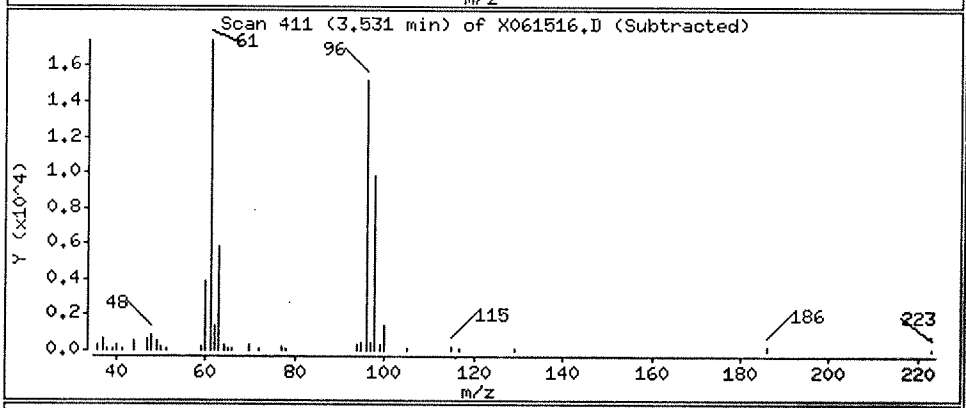
Column diameter: 0.18

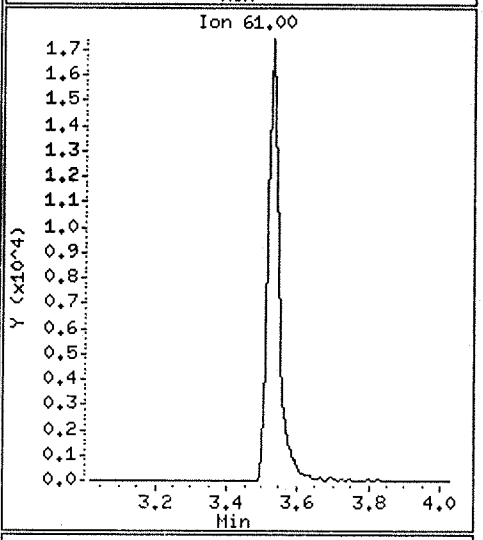
27 cis-1,2-Dichloroethene

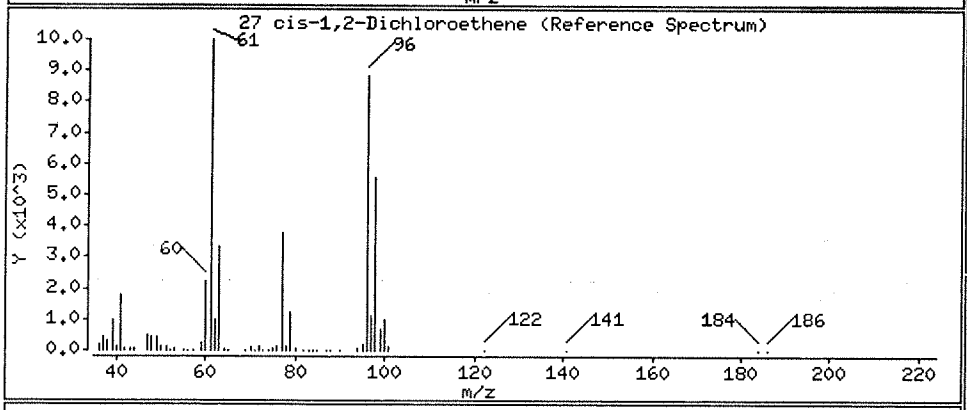
Concentration: 54.26 ug/l

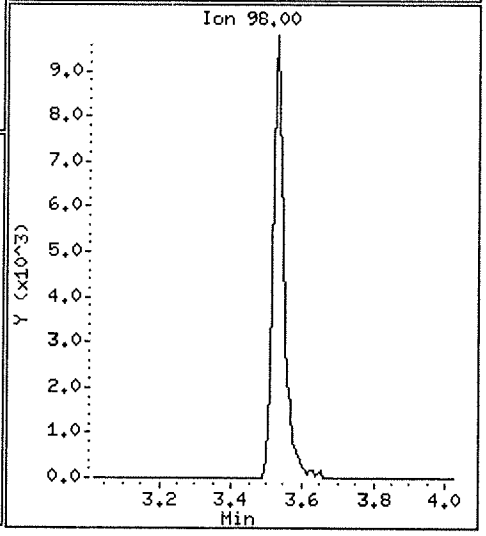


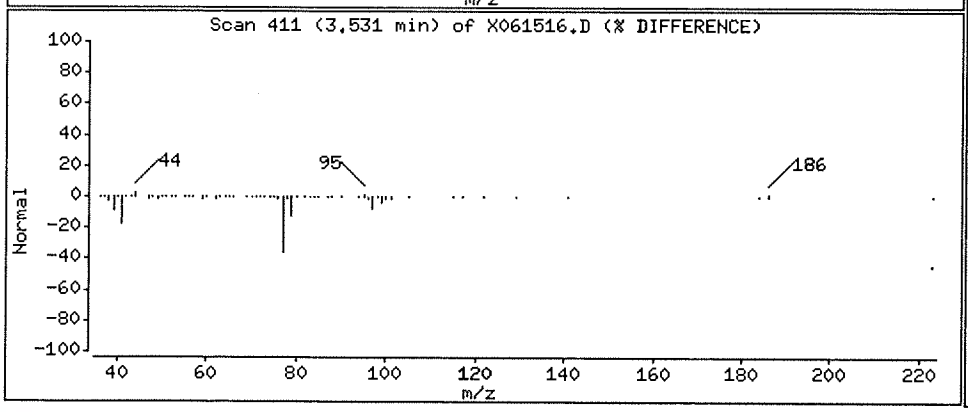












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061516.D

Date : 15-JUN-2021 16:11

Client ID: HS21060700-01

Instrument: voa6.i

Sample Info: HS21060700-01;HS21060700-01;;;

Purge Volume: 5.0

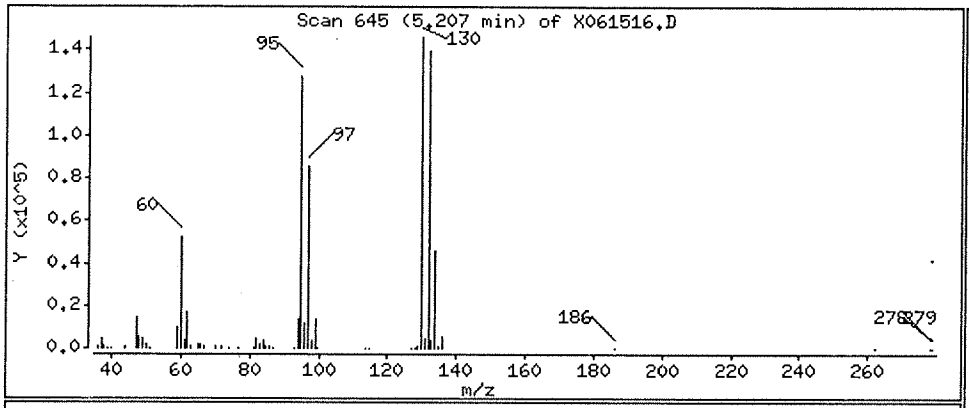
Operator: PC

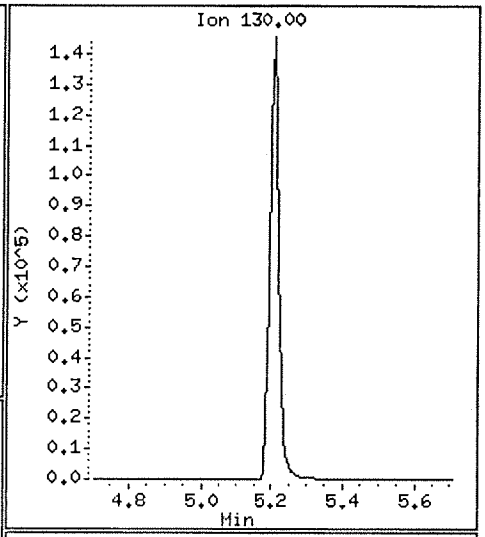
Column phase: DB624

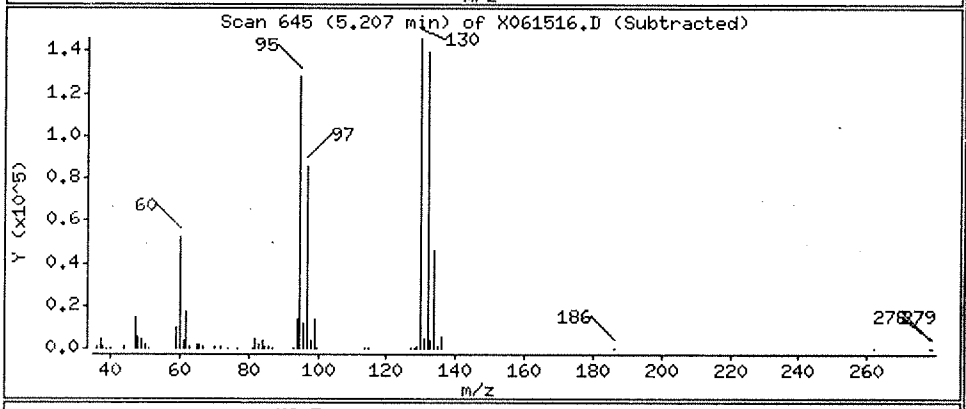
Column diameter: 0.18

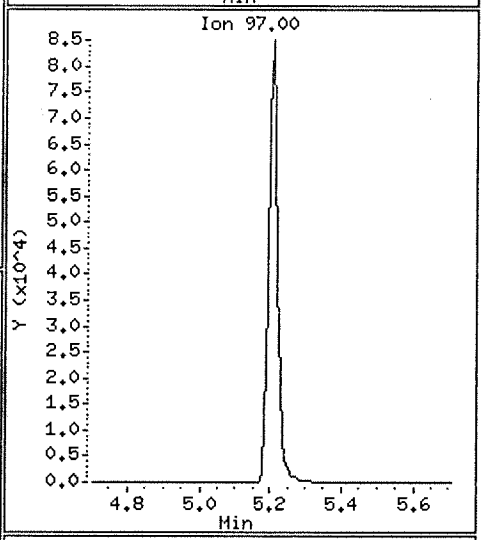
38 Trichloroethene

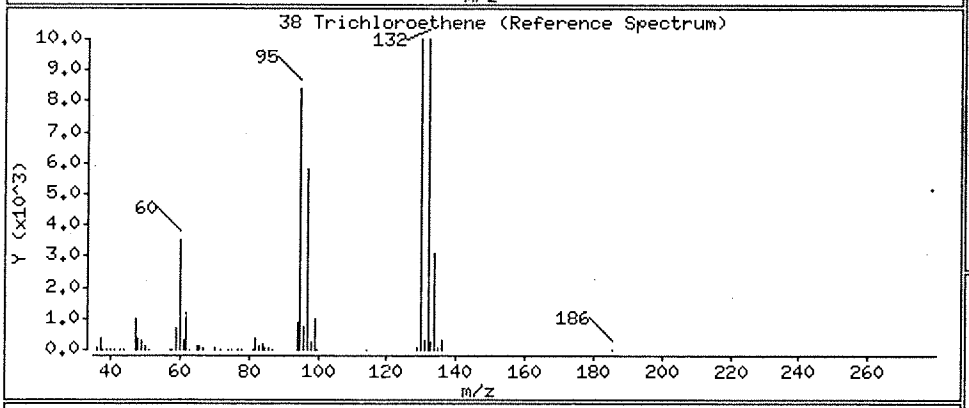
Concentration: 471.48 ug/l

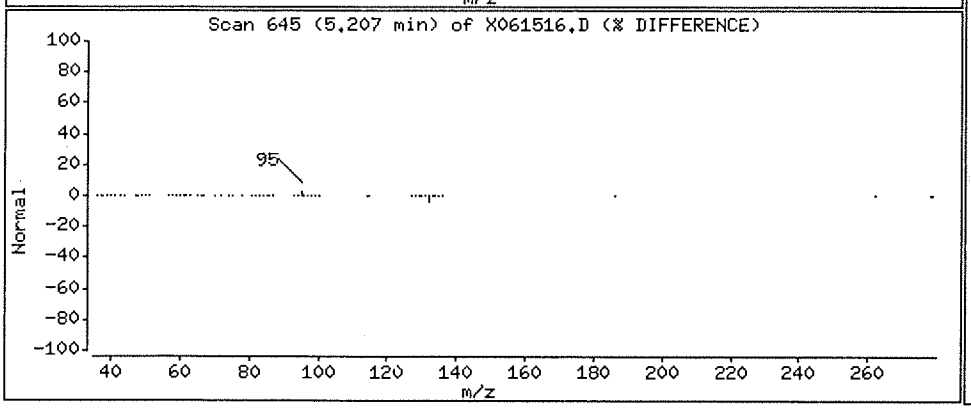


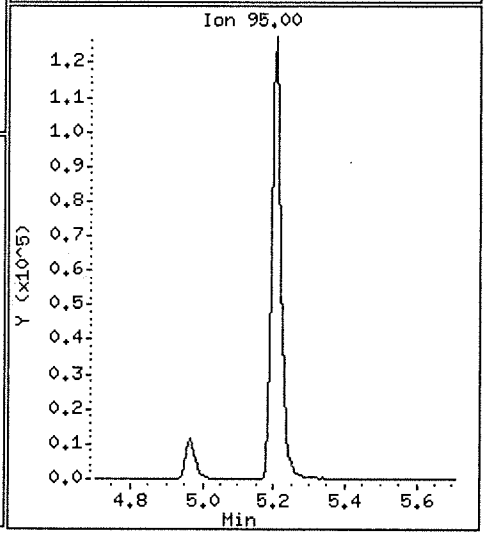












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061517.D Page 1
Report Date: 26-Jul-2021 14:24

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061517.D
Lab Smp Id: HS21060700-25 Client Smp ID: HS21060700-25
Inj Date : 15-JUN-2021 16:32
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-25;HS21060700-25;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

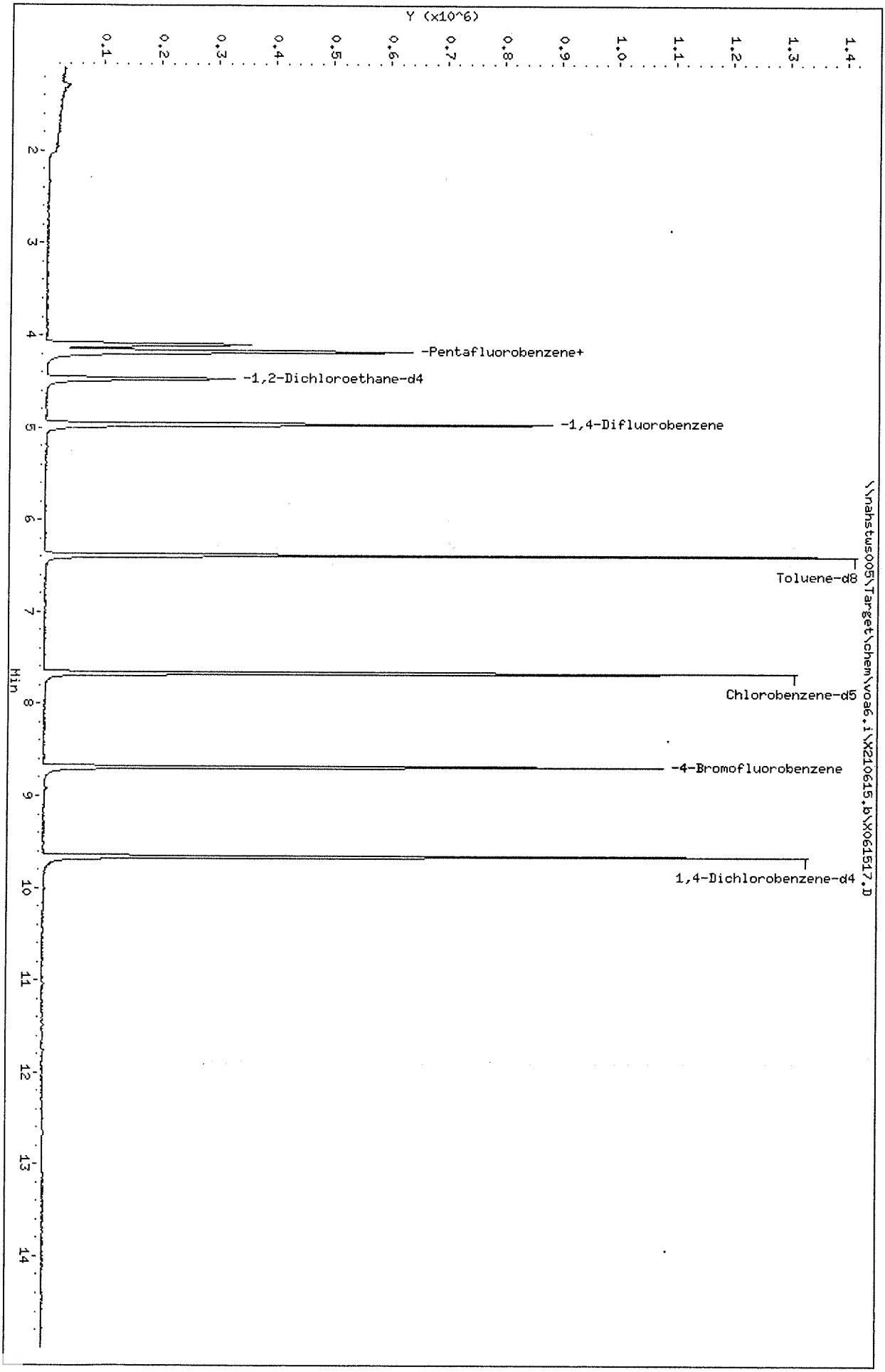
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	576058	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	789660	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	682043	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	346052	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	254905	44.9382	44.93
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	258088	46.8584	46.85
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	887035	52.2117	52.21
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	292408	48.8356	48.83

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061517.D
Date : 15-JUN-2021 16:32
Client ID: HS21060700-25
Sample Info: HS21060700-25;HS21060700-25;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061518.D Page 1
Report Date: 26-Jul-2021 14:24

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061518.D
Lab Smp Id: HS21060700-17 Client Smp ID: HS21060700-17
Inj Date : 15-JUN-2021 16:53
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-17;HS21060700-17;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

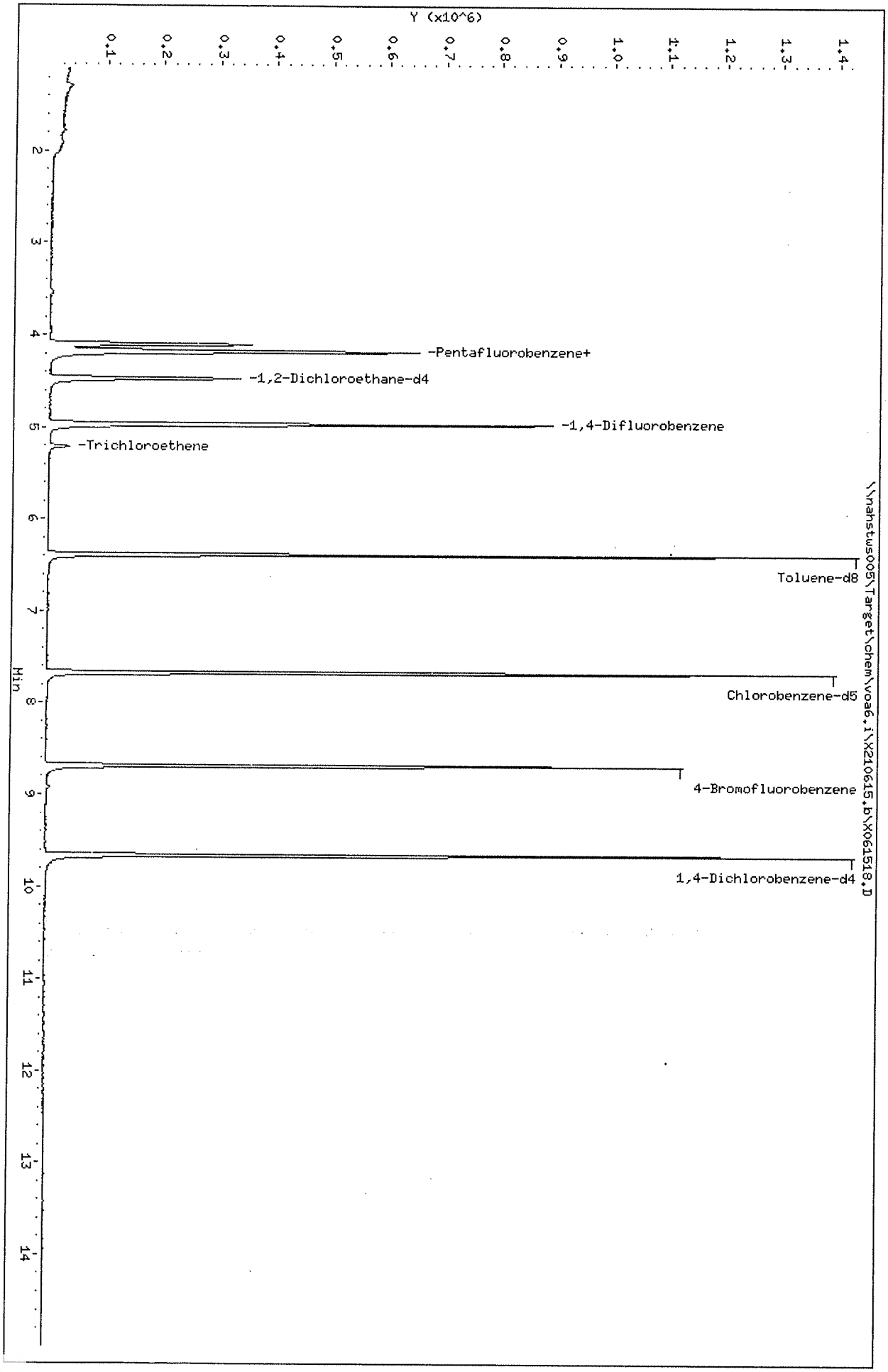
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	588044	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	807102	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	716513	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	368402	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	258953	44.7205	44.72
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	261123	46.4370	46.43
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	909836	50.9774	50.97
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	303000	48.1803	48.18
38 Trichloroethene	130	5.206	5.207	(1.049)	12659	2.28524	2.28(a)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061518.D
Date : 15-JUN-2021 16:53
Client ID: HS21060700-17
Sample Info: HS21060700-17;HS21060700-17;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061518.D

Date : 15-JUN-2021 16:53

Client ID: HS21060700-17

Instrument: voa6.i

Sample Info: HS21060700-17;HS21060700-17;;;

Purge Volume: 5.0

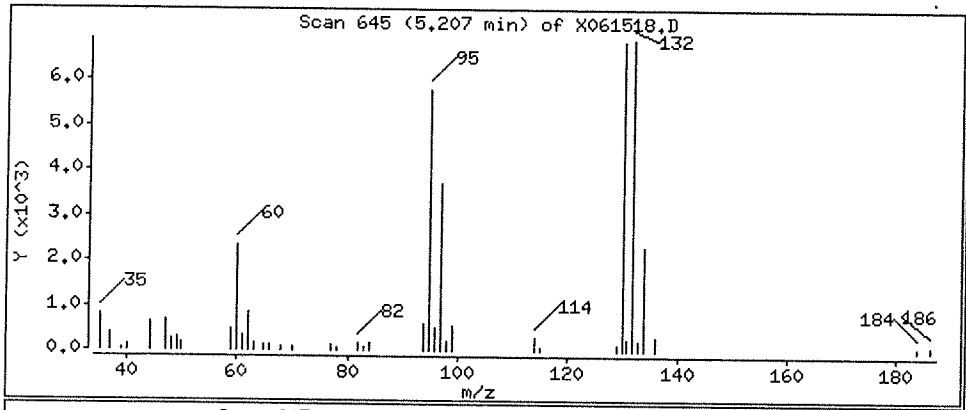
Operator: PC

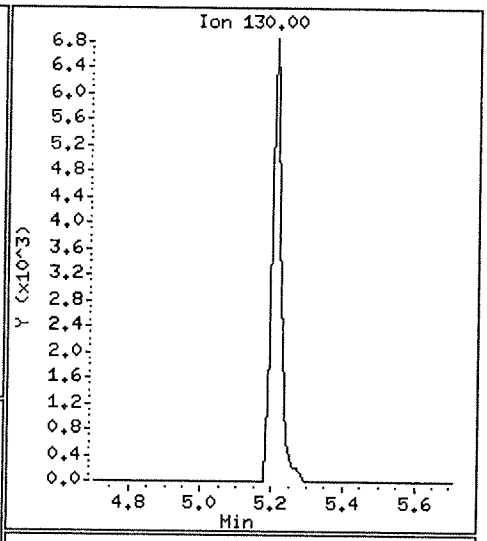
Column phase: DB624

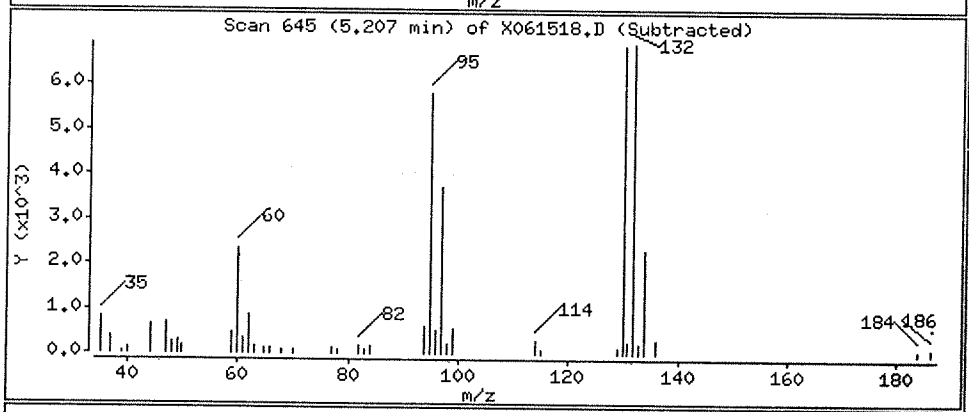
Column diameter: 0.18

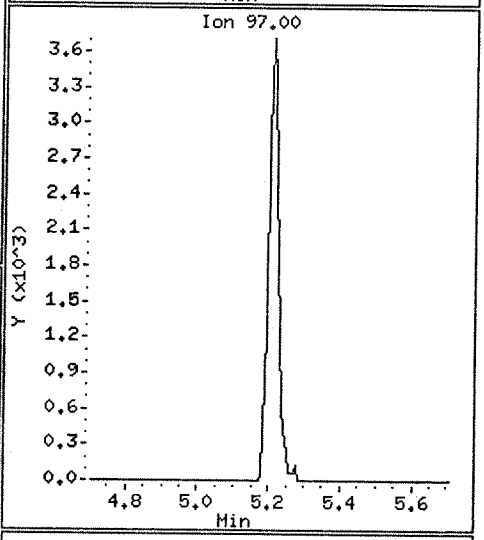
38 Trichloroethene

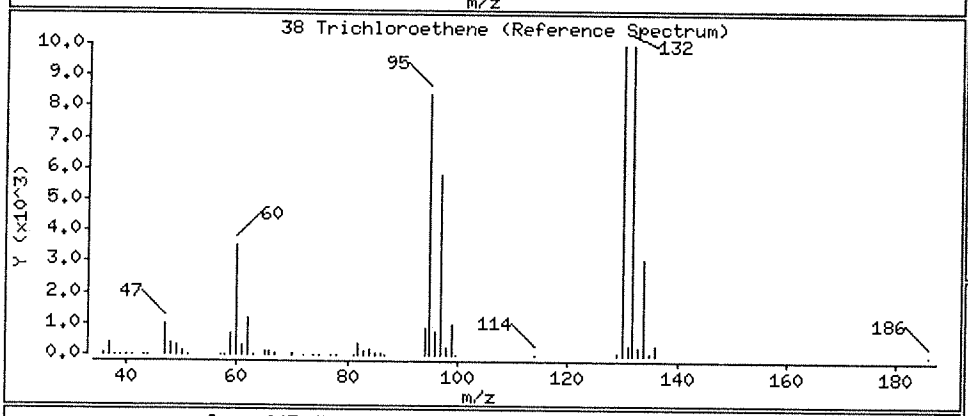
Concentration: 2.28 ug/l

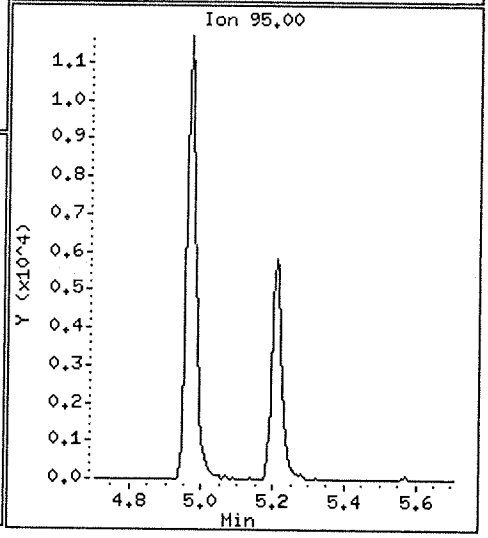


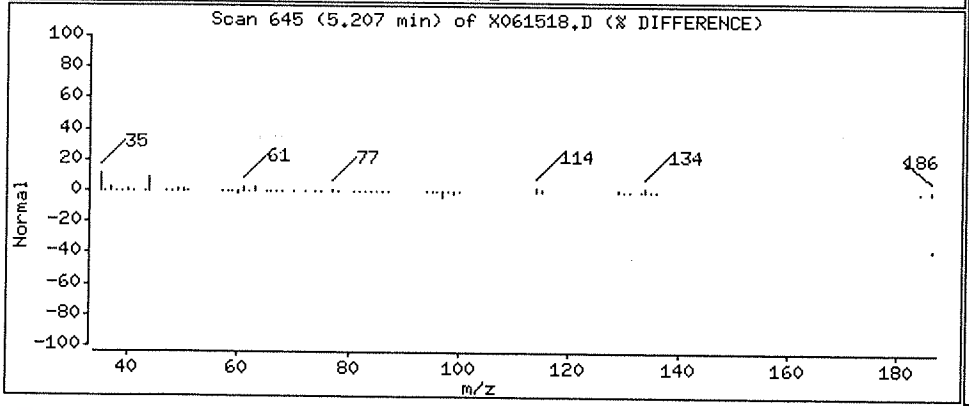












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061519.D Page 1
Report Date: 26-Jul-2021 14:24

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061519.D
Lab Smp Id: HS21060700-18 Client Smp ID: HS21060700-18
Inj Date : 15-JUN-2021 17:14
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-18;HS21060700-18;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

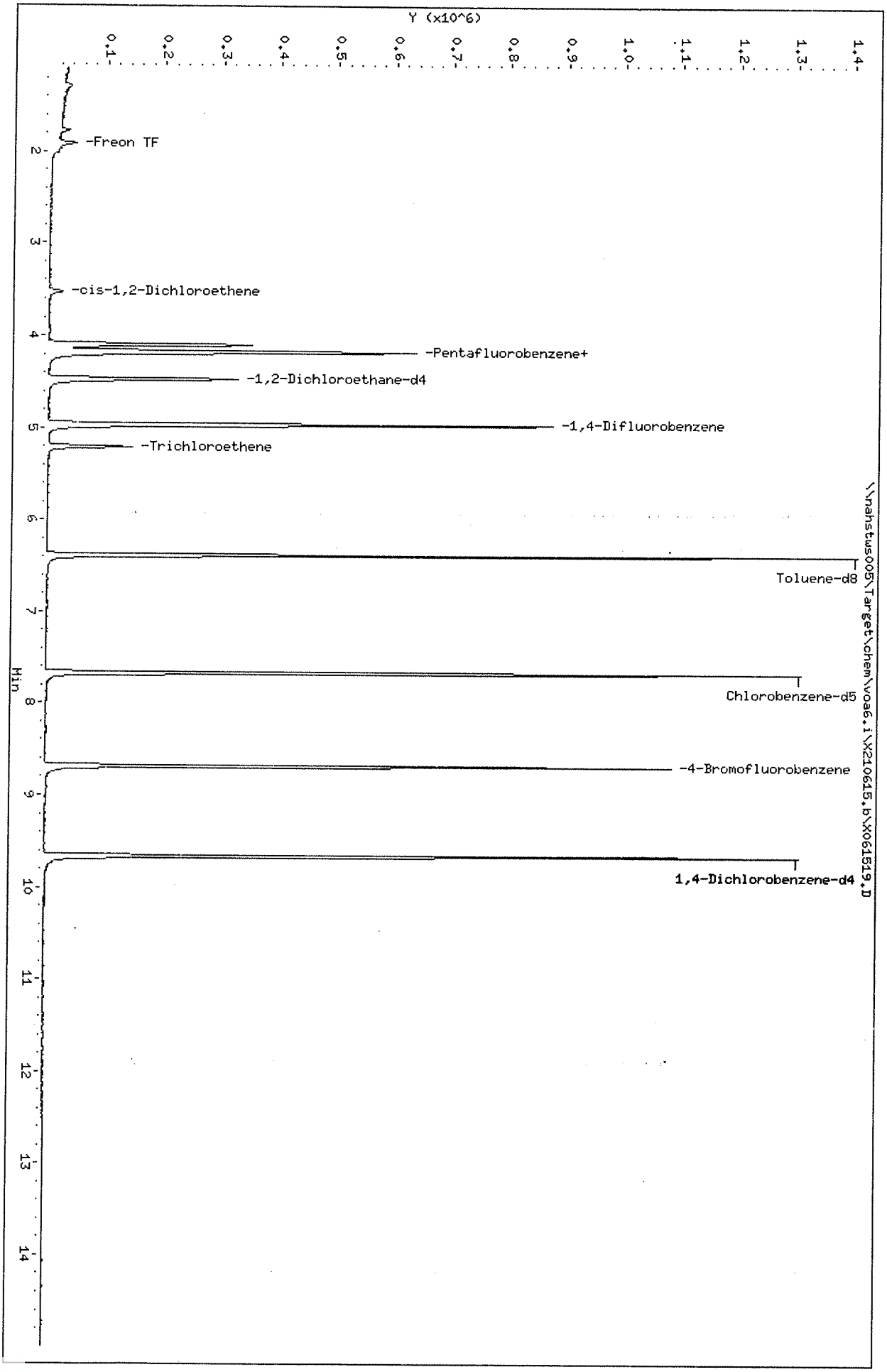
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	575578	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	784141	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	681656	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	341928	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	251681	44.4049	44.40
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	258552	46.9837	46.98
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	879860	51.8187	51.81
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	293682	49.0725	49.07
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	13530	2.24273	2.24(a)
38 Trichloroethene	130	5.206	5.207	(1.049)	51588	9.58551	9.58

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061519.D
Date : 15-JUN-2021 17:14
Client ID: HS21060700-18
Sample Info: HS21060700-18;HS21060700-18;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061519.D

Date : 15-JUN-2021 17:14

Client ID: HS21060700-18

Instrument: voa6.i

Sample Info: HS21060700-18;HS21060700-18;;;

Purge Volume: 5.0

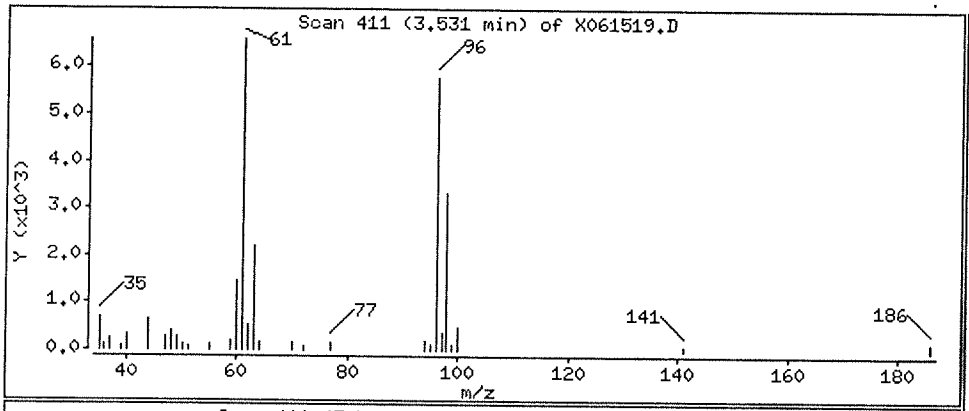
Operator: PC

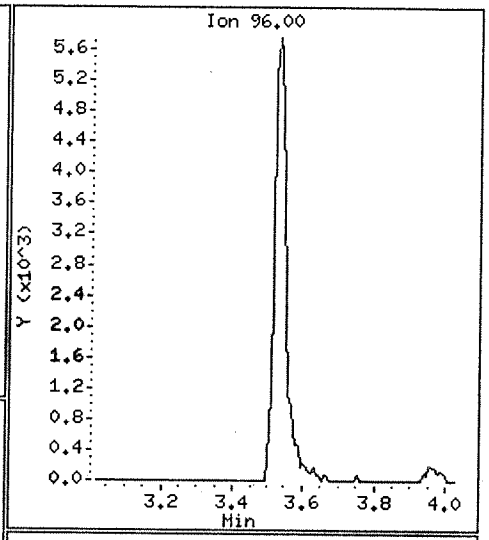
Column phase: DB624

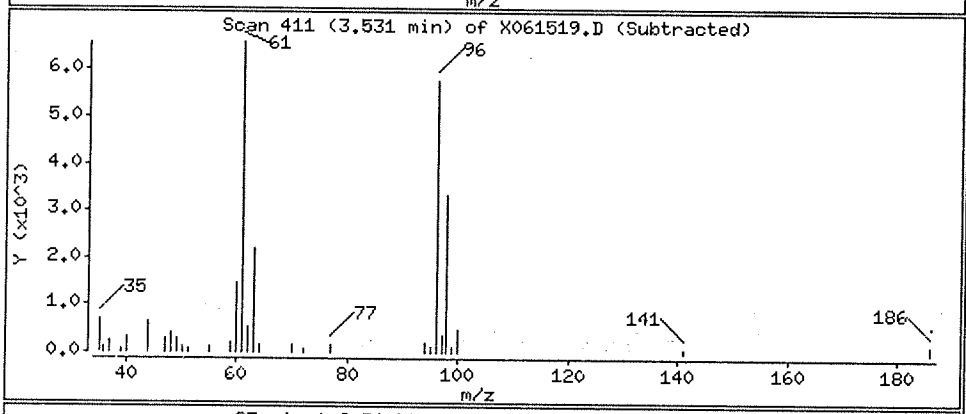
Column diameter: 0.18

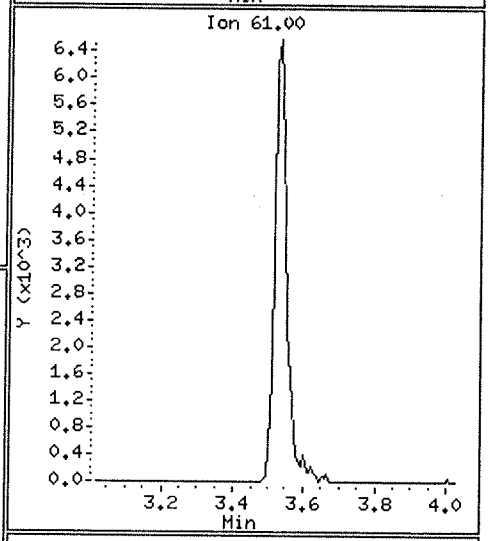
27 cis-1,2-Dichloroethene

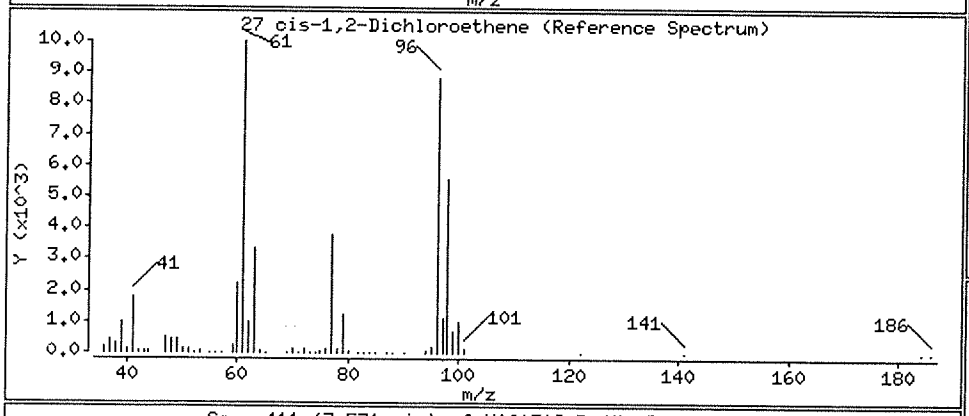
Concentration: 2.24 ug/l

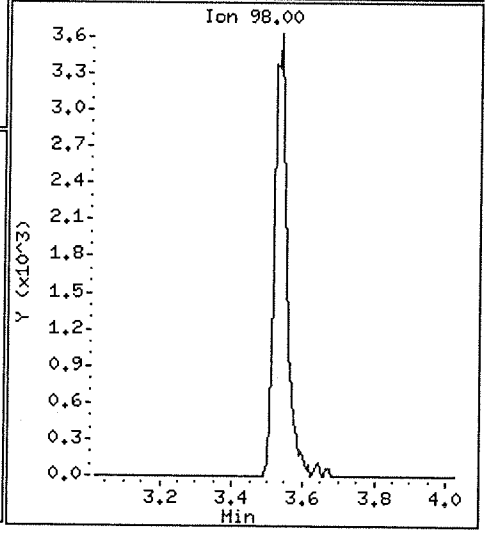


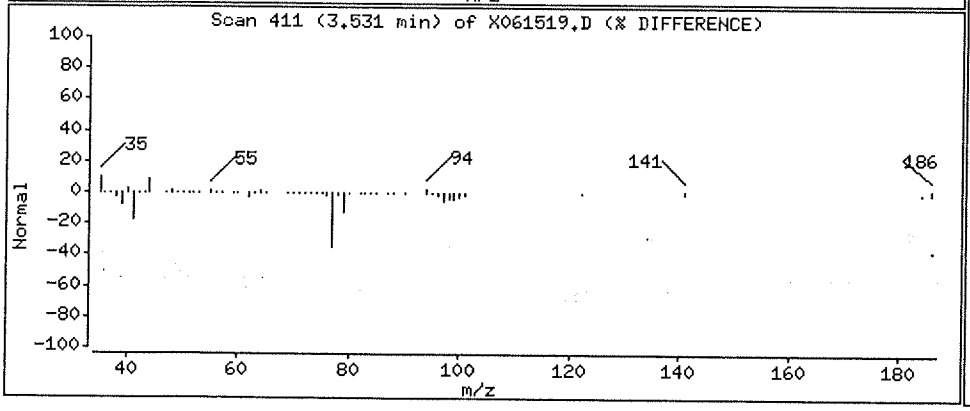












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061519.D

Date : 15-JUN-2021 17:14

Client ID: HS21060700-18

Instrument: voa6.i

Sample Info: HS21060700-18;HS21060700-18;;;

Purge Volume: 5.0

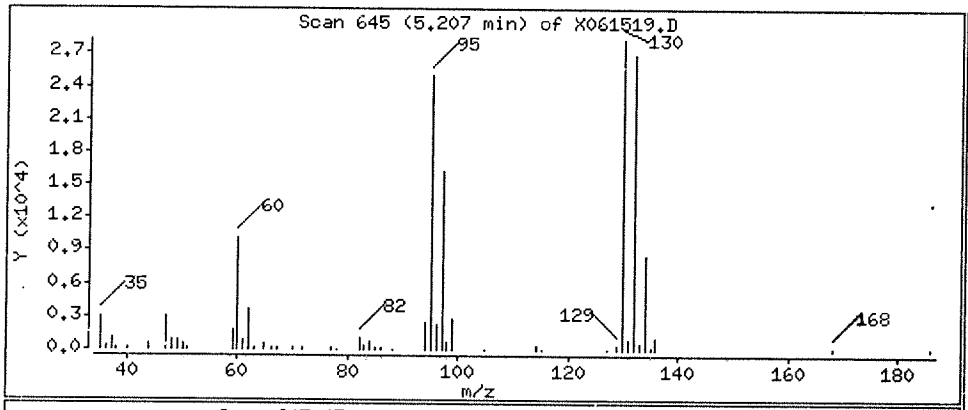
Operator: PC

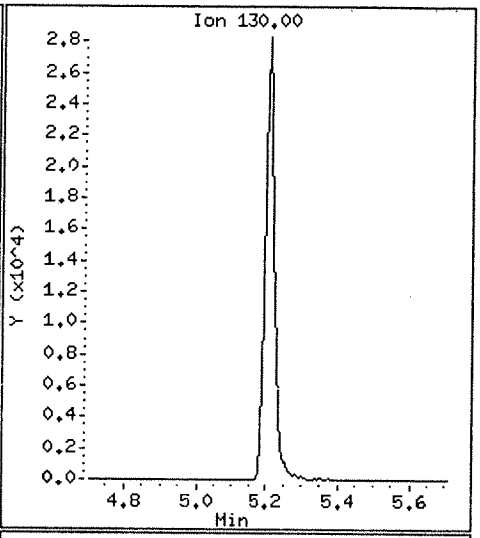
Column phase: DB624

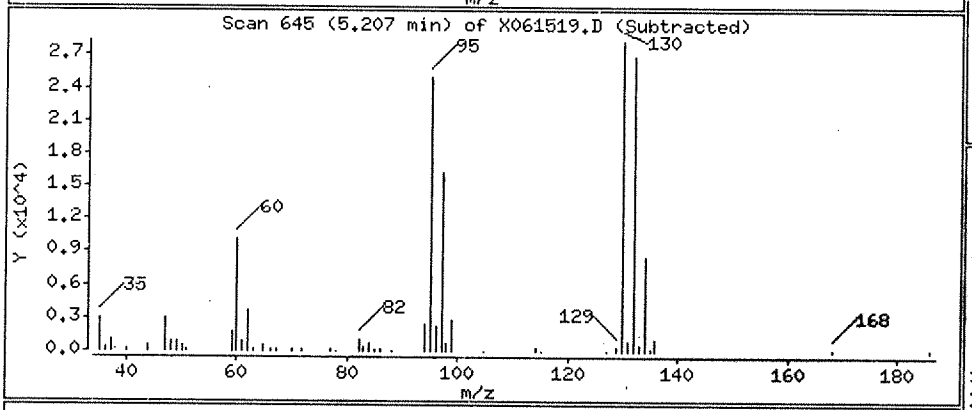
Column diameter: 0.18

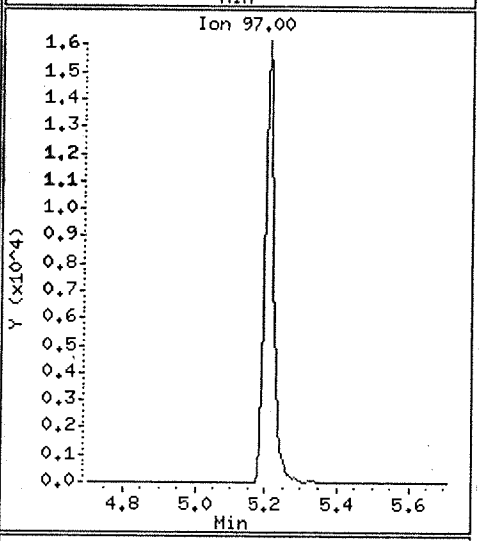
38 Trichloroethene

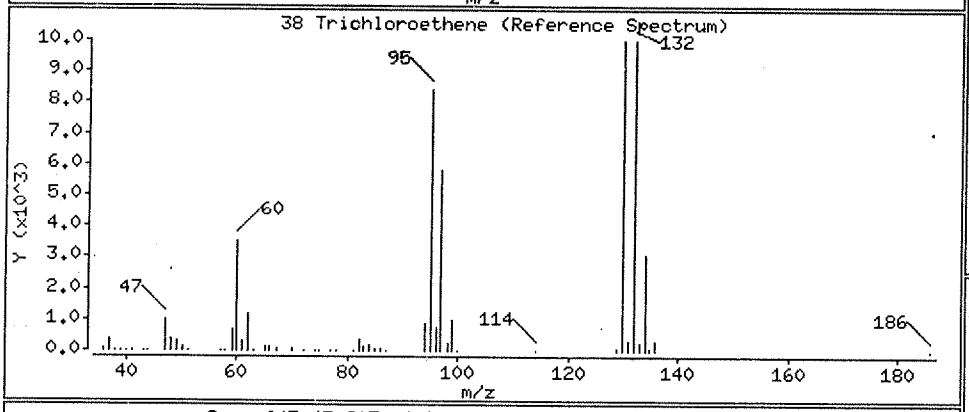
Concentration: 9.58 ug/l

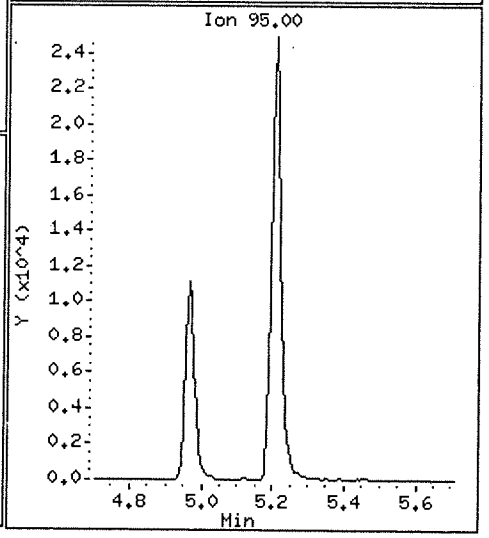


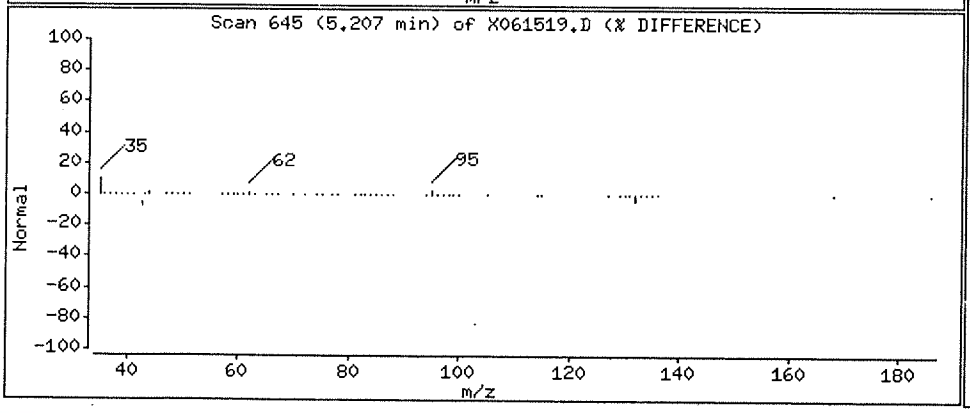












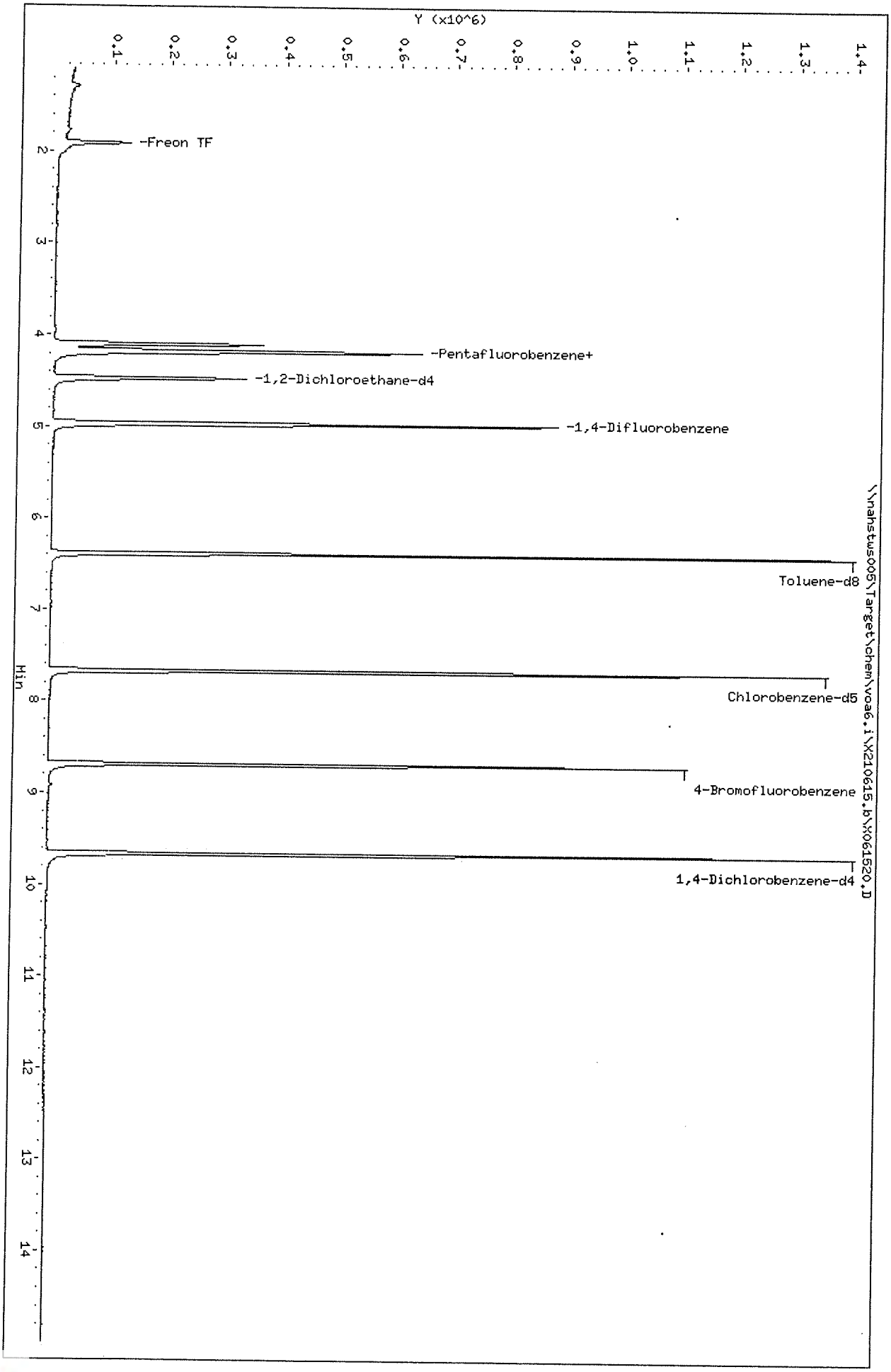
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061520.D
Lab Smp Id: HS21060700-19 Client Smp ID: HS21060700-19
Inj Date : 15-JUN-2021 17:35
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-19;HS21060700-19;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.182	4.182	(1.000)	578144	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	793665	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	693981	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	359685	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	253965	44.6097	44.60
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	257424	46.5650	46.56
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	889777	51.4721	51.47
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	302554	49.6482	49.64



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061520.D
Date : 15-JUN-2021 17:35
Client ID: HS21060700-19
Sample Info: HS21060700-19;HS21060700-19;;;
Purge Volume: 5.0
Column phase: DB624

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

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061521.D
Lab Smp Id: HS21060700-20 Client Smp ID: HS21060700-20
Inj Date : 15-JUN-2021 17:56
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-20;HS21060700-20;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

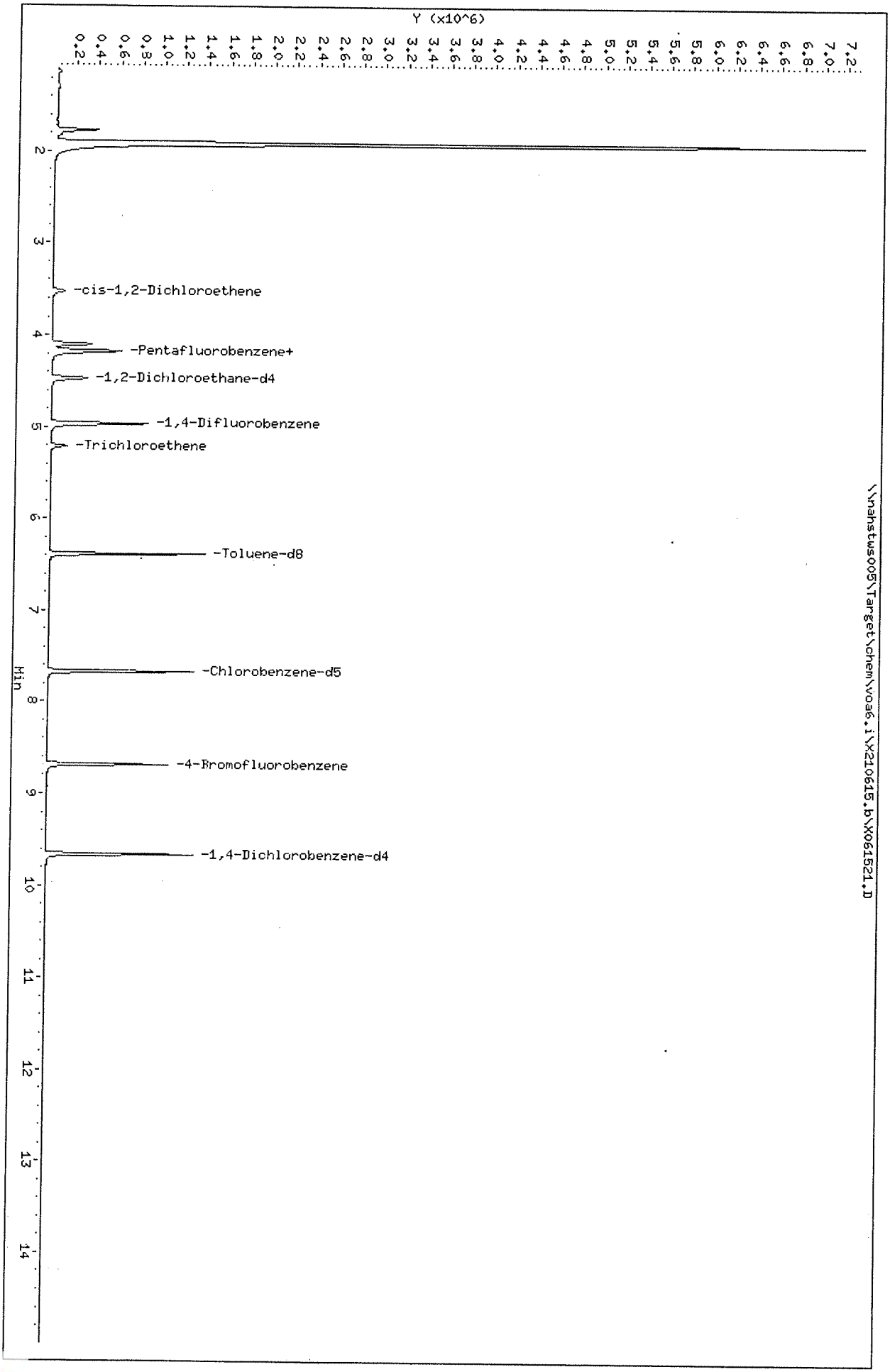
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	573848	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	785347	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	681066	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	346986	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	253177	44.8050	44.80
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	254362	46.3524	46.35
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	880556	51.9046	51.90
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	292421	48.9067	48.90
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	62173	10.3368	10.33
38 Trichloroethene	130	5.207	5.207	(1.049)	52718	9.78043	9.78
5 Vinyl Chloride	62	1.138	1.138	(0.272)	2758	0.40602	0.40(a)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061521.D
Date : 15-JUN-2021 17:56
Client ID: HS21060700-20
Sample Info: HS21060700-20;HS21060700-20;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061521.D

Date : 15-JUN-2021 17:56

Client ID: HS21060700-20

Instrument: voa6.i

Sample Info: HS21060700-20;HS21060700-20;;;

Purge Volume: 5.0

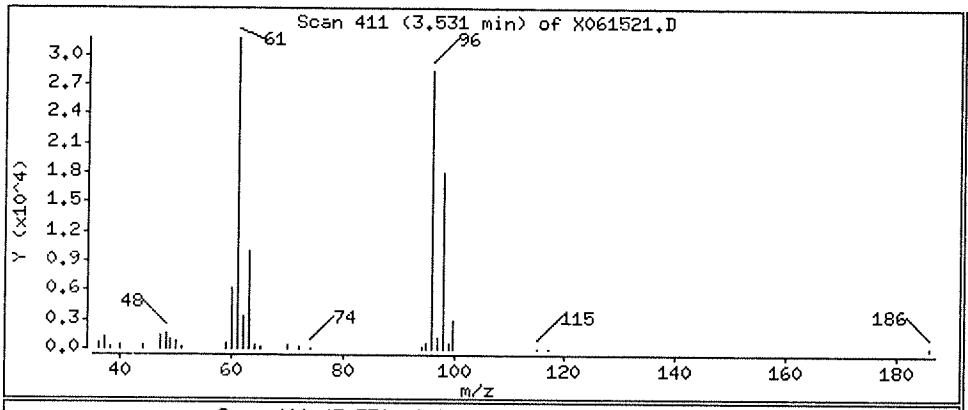
Operator: PC

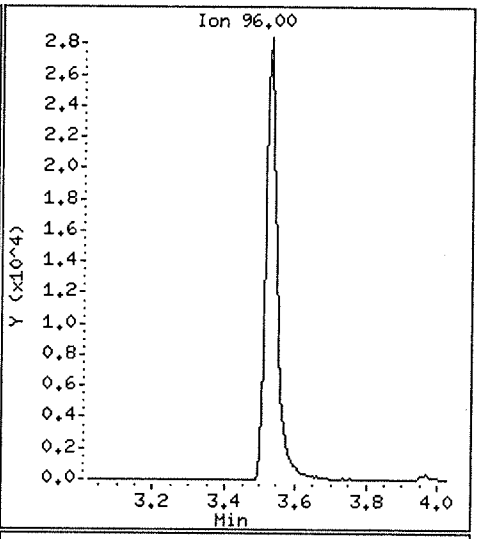
Column phase: DB624

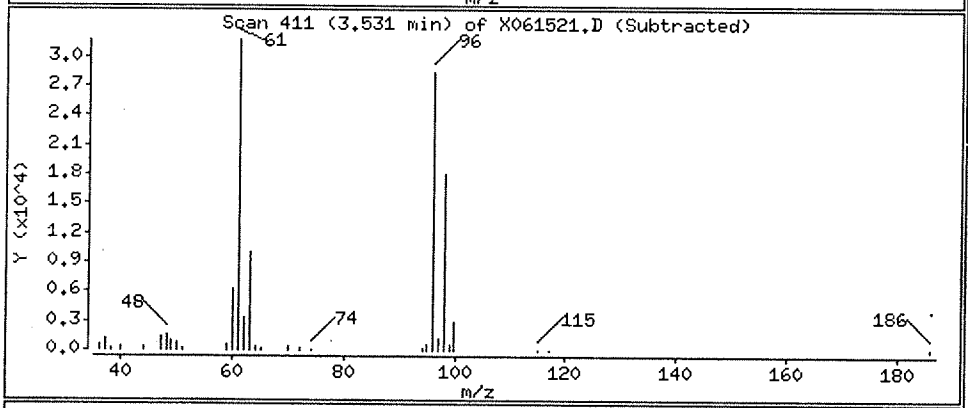
Column diameter: 0.18

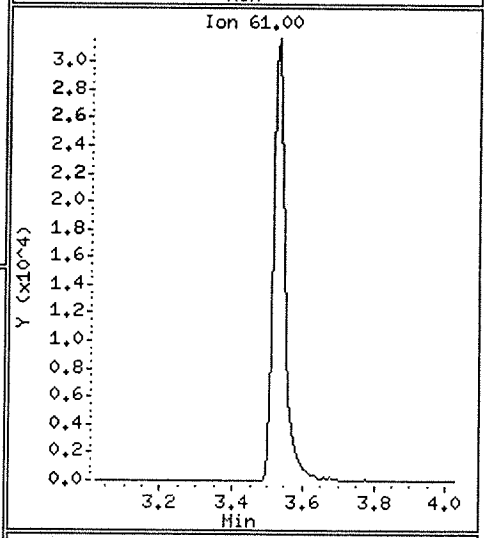
27 cis-1,2-Dichloroethene

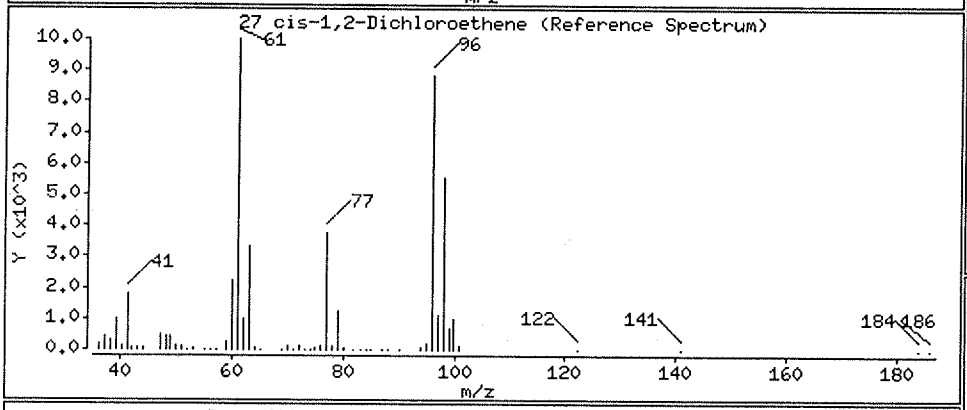
Concentration: 10.33 ug/l

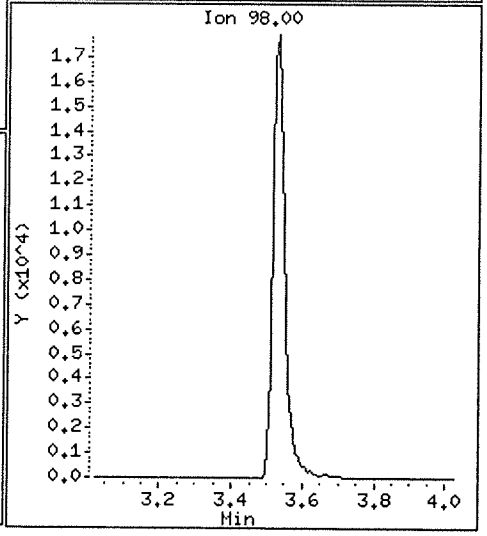


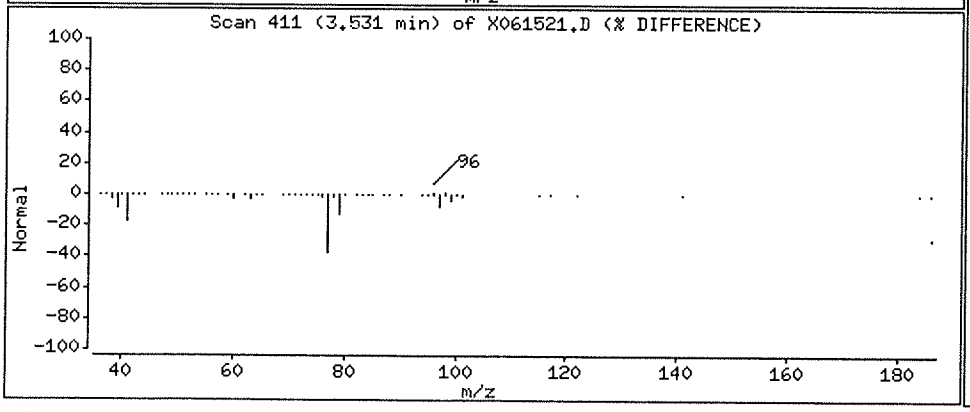












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061521.D

Date : 15-JUN-2021 17:56

Client ID: HS21060700-20

Instrument: voa6.i

Sample Info: HS21060700-20;HS21060700-20;;;

Purge Volume: 5.0

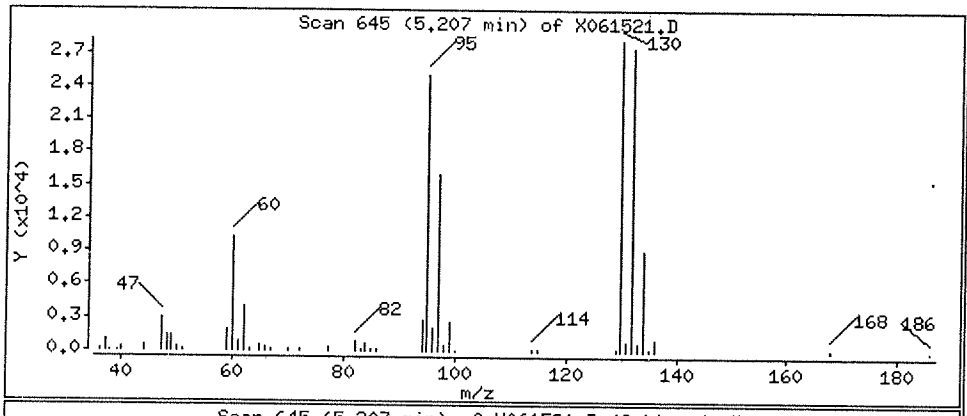
Operator: PC

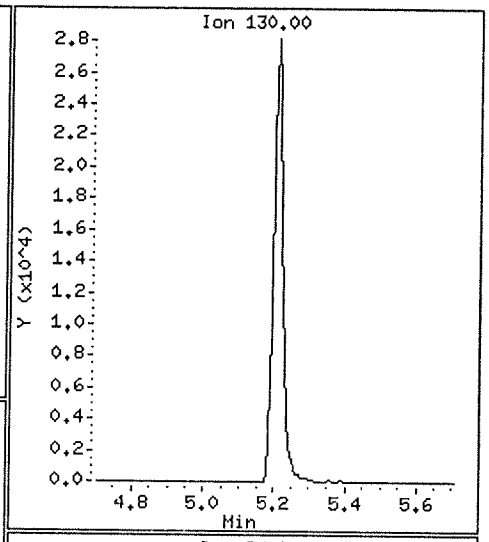
Column phase: DB624

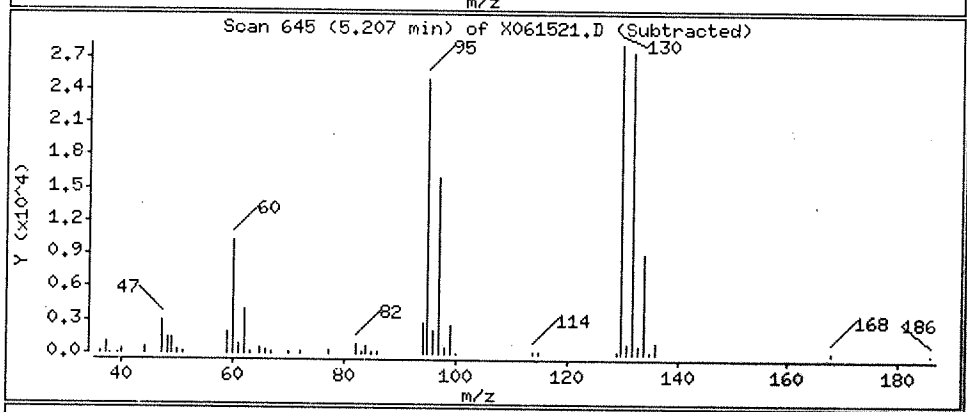
Column diameter: 0.18

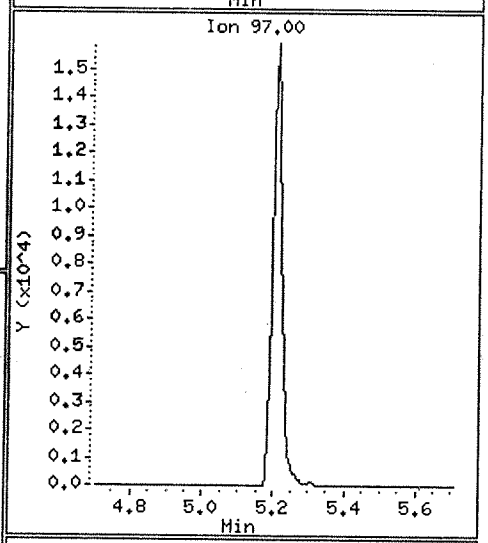
38 Trichloroethene

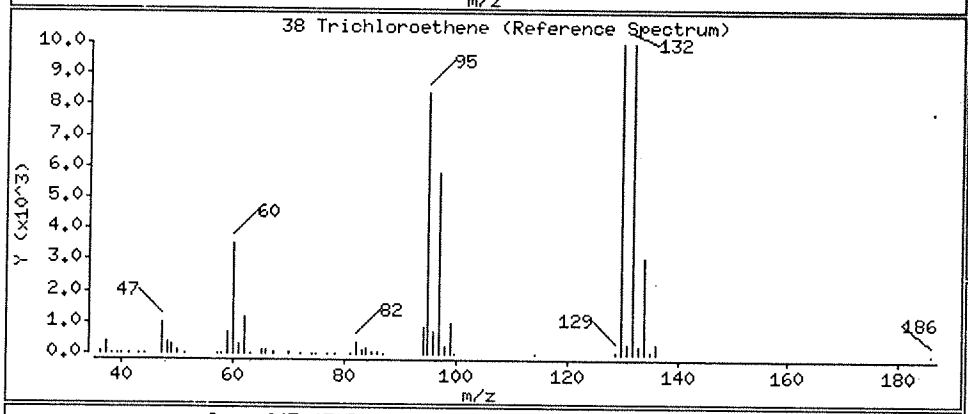
Concentration: 9.78 ug/l

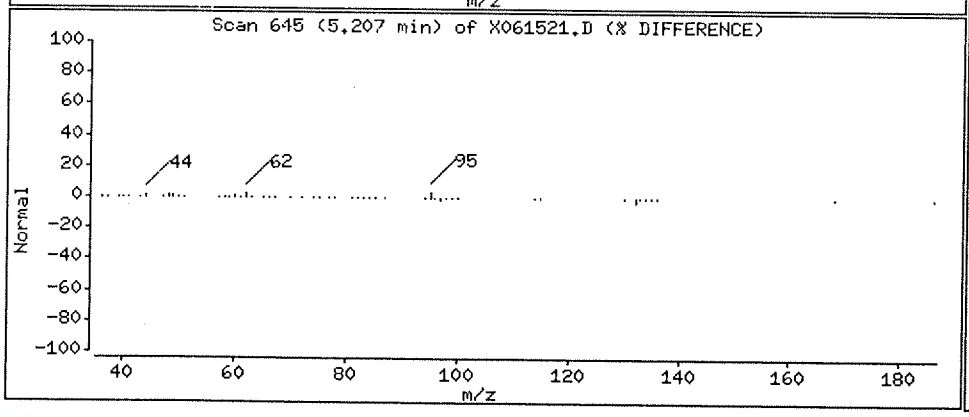


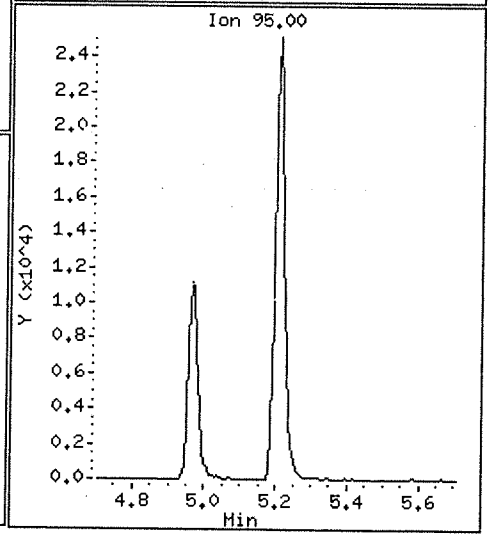












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061521.D

Date : 15-JUN-2021 17:56

Client ID: HS21060700-20

Instrument: voa6.i

Sample Info: HS21060700-20;HS21060700-20;;;

Purge Volume: 5.0

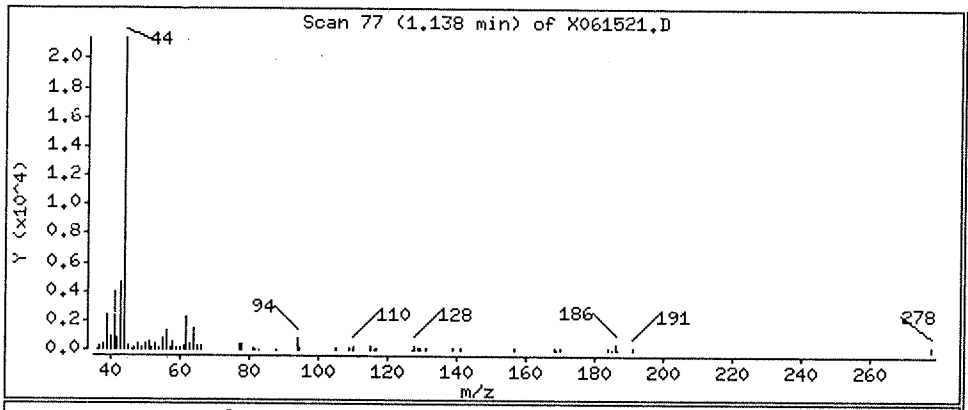
Operator: PC

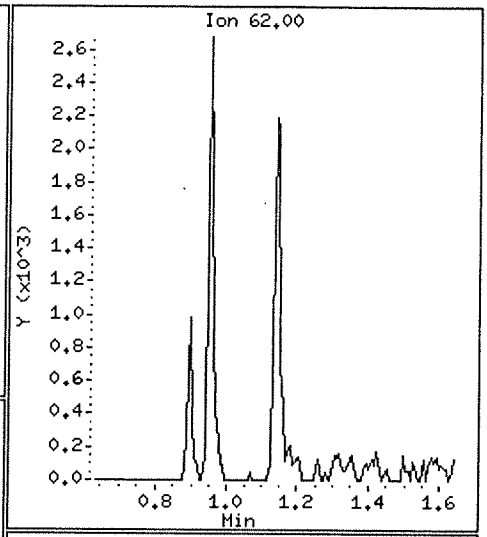
Column phase: DB624

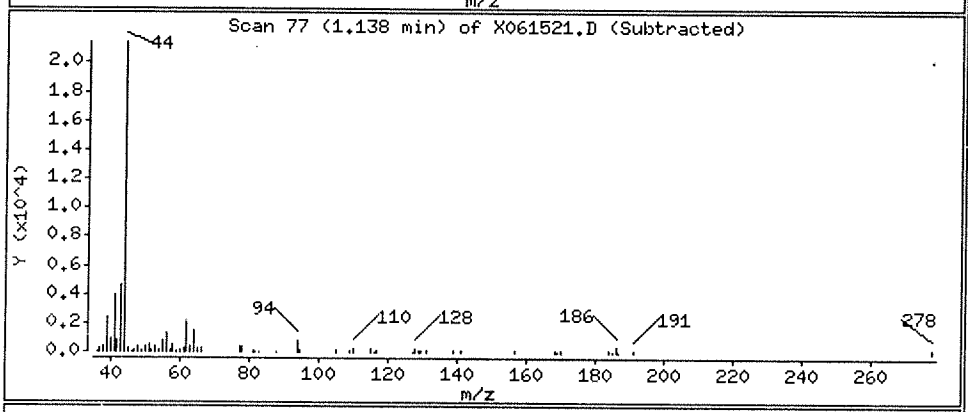
Column diameter: 0.18

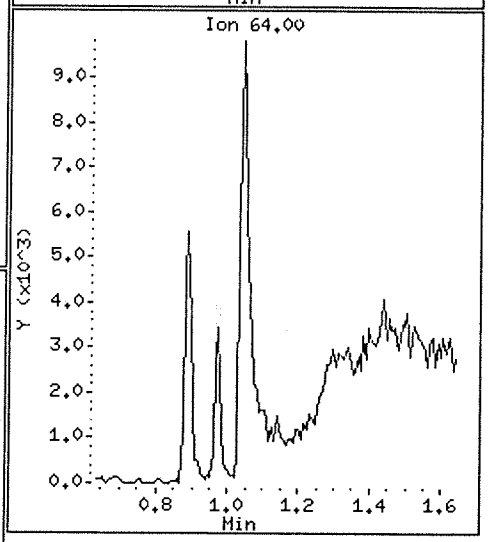
5 Vinyl Chloride

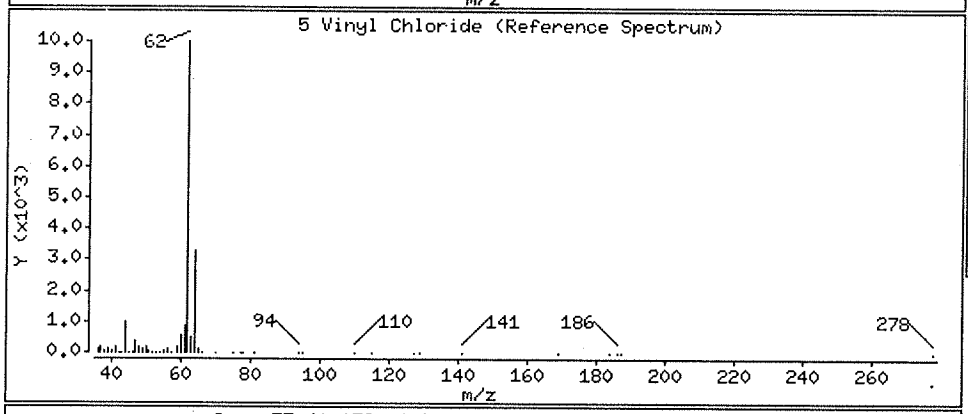
Concentration: 0.40 ug/l

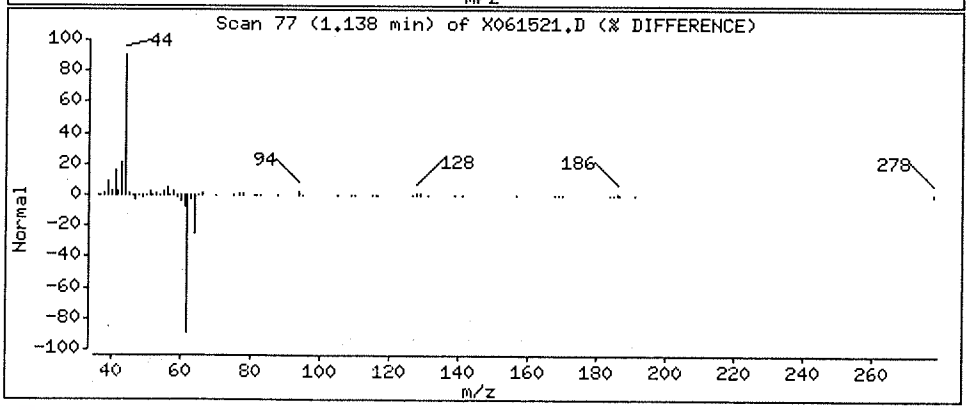












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061522.D
Lab Smp Id: HS21060700-21 Client Smp ID: HS21060700-21
Inj Date : 15-JUN-2021 18:17
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-21;HS21060700-21;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.182	4.182	(1.000)	568449	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	783677	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	675241	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	337397	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	249882	44.6413	44.64
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	253056	46.5554	46.55
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	874707	52.0047	52.00
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	275629	46.5329	46.53
22 1,1-Dichloroethane	63	2.921	2.922	(0.699)	6839	0.76101	0.76(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	79263	13.3034	13.30
38 Trichloroethene	130	5.206	5.207	(1.049)	607228	112.895	112.89
5 Vinyl Chloride	62	1.138	1.138	(0.272)	6324	0.93984	0.93(a)

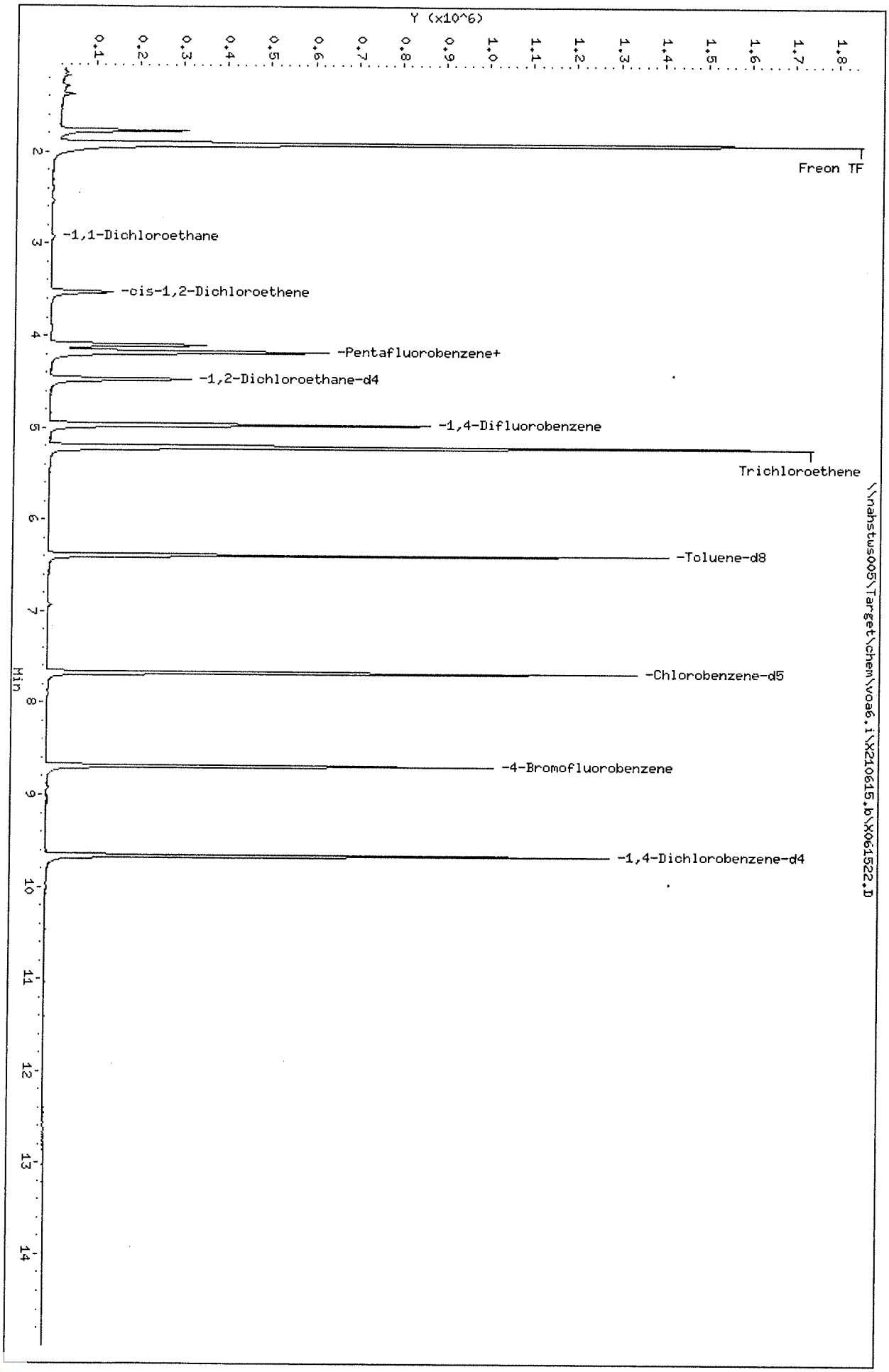
QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061522.D
Date : 15-JUN-2021 18:17
Client ID: HS21060700-21
Sample Info: HS21060700-21;HS21060700-21;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i

Operator: PC
Column diameter: 0.18



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061522.D

Date : 15-JUN-2021 18:17

Client ID: HS21060700-21

Instrument: voa6.i

Sample Info: HS21060700-21;HS21060700-21;;;

Purge Volume: 5.0

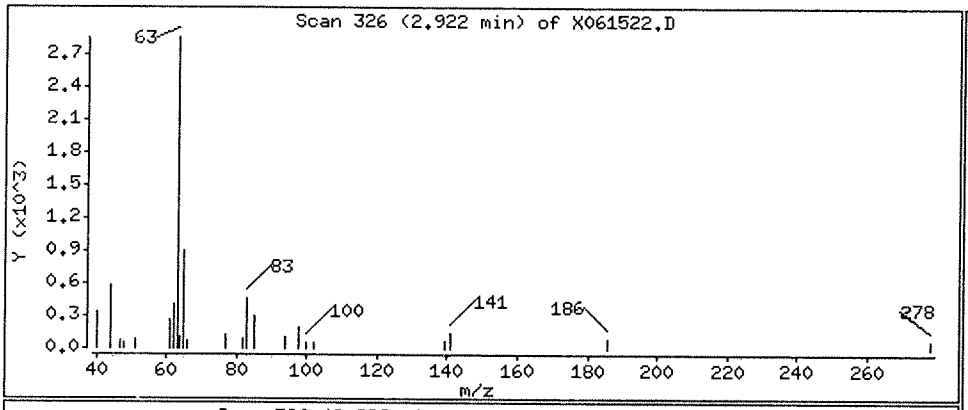
Operator: PC

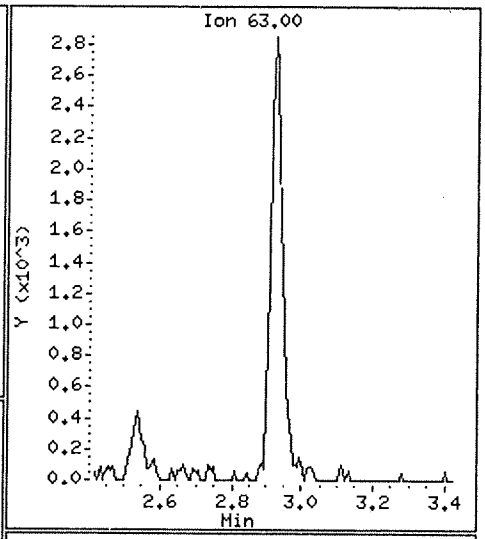
Column phase: DB624

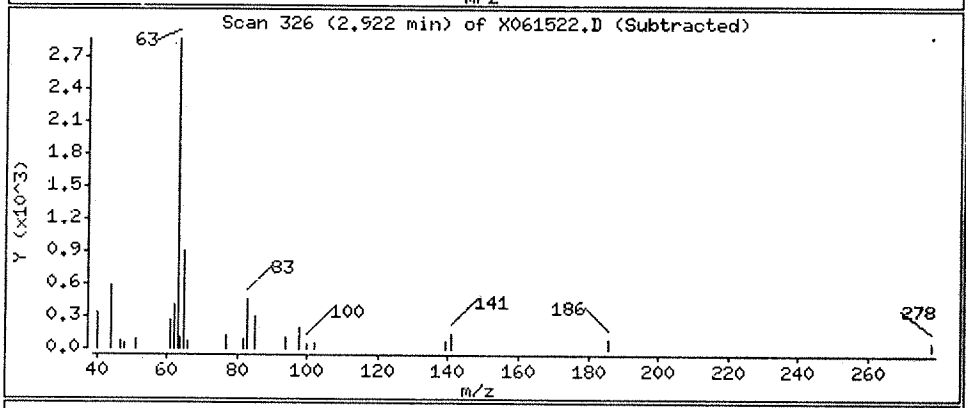
Column diameter: 0.18

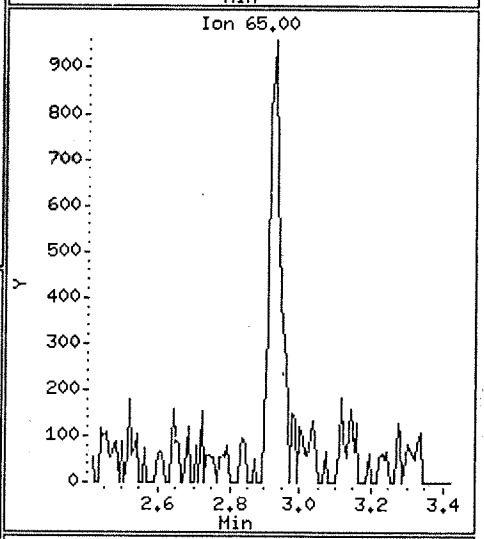
22 1,1-Dichloroethane

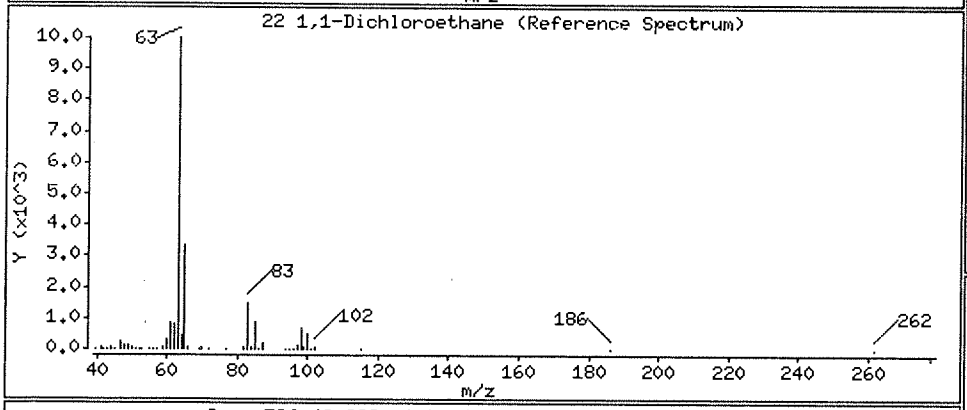
Concentration: 0.76 ug/l

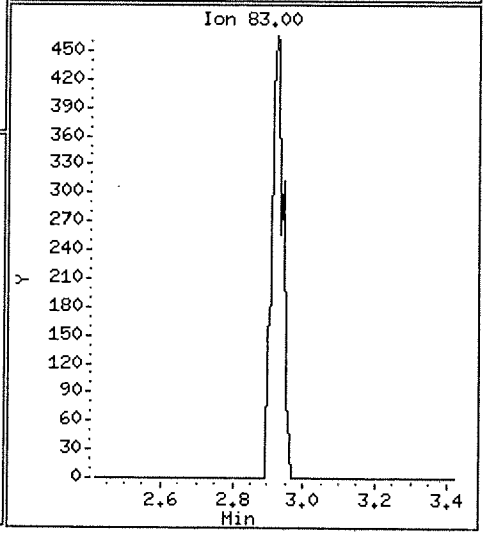


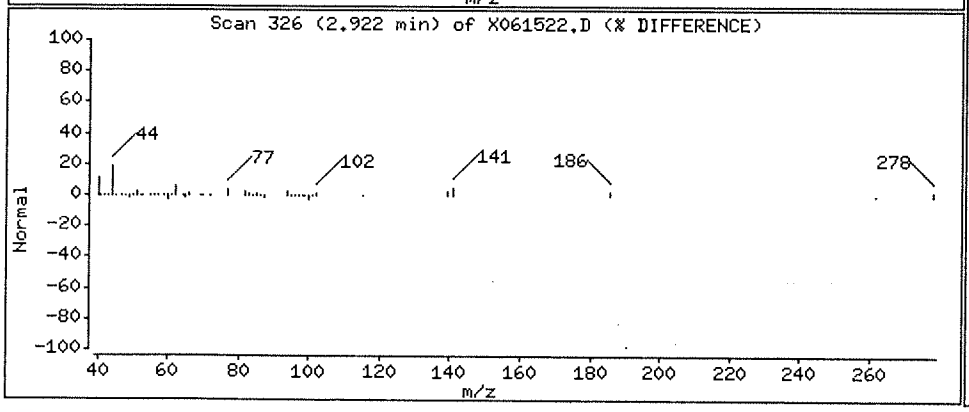












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061522.D

Date : 15-JUN-2021 18:17

Client ID: HS21060700-21

Instrument: voa6.i

Sample Info: HS21060700-21;HS21060700-21;;;

Purge Volume: 5.0

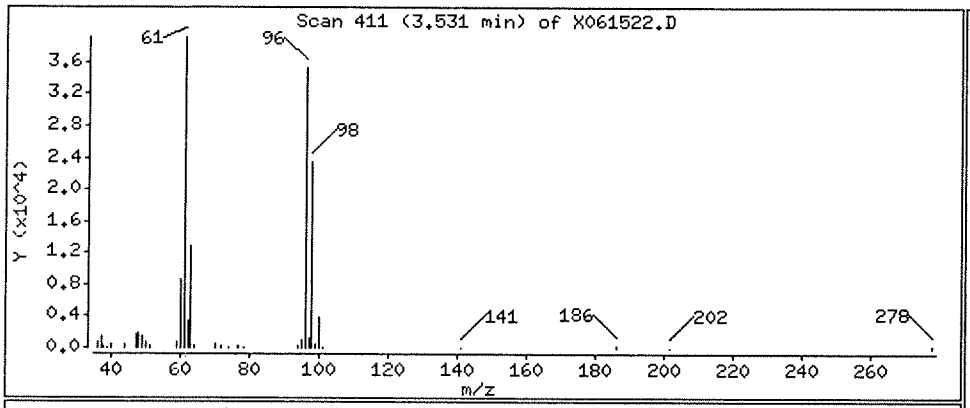
Operator: PC

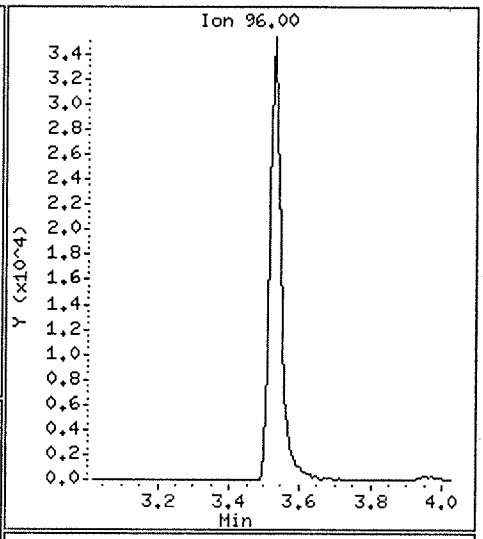
Column phase: DB624

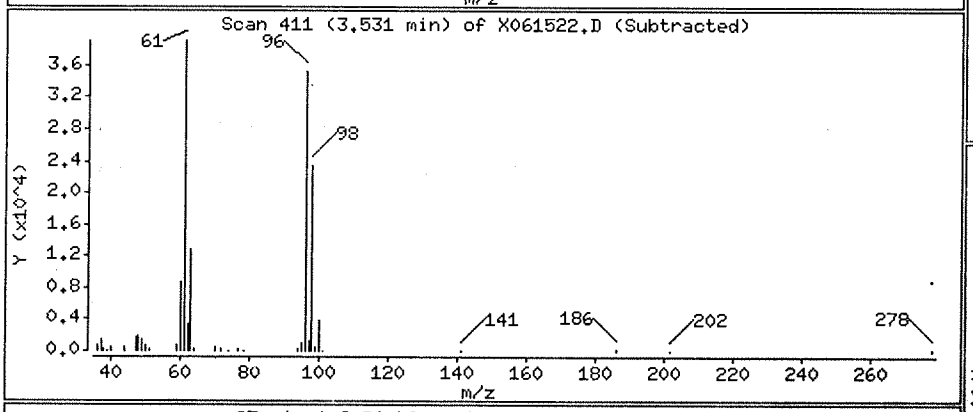
Column diameter: 0.18

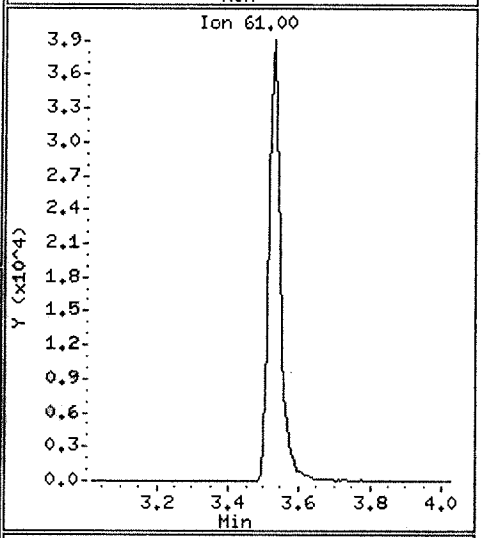
27 cis-1,2-Dichloroethene

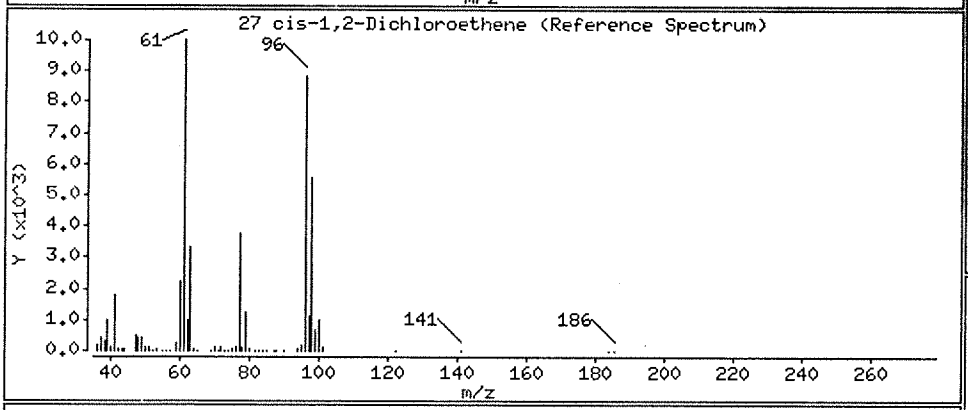
Concentration: 13.30 ug/l

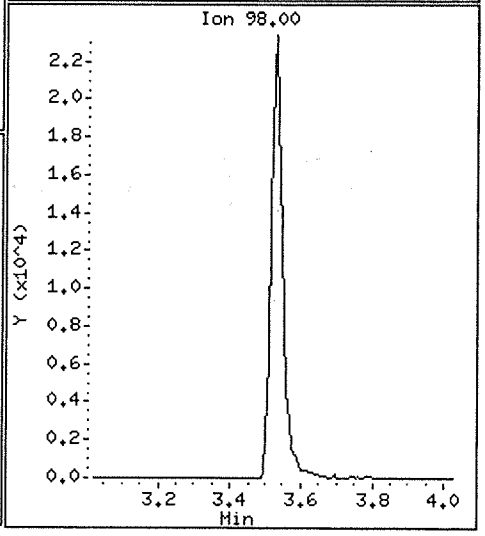


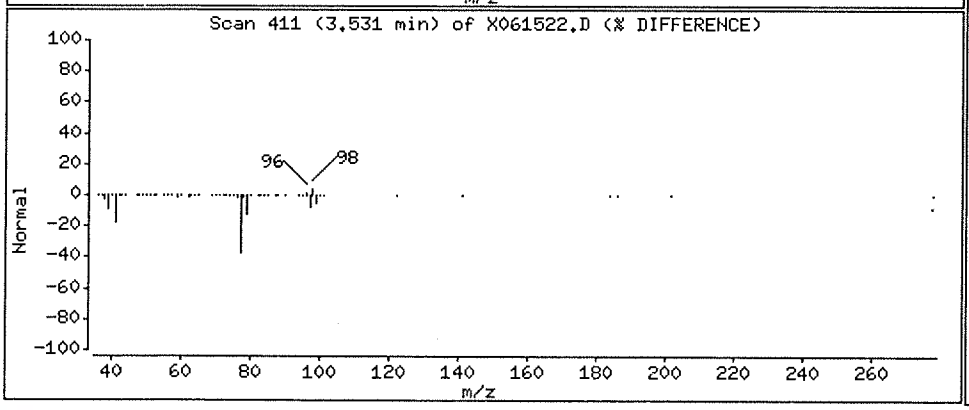












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061522.D

Date : 15-JUN-2021 18:17

Client ID: HS21060700-21

Instrument: voa6.i

Sample Info: HS21060700-21;HS21060700-21;;;

Purge Volume: 5.0

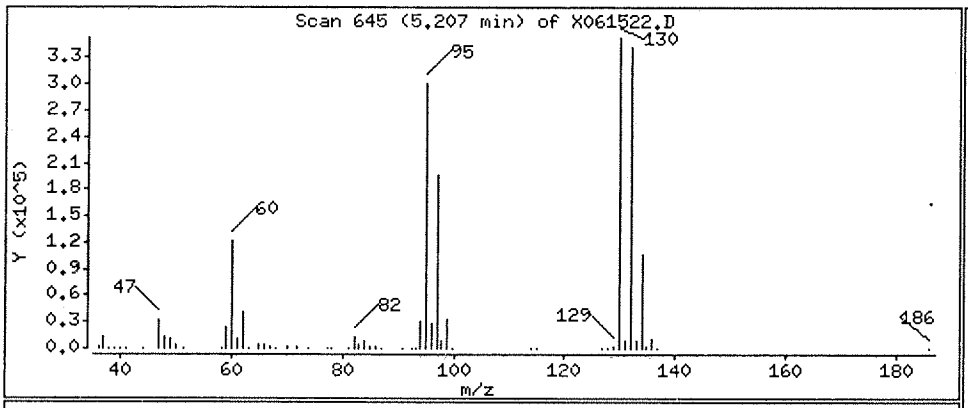
Operator: PC

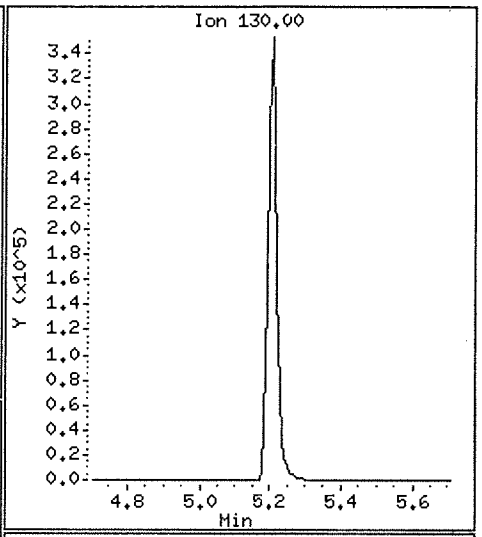
Column phase: DB624

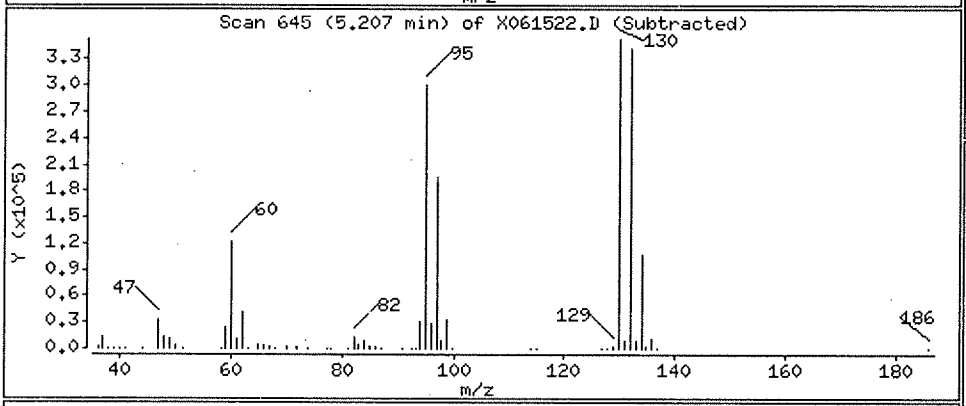
Column diameter: 0.18

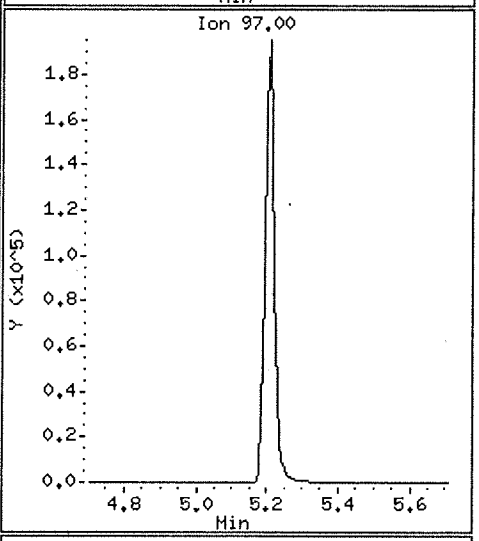
38 Trichloroethene

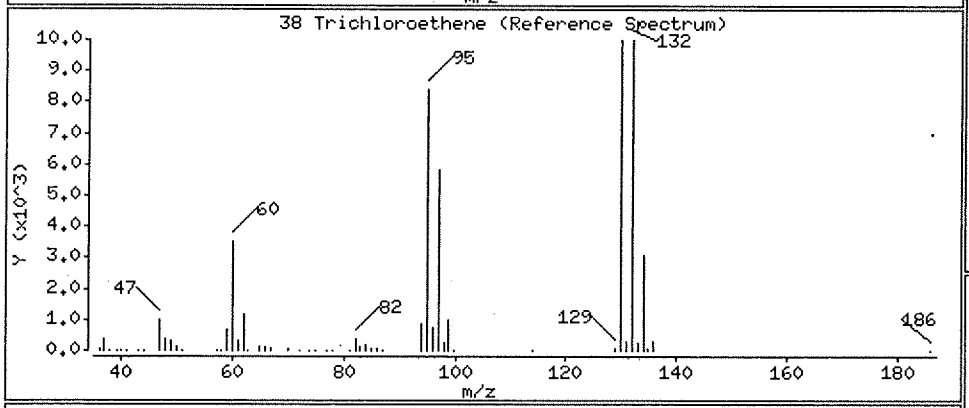
Concentration: 112.89 ug/l

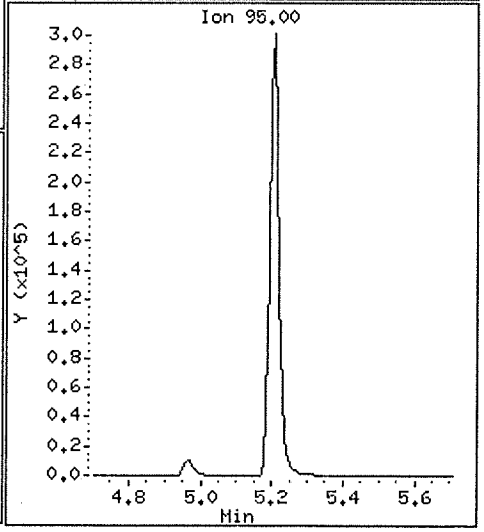


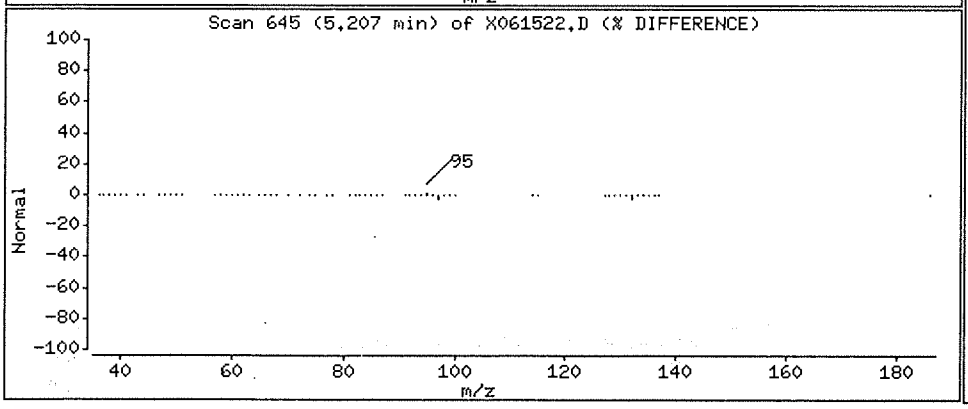












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061522.D

Date : 15-JUN-2021 18:17

Client ID: HS21060700-21

Instrument: voa6.i

Sample Info: HS21060700-21;HS21060700-21;;;

Purge Volume: 5.0

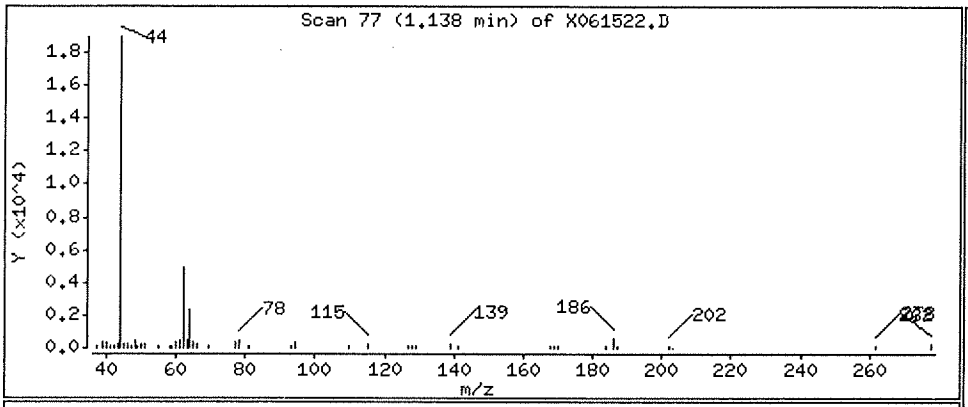
Operator: PC

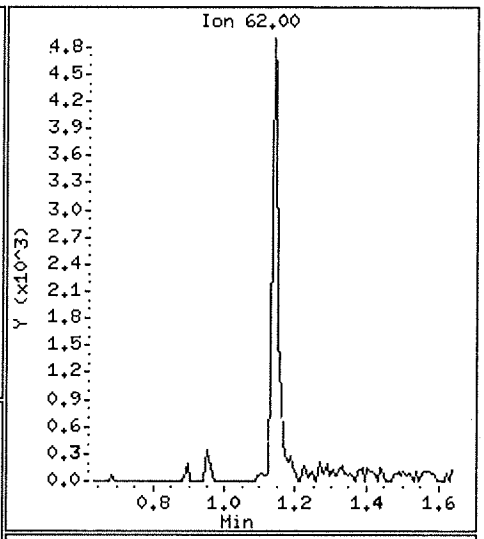
Column phase: DB624

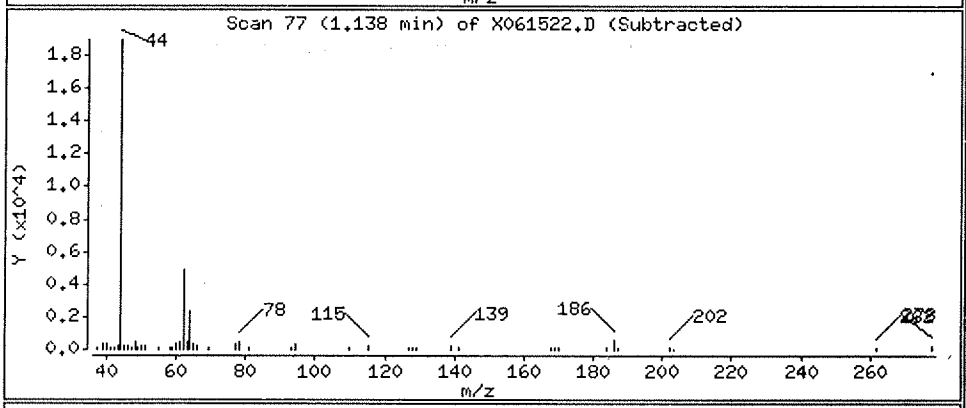
Column diameter: 0.18

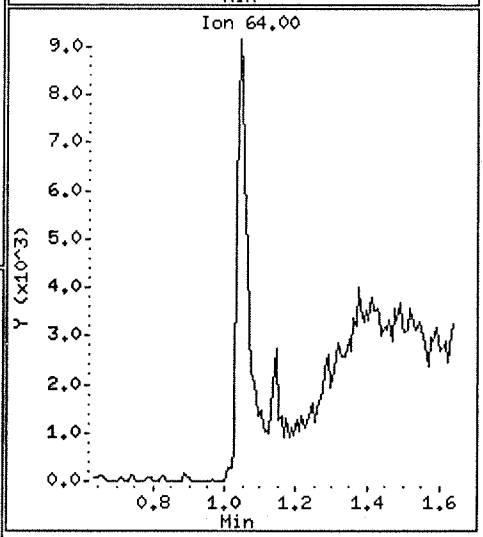
5 Vinyl Chloride

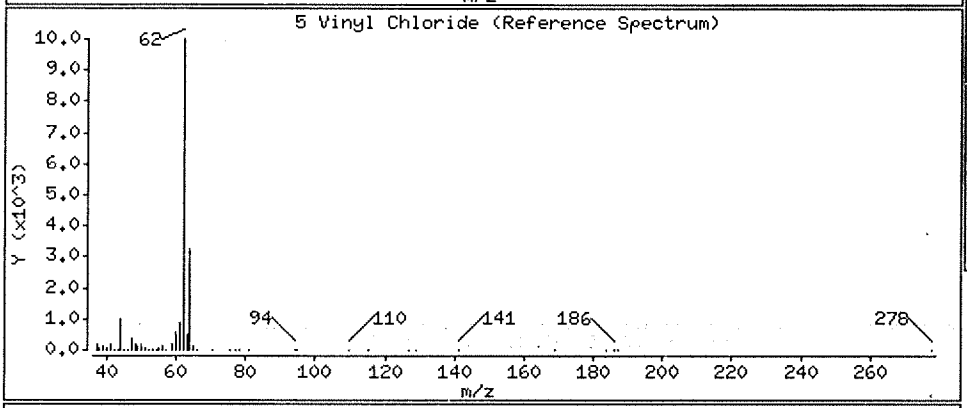
Concentration: 0.93 ug/l

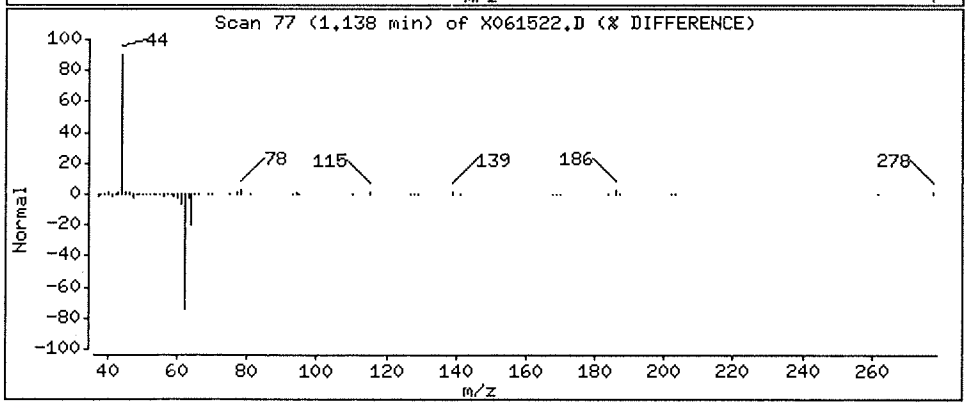












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D
Lab Smp Id: HS21060700-04 Client Smp ID: HS21060700-04
Inj Date : 15-JUN-2021 18:38
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-04;HS21060700-04;;;
Misc Info : HS18090001;WATER;0;5;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 22
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.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

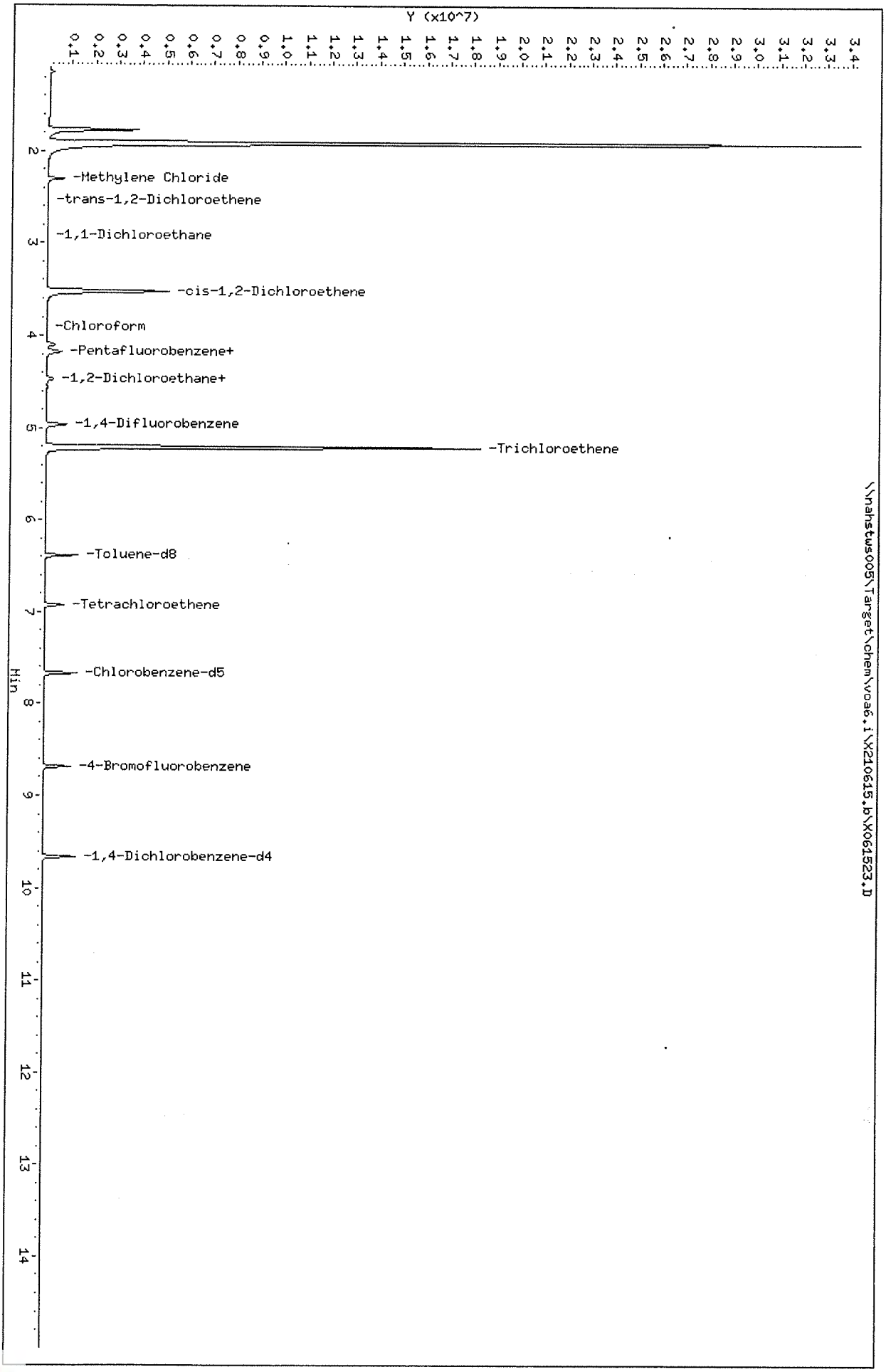
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	570514	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	781112	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	690270	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	355767	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	248904	44.3044	44.30
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	251812	46.1530	46.15
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	872912	50.7680	50.76
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	298828	49.3056	49.30
22 1,1-Dichloroethane	63	2.921	2.922	(0.699)	10493	1.16339	5.81(a)
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	48908	7.85834	39.29
37 Benzene	78	4.512	4.512	(0.909)	12185	0.67904	3.39(a)
28 Chloroform	83	3.910	3.910	(0.935)	14477	1.44296	7.21(a)
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	2739355	458.104	2290.52(A)
17 Methylene Chloride	84	2.305	2.298	(0.551)	332062	64.5594	322.79
56 Tetrachloroethene	164	6.925	6.926	(0.903)	171717	40.4102	202.05
20 trans-1,2-Dichloroethene	96	2.527	2.528	(0.604)	7002	1.31442	6.57(a)
38 Trichloroethene	130	5.206	5.207	(1.049)	6249284	1165.68	5828.37(A)
5 Vinyl Chloride	62	1.138	1.138	(0.272)	139518	20.6594	103.29

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D
Date : 15-JUN-2021 18:38
Client ID: HS21060700-04
Sample Info: HS21060700-04;HS21060700-04;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D

Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

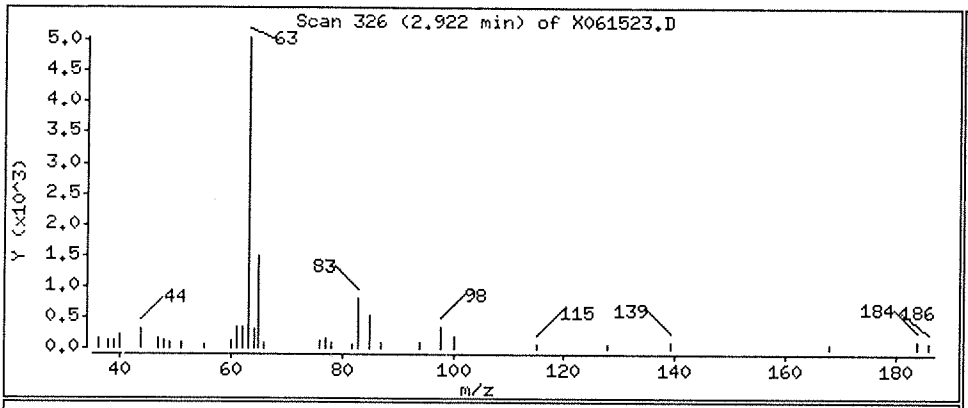
Operator: PC

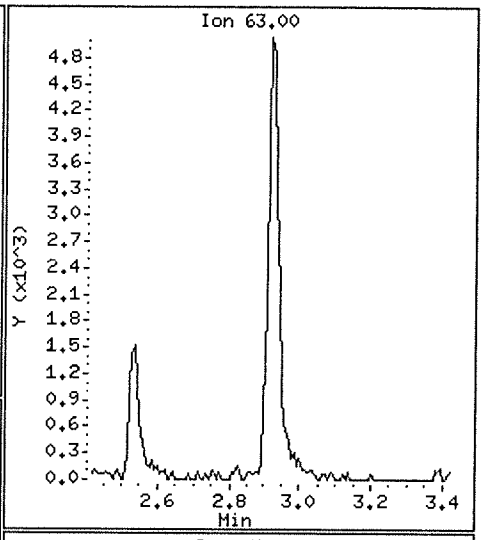
Column phase: DB624

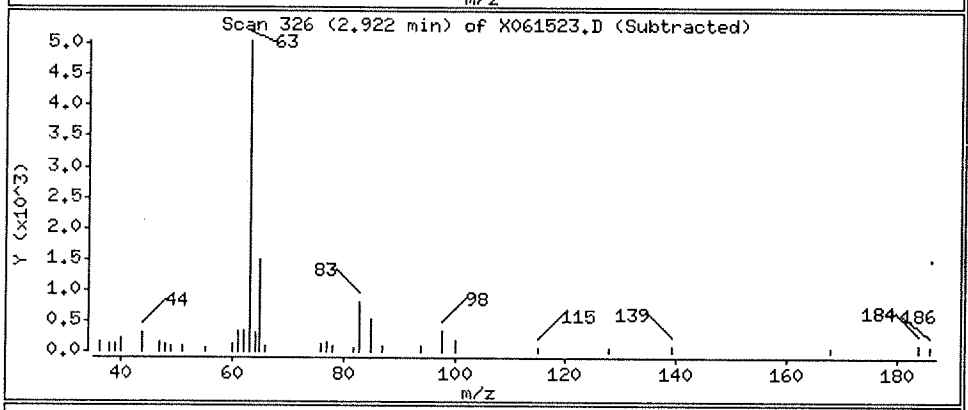
Column diameter: 0.18

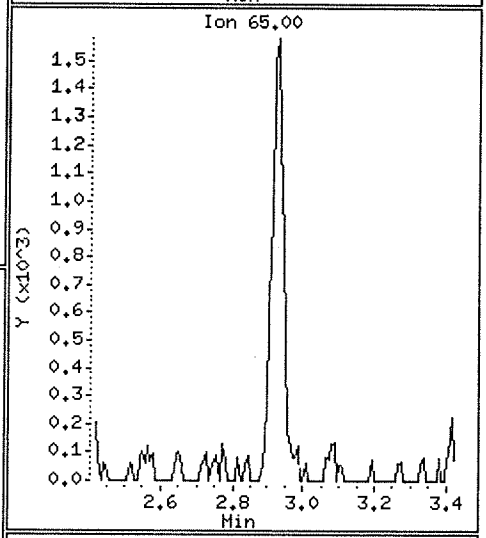
22 1,1-Dichloroethane

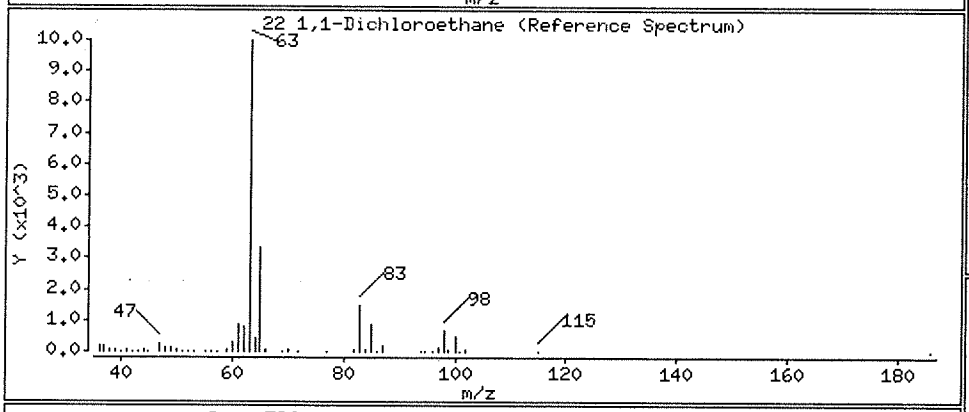
Concentration: 5.81 ug/l

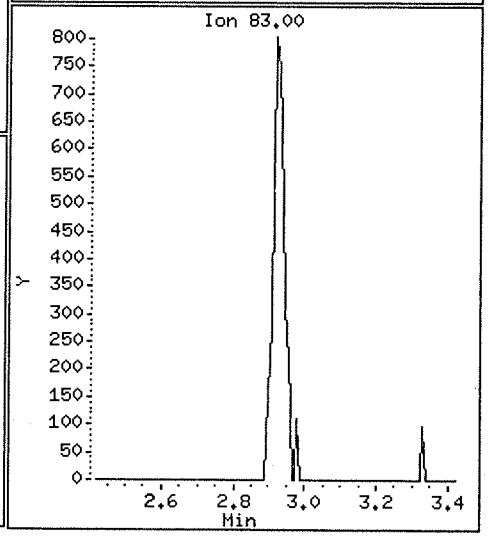


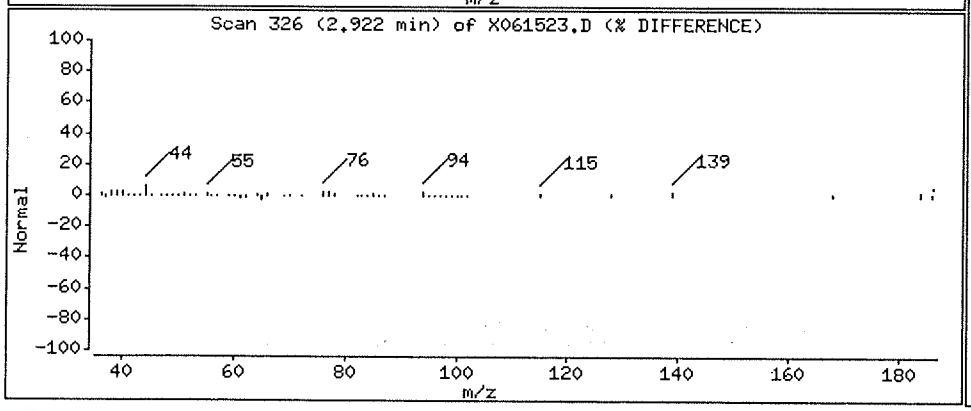












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D

Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

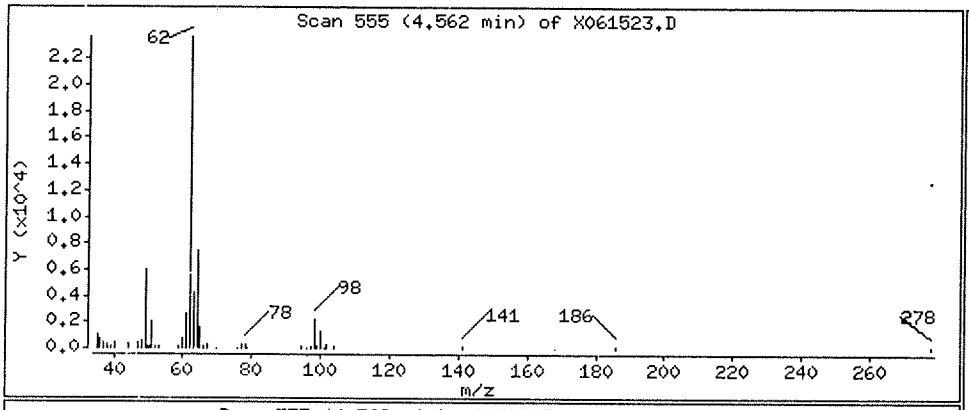
Operator: PC

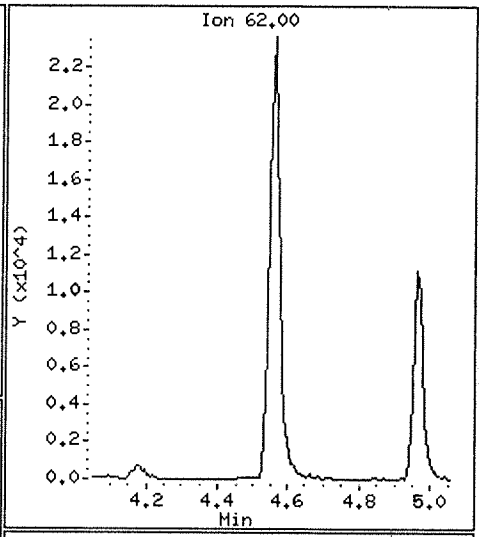
Column phase: DB624

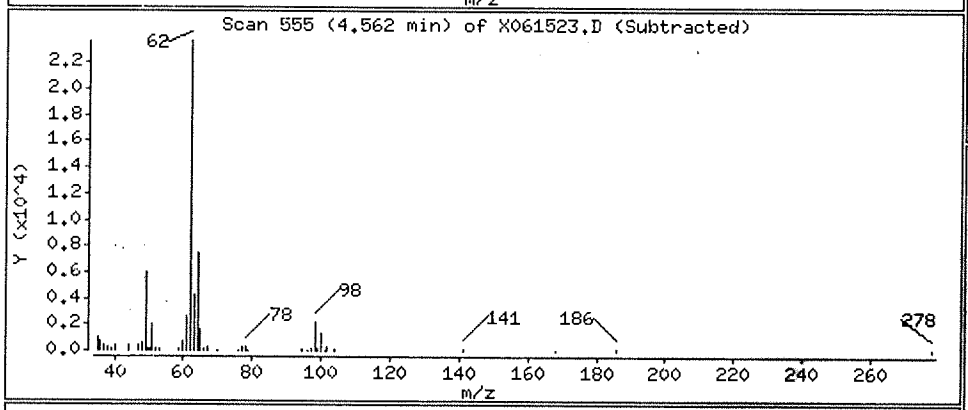
Column diameter: 0.18

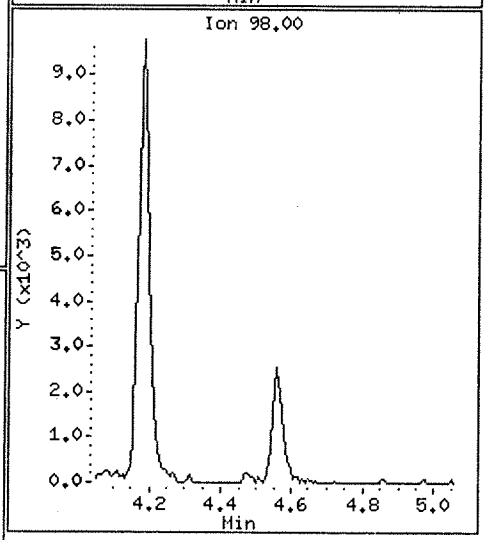
33 1,2-Dichloroethane

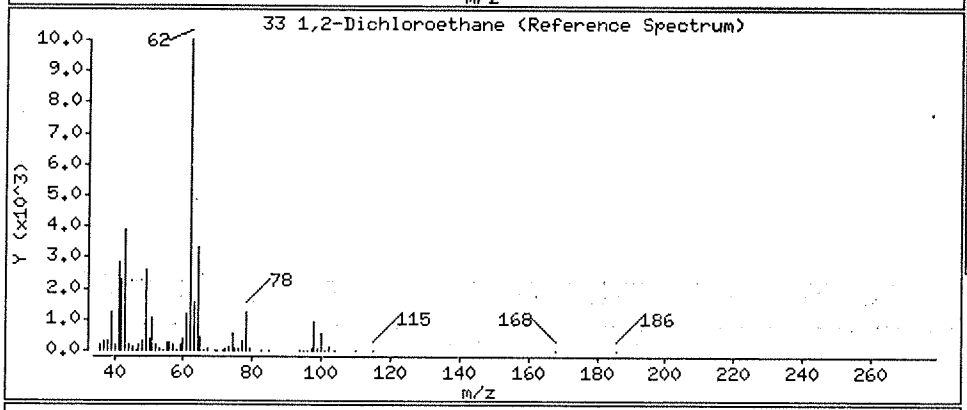
Concentration: 39.29 ug/l

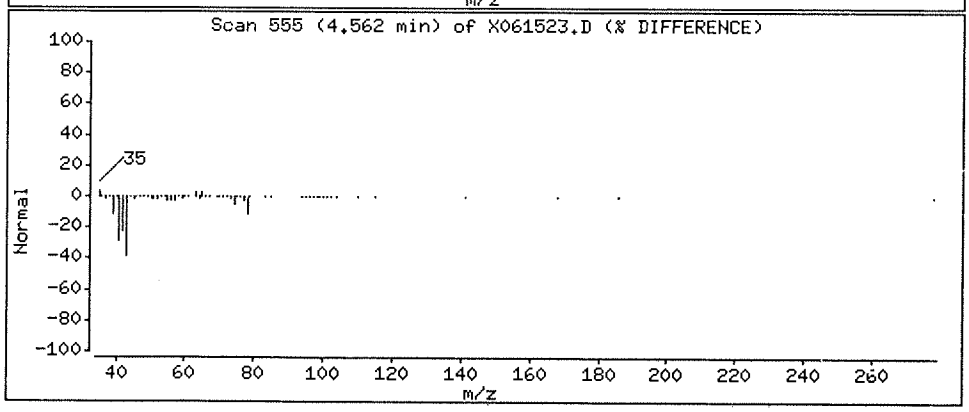












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D

Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

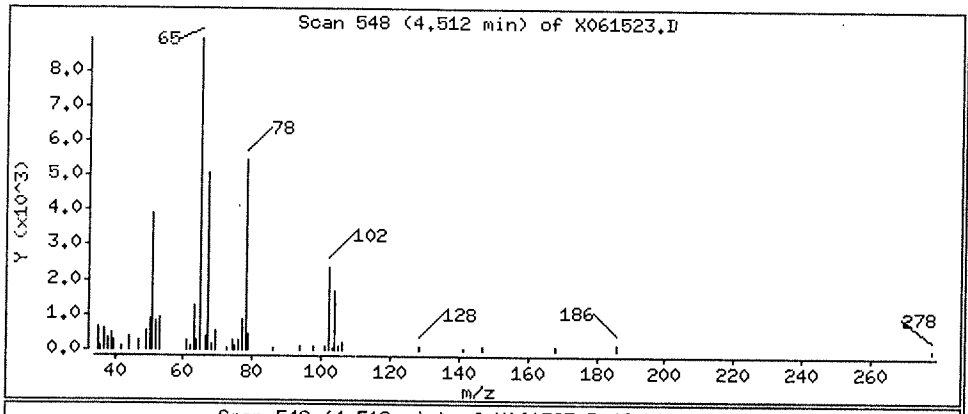
Operator: PC

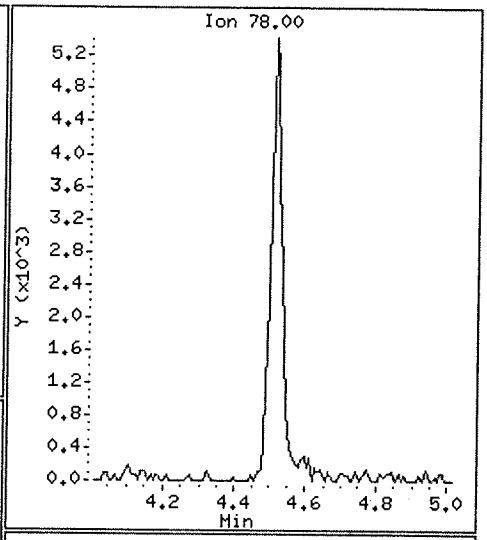
Column phase: DB624

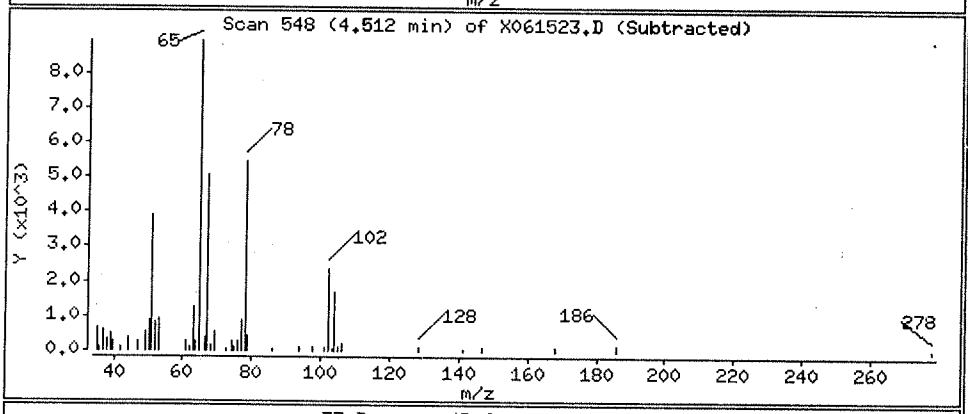
Column diameter: 0.18

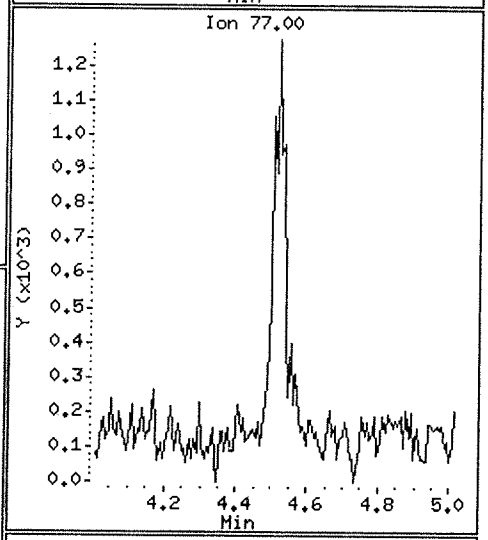
37 Benzene

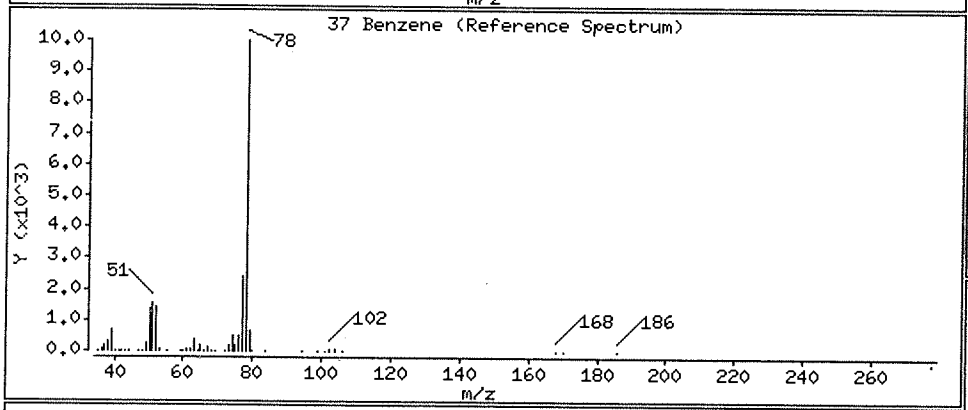
Concentration: 3.39 ug/l

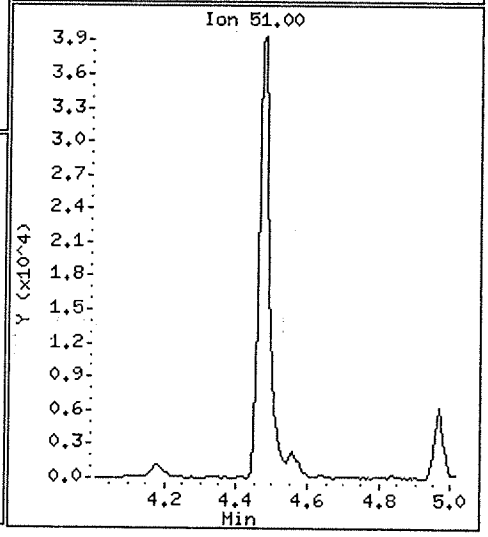


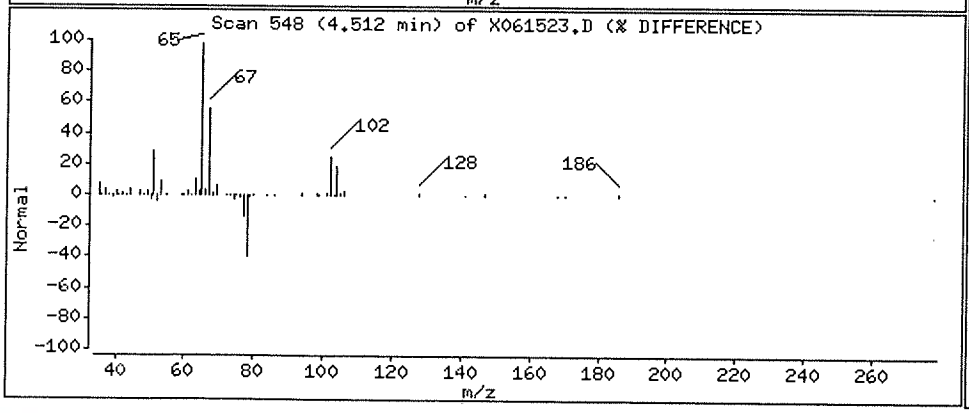












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D

Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

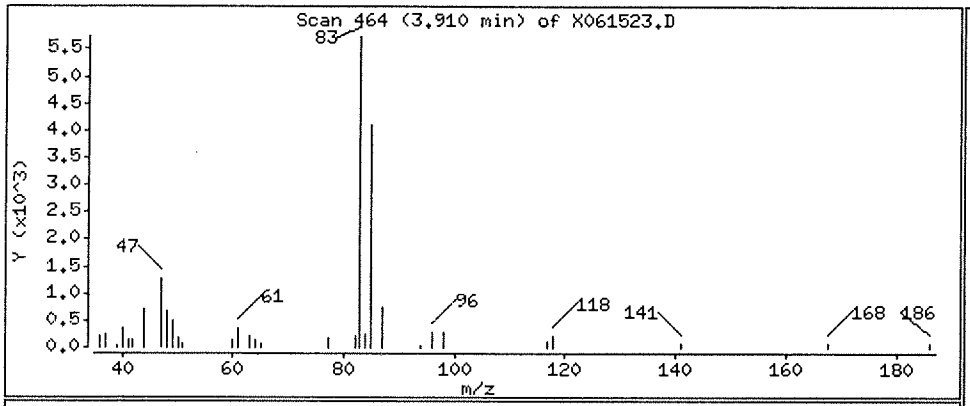
Operator: PC

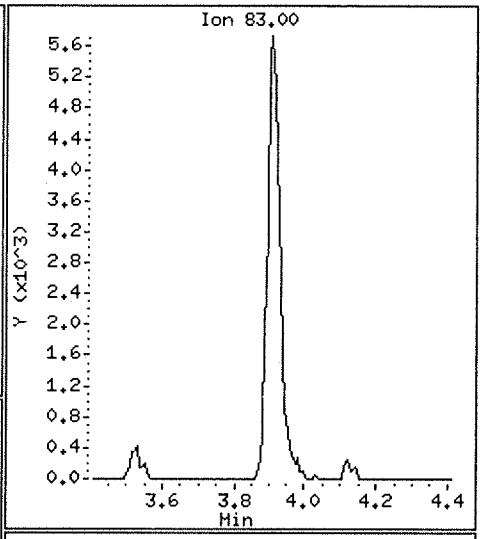
Column phase: DB624

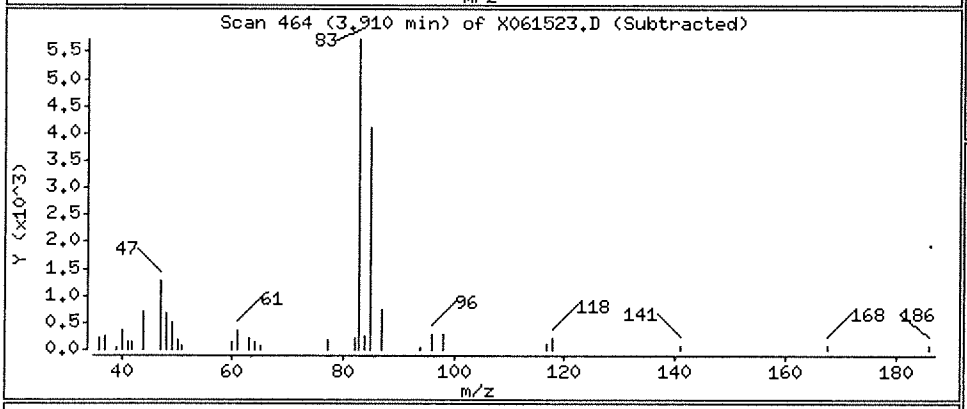
Column diameter: 0.18

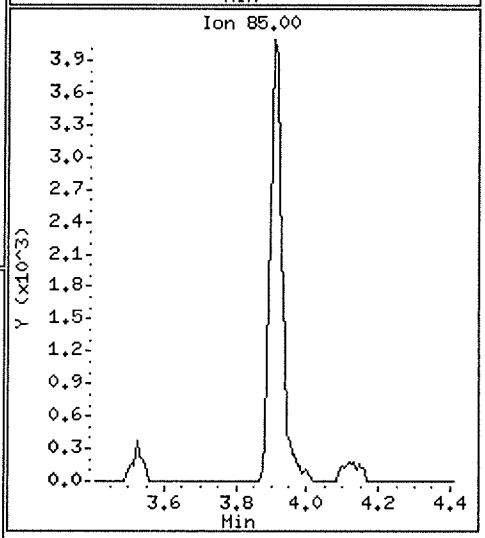
28 Chloroform

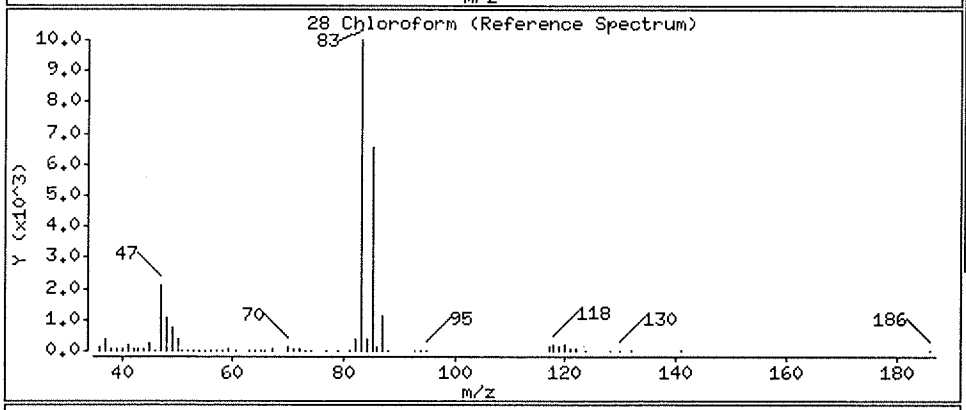
Concentration: 7.21 ug/l

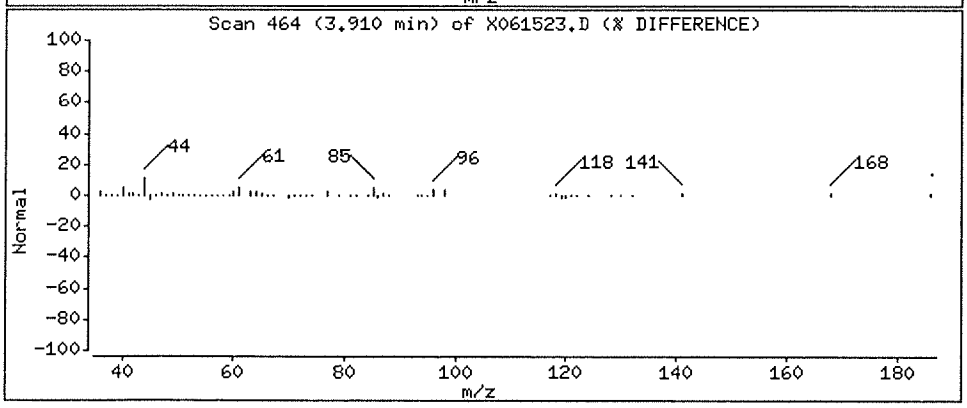












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D

Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

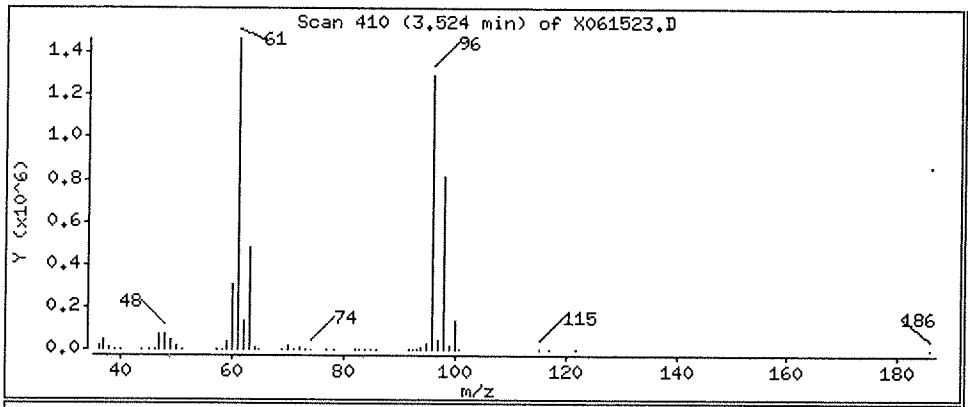
Operator: PC

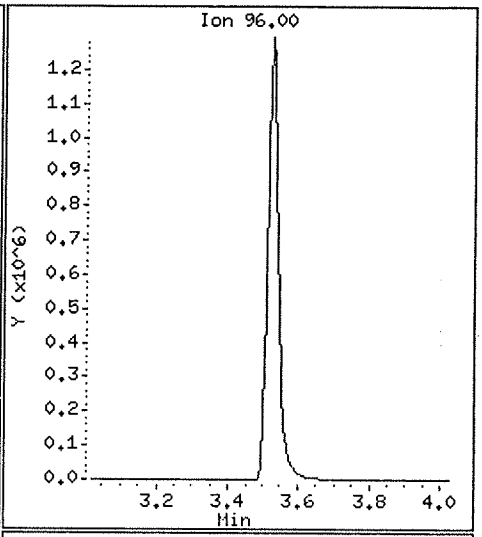
Column phase: DB624

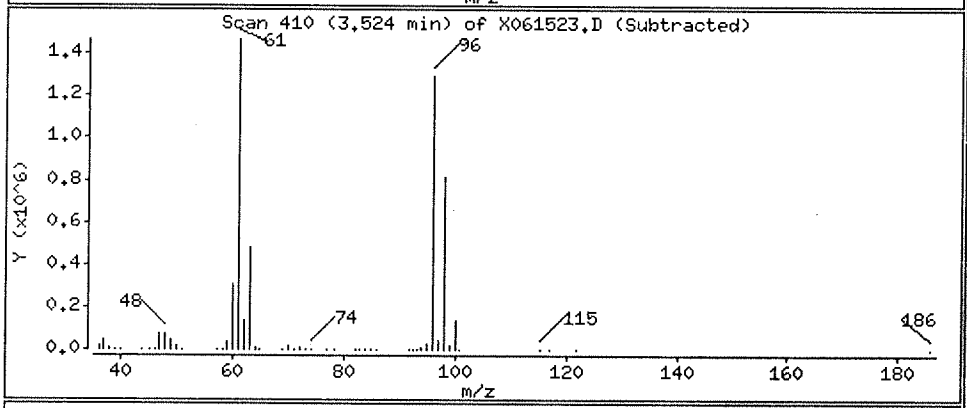
Column diameter: 0.18

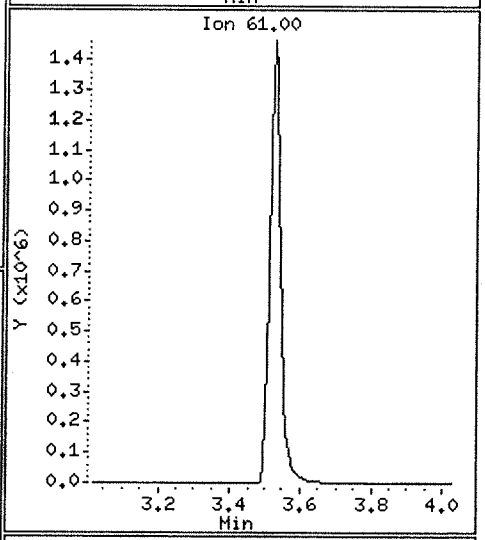
27 cis-1,2-Dichloroethene

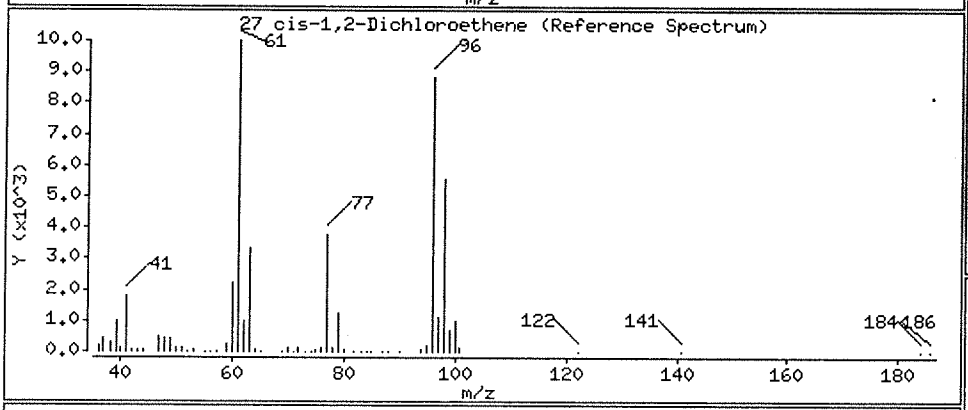
Concentration: 2290.52 ug/l

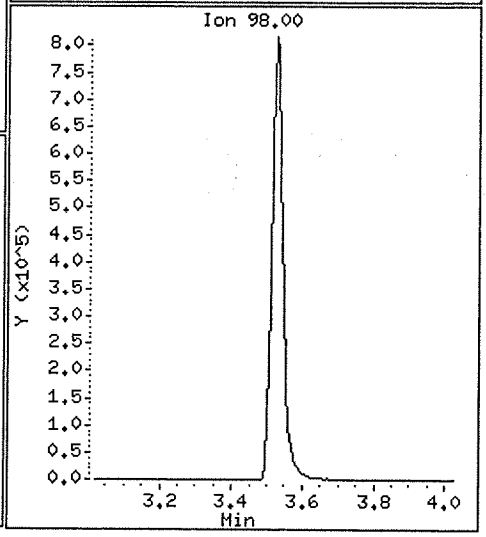


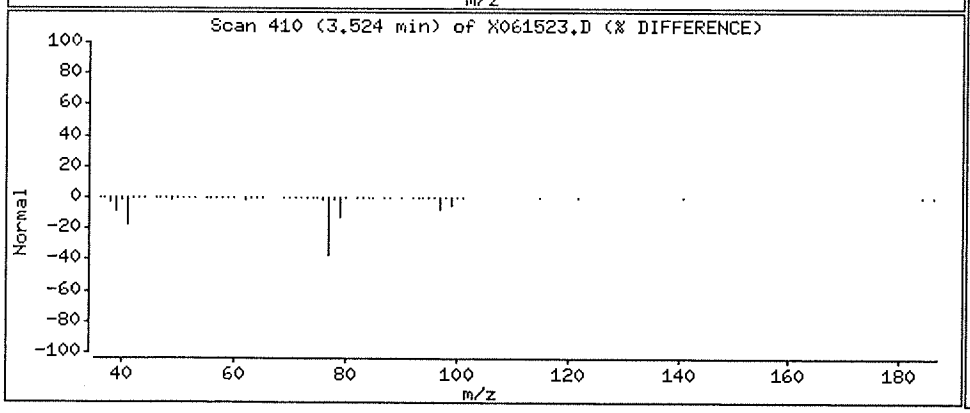












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D

Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

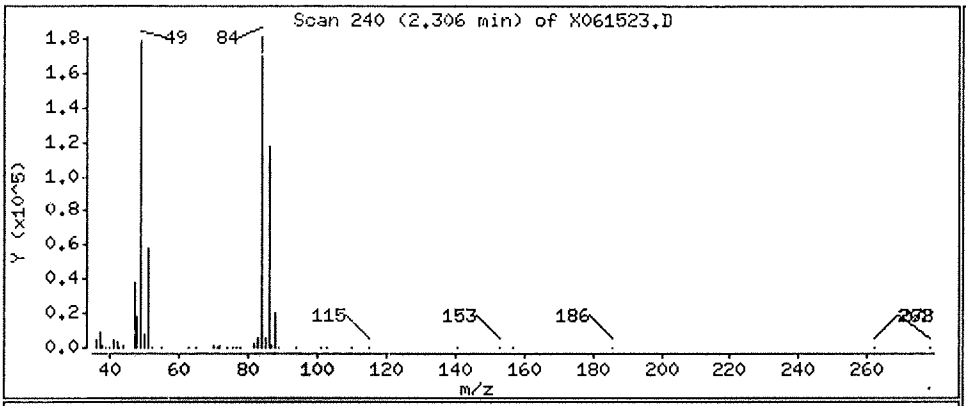
Operator: PC

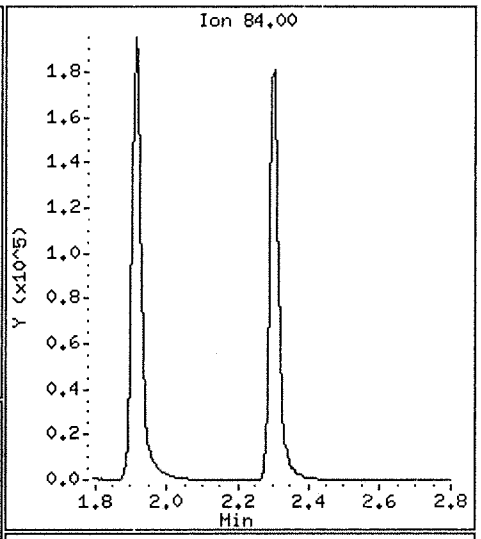
Column phase: DB624

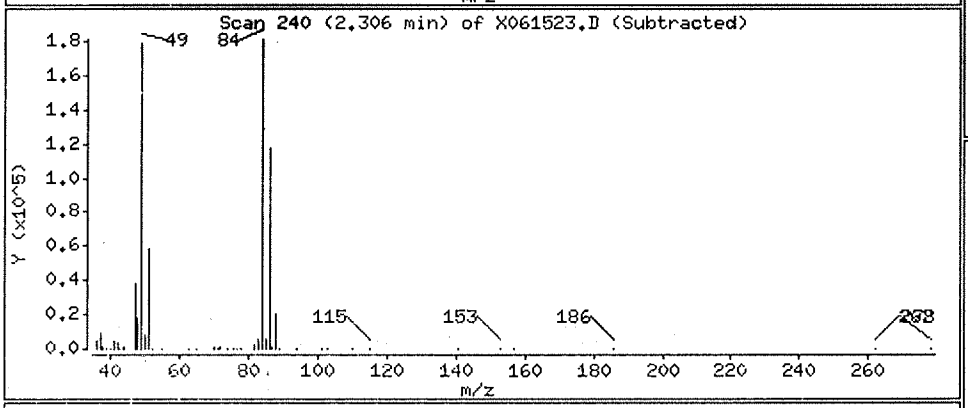
Column diameter: 0.18

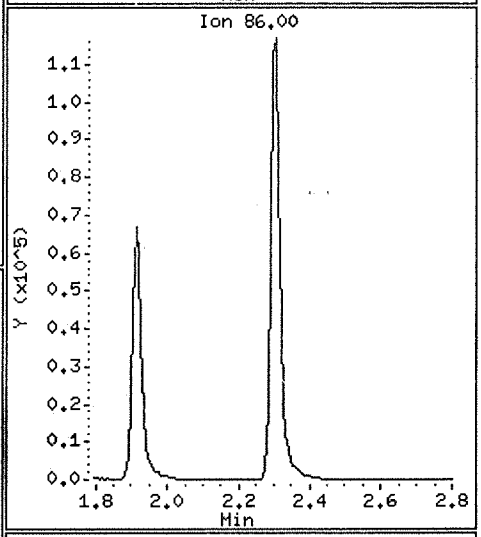
17 Methylene Chloride

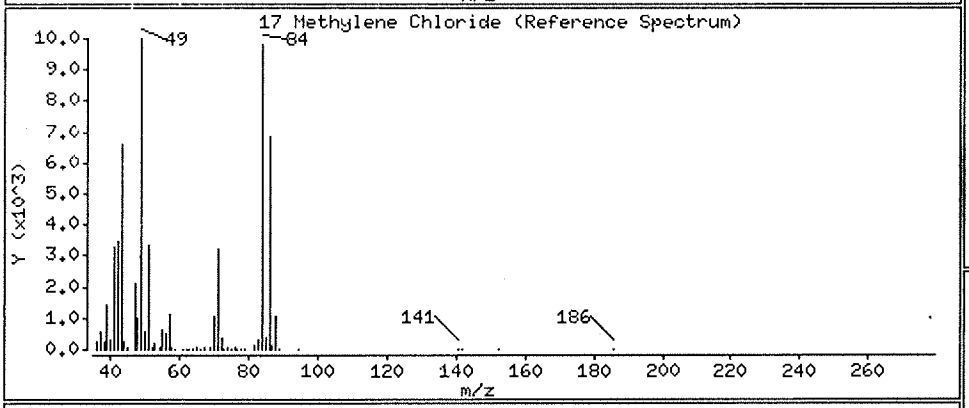
Concentration: 322.79 ug/l

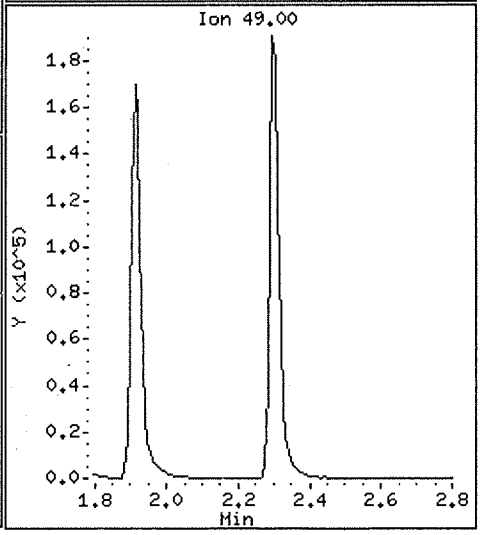


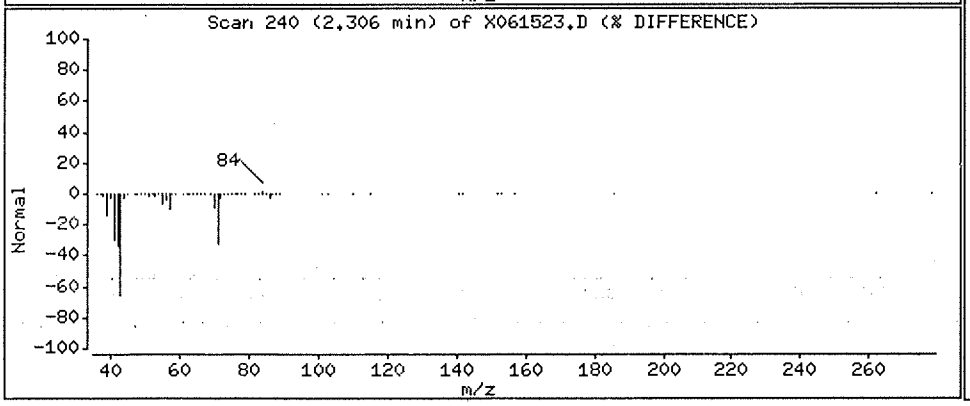












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Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

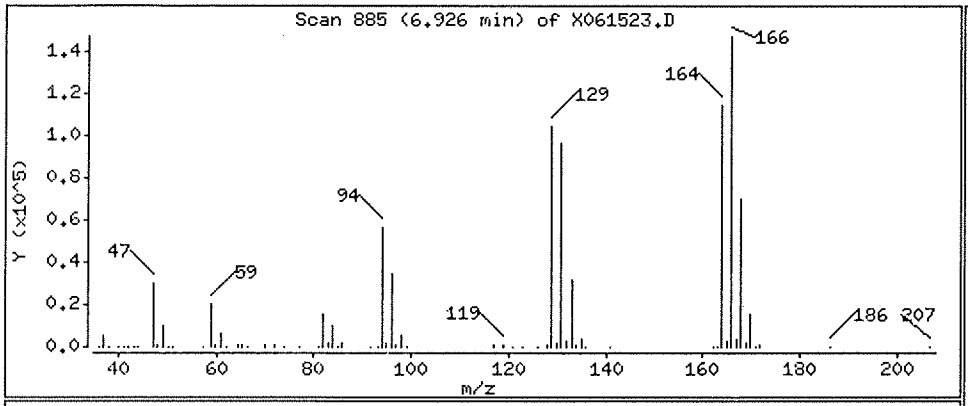
Operator: PC

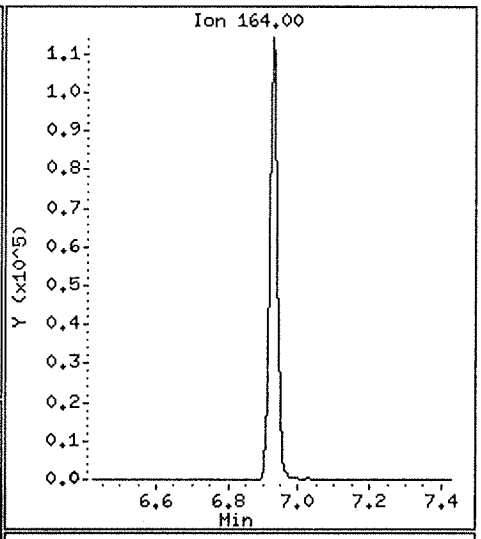
Column phase: DB624

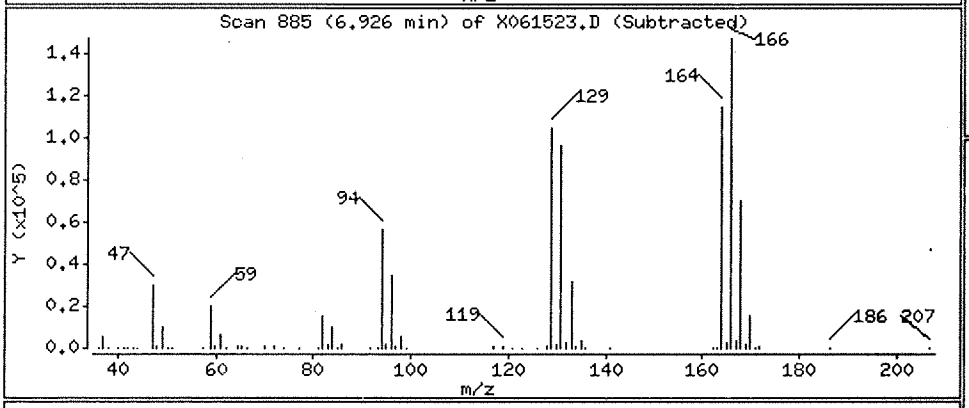
Column diameter: 0.18

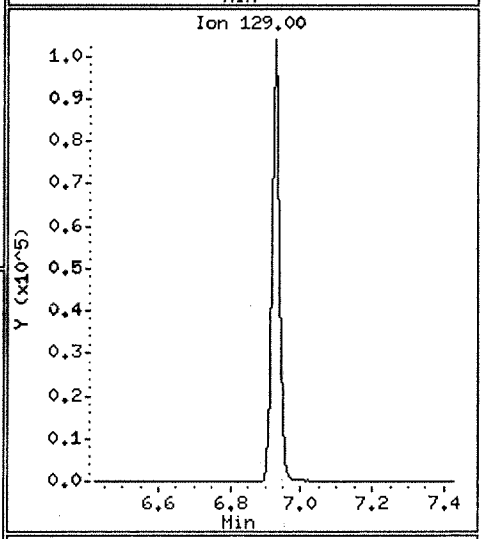
56 Tetrachloroethene

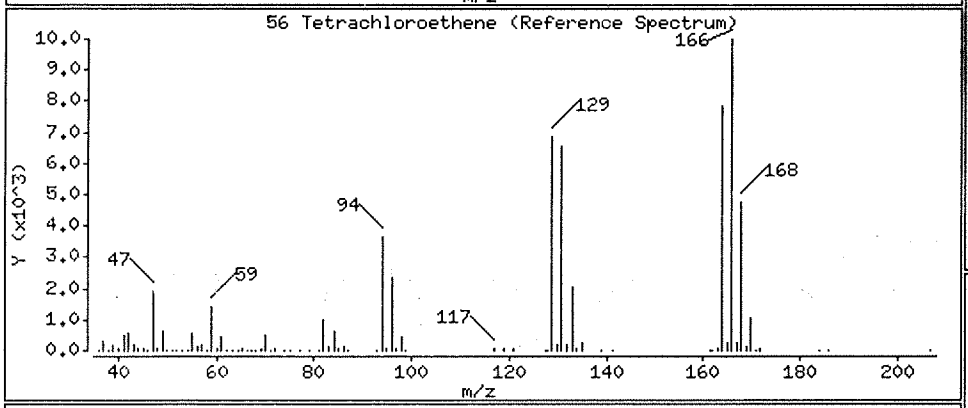
Concentration: 202.05 ug/l

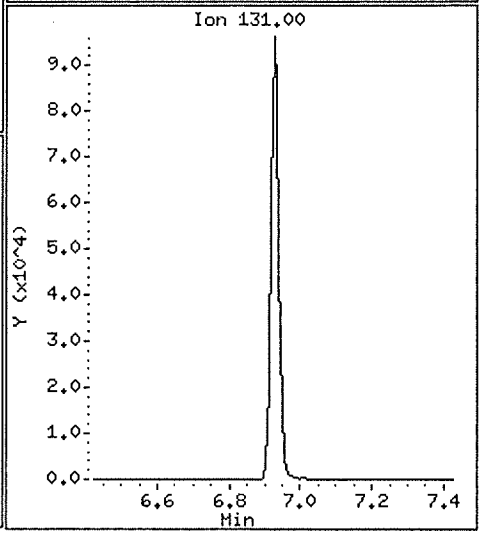


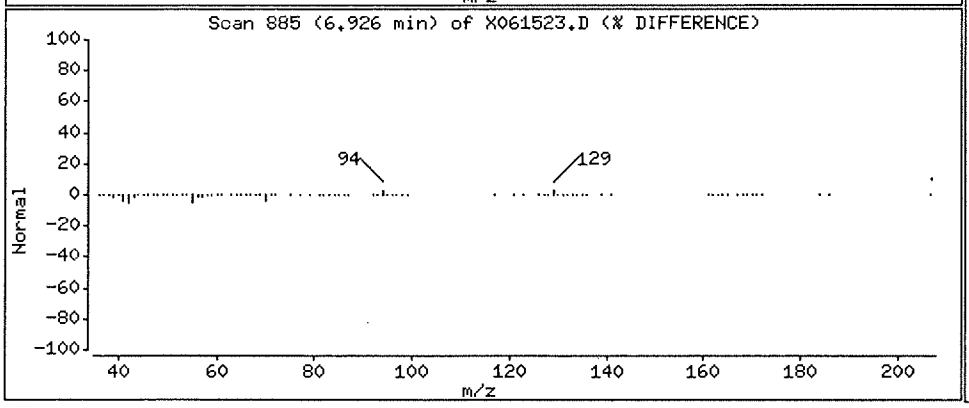












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Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

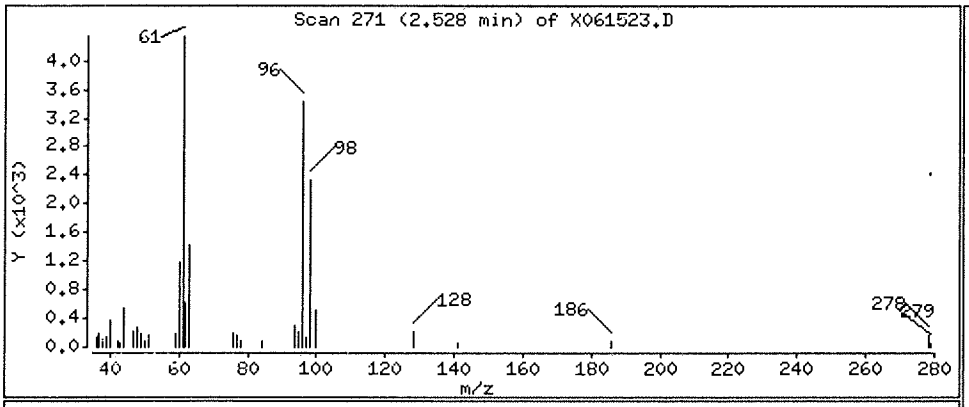
Operator: PC

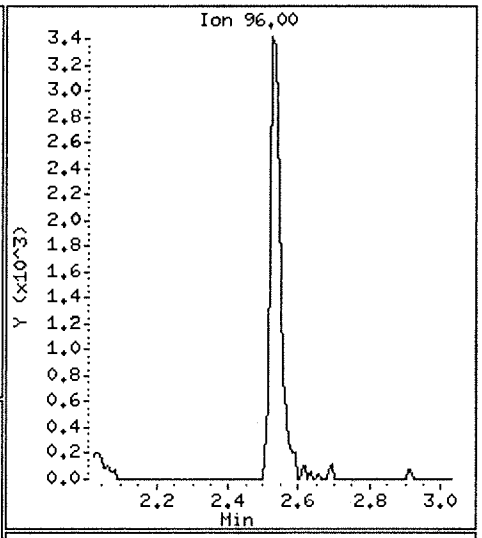
Column phase: DB624

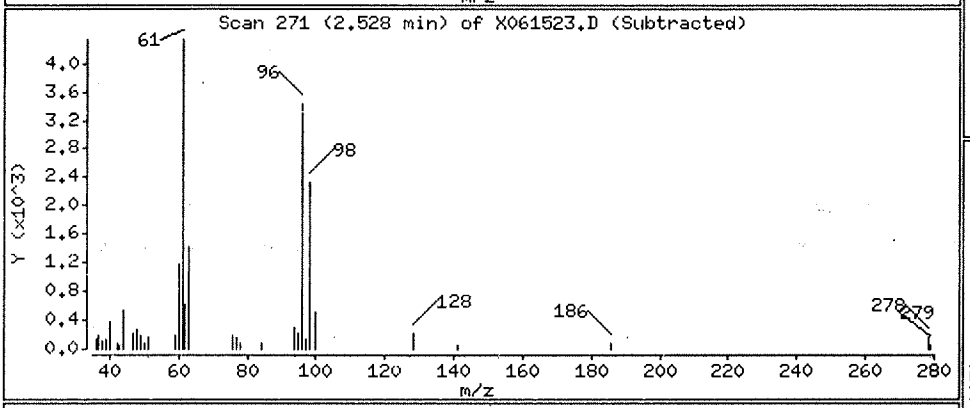
Column diameter: 0.18

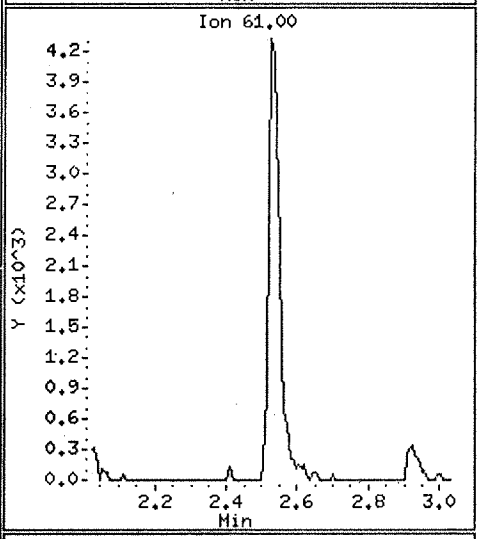
20 trans-1,2-Dichloroethene

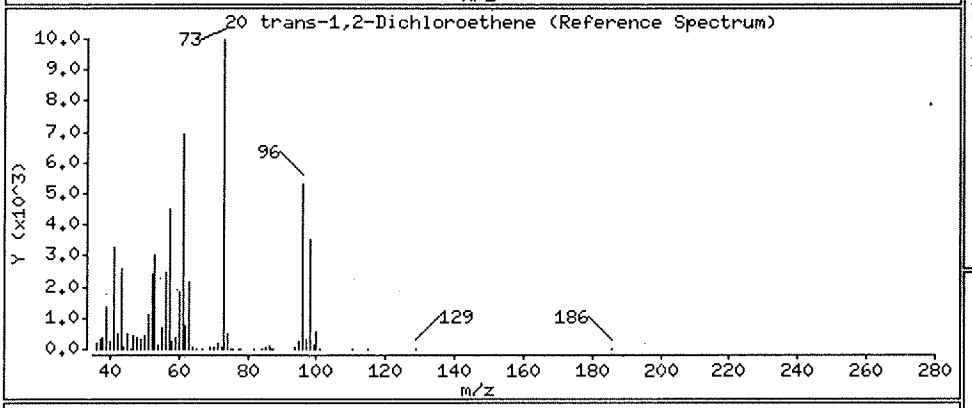
Concentration: 6.57 ug/l

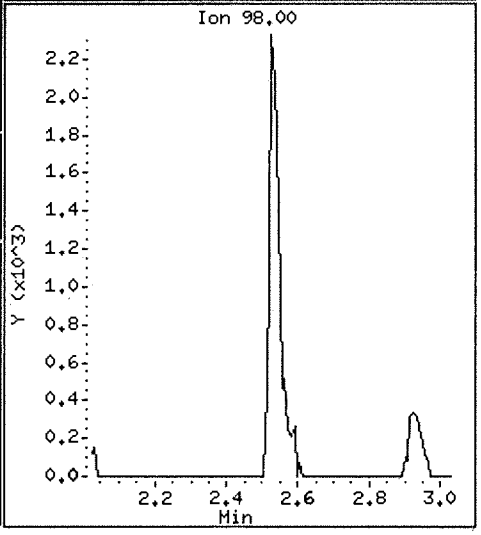


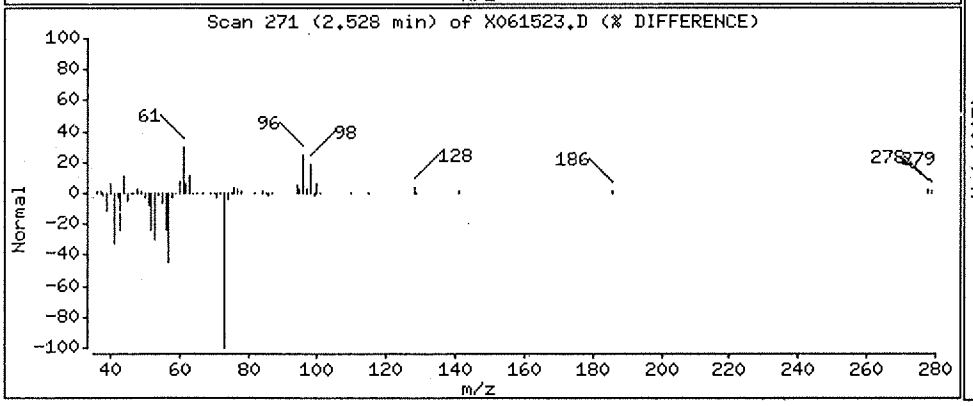












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Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

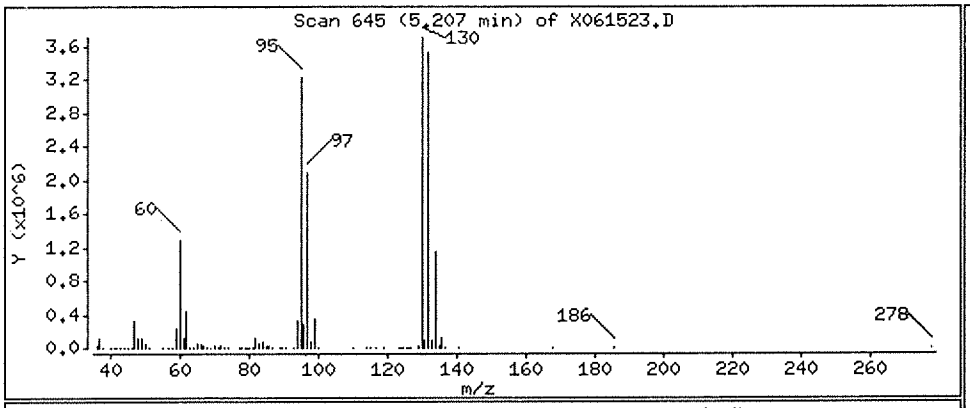
Operator: PC

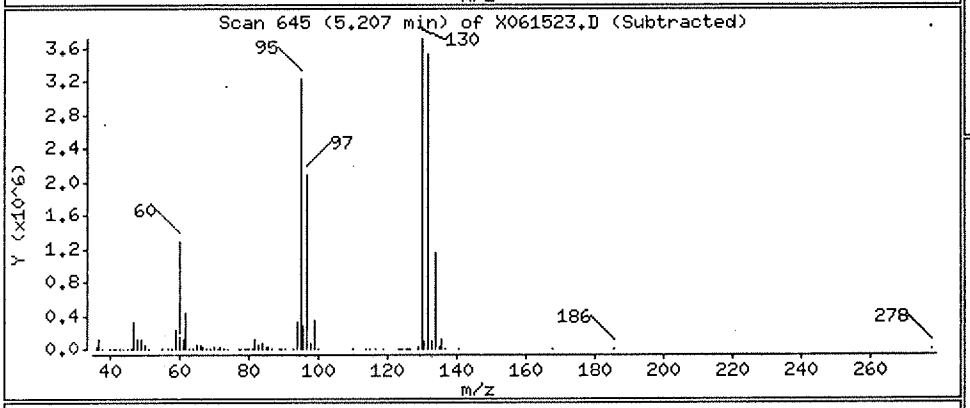
Column phase: DB624

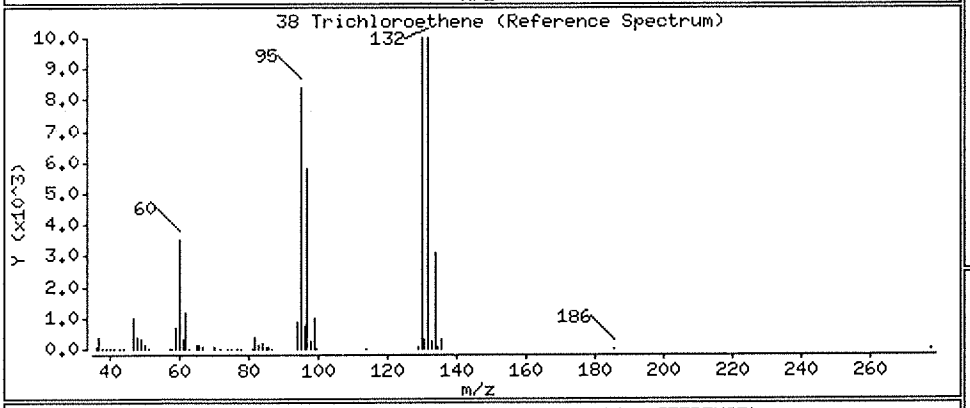
Column diameter: 0.18

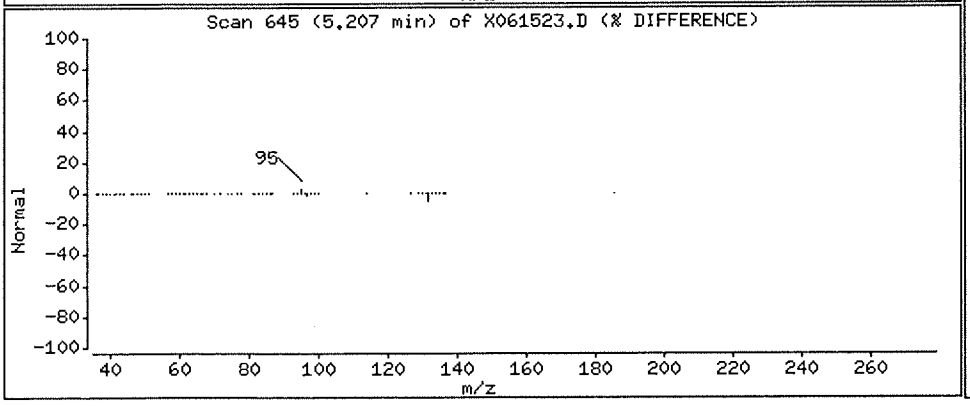
38 Trichloroethene

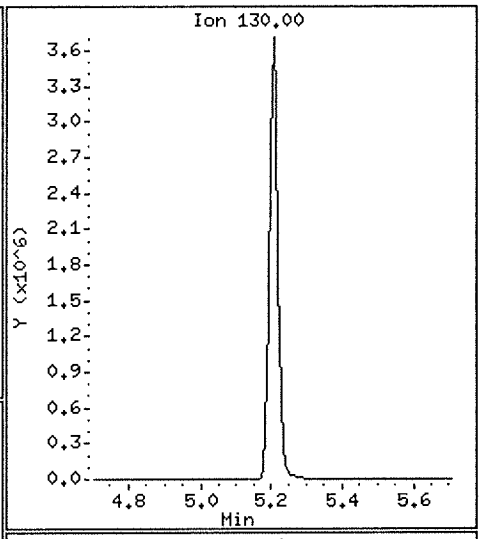
Concentration: 5828.37 ug/l

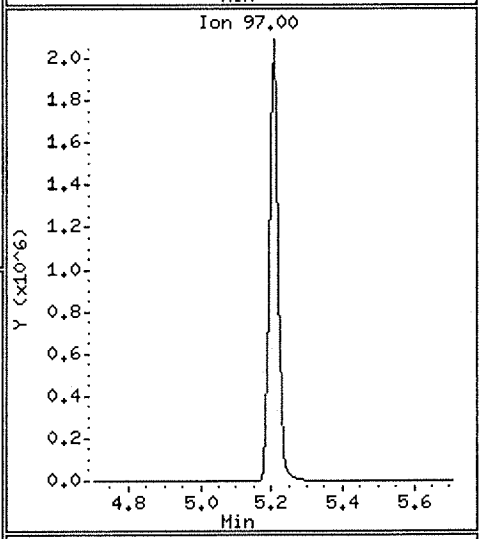


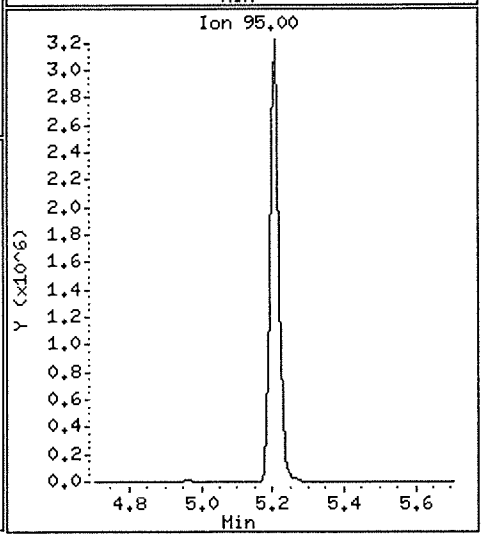












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061523.D

Date : 15-JUN-2021 18:38

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

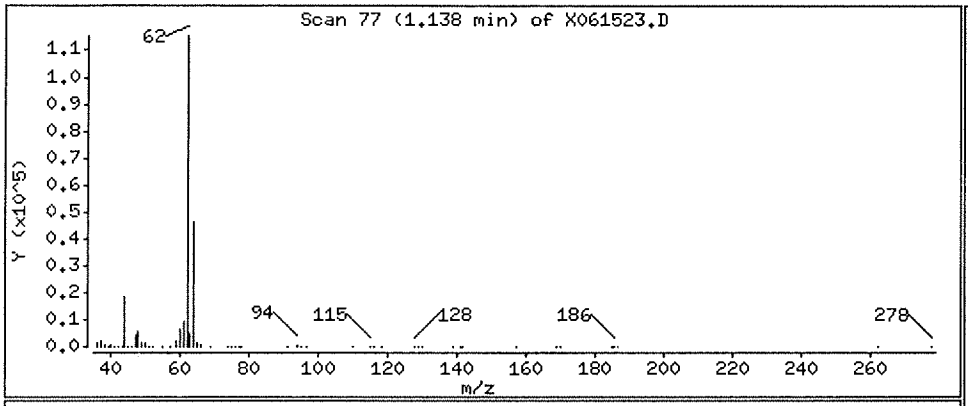
Operator: PC

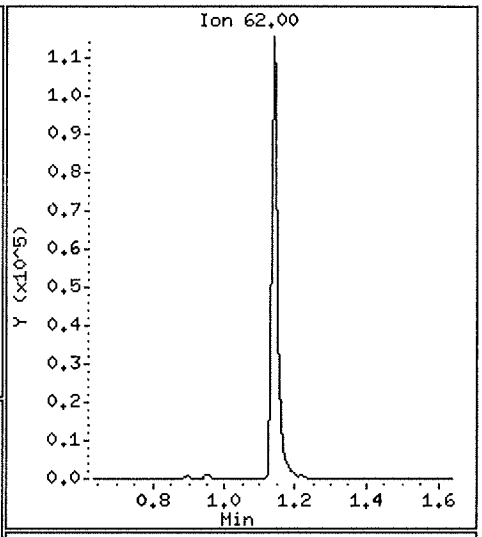
Column phase: DB624

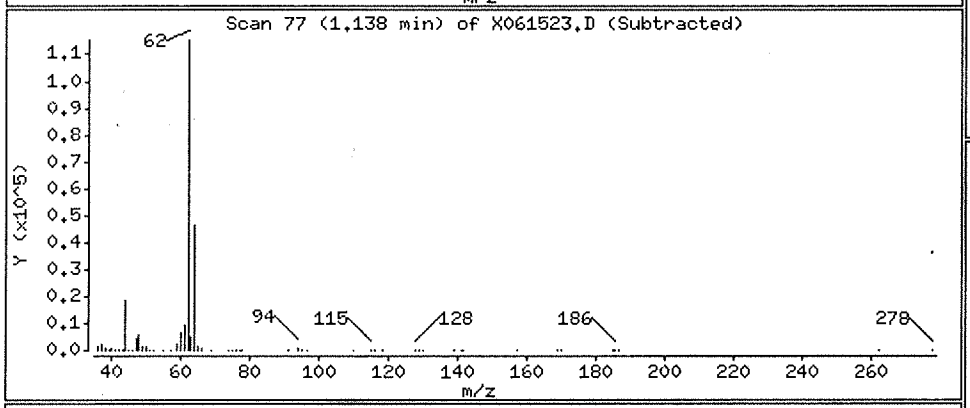
Column diameter: 0.18

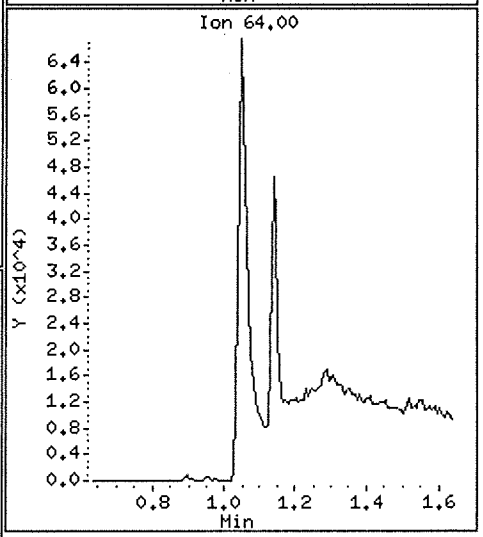
5 Vinyl Chloride

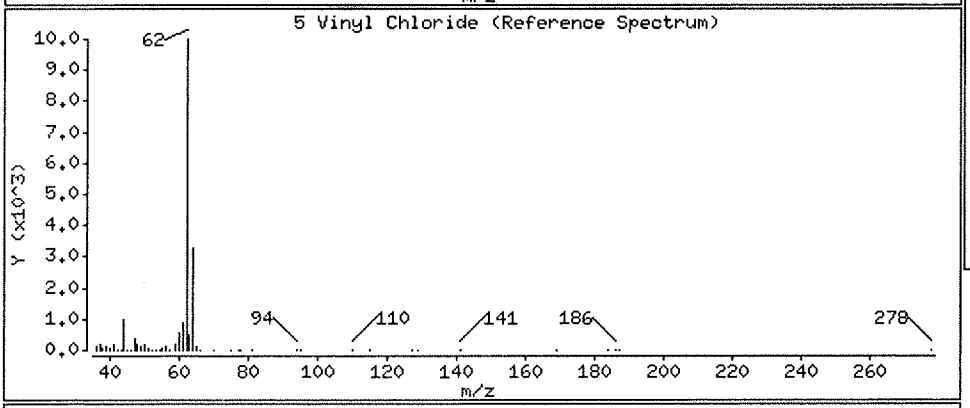
Concentration: 103.29 ug/l

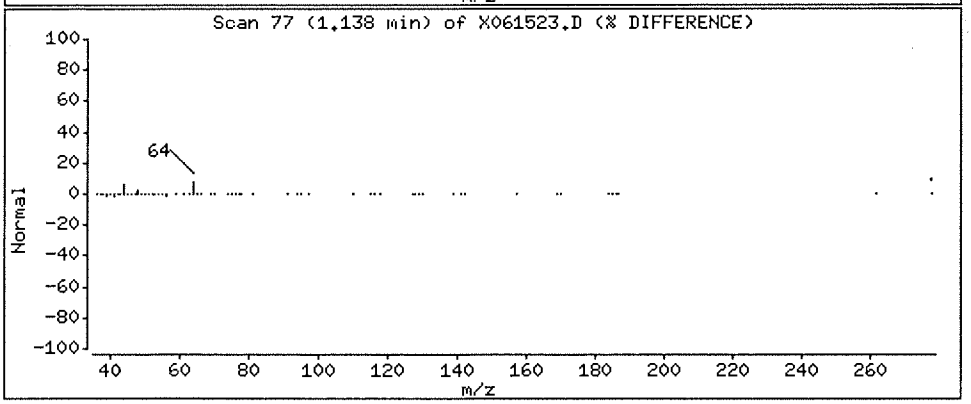












ALS Laboratory Group

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Inj Date : 15-JUN-2021 18:59
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-04;HS21060700-04;;;
Misc Info : HS18090001;WATER;0;50;
Comment :
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Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 23
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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

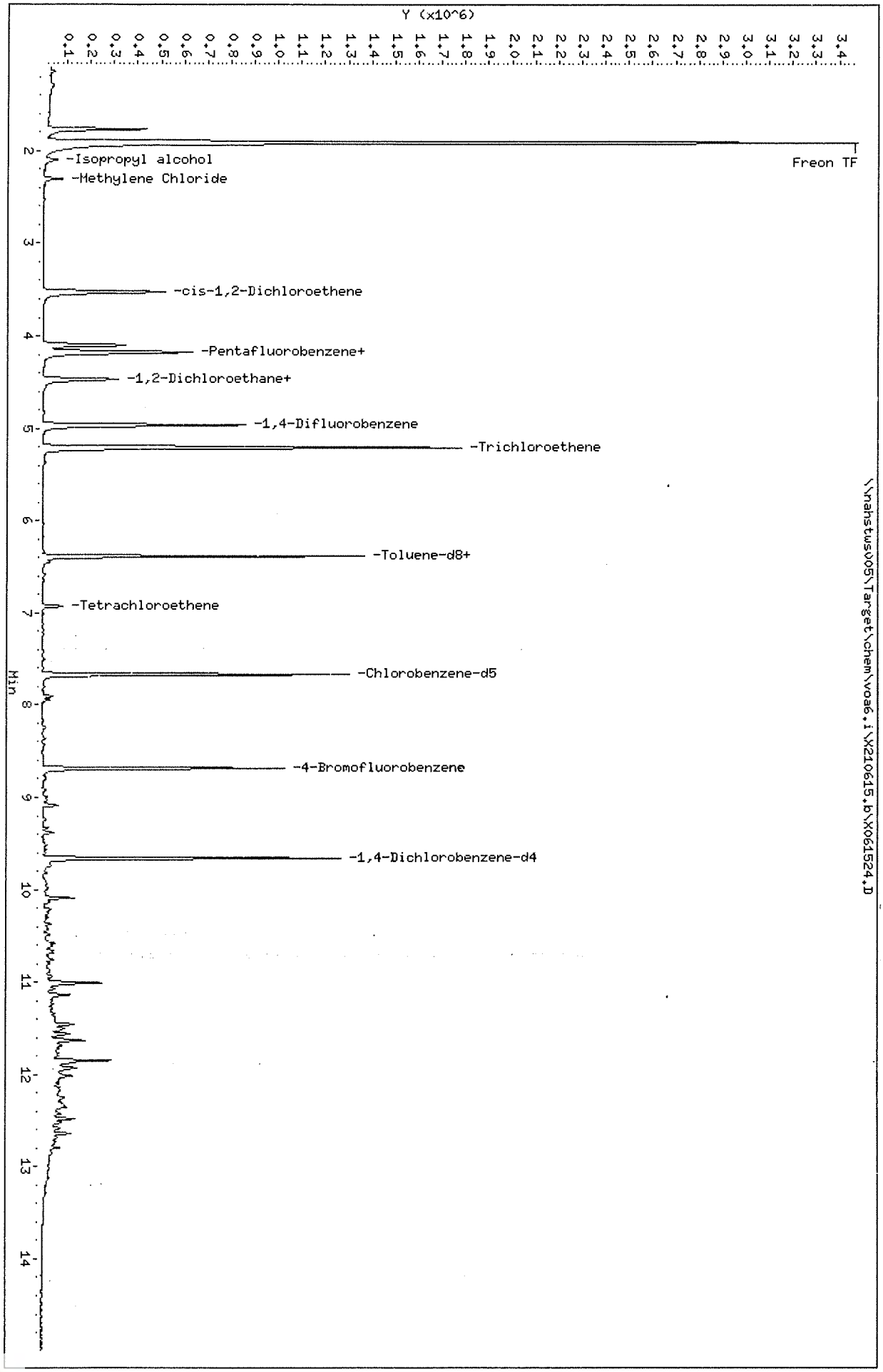
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	572001	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	770590	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	659116	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	317168	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	248175	44.0589	44.05
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	246340	45.0158	45.01
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	864260	52.6406	52.64
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	273181	47.2364	47.23
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	5758	0.93780	46.89(a)
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	289051	48.2126	2410.62
17 Methylene Chloride	84	2.305	2.298	(0.551)	39494	6.48753	324.37
56 Tetrachloroethene	164	6.925	6.926	(0.903)	19938	4.91379	245.68(a)
50 Toluene	91	6.446	6.446	(0.840)	18355	0.95389	47.69(a)
38 Trichloroethene	130	5.206	5.207	(1.049)	628468	118.828	5941.42
5 Vinyl Chloride	62	1.138	1.138	(0.272)	15606	2.30488	115.24(a)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061524.D
Date : 15-JUN-2021 18:59
Client ID: HS21060700-04
Sample Info: HS21060700-04;HS21060700-04;;;
Purge Volume: 5.0
Column phase: DB624

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



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Date : 15-JUN-2021 18:59

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

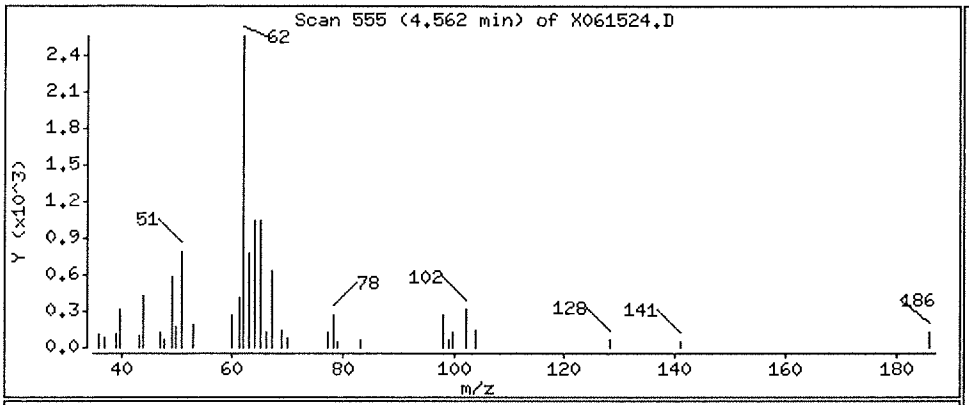
Operator: PC

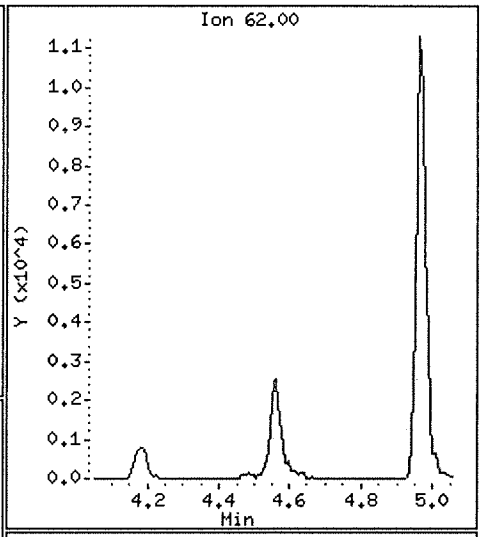
Column phase: DB624

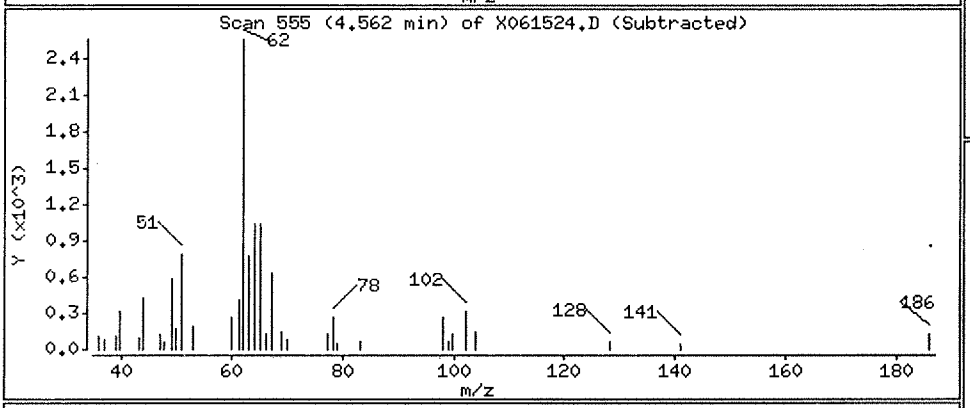
Column diameter: 0.18

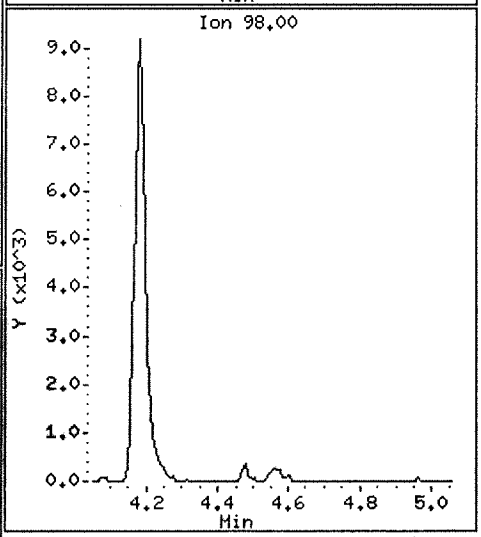
33 1,2-Dichloroethane

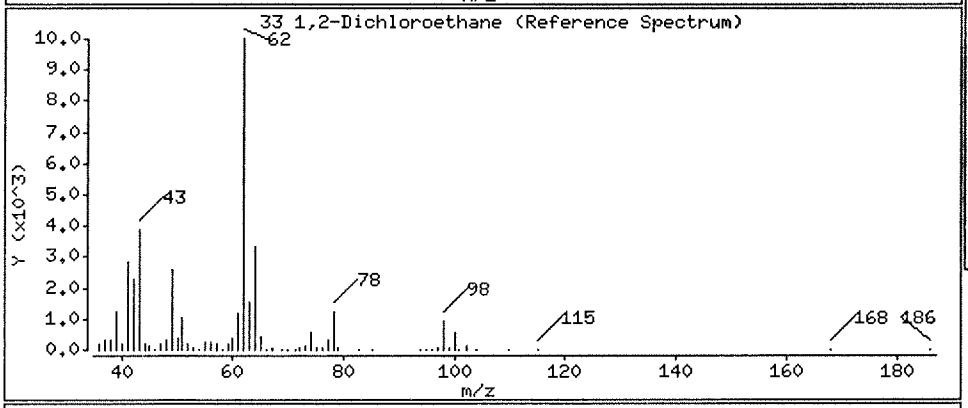
Concentration: 46.89 ug/l

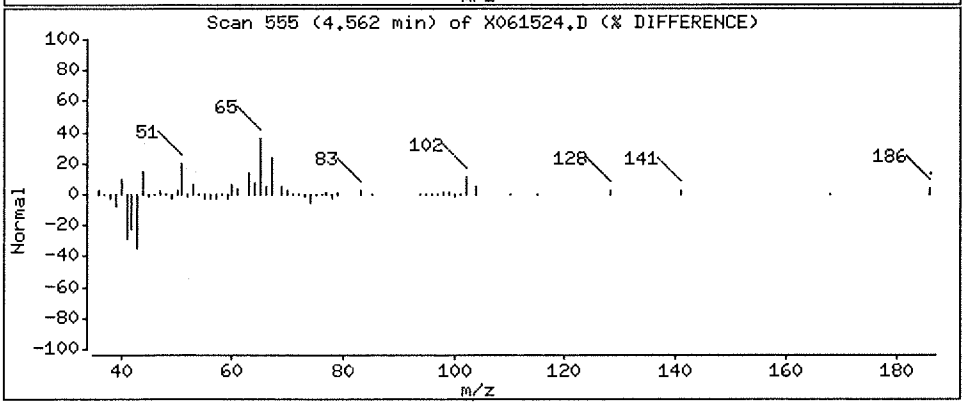












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Date : 15-JUN-2021 18:59

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

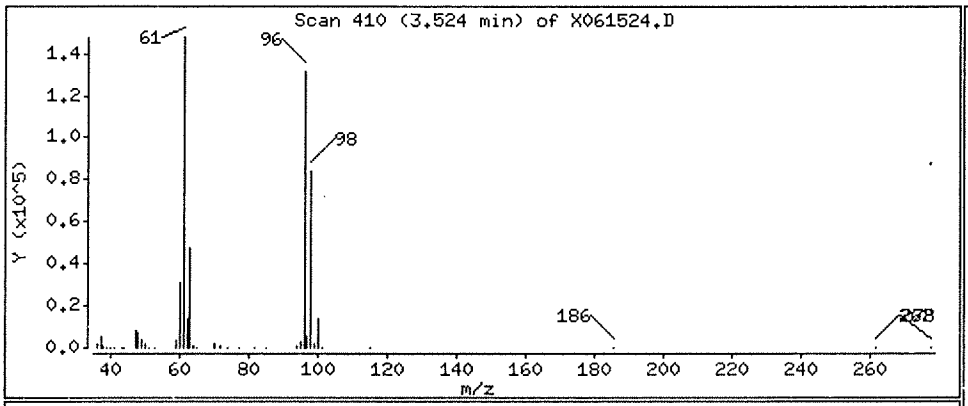
Operator: PC

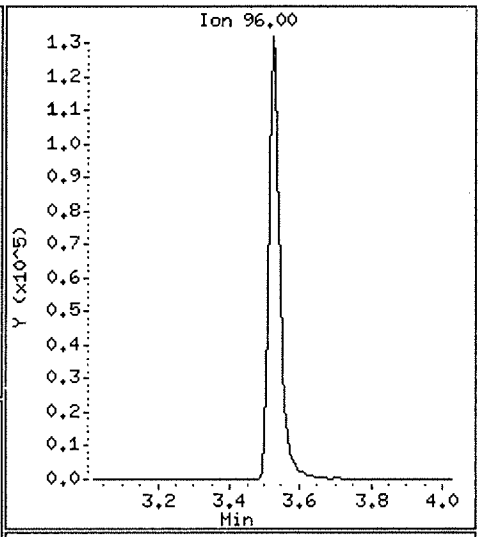
Column phase: DB624

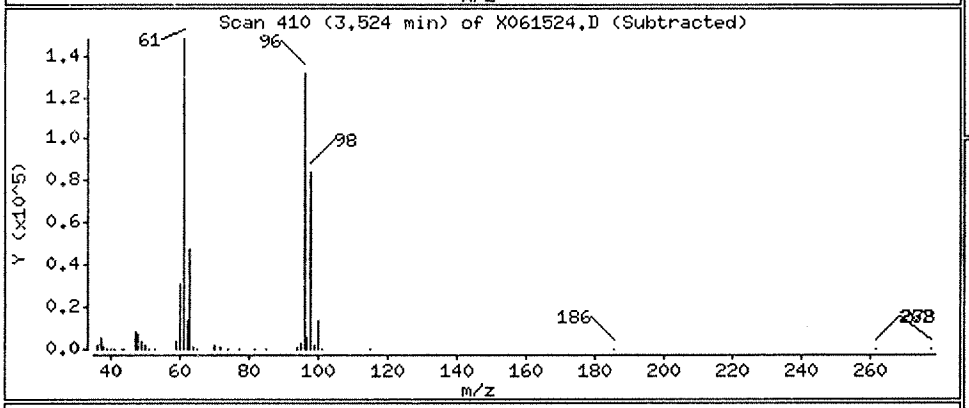
Column diameter: 0.18

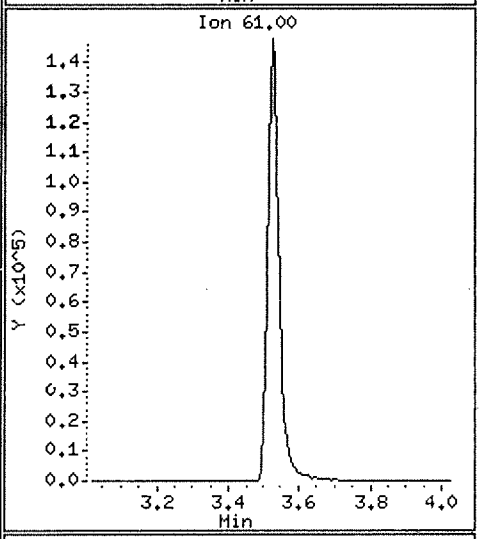
27 cis-1,2-Dichloroethene

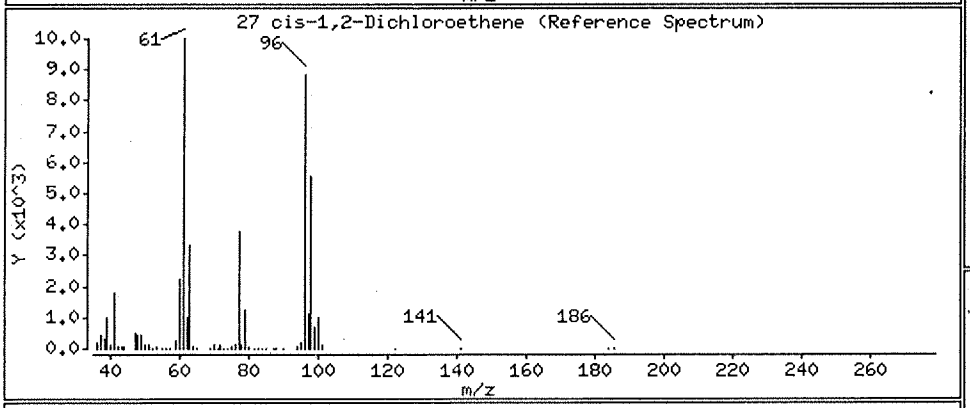
Concentration: 2410.62 ug/l

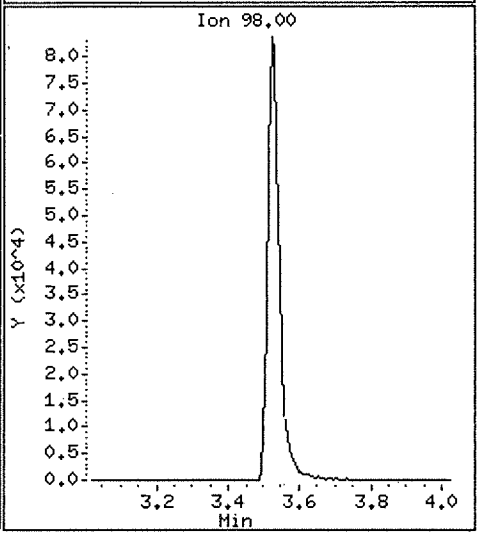


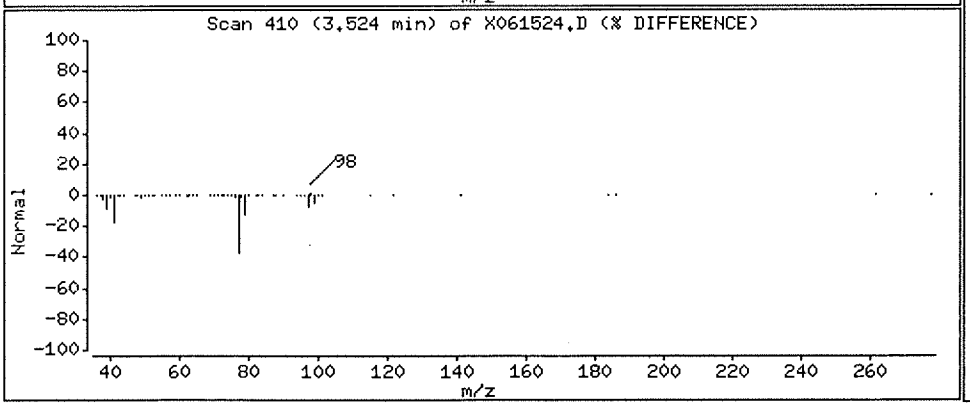












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061524.D

Date : 15-JUN-2021 18:59

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

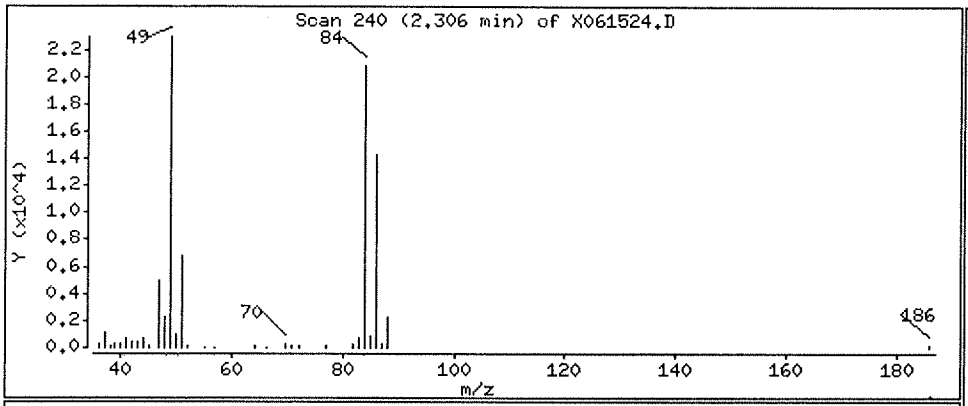
Operator: PC

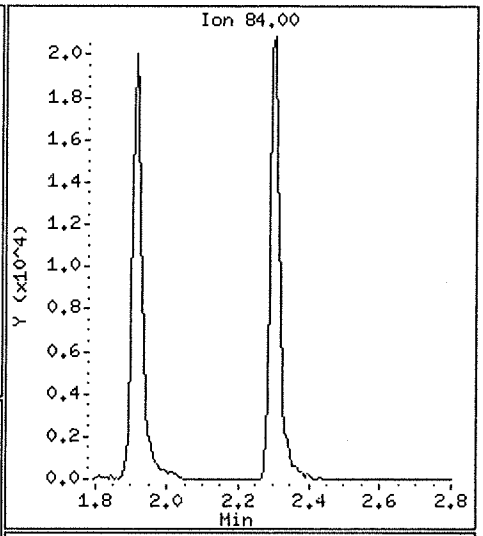
Column phase: DB624

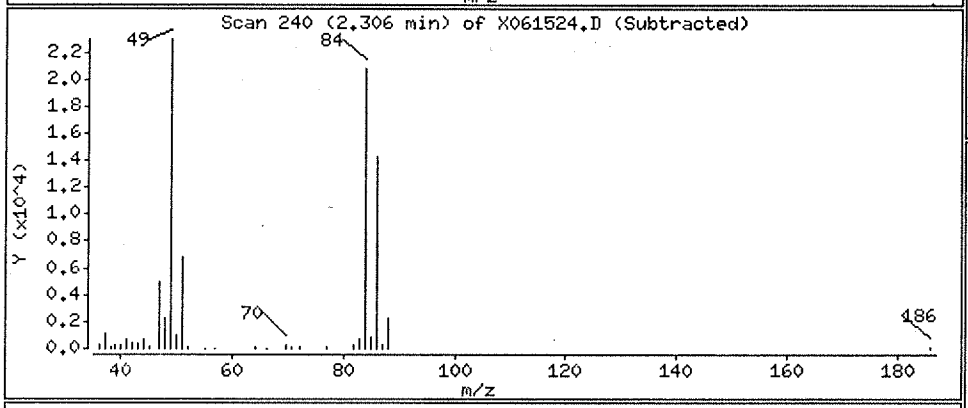
Column diameter: 0.18

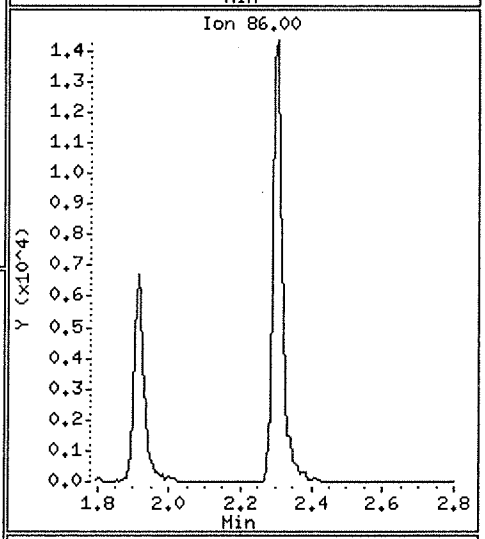
17 Methylene Chloride

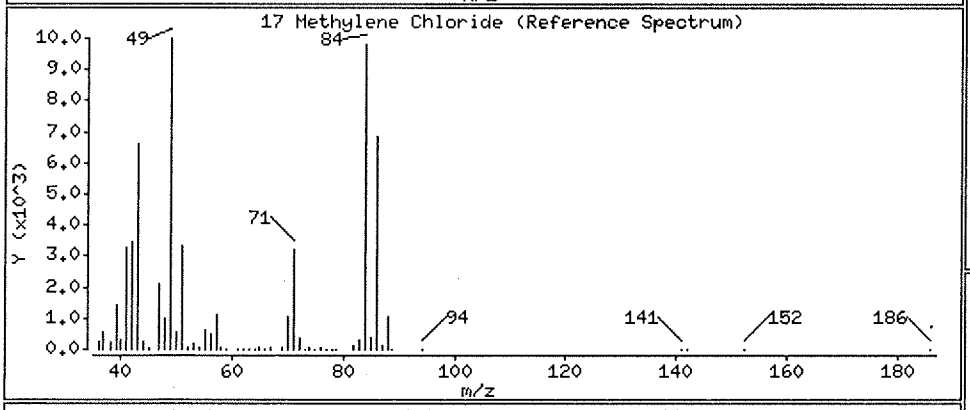
Concentration: 324.37 ug/l

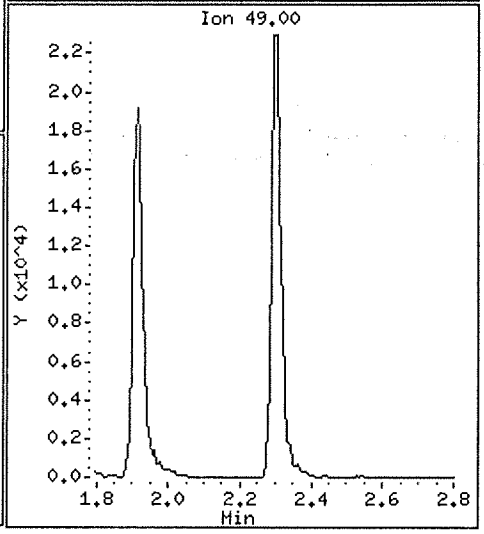


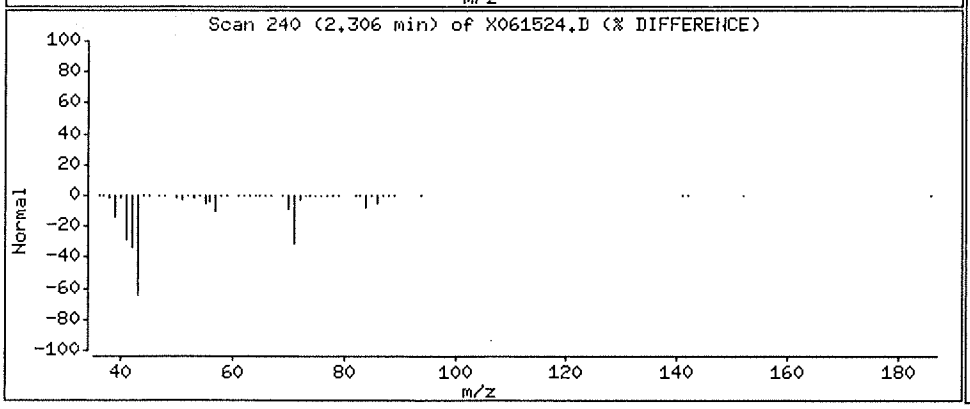












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061524.D

Date : 15-JUN-2021 18:59

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

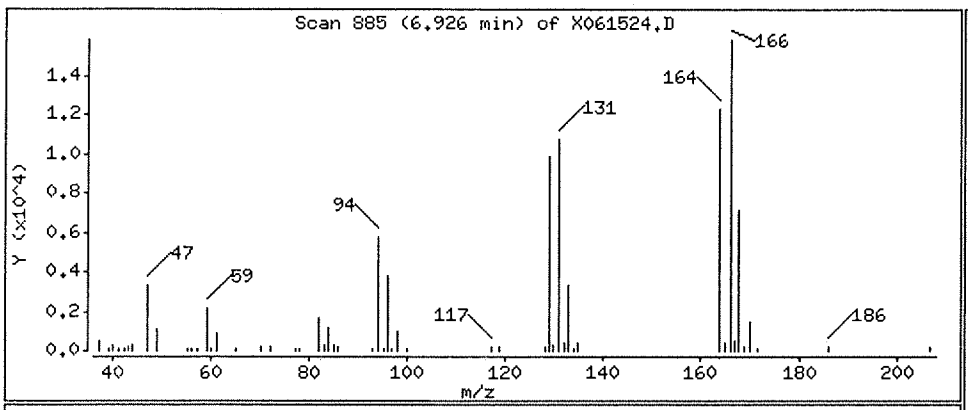
Operator: PC

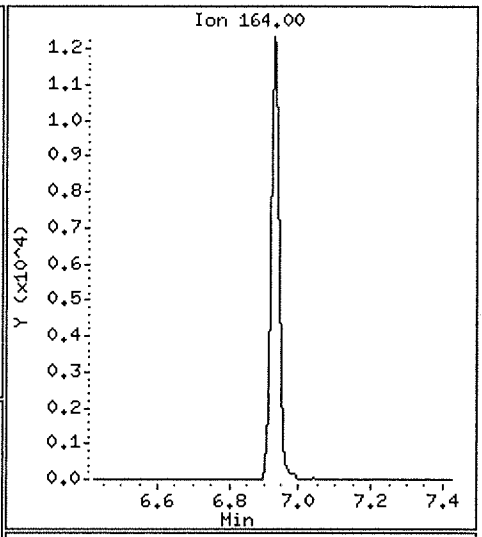
Column phase: DB624

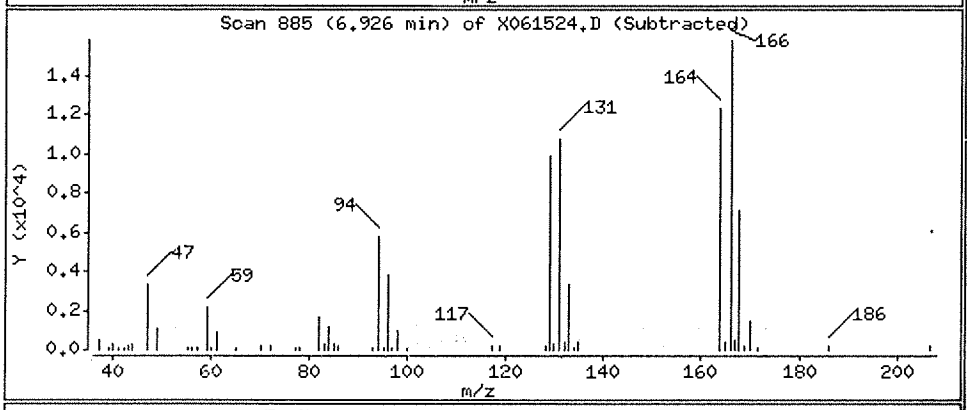
Column diameter: 0.18

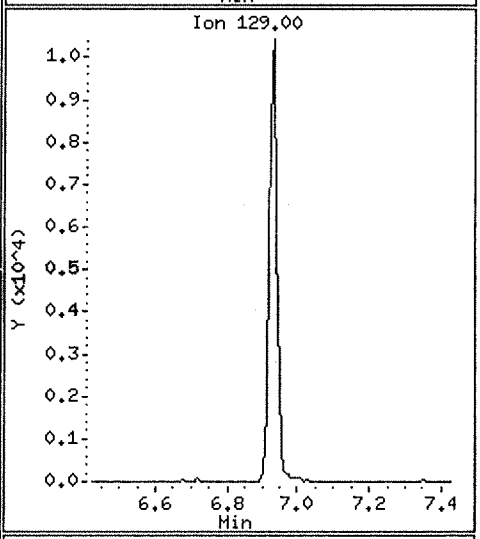
56 Tetrachloroethene

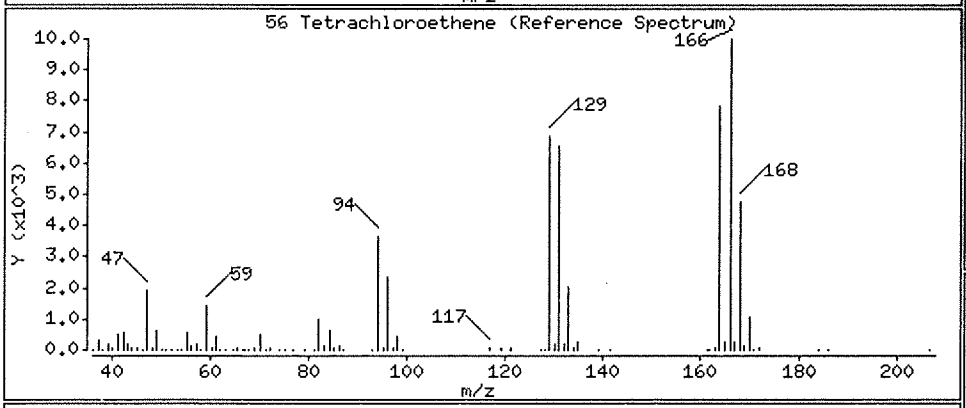
Concentration: 245.68 ug/l

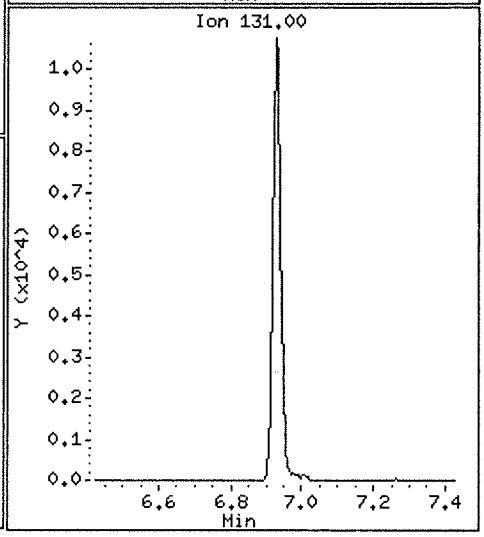


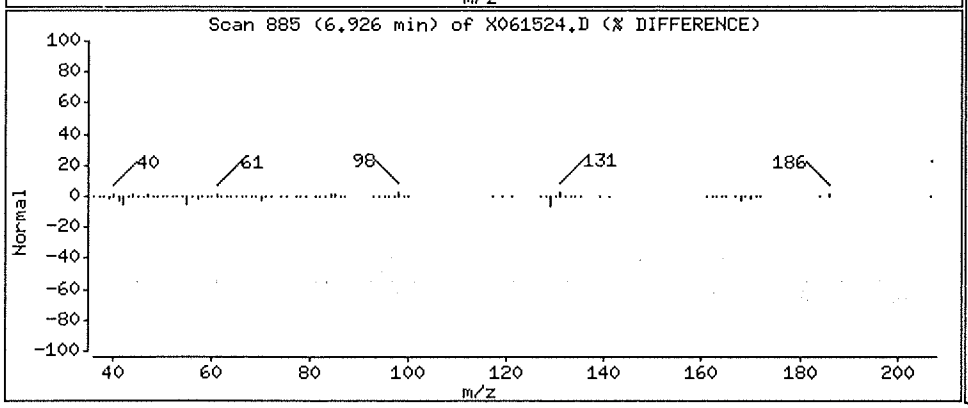












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061524.D

Date : 15-JUN-2021 18:59

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

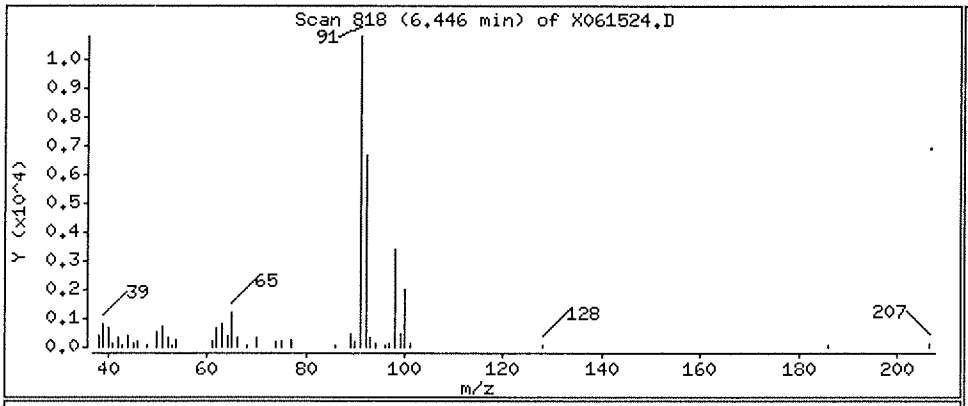
Operator: PC

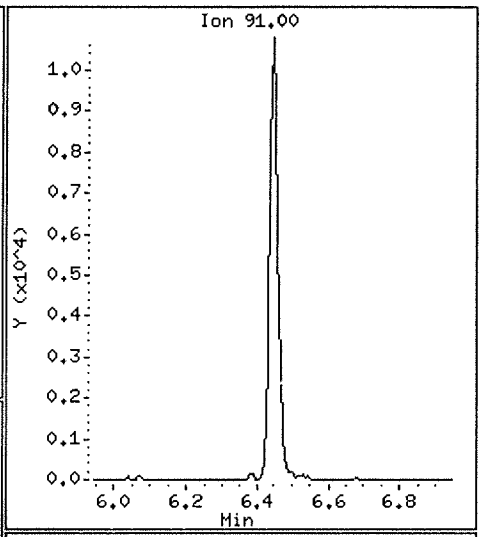
Column phase: DB624

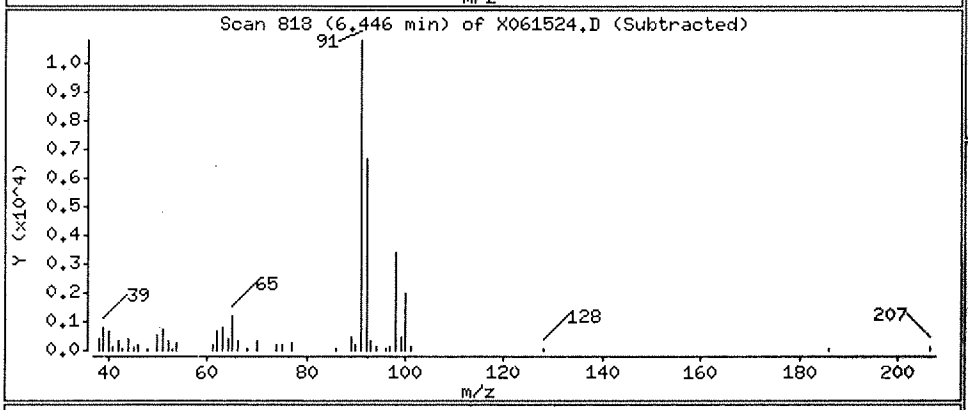
Column diameter: 0.18

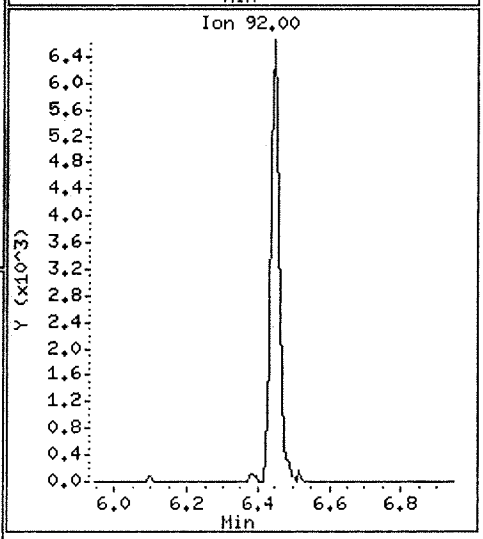
50 Toluene

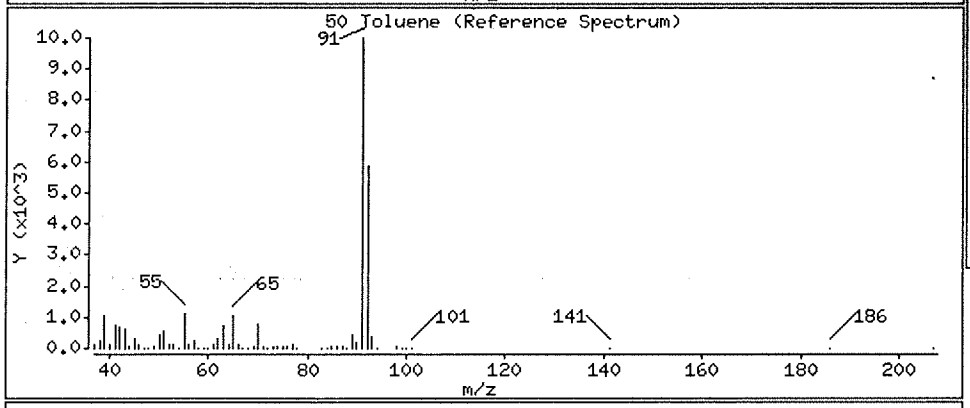
Concentration: 47.69 ug/l

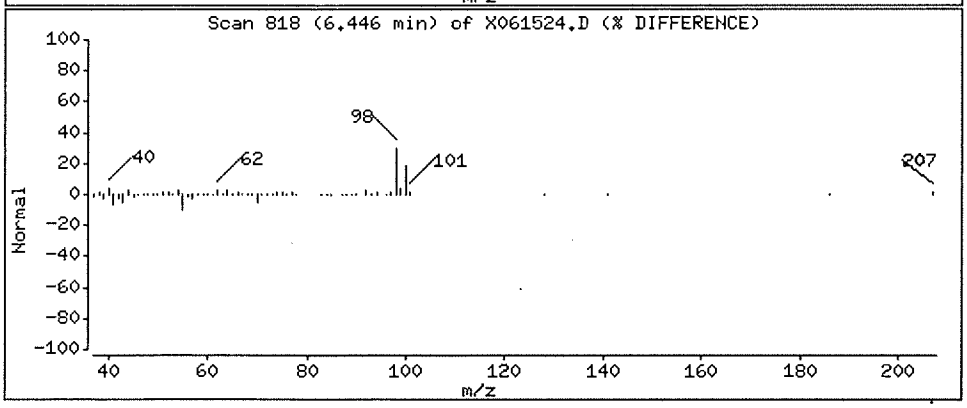












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Date : 15-JUN-2021 18:59

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

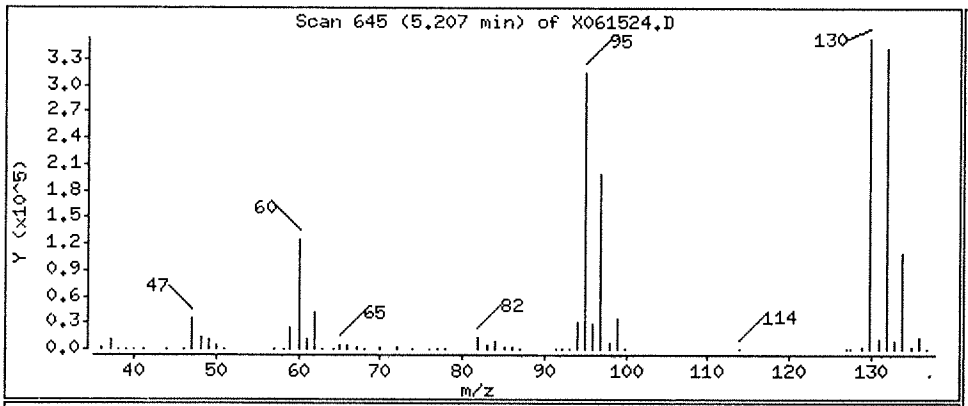
Operator: PC

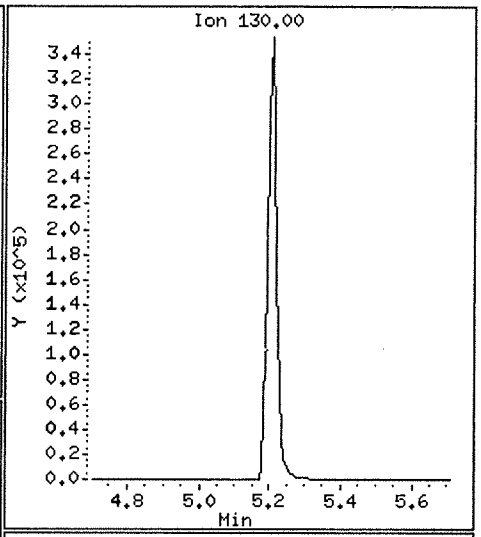
Column phase: DB624

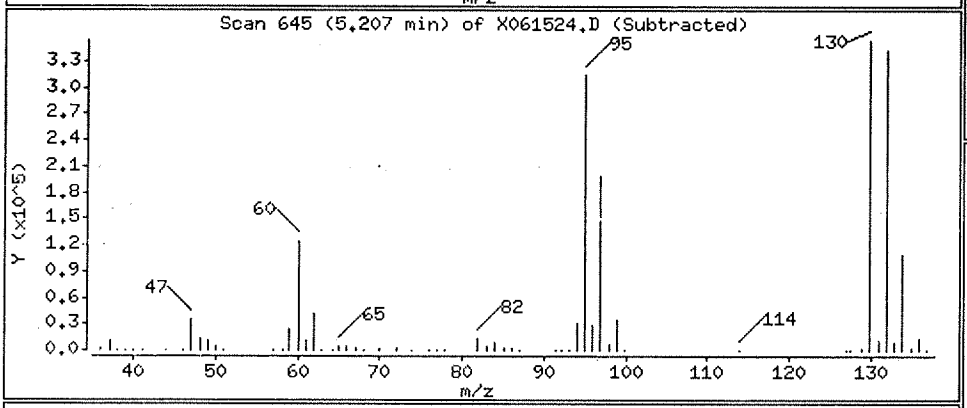
Column diameter: 0.18

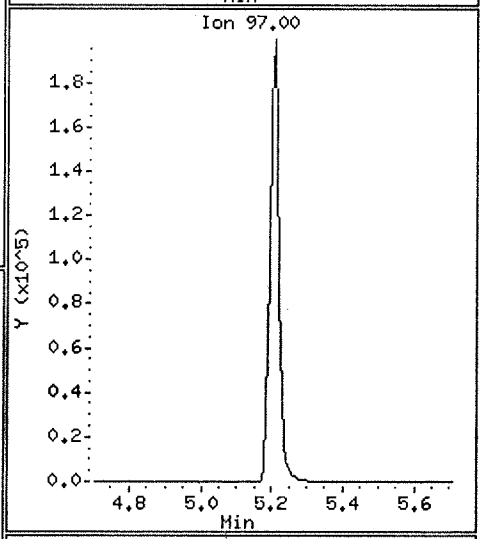
38 Trichloroethene

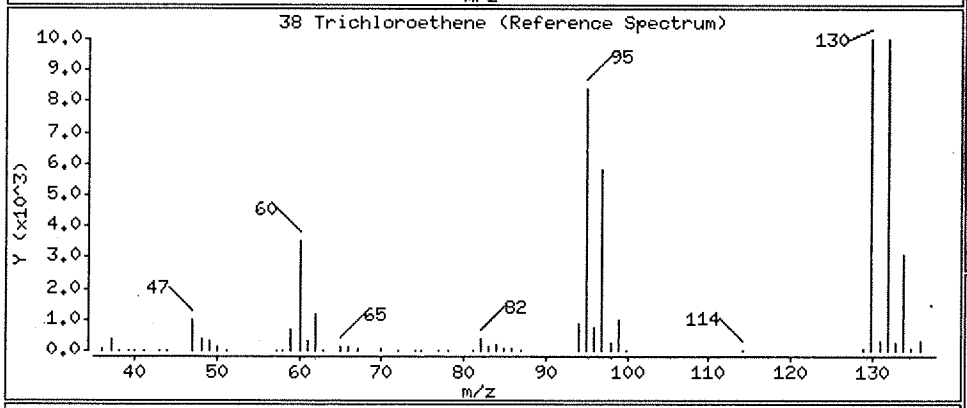
Concentration: 5941.42 ug/l

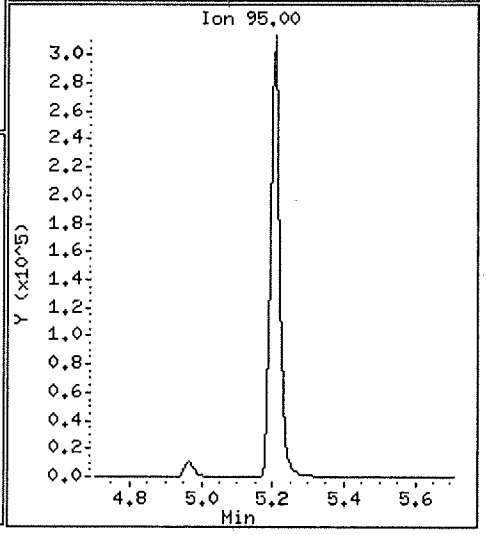


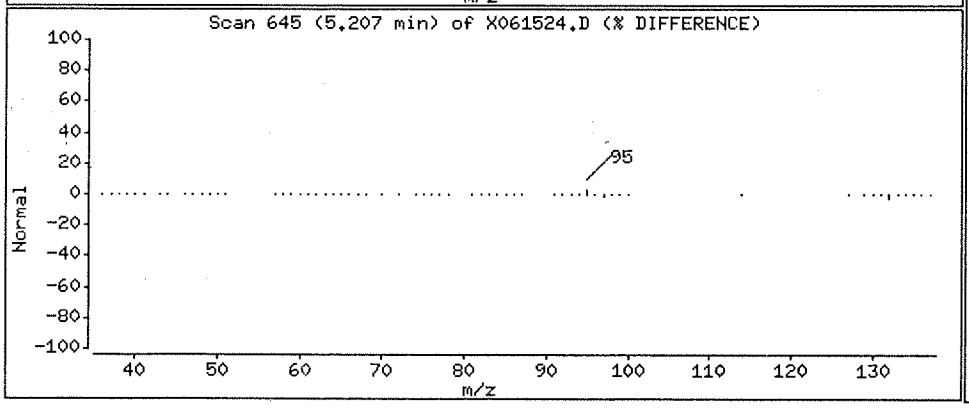












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061524.D

Date : 15-JUN-2021 18:59

Client ID: HS21060700-04

Instrument: voa6.i

Sample Info: HS21060700-04;HS21060700-04;;;

Purge Volume: 5.0

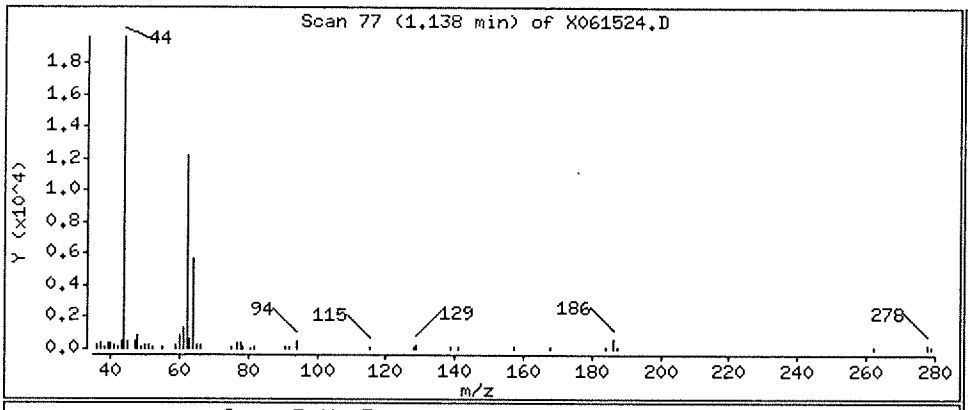
Operator: PC

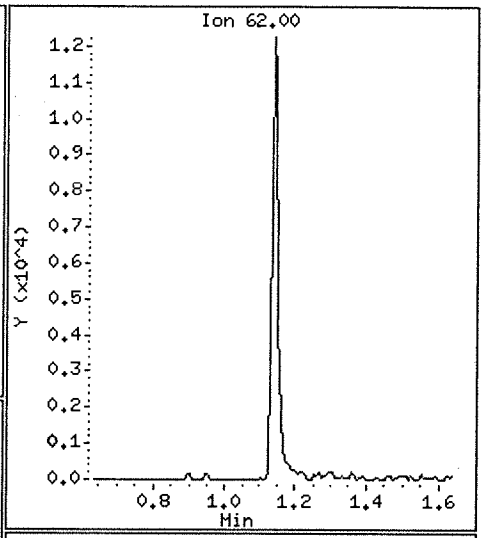
Column phase: DB624

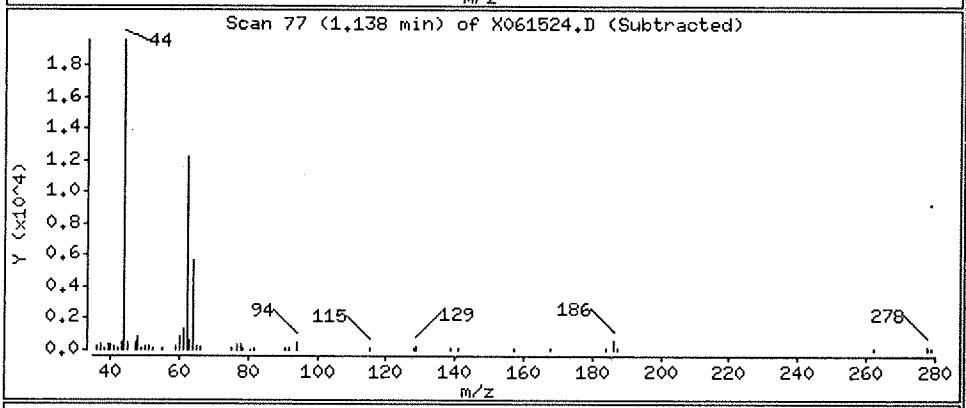
Column diameter: 0.18

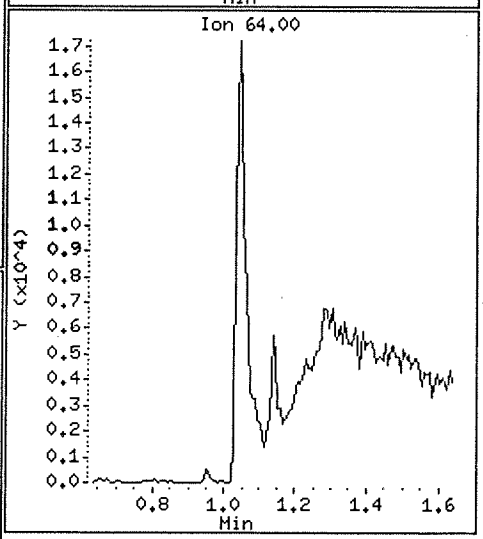
5 Vinyl Chloride

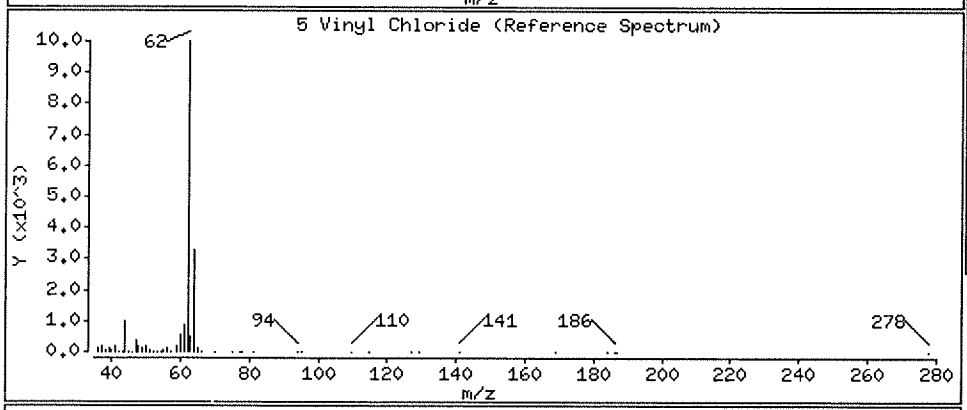
Concentration: 115.24 ug/l

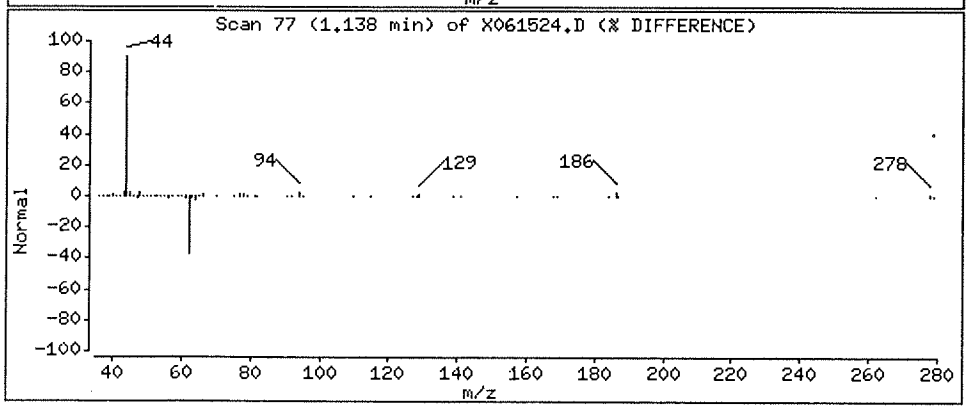












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D
Lab Smp Id: HS21060700-05 Client Smp ID: HS21060700-05
Inj Date : 15-JUN-2021 19:20
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-05;HS21060700-05;;;
Misc Info : HS18090001;WATER;0;5;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 24
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

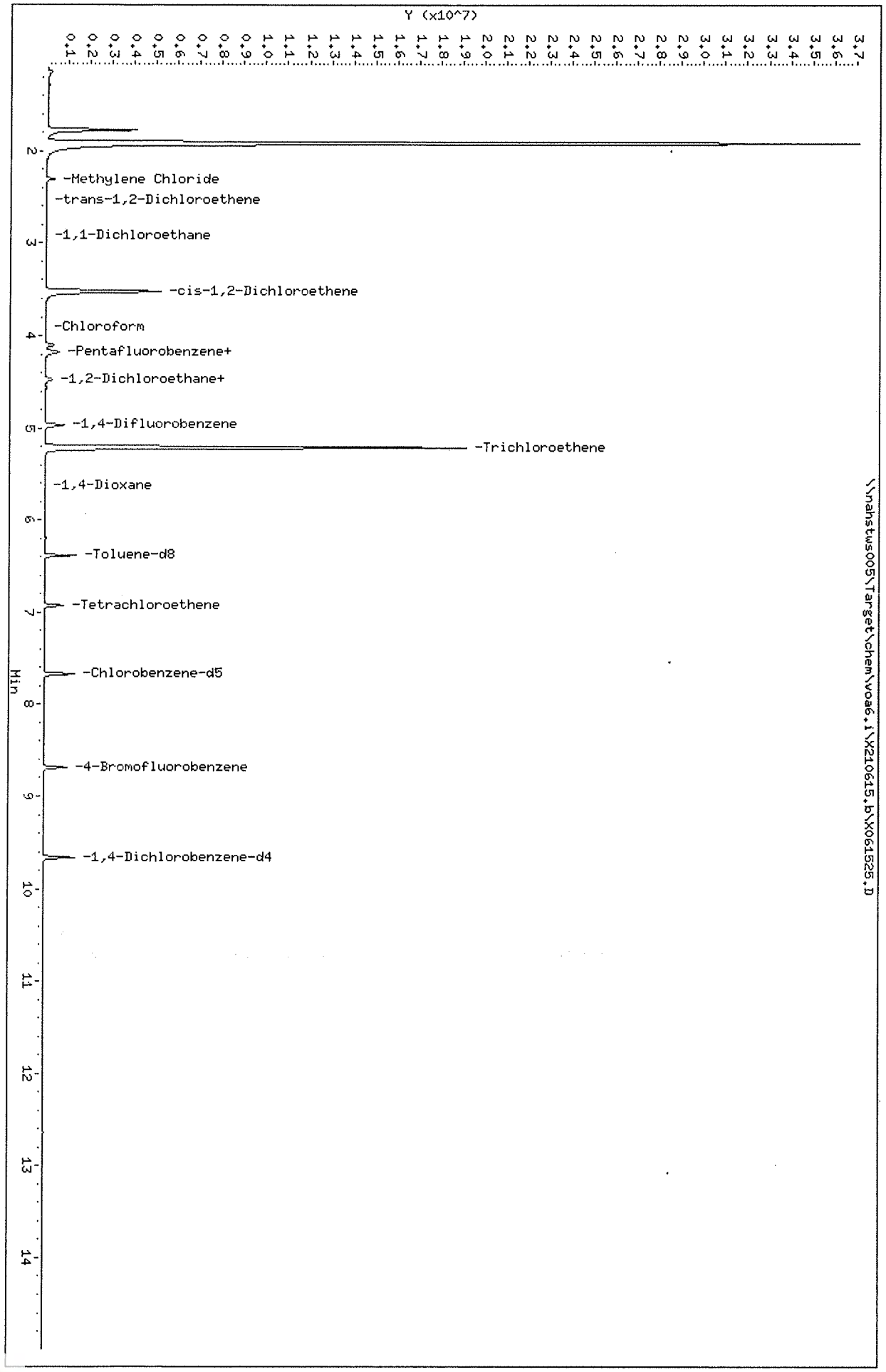
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	572669	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	790471	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	692337	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	359168	50.0000	
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	250107	44.3511	44.35
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	253862	46.3566	46.35
$	48 Toluene-d8	98	6.388	6.388	(0.833)	892642	51.7605	51.76
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	299147	49.2123	49.21
	22 1,1-Dichloroethane	63	2.921	2.922	(0.699)	11107	1.22683	6.13(a)
	33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	49973	7.93439	39.67
	37 Benzene	78	4.519	4.512	(0.911)	12152	0.66918	3.34(a)
	28 Chloroform	83	3.910	3.910	(0.935)	15386	1.52779	7.63(a)
	27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	2817474	469.395	2346.97(A)
	17 Methylene Chloride	84	2.305	2.298	(0.551)	187927	35.8198	179.09
	56 Tetrachloroethene	164	6.926	6.926	(0.903)	183302	43.0078	215.03
	20 trans-1,2-Dichloroethene	96	2.535	2.528	(0.606)	7429	1.38933	6.94(a)
	38 Trichloroethene	130	5.207	5.207	(1.049)	6502381	1198.53	5992.62(A)
	5 Vinyl Chloride	62	1.138	1.138	(0.272)	144422	21.3051	106.52

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D
Date : 15-JUN-2021 19:20
Client ID: HS21060700-05
Sample Info: HS21060700-05;HS21060700-05;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

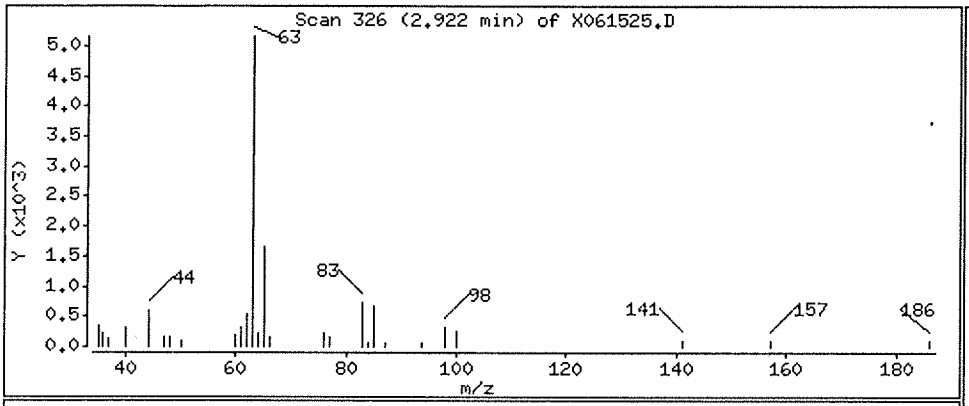
Operator: PC

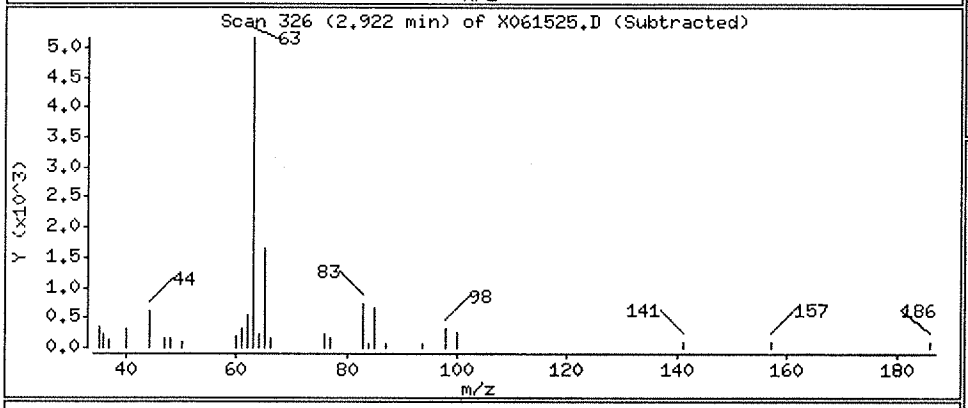
Column phase: DB624

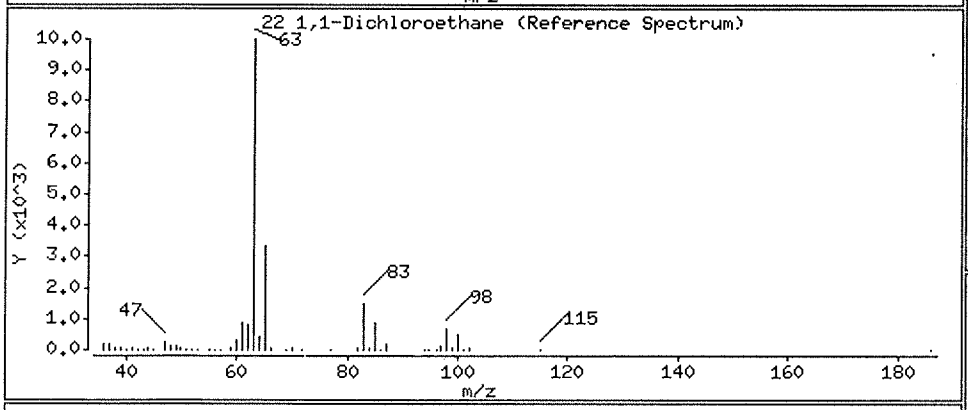
Column diameter: 0.18

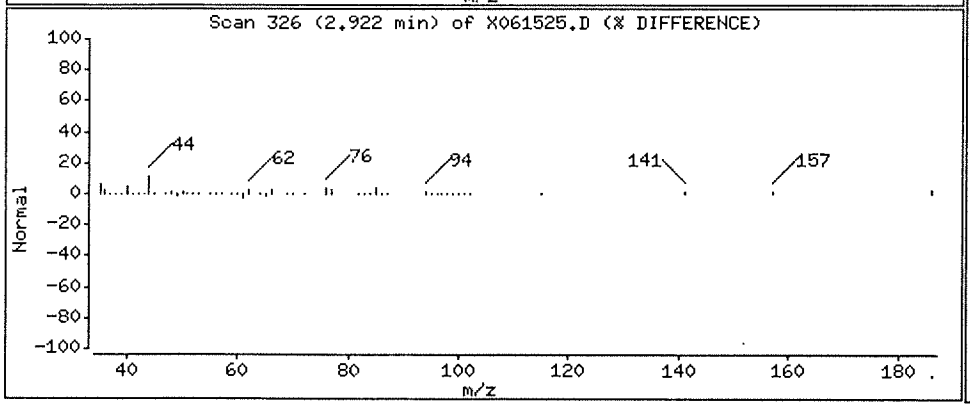
22 1,1-Dichloroethane

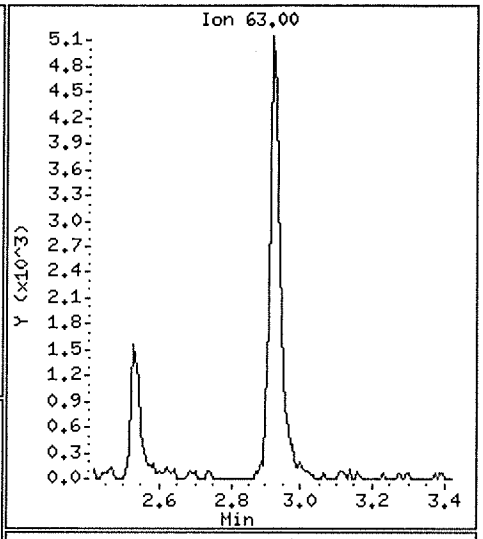
Concentration: 6.13 ug/l

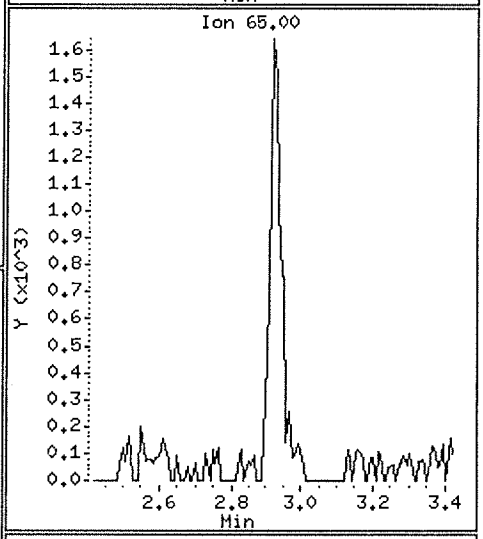


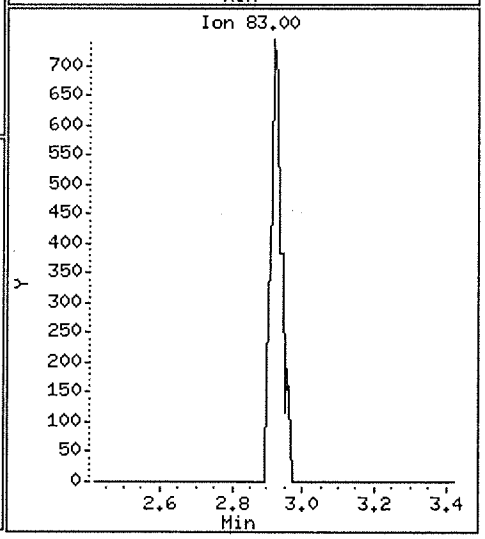












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

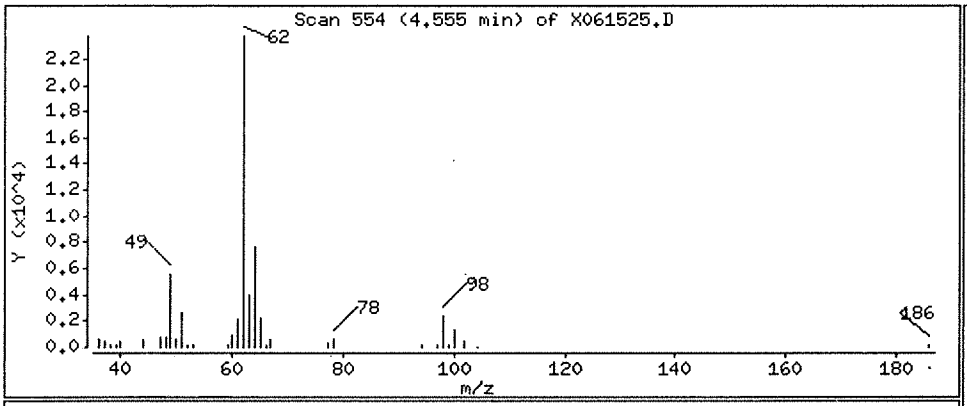
Operator: PC

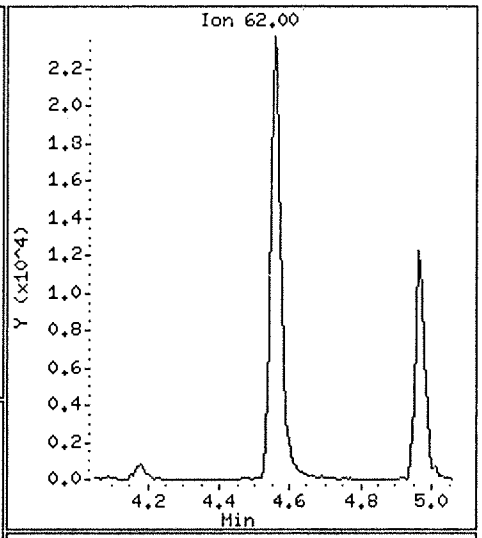
Column phase: DB624

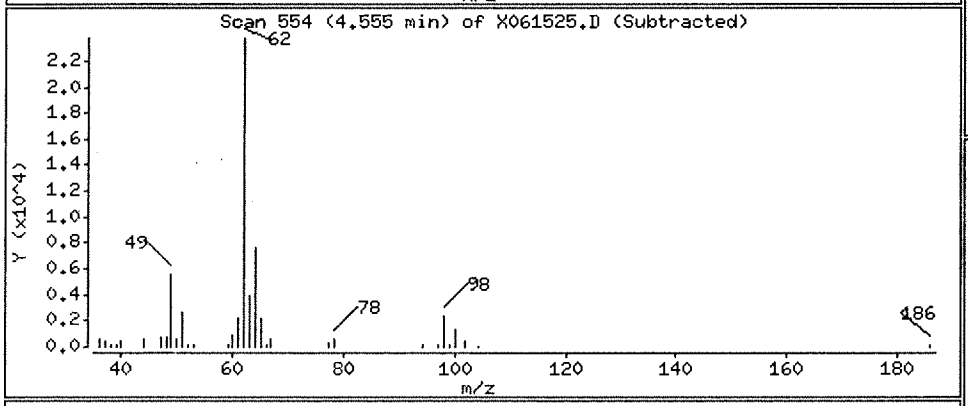
Column diameter: 0.18

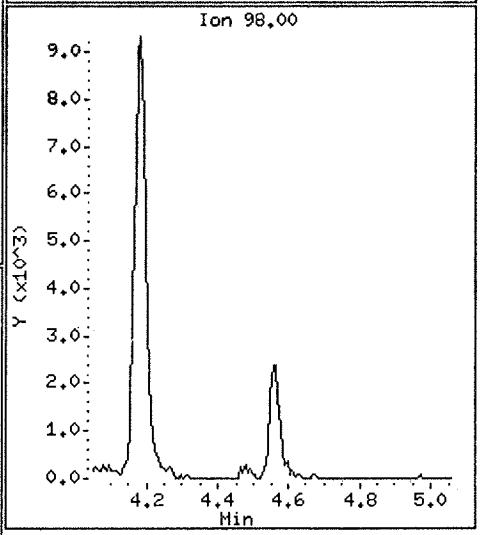
33 1,2-Dichloroethane

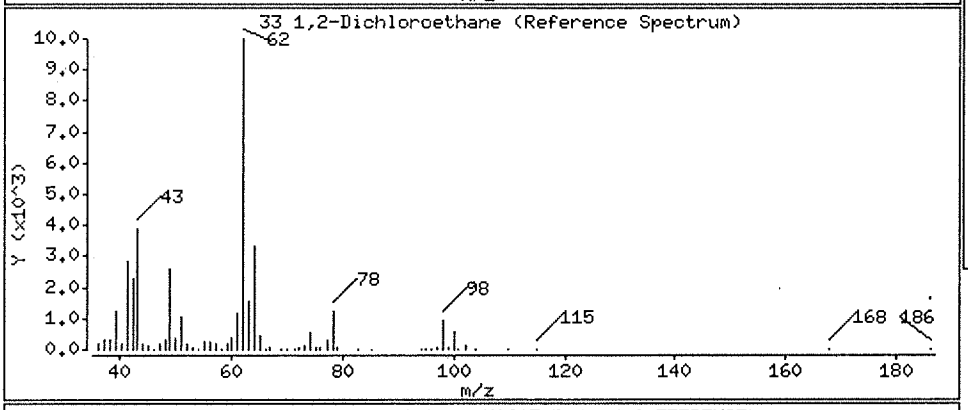
Concentration: 39.67 ug/l

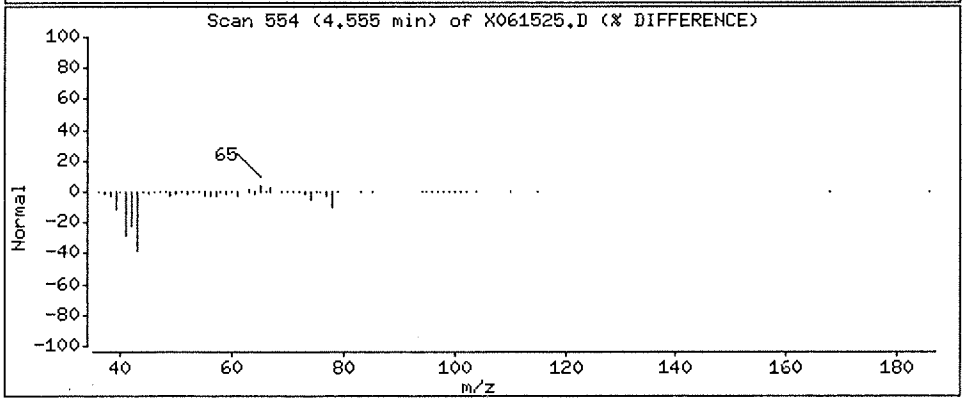












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

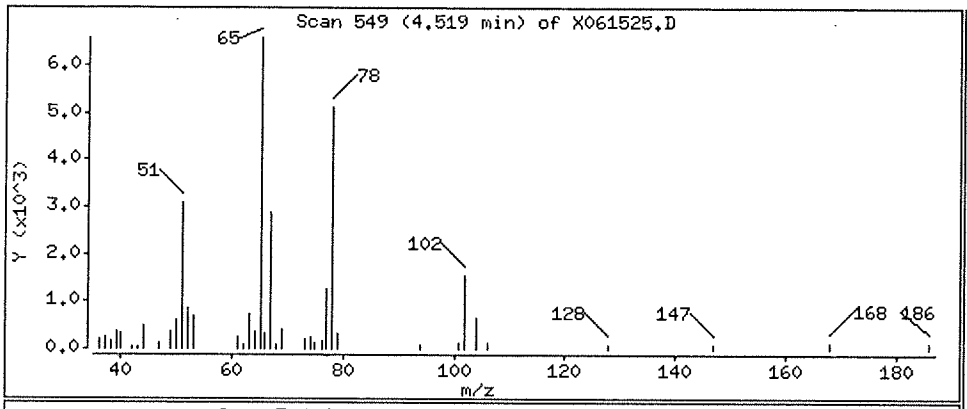
Operator: PC

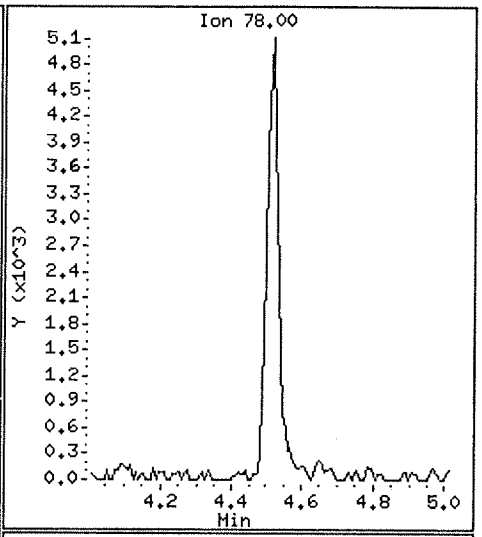
Column phase: DB624

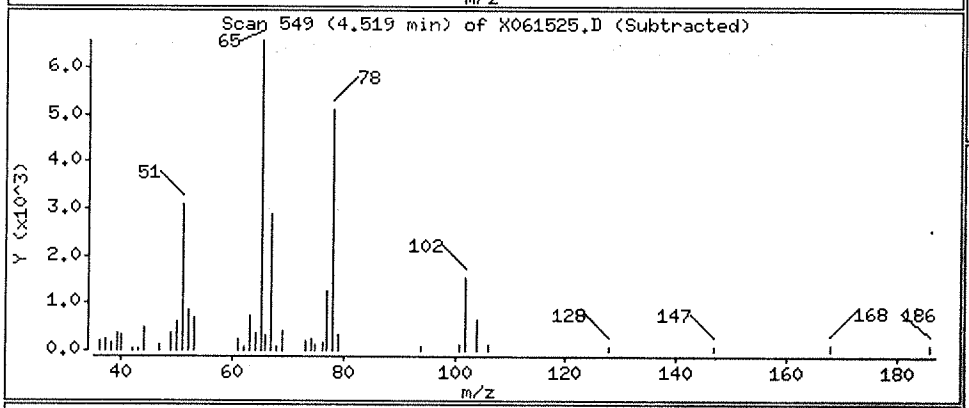
Column diameter: 0.18

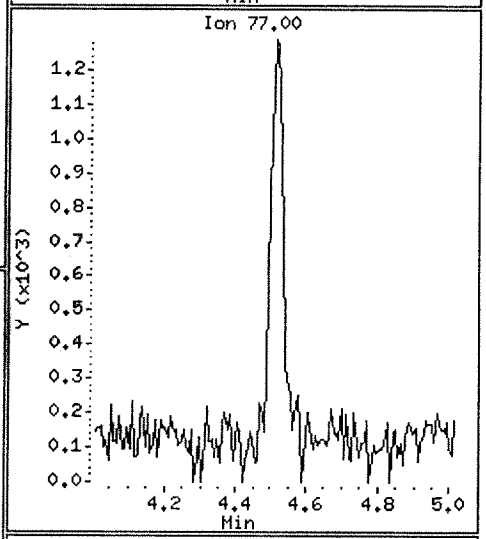
37 Benzene

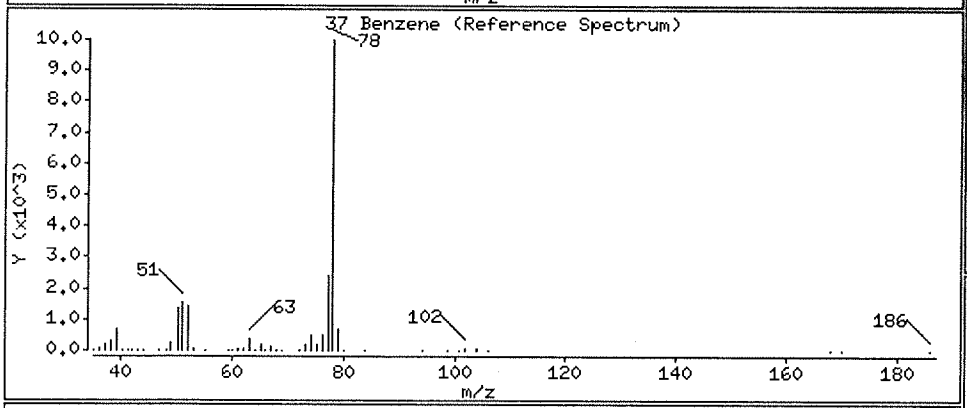
Concentration: 3.34 ug/l

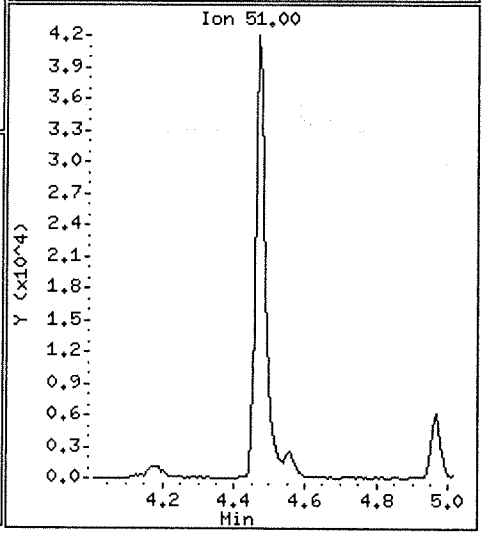


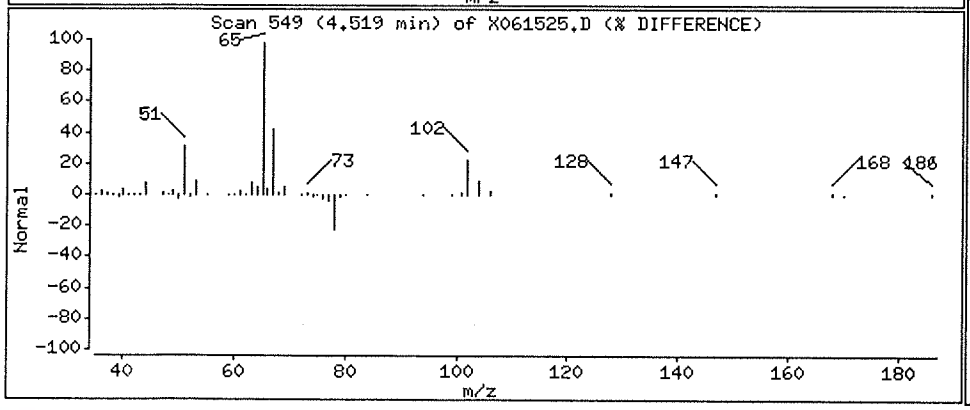












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

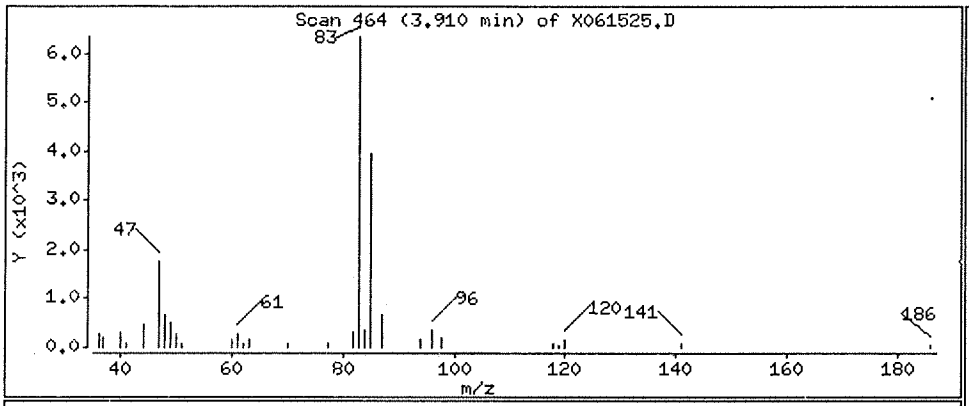
Operator: PC

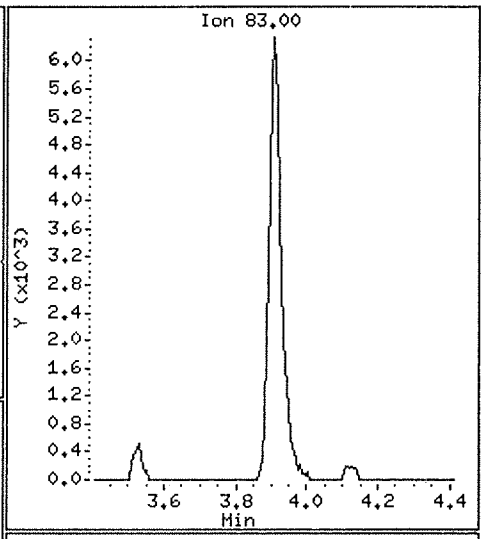
Column phase: DB624

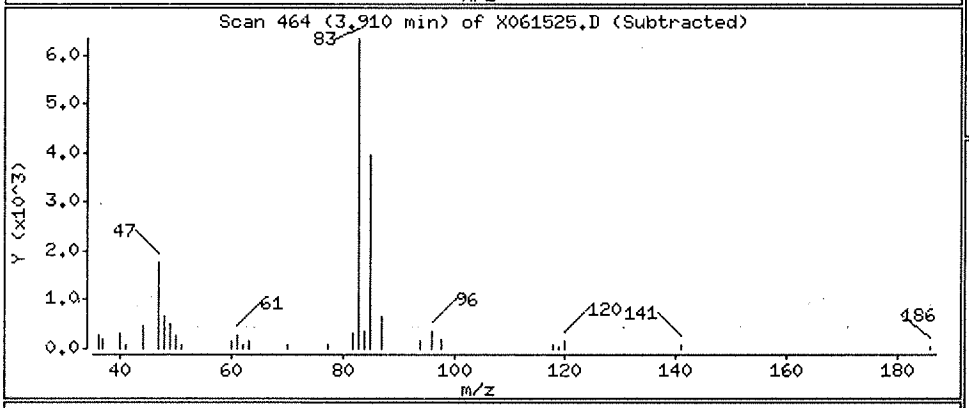
Column diameter: 0.18

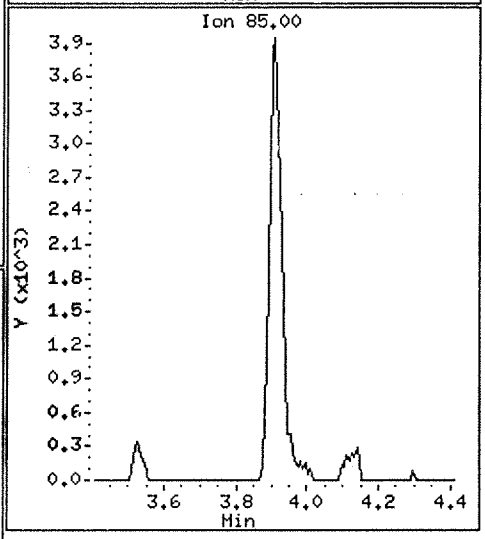
28 Chloroform

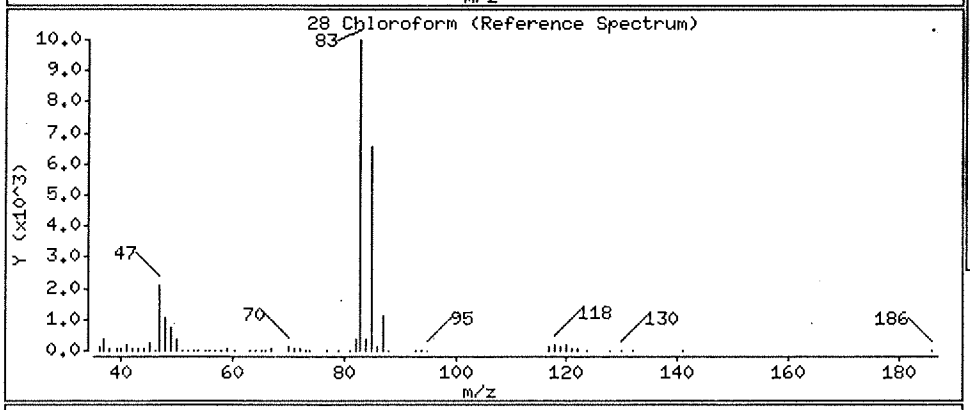
Concentration: 7.63 ug/l

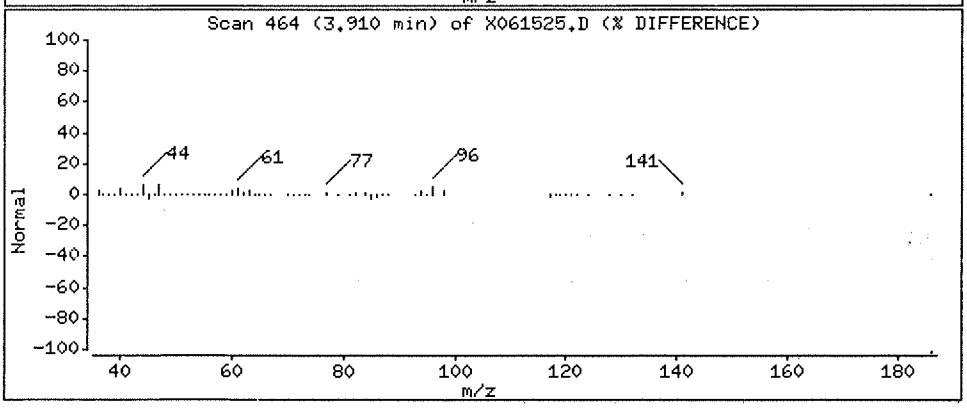












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

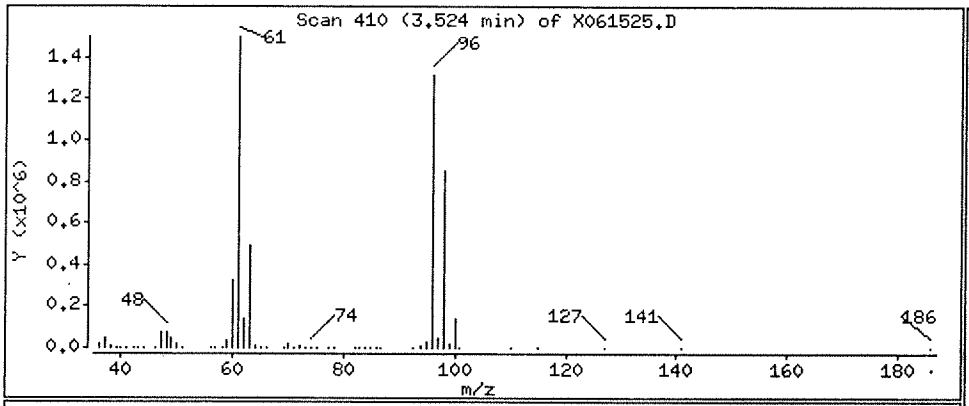
Operator: PC

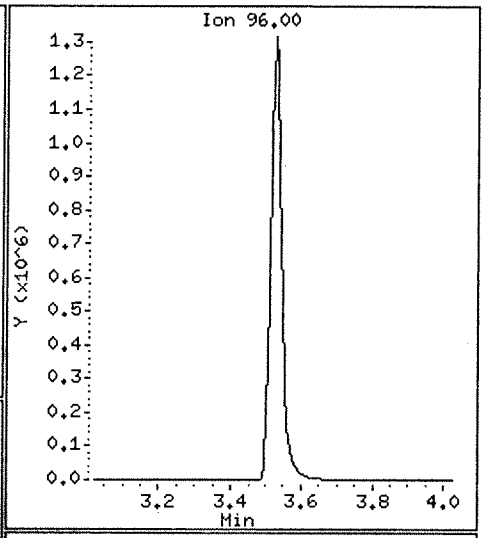
Column phase: DB624

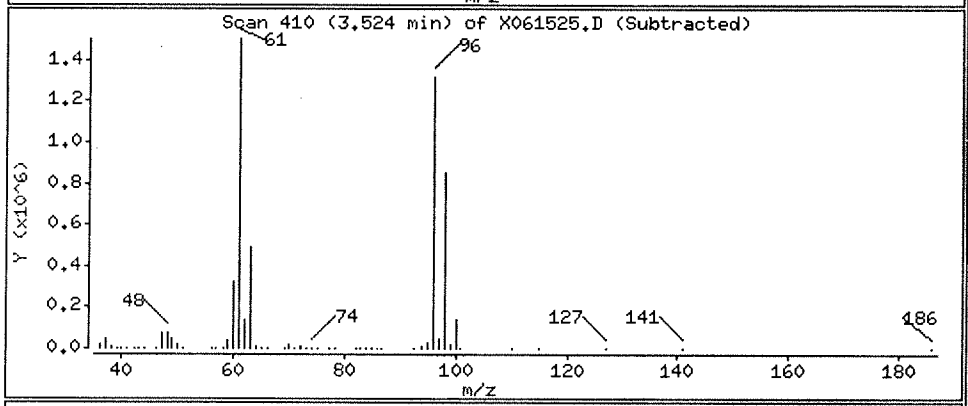
Column diameter: 0.18

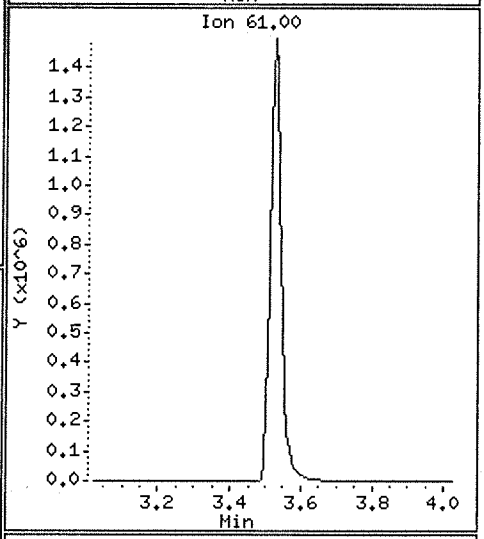
27 cis-1,2-Dichloroethene

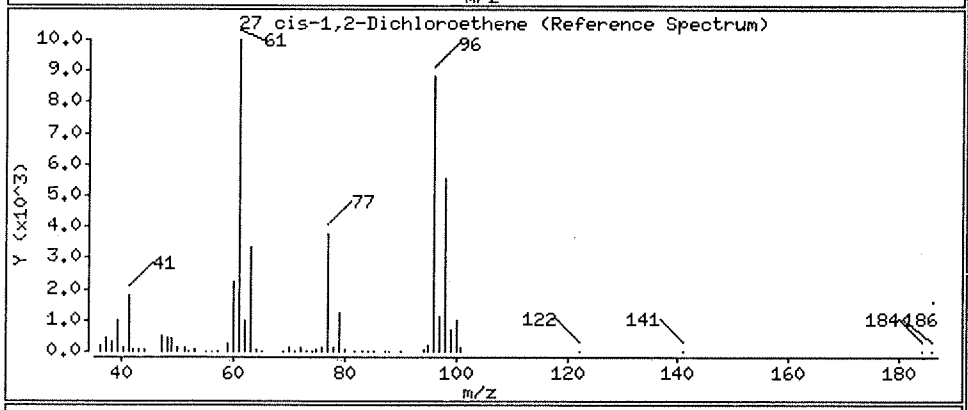
Concentration: 2346.97 ug/l

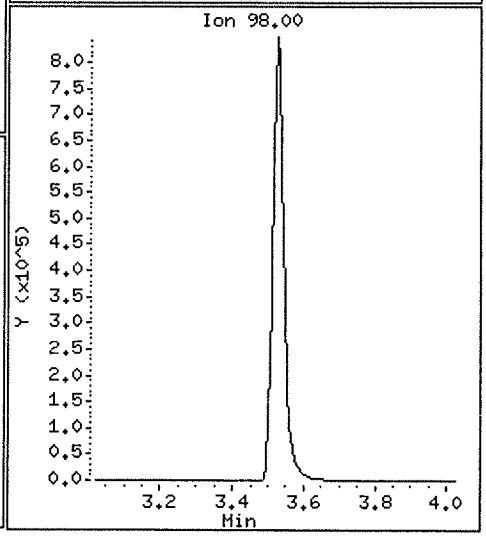


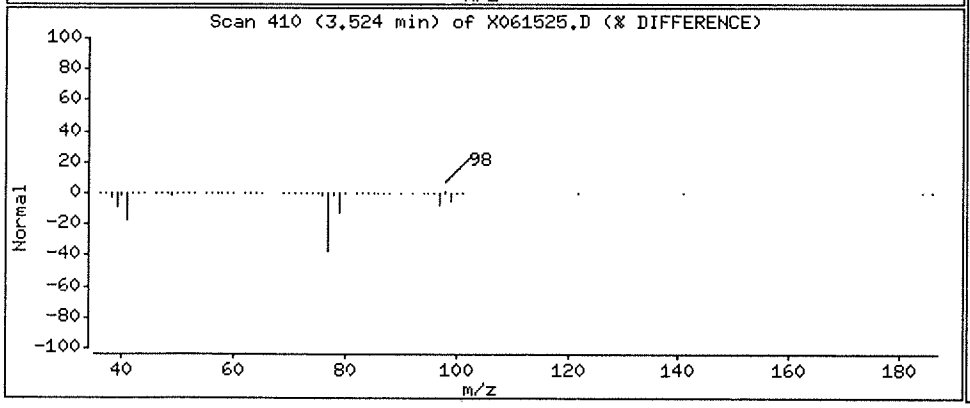












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

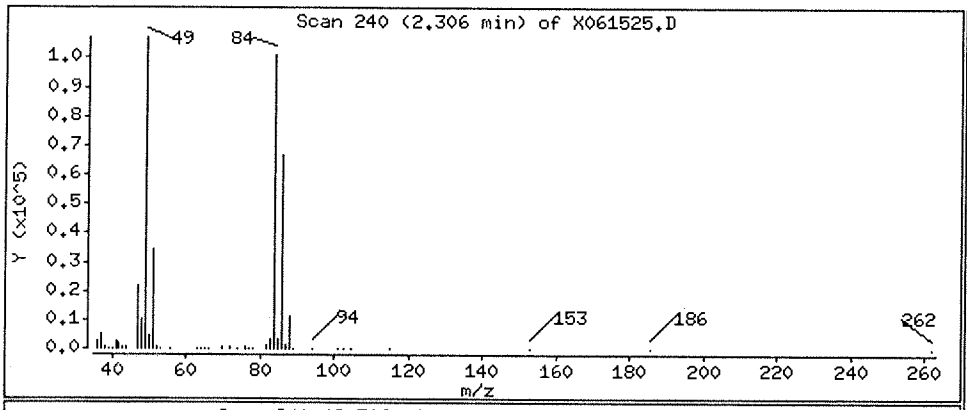
Operator: PC

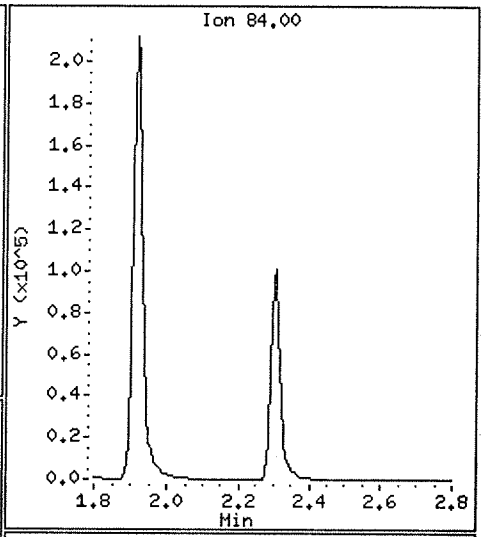
Column phase: DB624

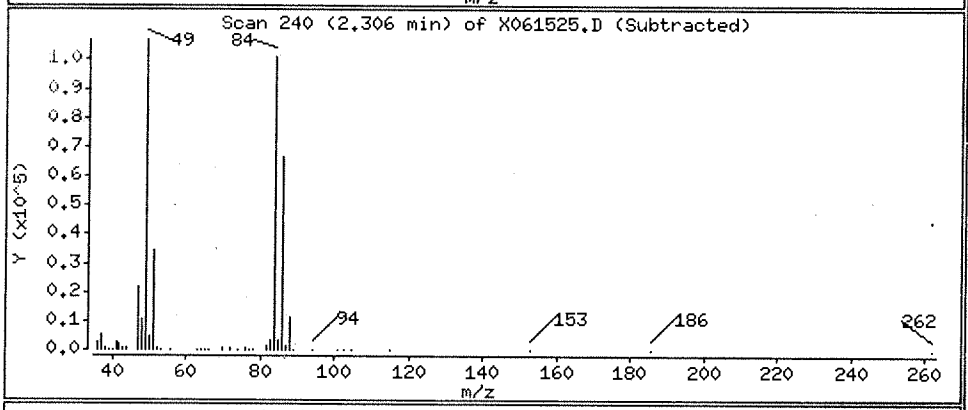
Column diameter: 0.18

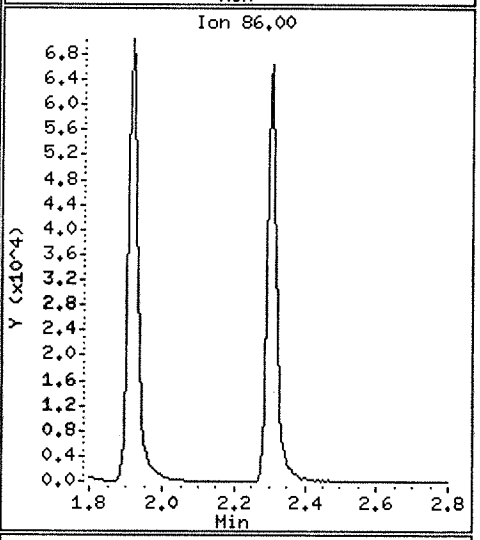
17 Methylene Chloride

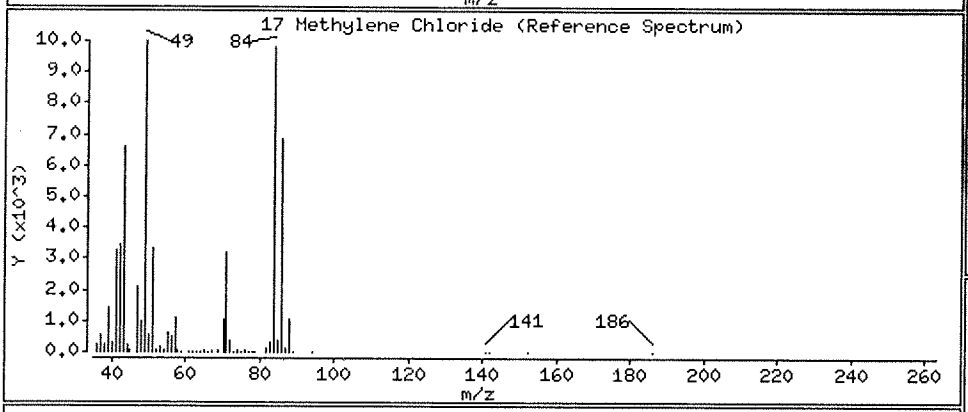
Concentration: 179.09 ug/l

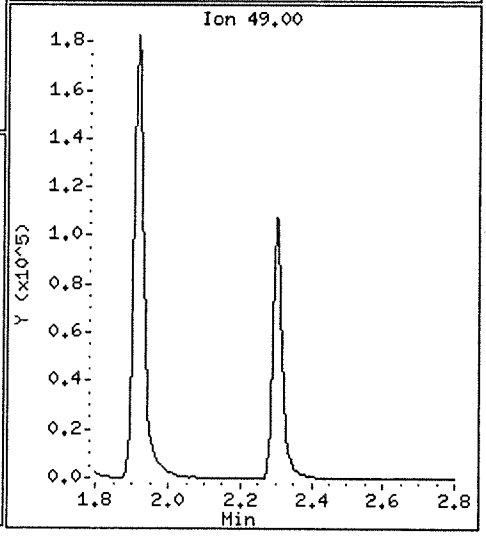


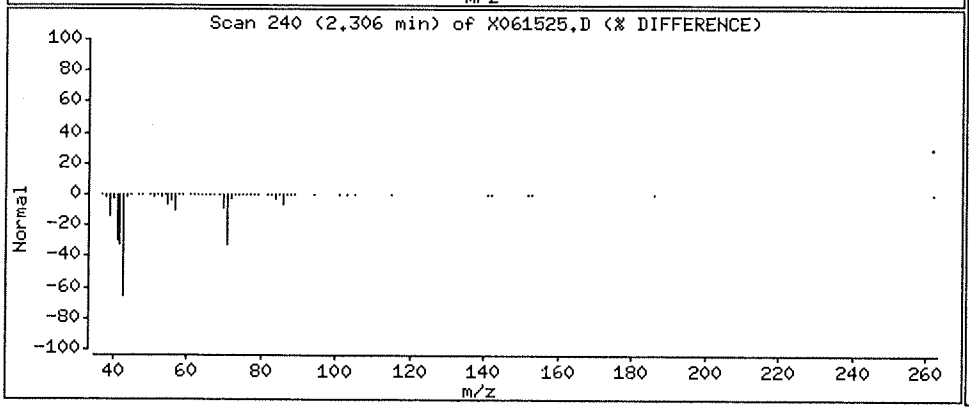












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

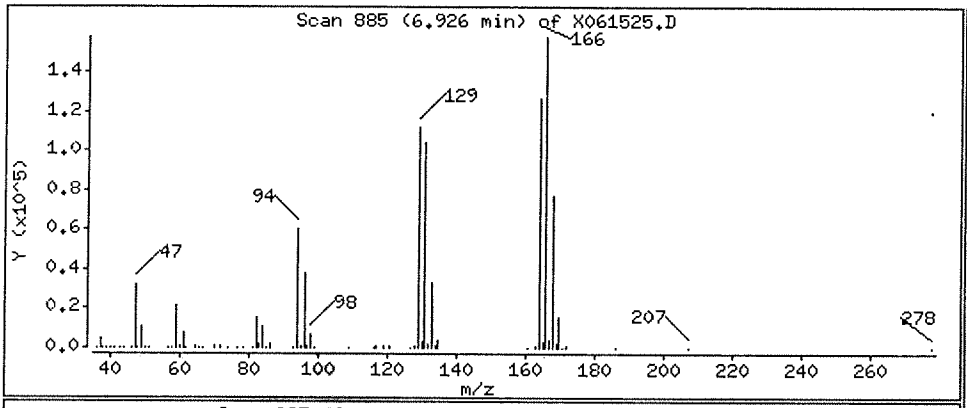
Operator: PC

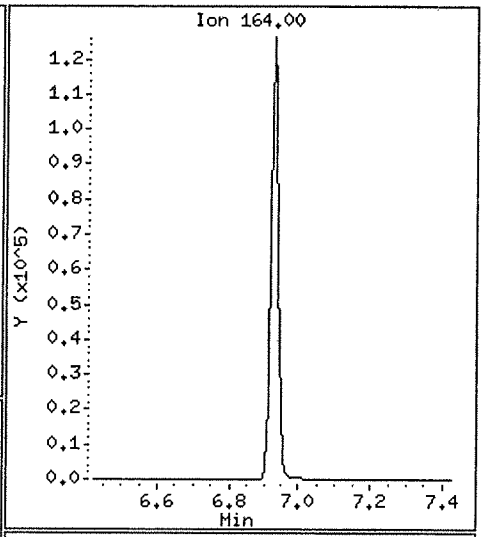
Column phase: DB624

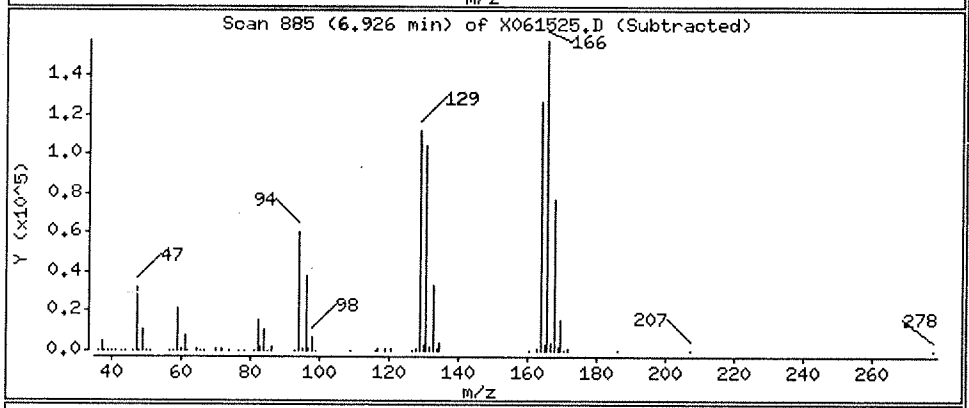
Column diameter: 0.18

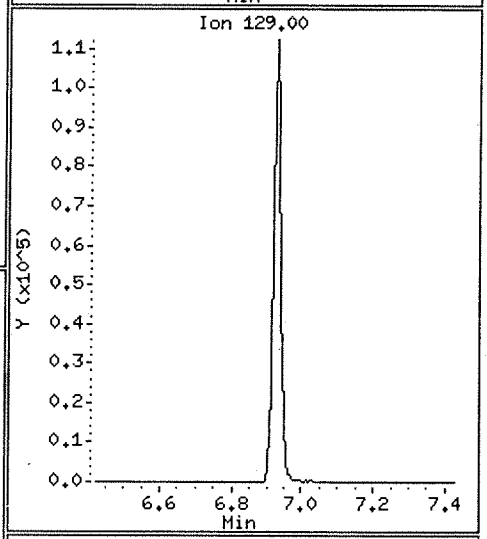
56 Tetrachloroethene

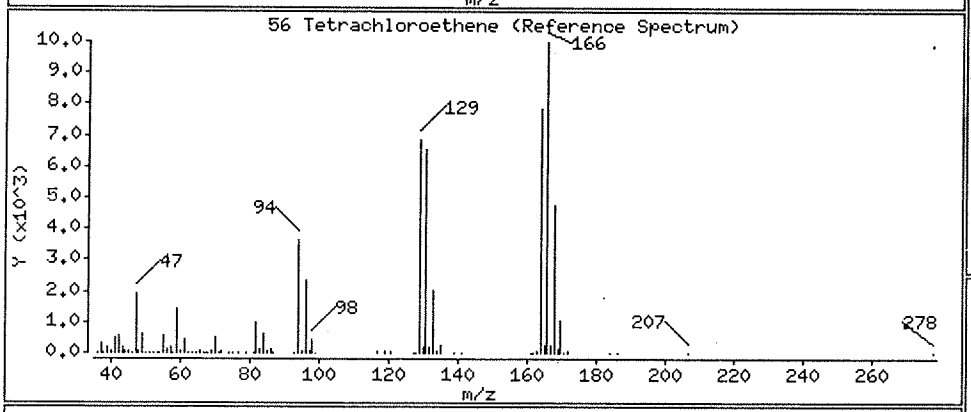
Concentration: 215.03 ug/l

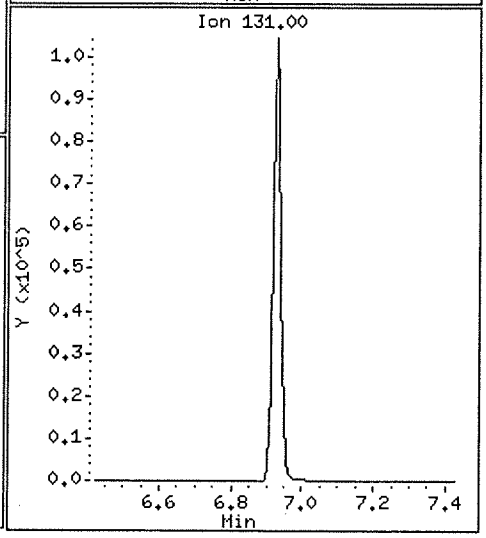


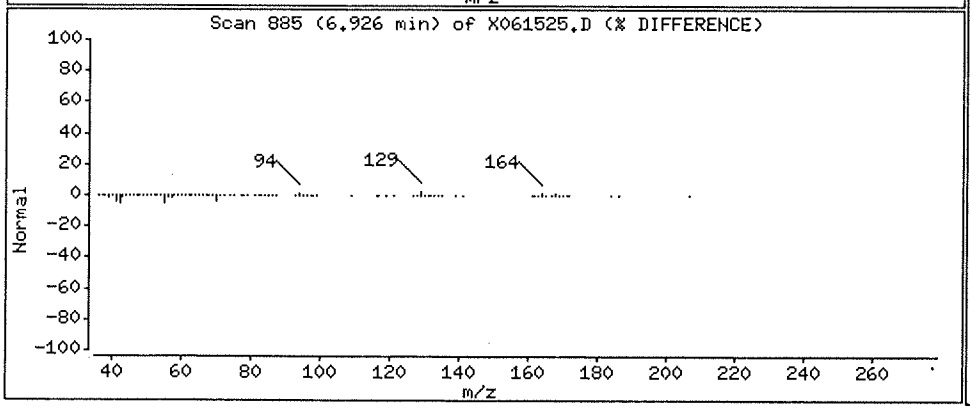












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Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

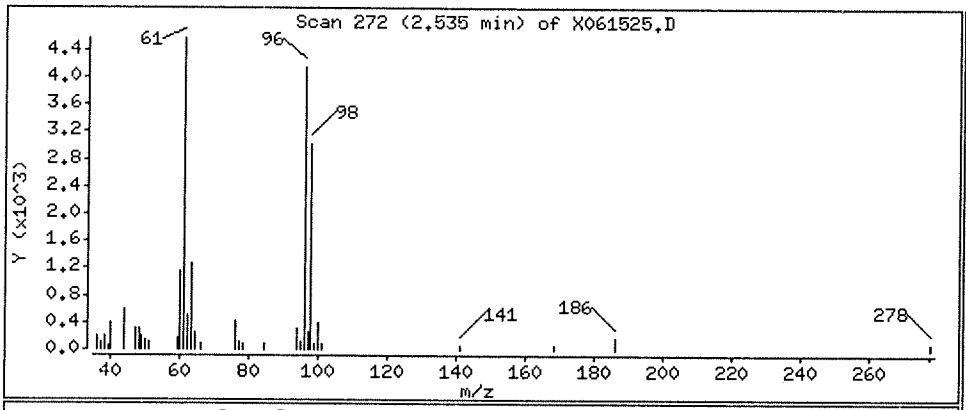
Operator: PC

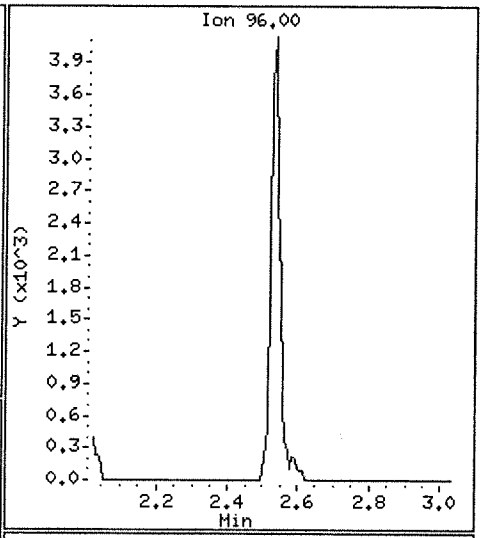
Column phase: DB624

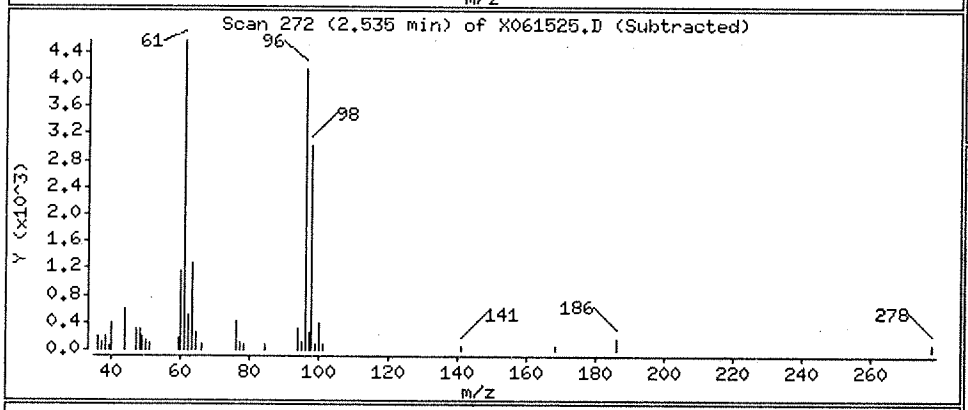
Column diameter: 0.18

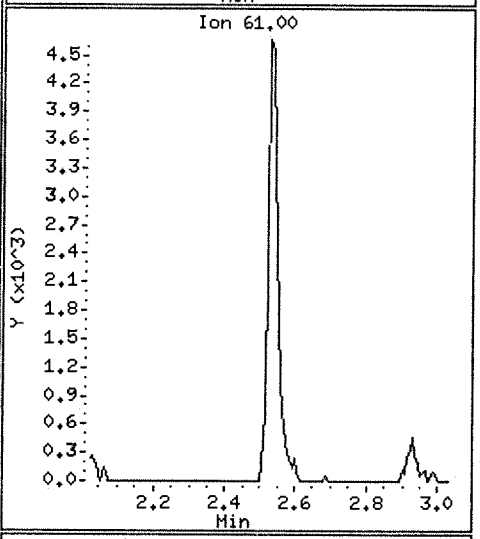
20 trans-1,2-Dichloroethene

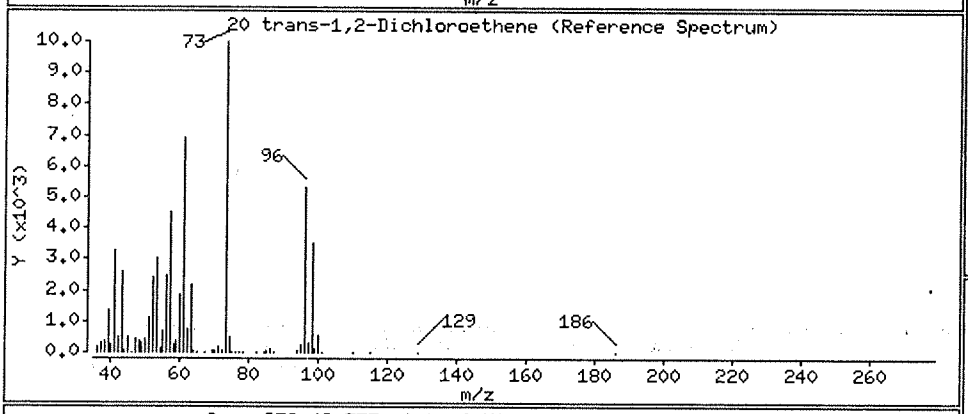
Concentration: 6.94 ug/l

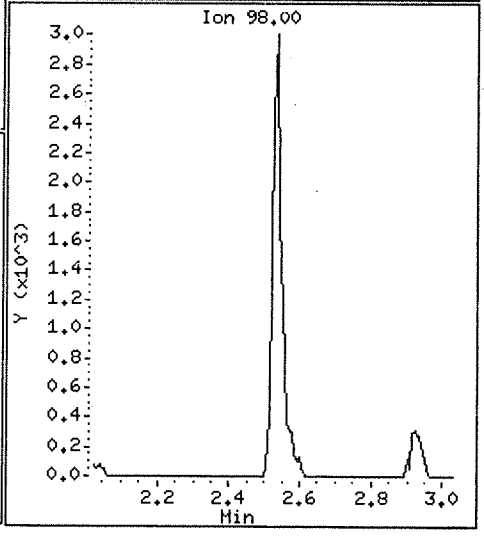


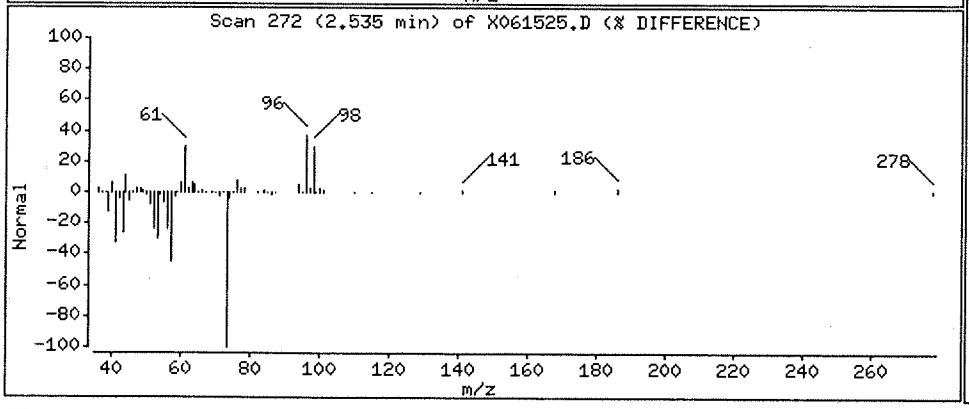












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

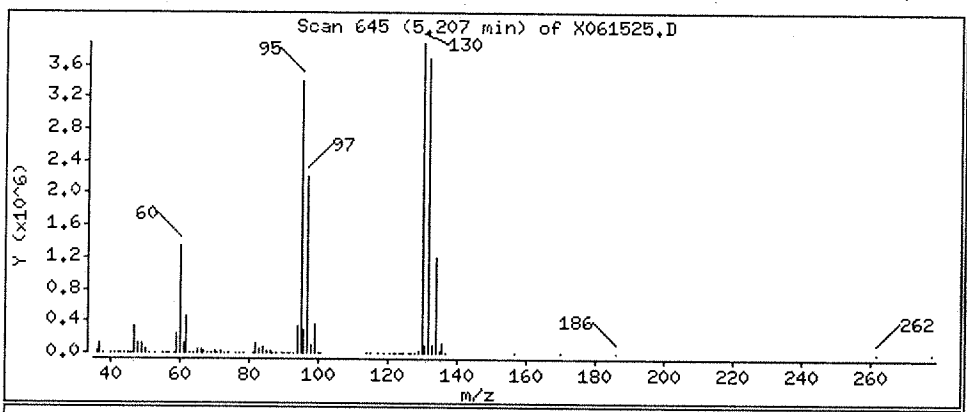
Operator: PC

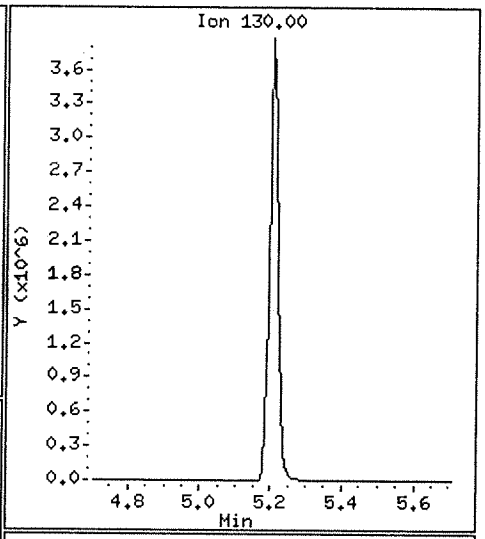
Column phase: DB624

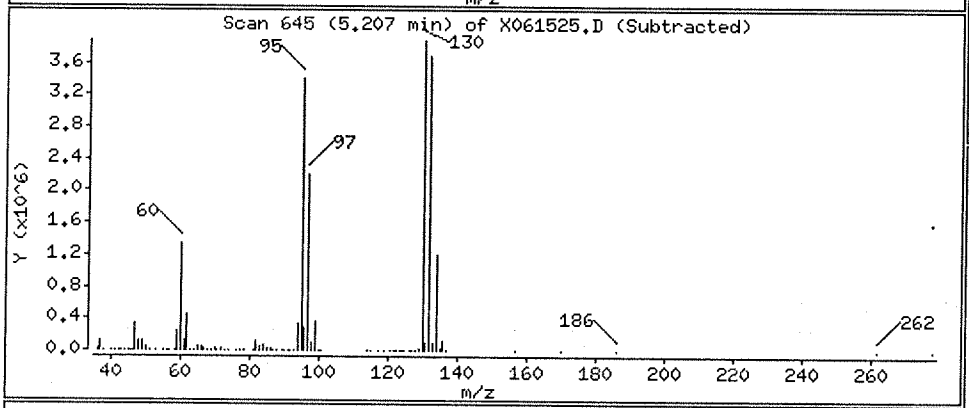
Column diameter: 0.18

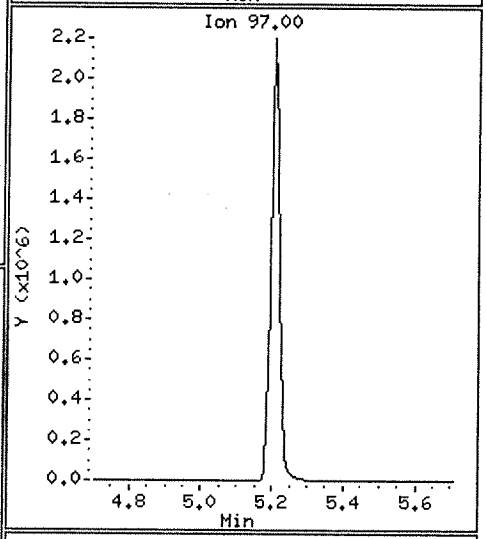
38 Trichloroethene

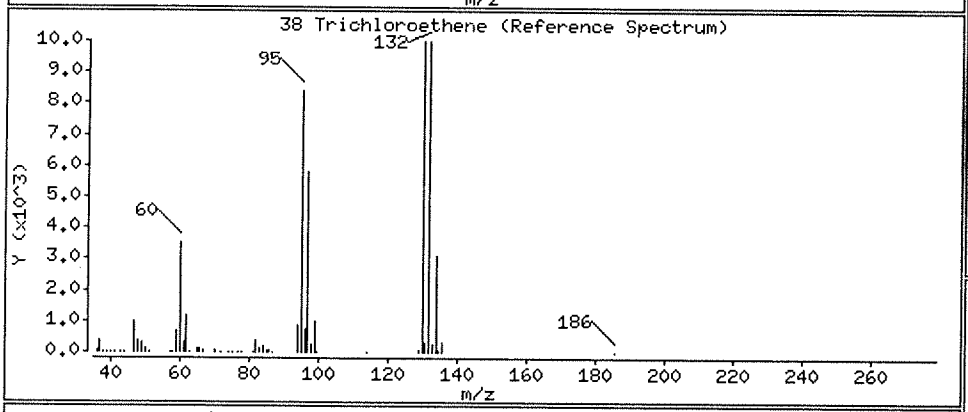
Concentration: 5992.62 ug/l

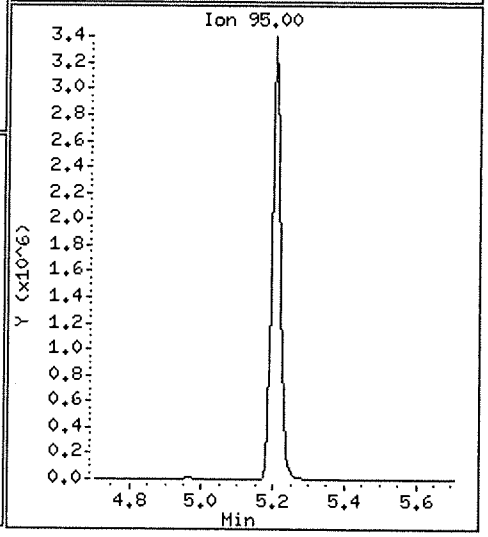


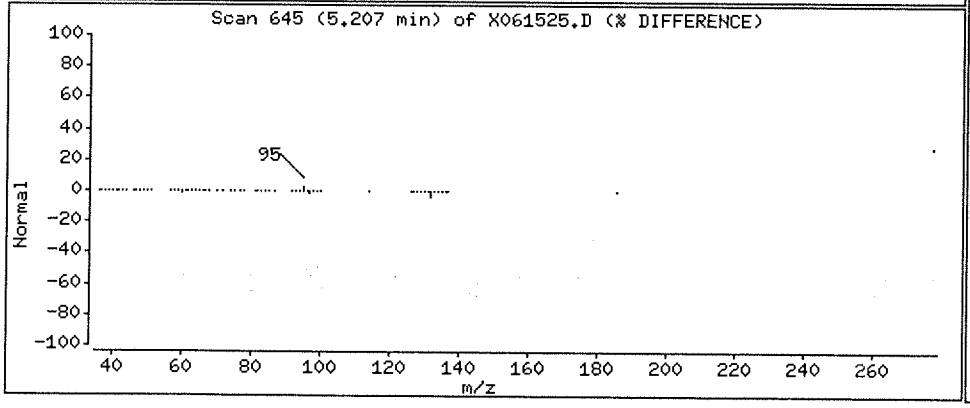












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061525.D

Date : 15-JUN-2021 19:20

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

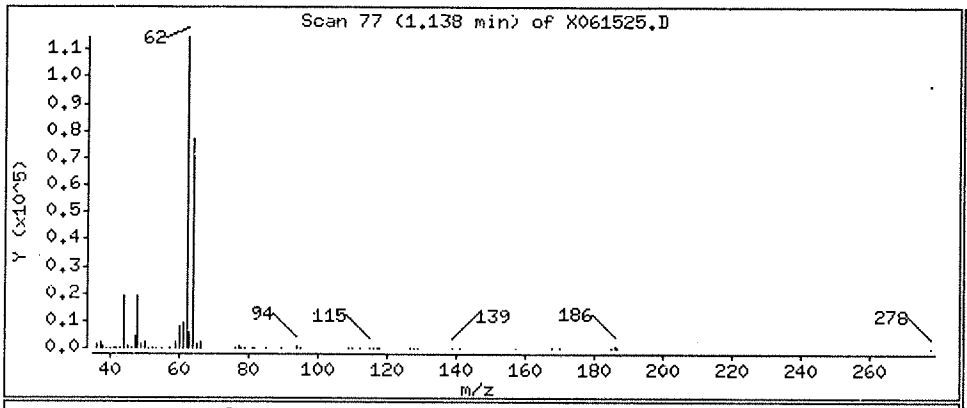
Operator: PC

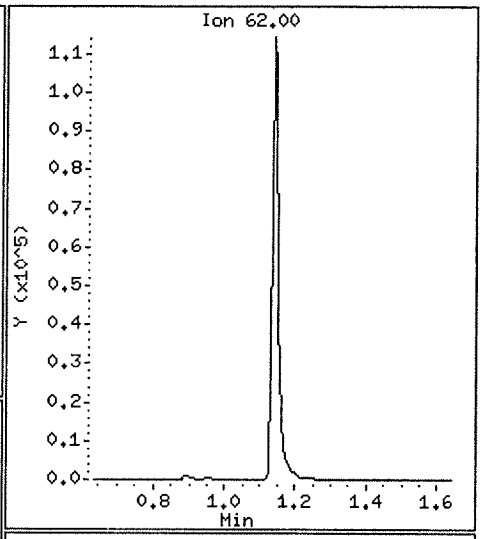
Column phase: DB624

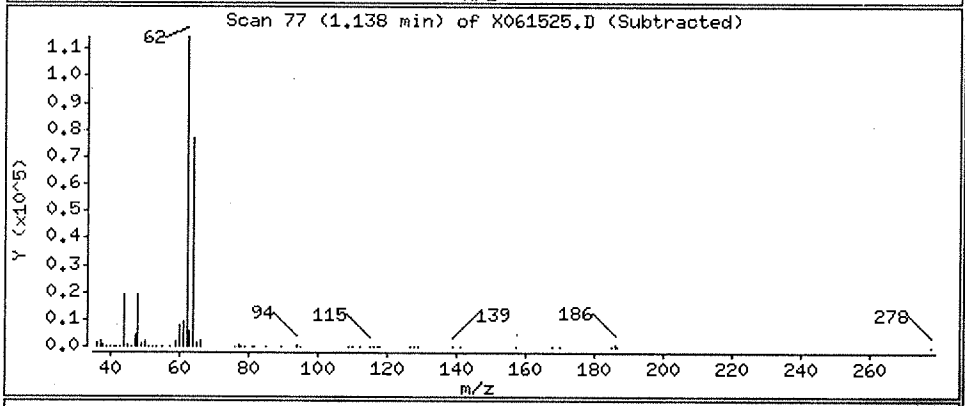
Column diameter: 0.18

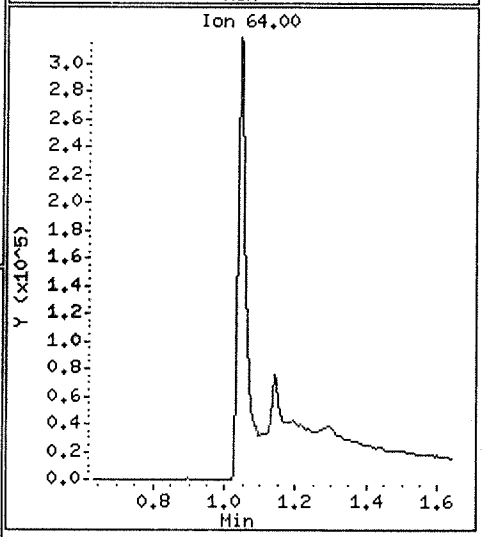
5 Vinyl Chloride

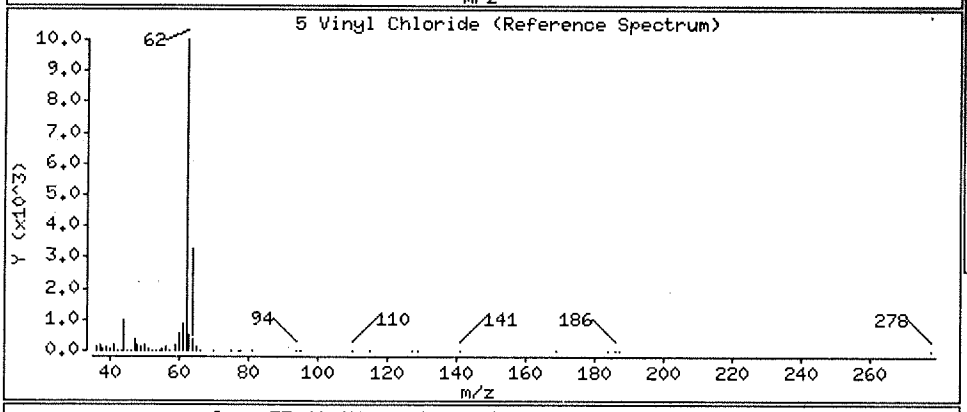
Concentration: 106.52 ug/l

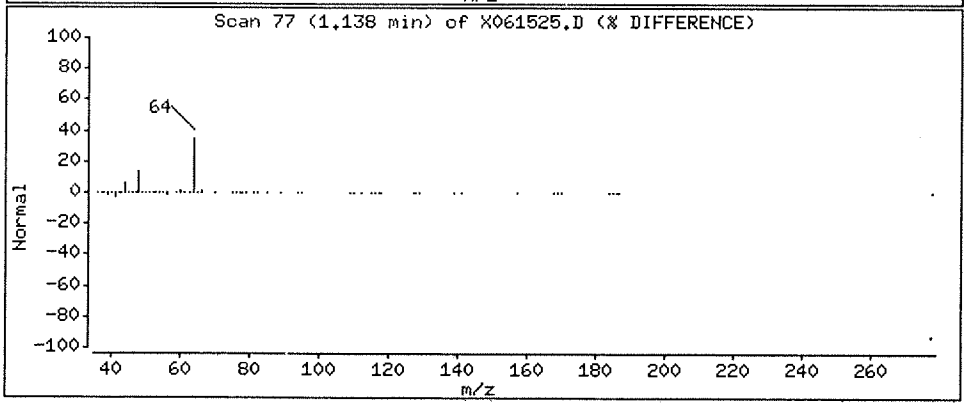












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061526.D
Lab Smp Id: HS21060700-05 Client Smp ID: HS21060700-05
Inj Date : 15-JUN-2021 19:41
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-05;HS21060700-05;;;
Misc Info : HS18090001;WATER;0;50;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 25
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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

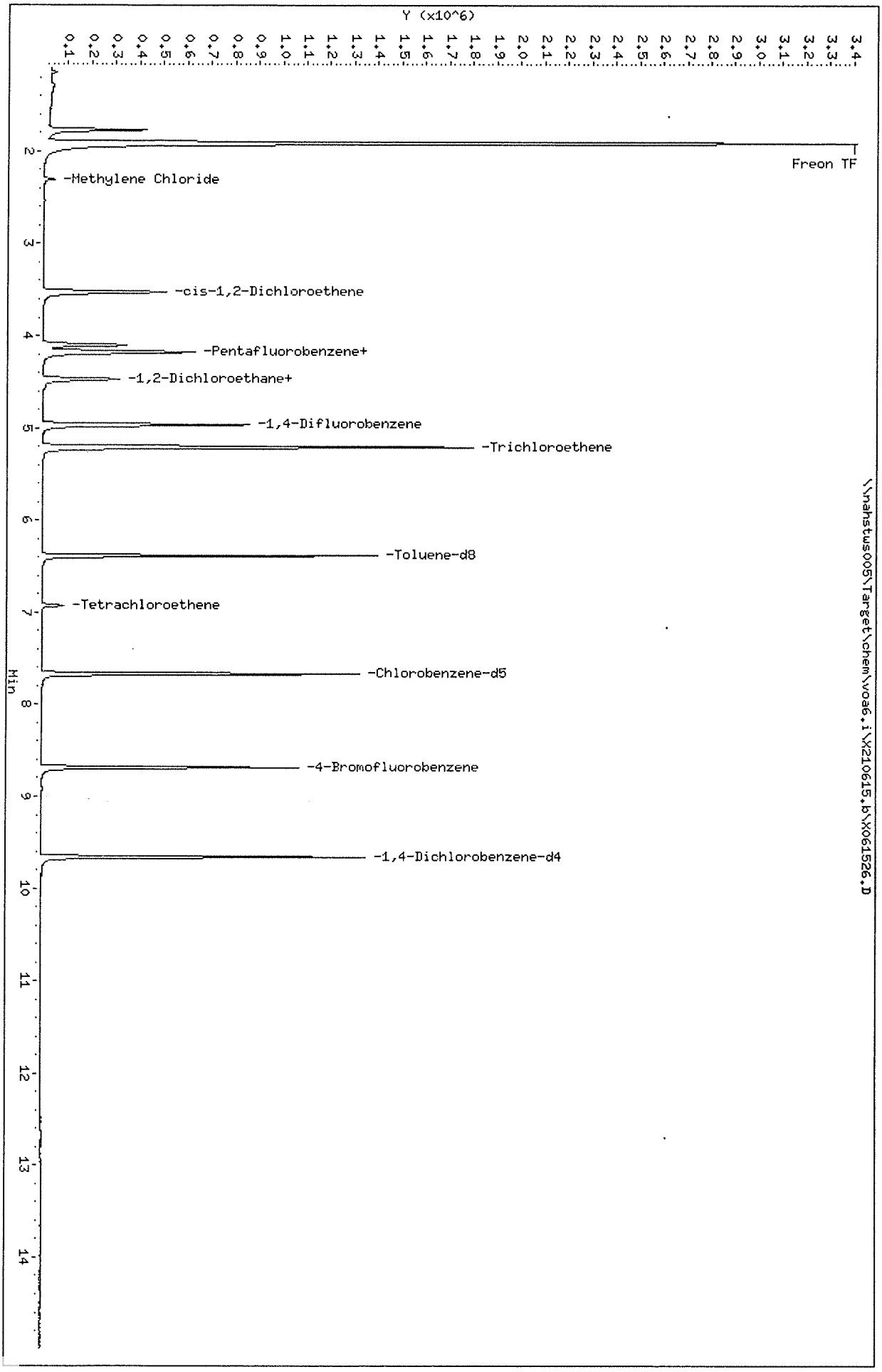
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	572158	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	777996	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	682882	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	352488	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	249085	44.2088	44.20
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	250320	45.7416	45.74
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	874172	51.3913	51.39
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	291224	48.5820	48.58
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	5986	0.96566	48.28(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	285688	47.6386	2381.92
17 Methylene Chloride	84	2.305	2.298	(0.551)	20952	2.81684	140.84(a)
56 Tetrachloroethene	164	6.933	6.926	(0.904)	19457	4.62836	231.41(a)
38 Trichloroethene	130	5.206	5.207	(1.049)	634703	118.865	5943.24
5 Vinyl Chloride	62	1.138	1.138	(0.272)	15873	2.34367	117.18(a)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061526.D
Date : 15-JUN-2021 19:41
Client ID: HS21060700-05
Sample Info: HS21060700-05;HS21060700-05;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061526.D

Date : 15-JUN-2021 19:41

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

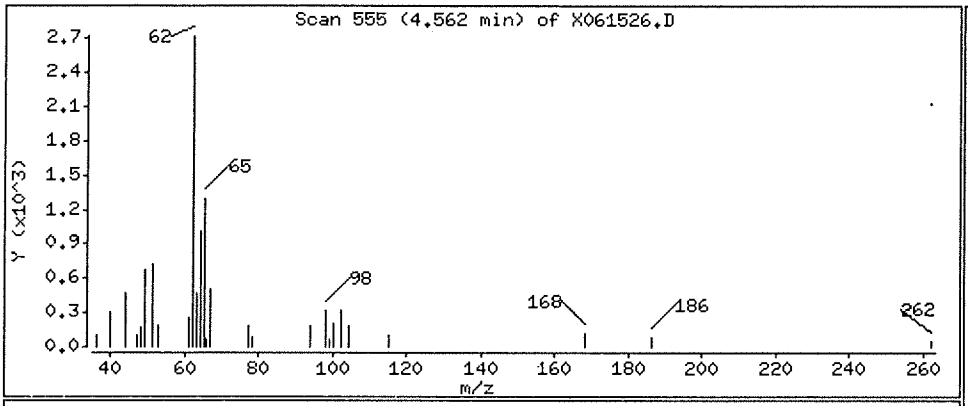
Operator: PC

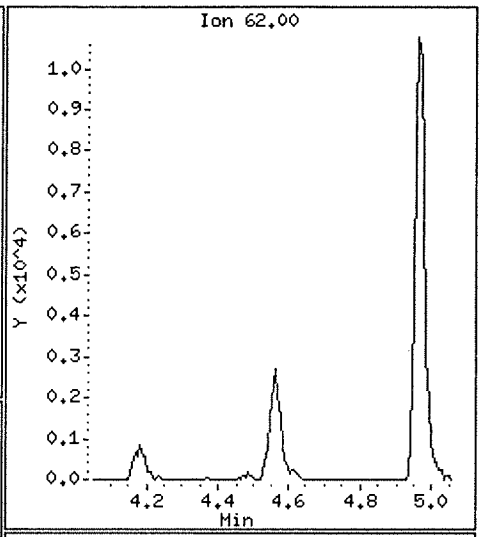
Column phase: DB624

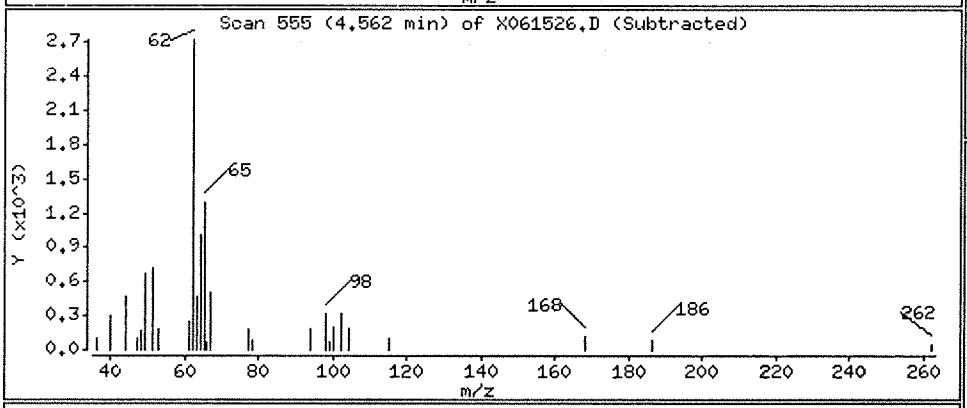
Column diameter: 0.18

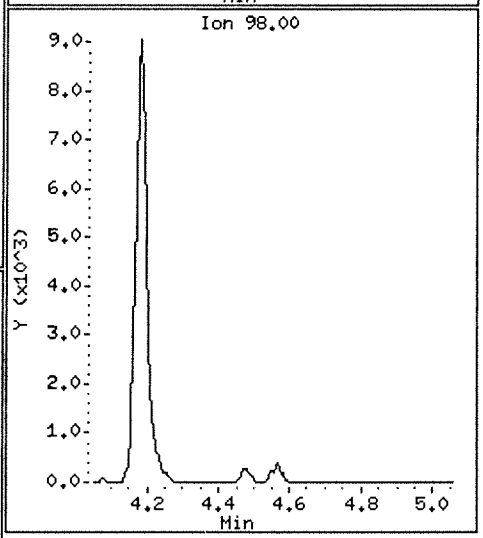
33 1,2-Dichloroethane

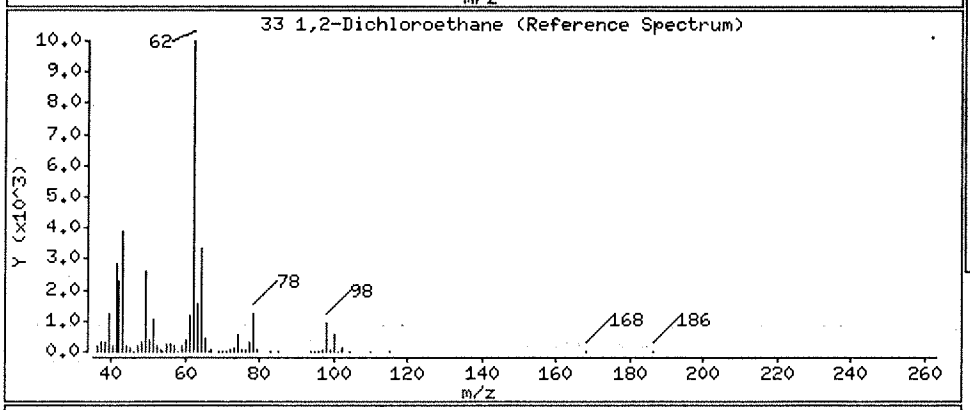
Concentration: 48.28 ug/l

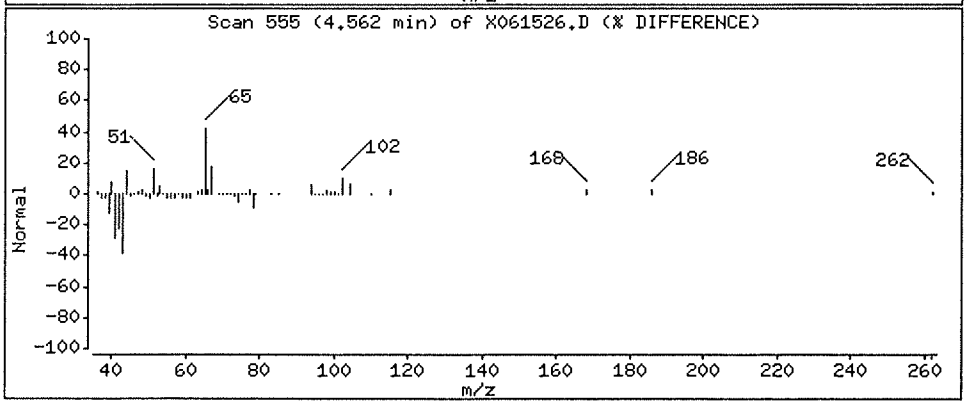












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061526.D

Date : 15-JUN-2021 19:41

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

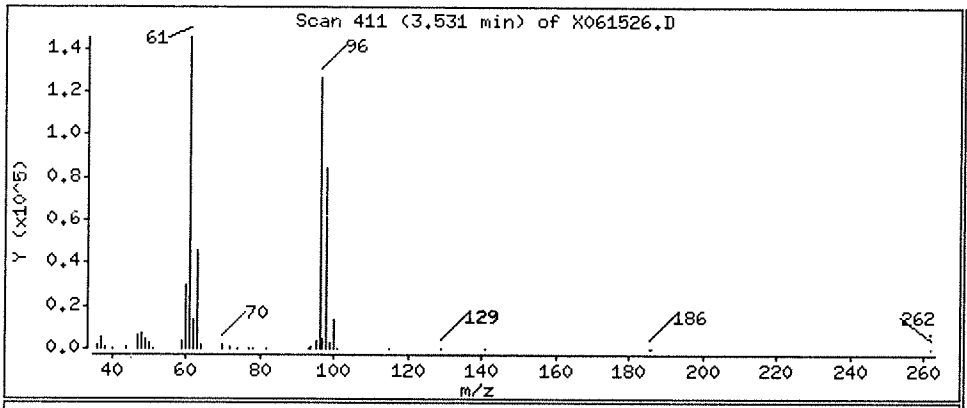
Operator: PC

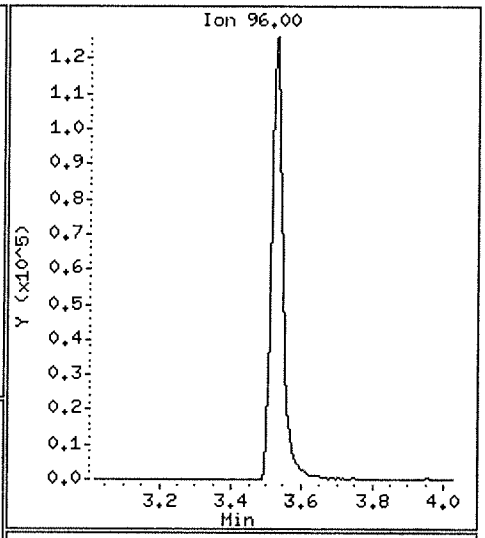
Column phase: DB624

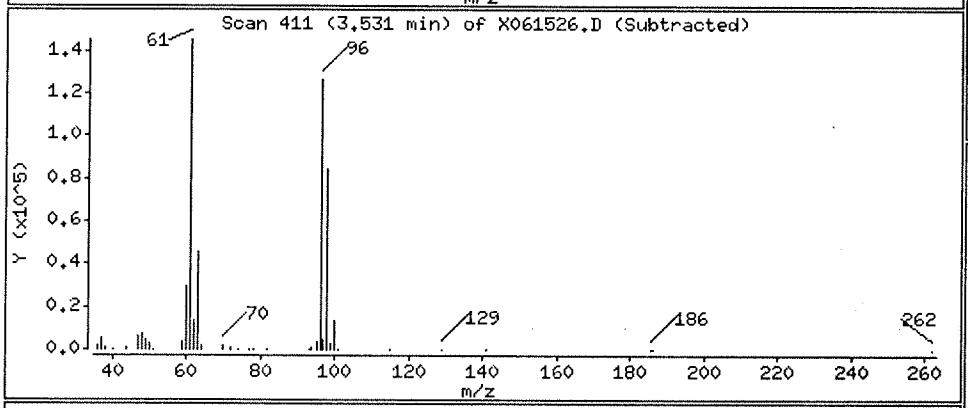
Column diameter: 0.18

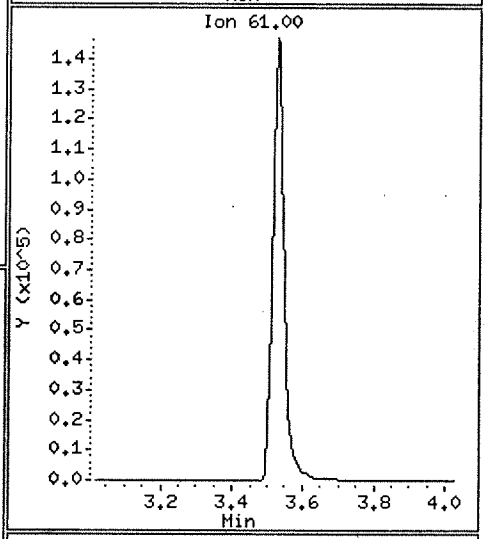
27 cis-1,2-Dichloroethene

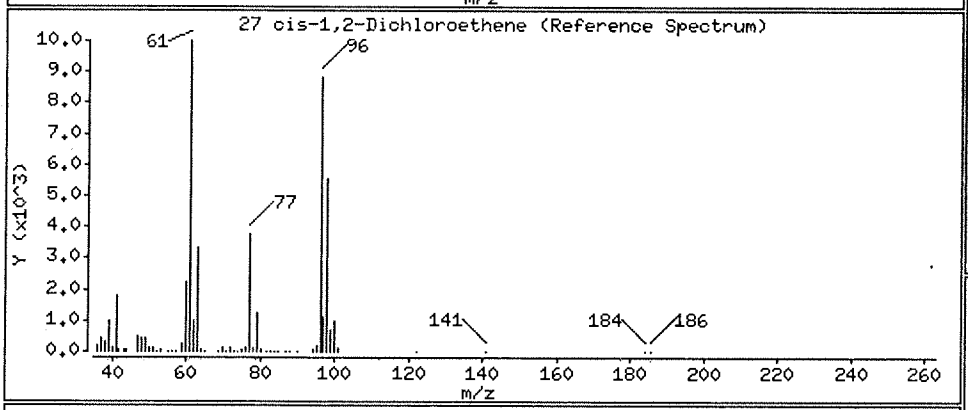
Concentration: 2381.92 ug/l

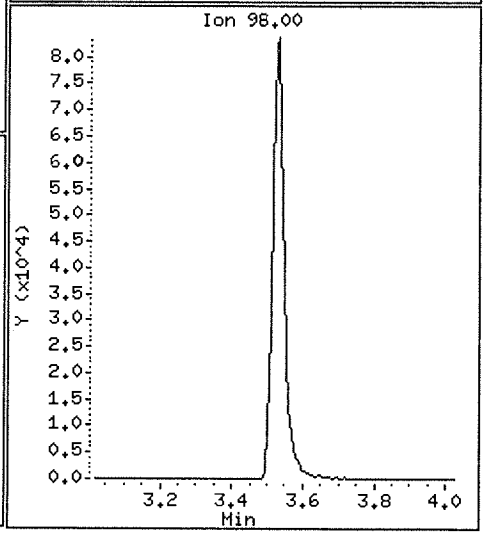


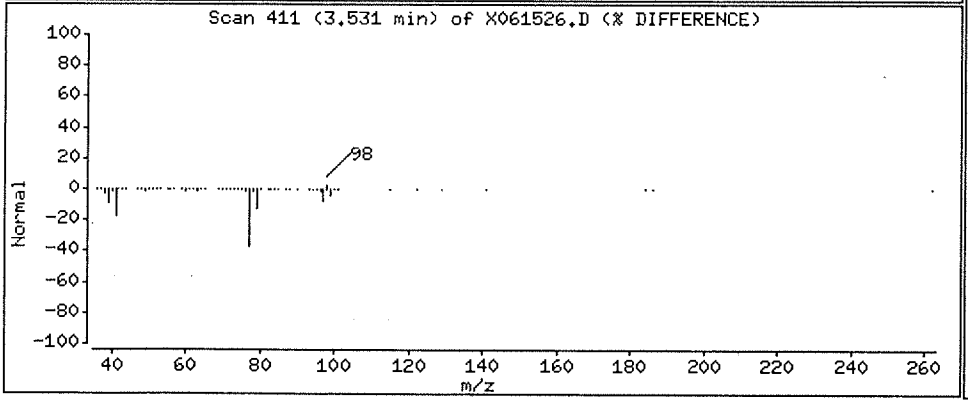












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061526.D

Date : 15-JUN-2021 19:41

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

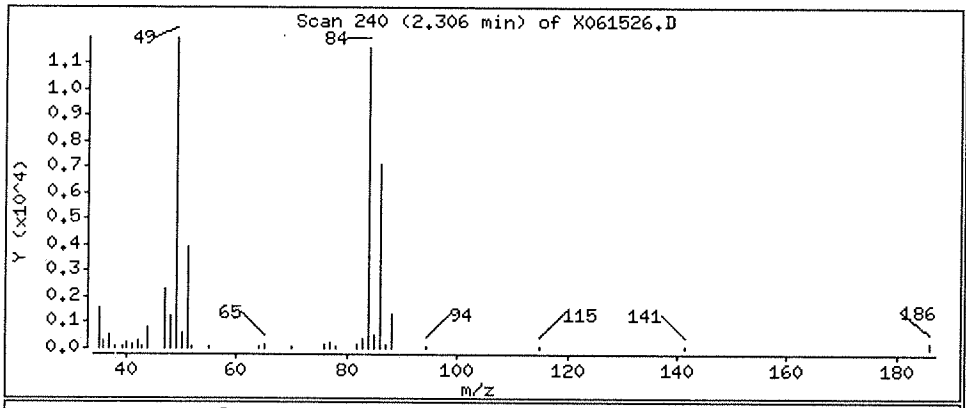
Operator: PC

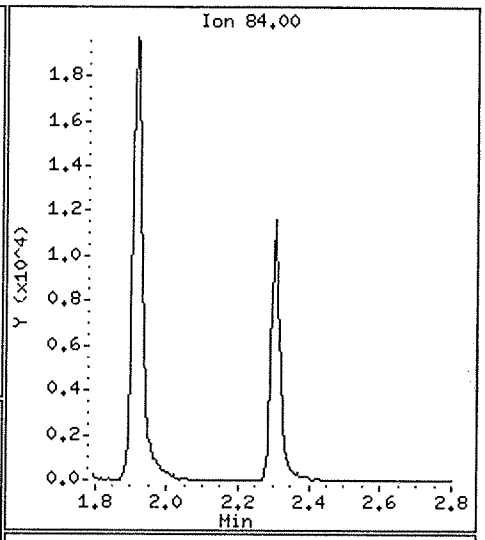
Column phase: DB624

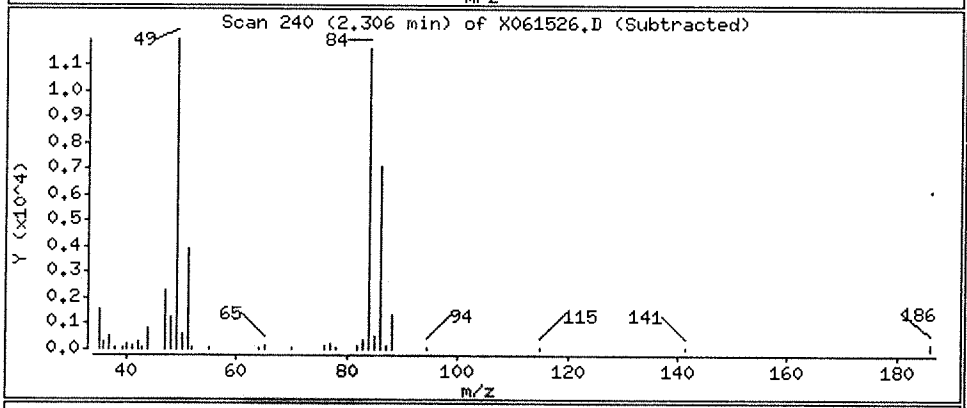
Column diameter: 0.18

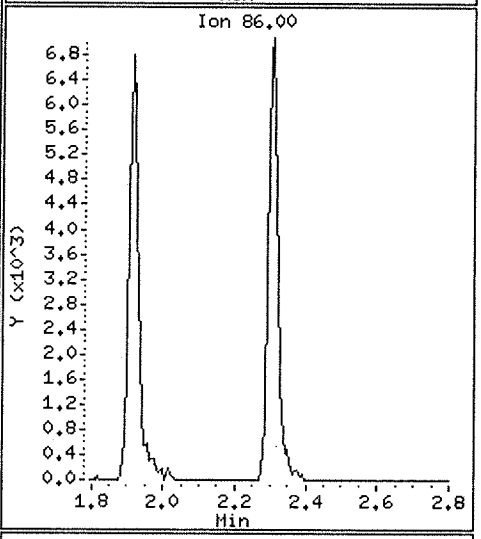
17 Methylene Chloride

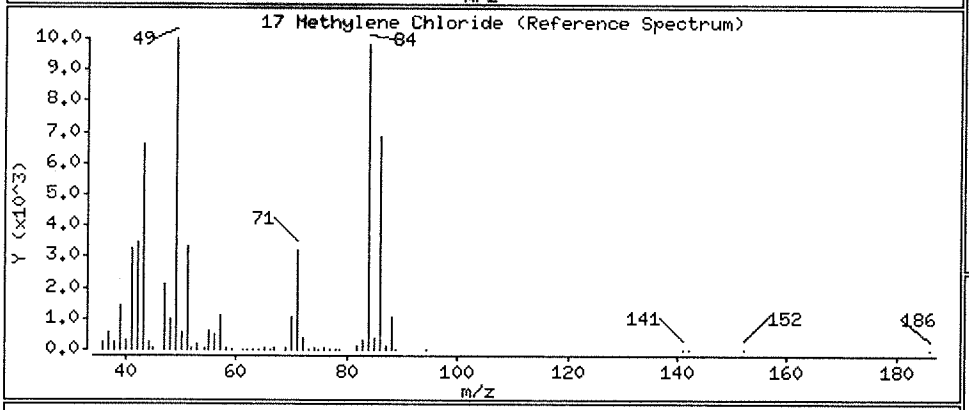
Concentration: 140.84 ug/l

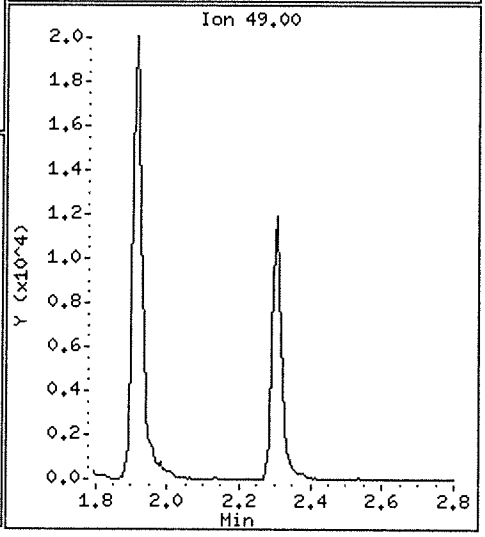


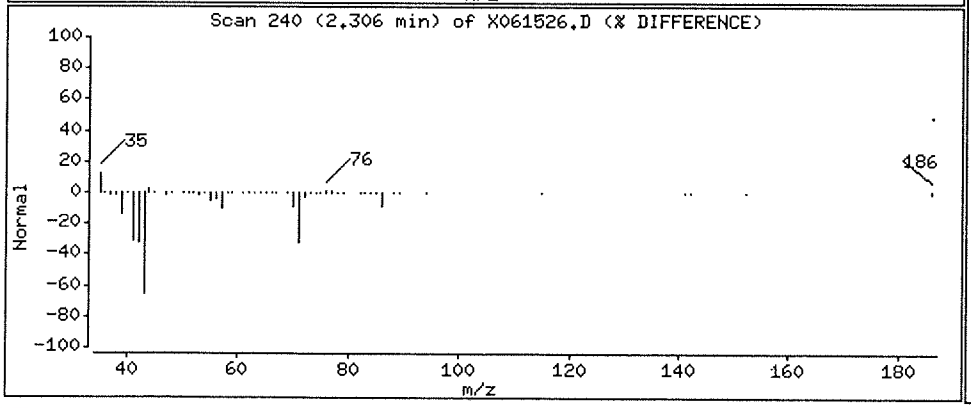












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061526.D

Date : 15-JUN-2021 19:41

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

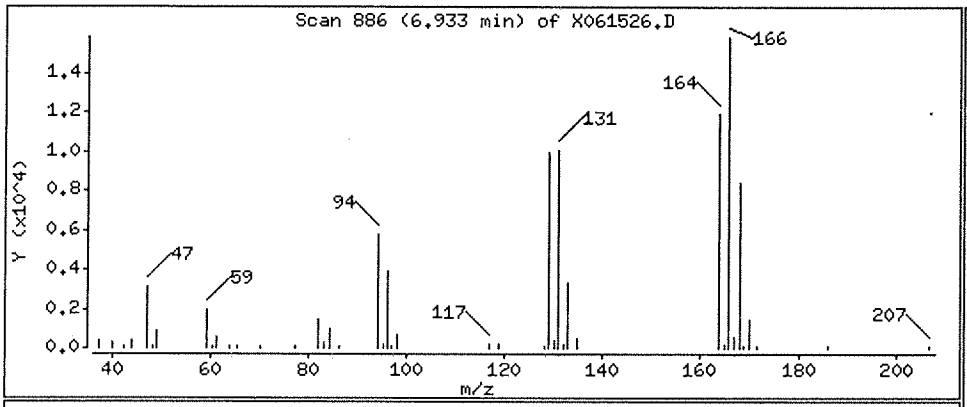
Operator: PC

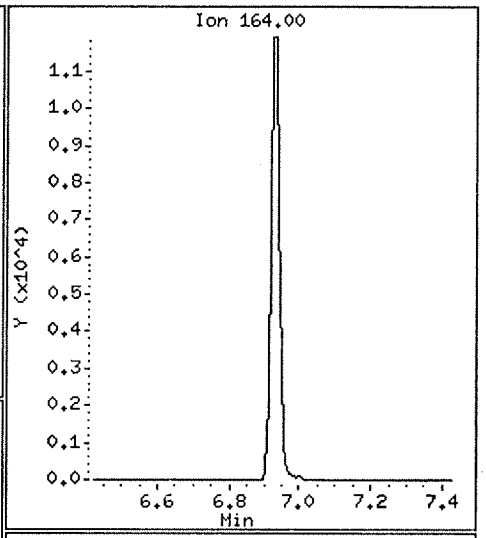
Column phase: DB624

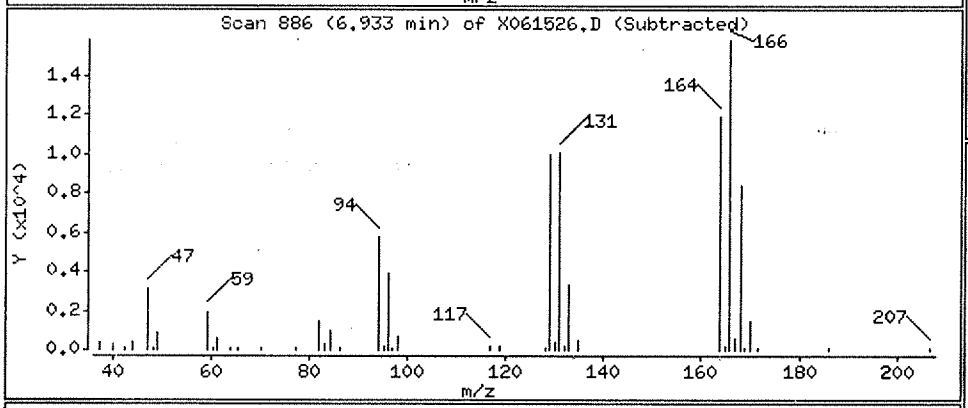
Column diameter: 0.18

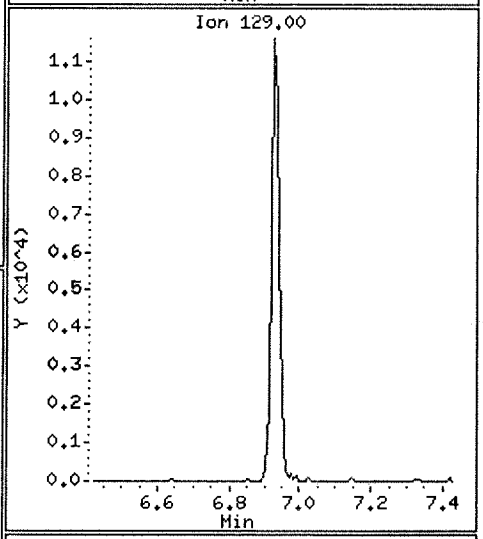
56 Tetrachloroethene

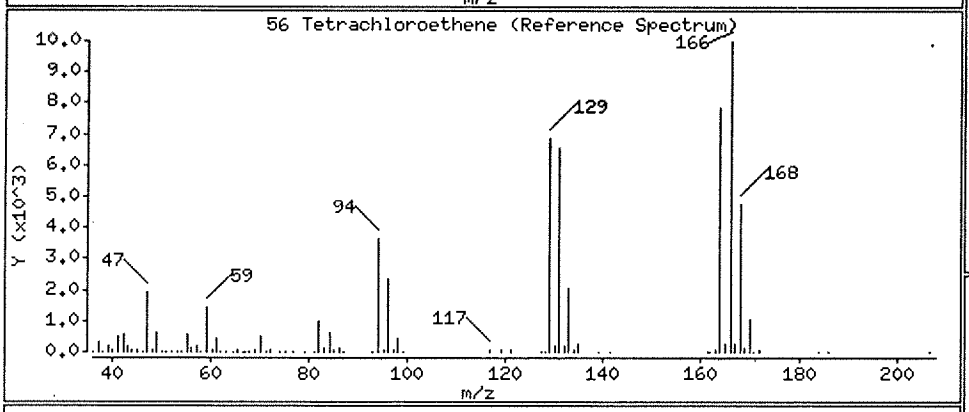
Concentration: 231.41 ug/l

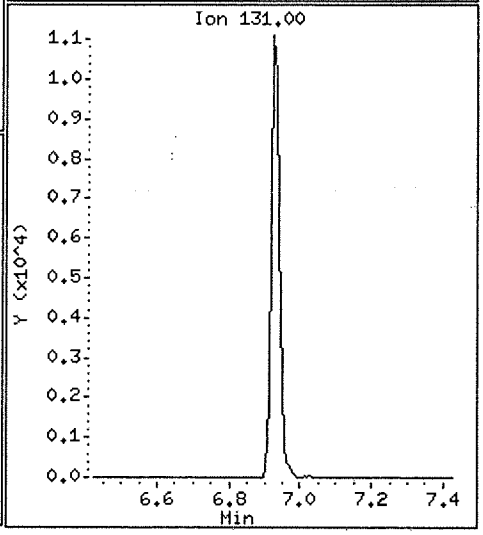


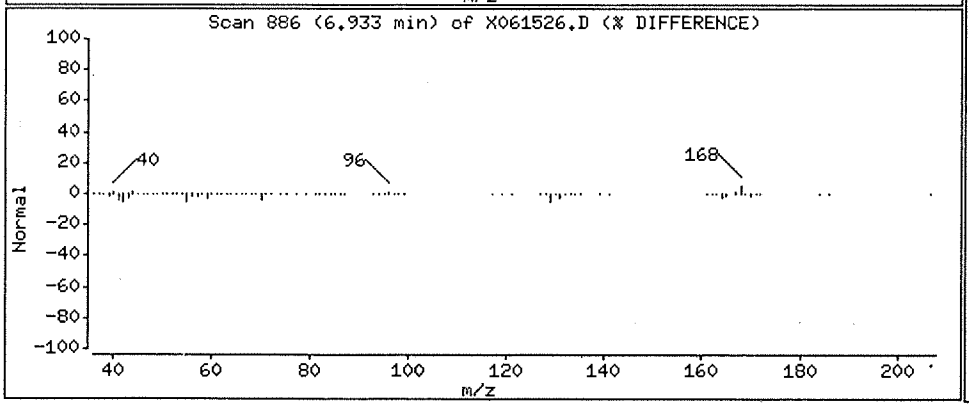












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061526.D

Date : 15-JUN-2021 19:41

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

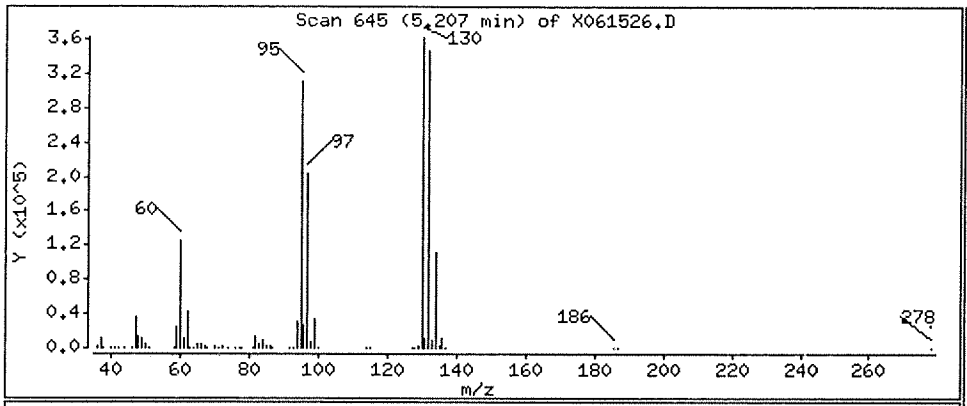
Operator: PC

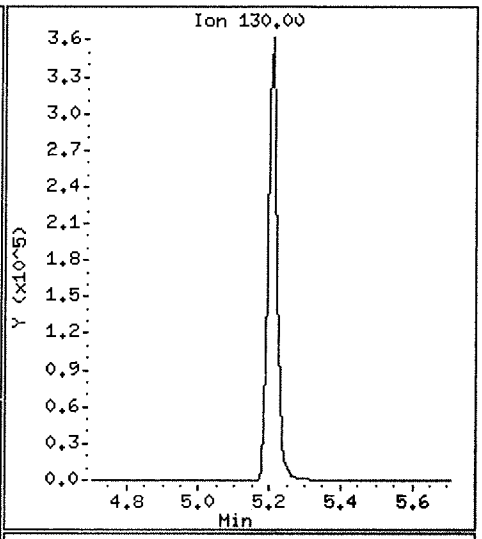
Column phase: DB624

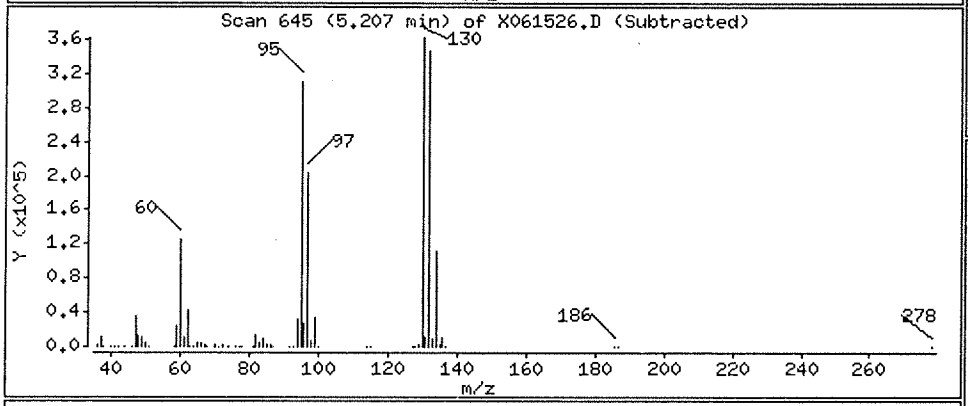
Column diameter: 0.18

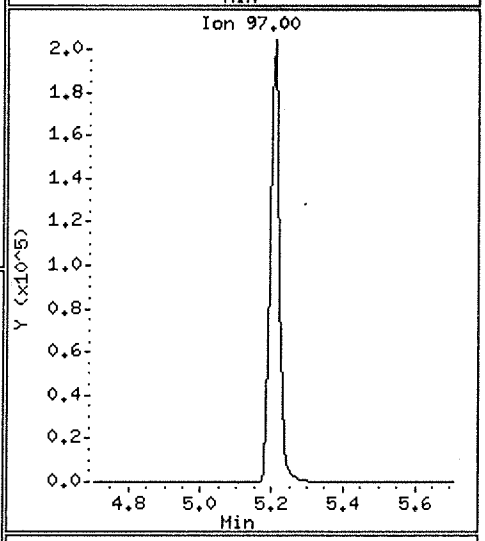
38 Trichloroethene

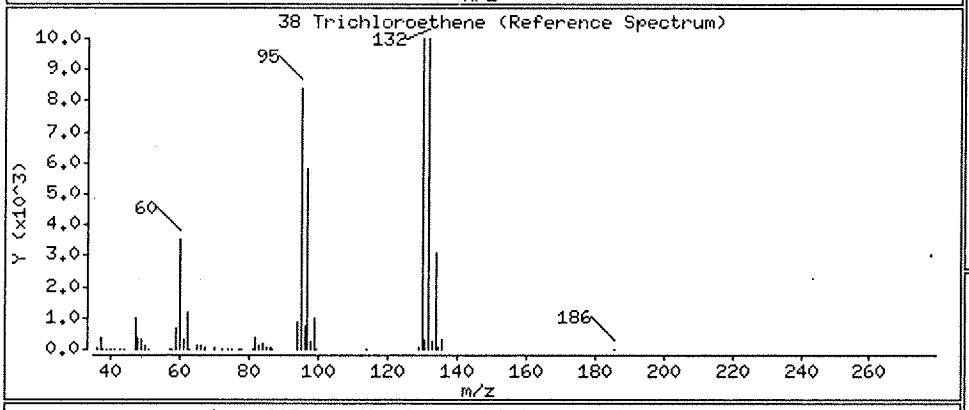
Concentration: 5943.24 ug/l

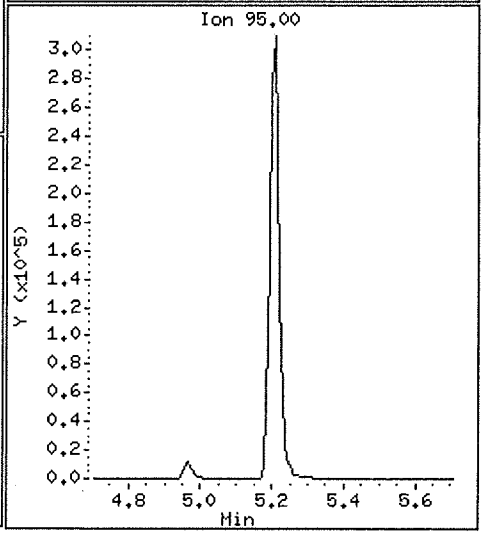


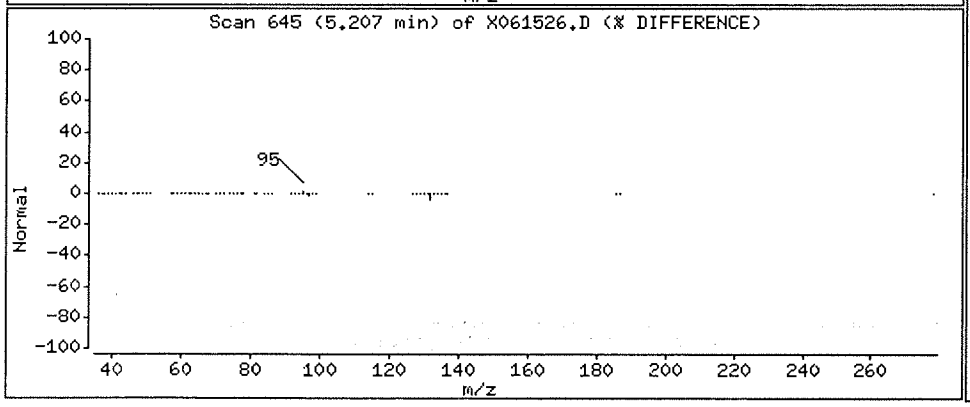












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061526.D

Date : 15-JUN-2021 19:41

Client ID: HS21060700-05

Instrument: voa6.i

Sample Info: HS21060700-05;HS21060700-05;;;

Purge Volume: 5.0

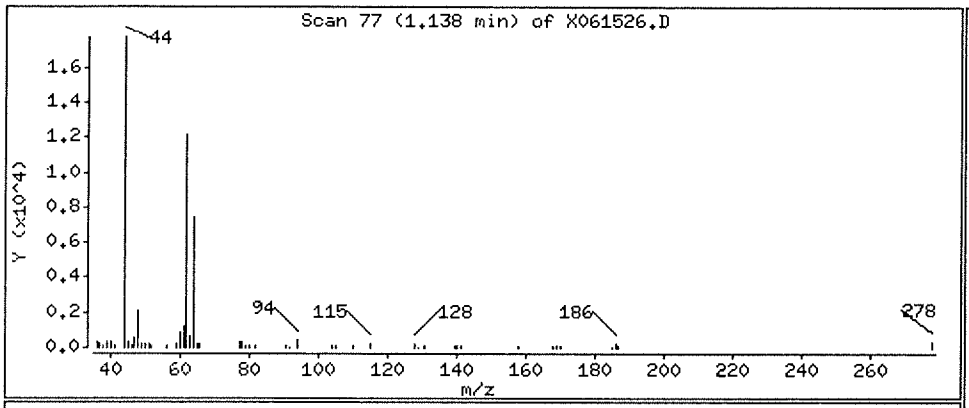
Operator: PC

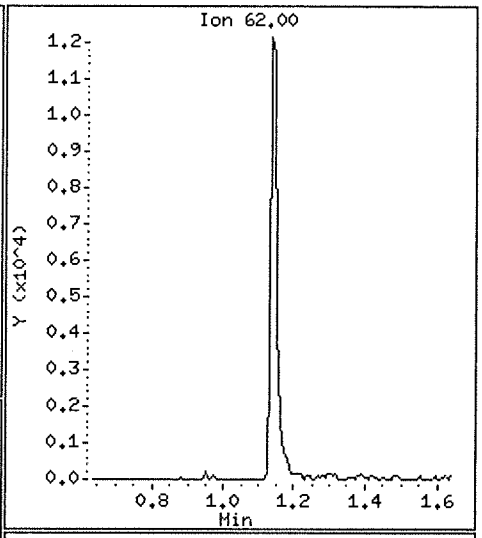
Column phase: DB624

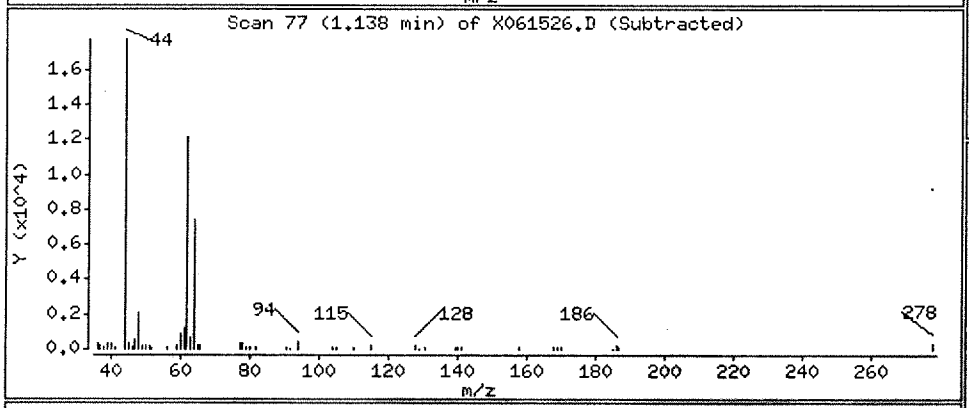
Column diameter: 0.18

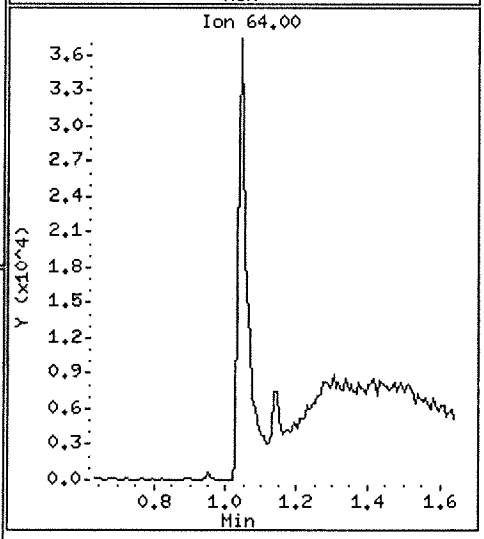
5 Vinyl Chloride

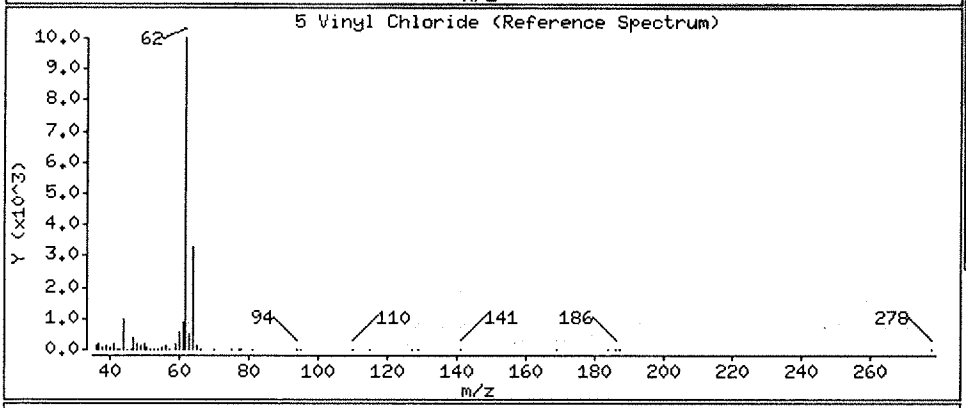
Concentration: 117.18 ug/l

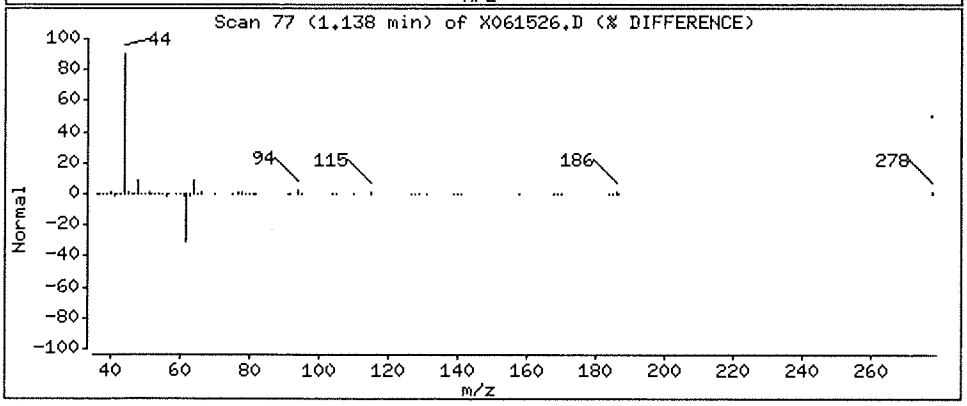












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D
Lab Smp Id: HS21060700-06 Client Smp ID: HS21060700-06
Inj Date : 15-JUN-2021 20:03
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-06;HS21060700-06;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 26
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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

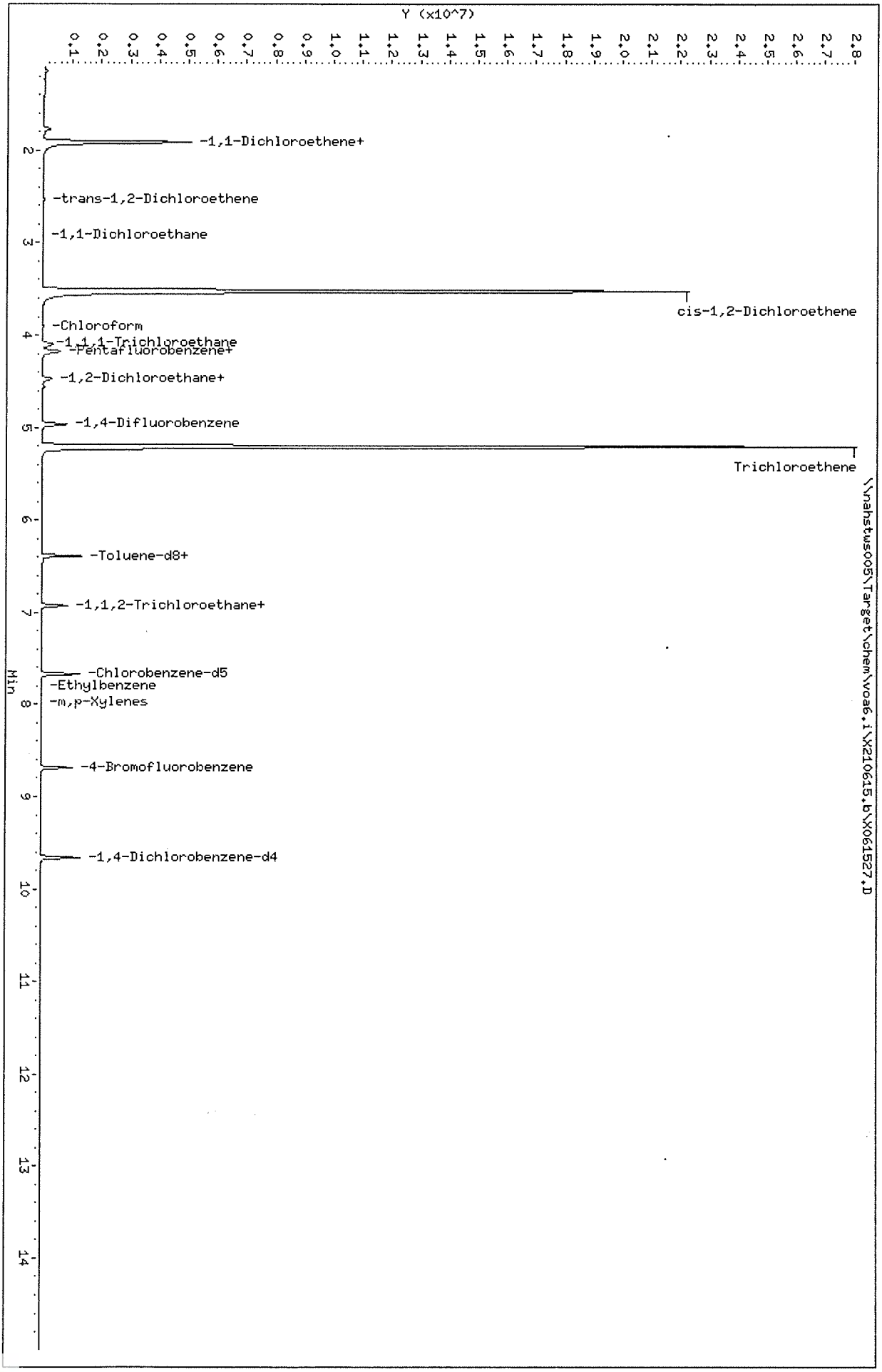
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	564323	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	773488	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	680894	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	341074	50.0000	
$	30 Dibromofluoromethane	113	4.104	4.096	(0.981)	248886	44.7890	44.78
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	247688	45.8913	45.89
$	48 Toluene-d8	98	6.389	6.388	(0.833)	860768	50.7511	50.75
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	278129	46.5646	46.56
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	14798	1.77442	17.74(a)
	53 1,1,2-Trichloroethane	83	6.847	6.840	(0.893)	2217	0.60107	6.01(a)
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	22430	2.51416	25.14(a)
	11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	228739	39.3504	393.50
	33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	61388	9.96079	99.60
	28 Chloroform	83	3.910	3.910	(0.935)	24723	2.49124	24.91(a)
	27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	11702344	1978.46	19784.61(A)
	61 Ethylbenzene	106	7.807	7.800	(1.018)	4718	0.72149	7.21(a)
	62 m,p-Xylenes	106	7.907	7.900	(1.031)	5798	0.68015	6.80(a)
	56 Tetrachloroethene	164	6.926	6.926	(0.903)	186532	44.5011	445.01
	50 Toluene	91	6.446	6.446	(0.840)	28252	1.42127	14.21(a)
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	18720	3.55269	35.52(a)
	38 Trichloroethene	130	5.207	5.207	(1.049)	9357686	1762.69	17626.88(A)
	5 Vinyl Chloride	62	1.138	1.138	(0.272)	102584	15.3570	153.56

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D
Date : 15-JUN-2021 20:03
Client ID: HS21060700-06
Sample Info: HS21060700-06;HS21060700-06;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

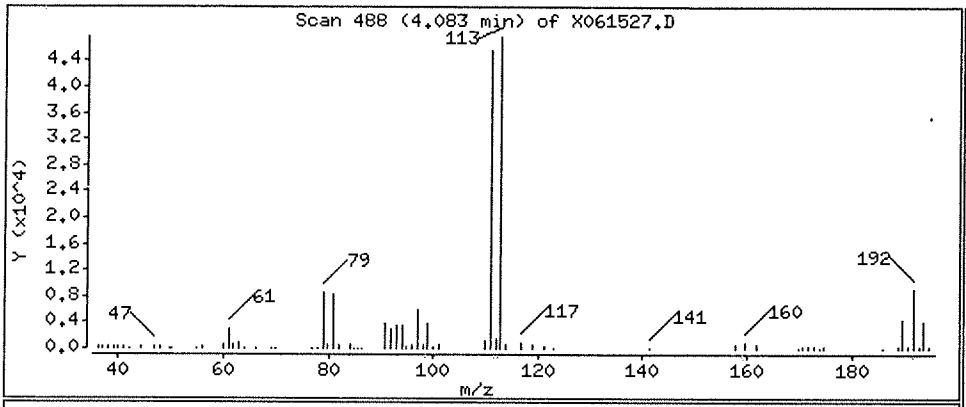
Operator: PC

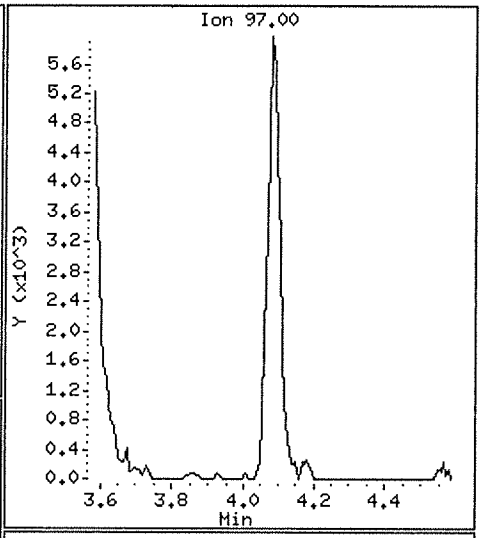
Column phase: DB624

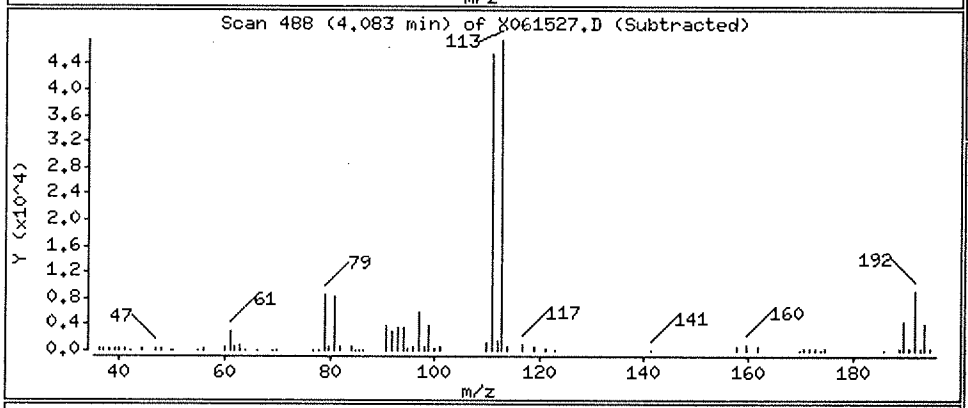
Column diameter: 0.18

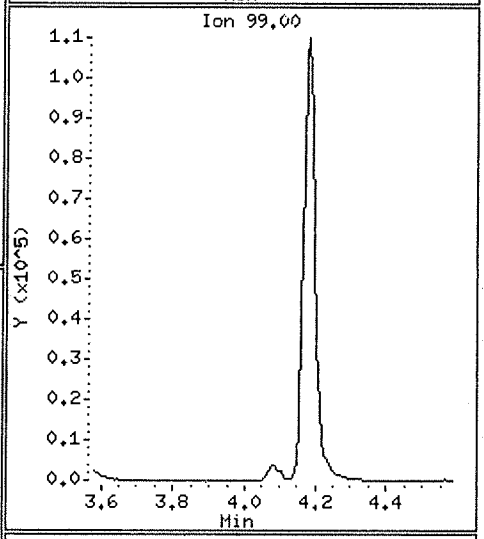
31 1,1,1-Trichloroethane

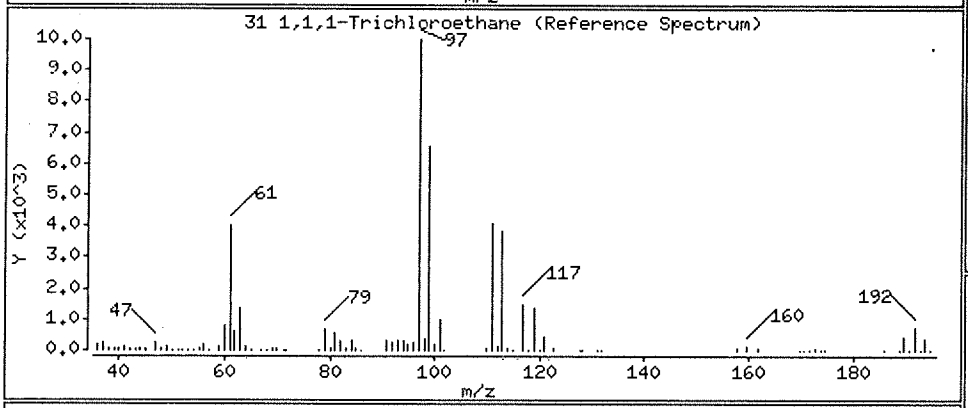
Concentration: 17.74 ug/l

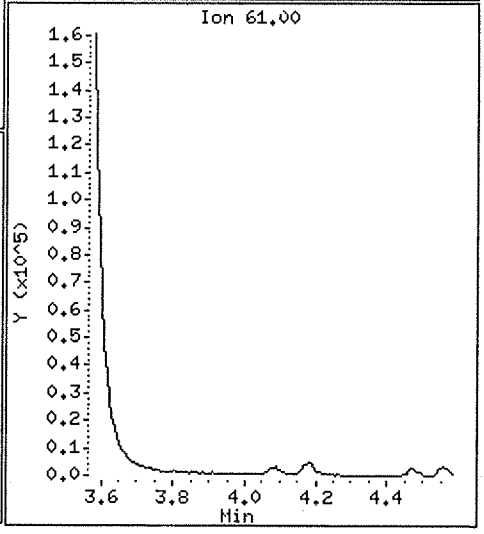


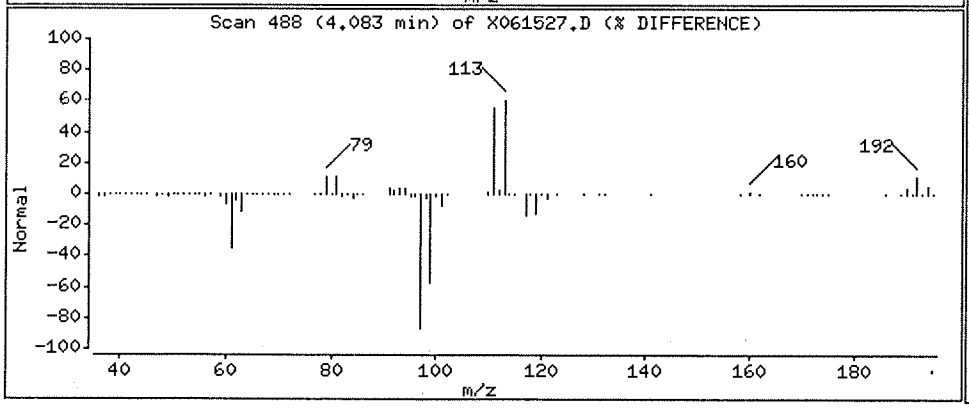












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

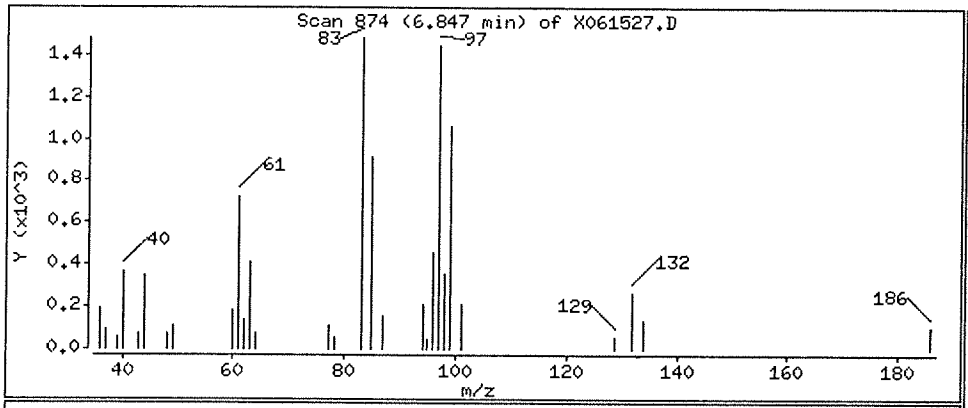
Operator: PC

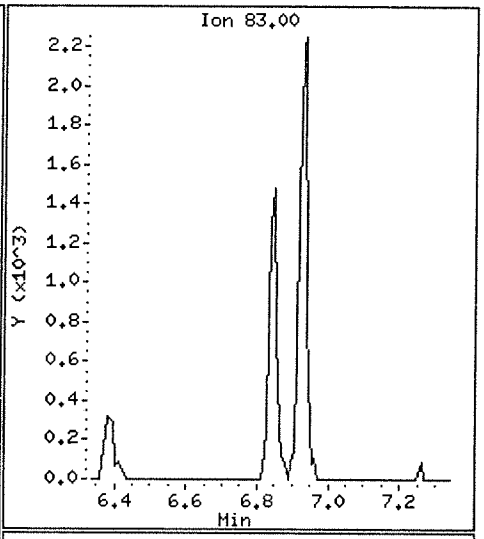
Column phase: DB624

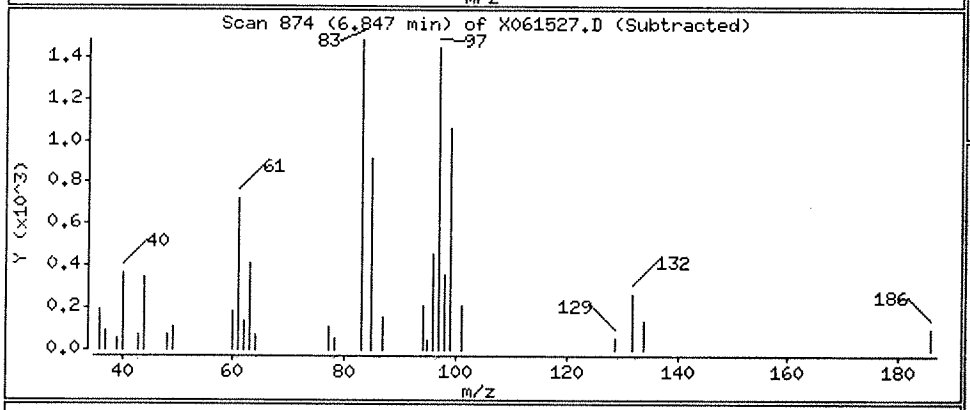
Column diameter: 0.18

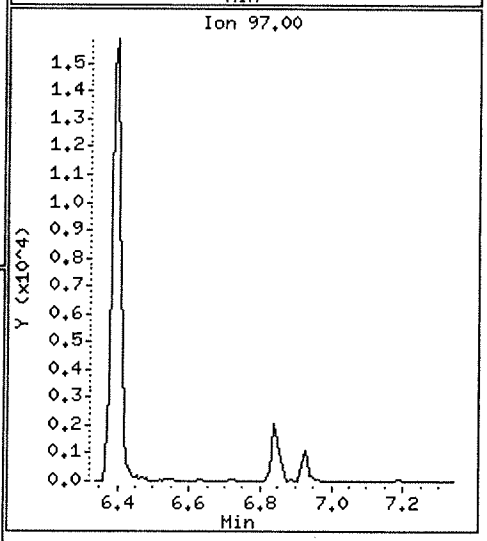
53 1,1,2-Trichloroethane

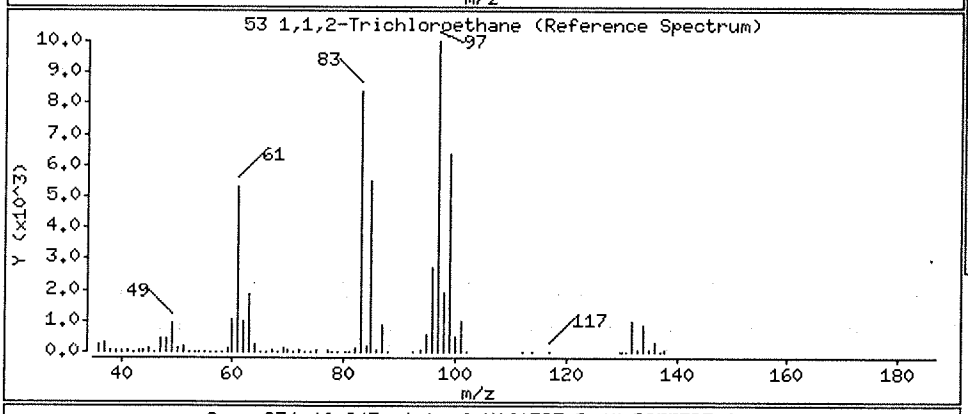
Concentration: 6.01 ug/l

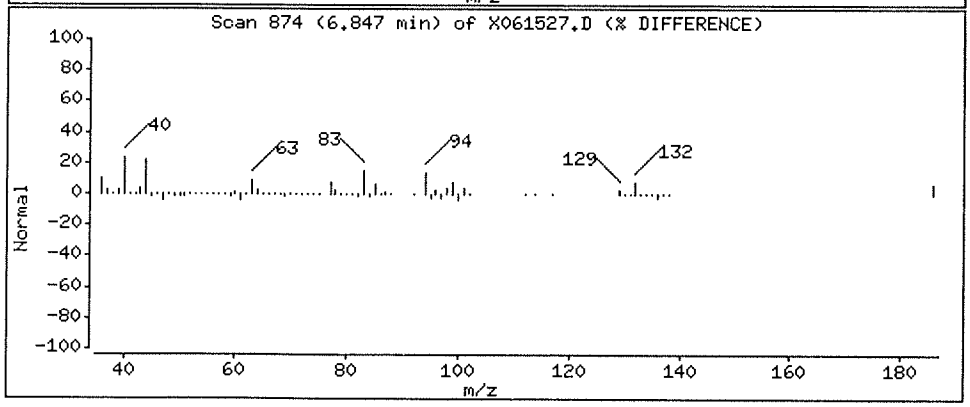












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

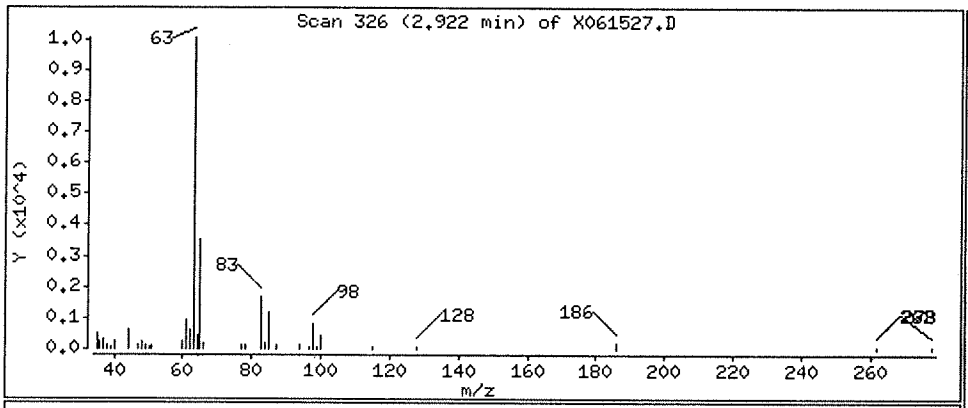
Operator: PC

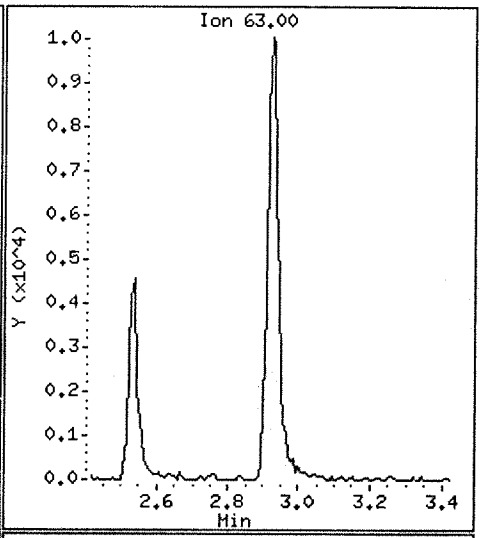
Column phase: DB624

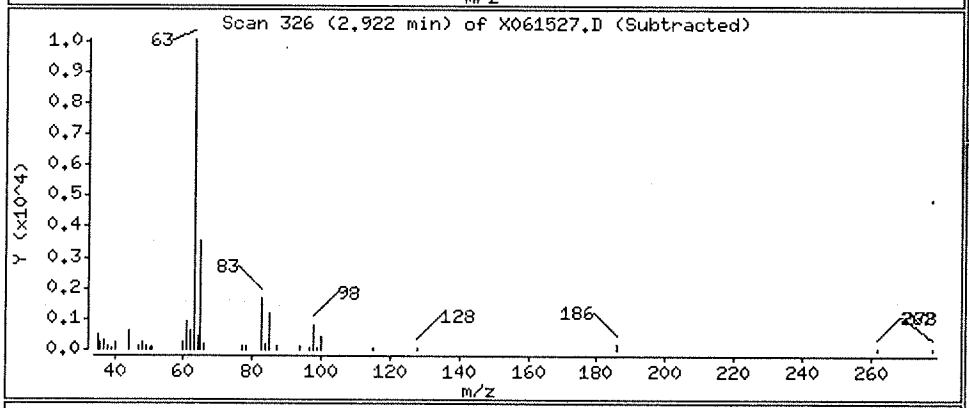
Column diameter: 0.18

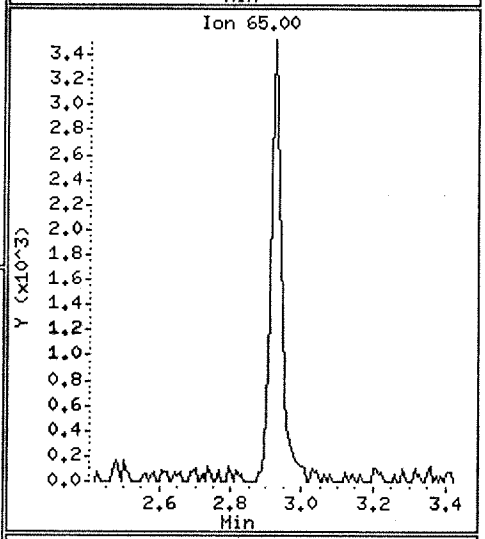
22 1,1-Dichloroethane

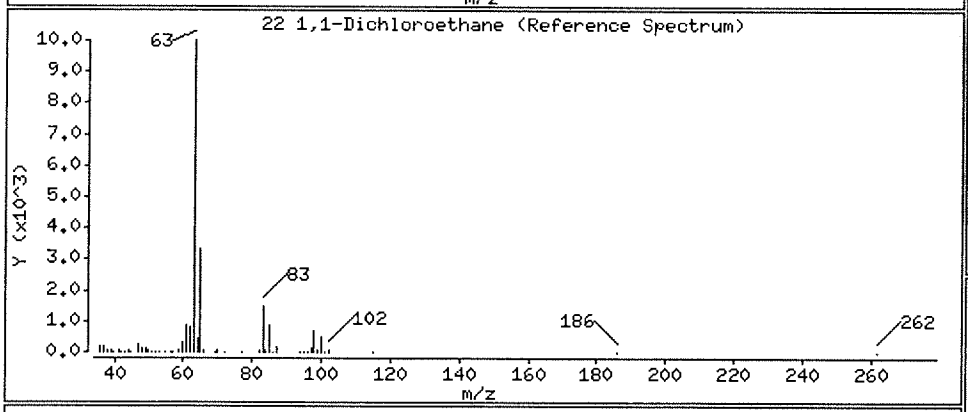
Concentration: 25.14 ug/l

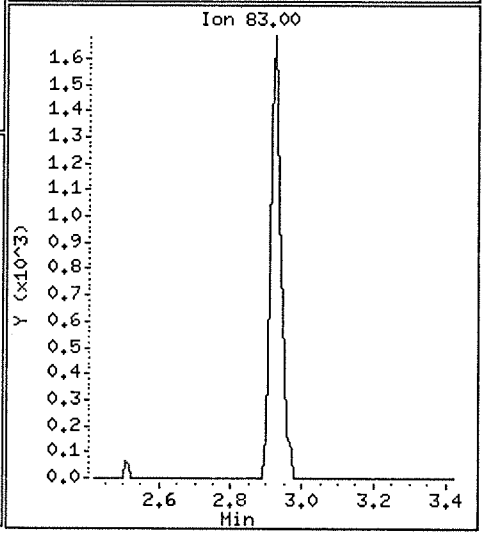


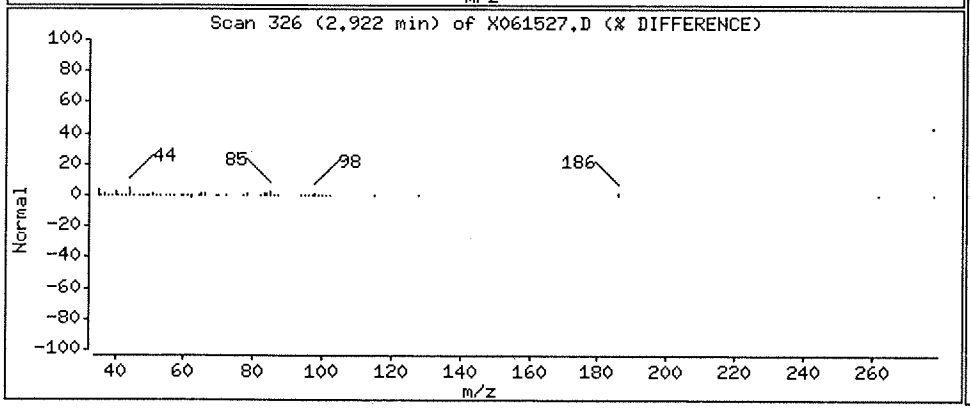












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

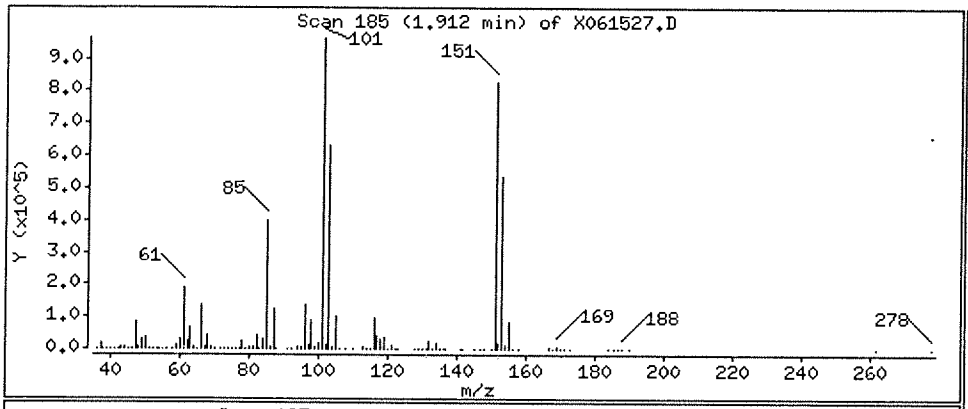
Operator: PC

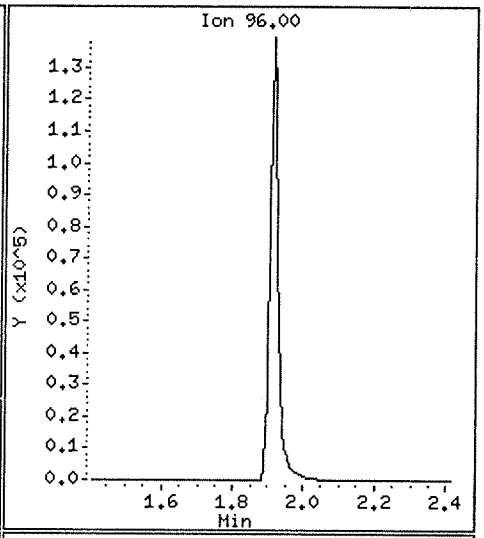
Column phase: DB624

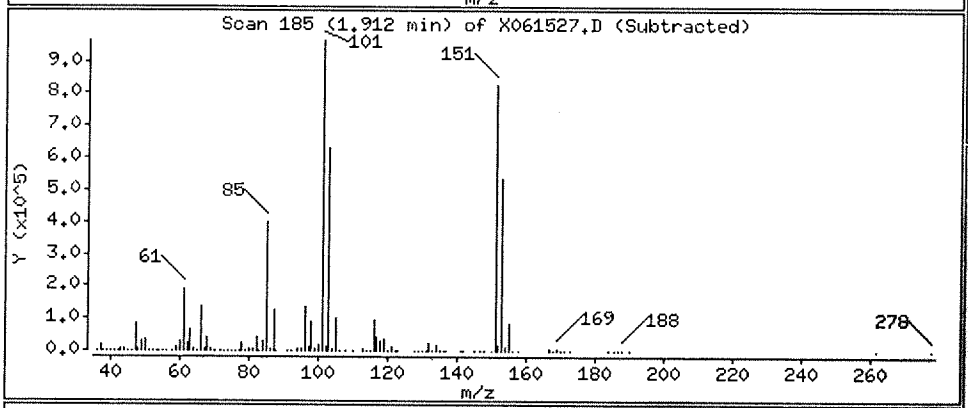
Column diameter: 0.18

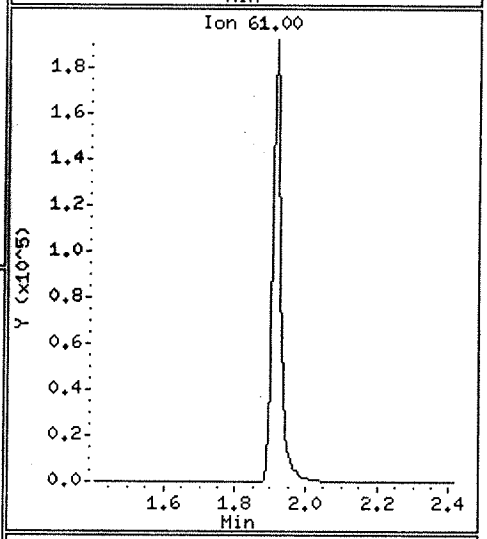
11 1,1-Dichloroethene

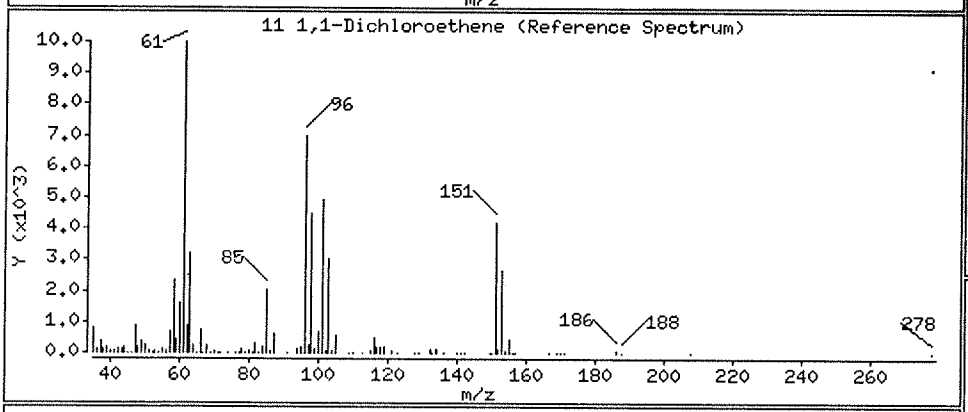
Concentration: 393.50 ug/l

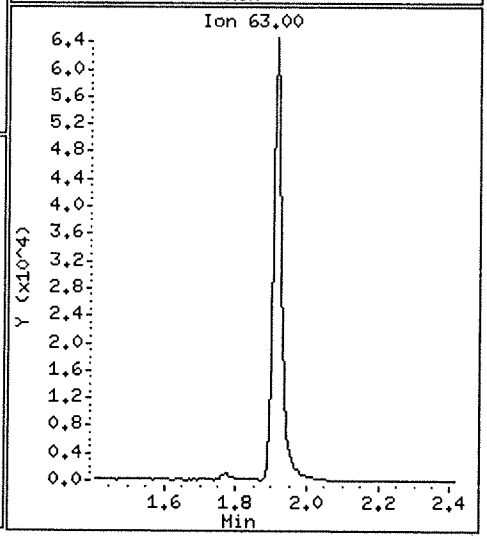


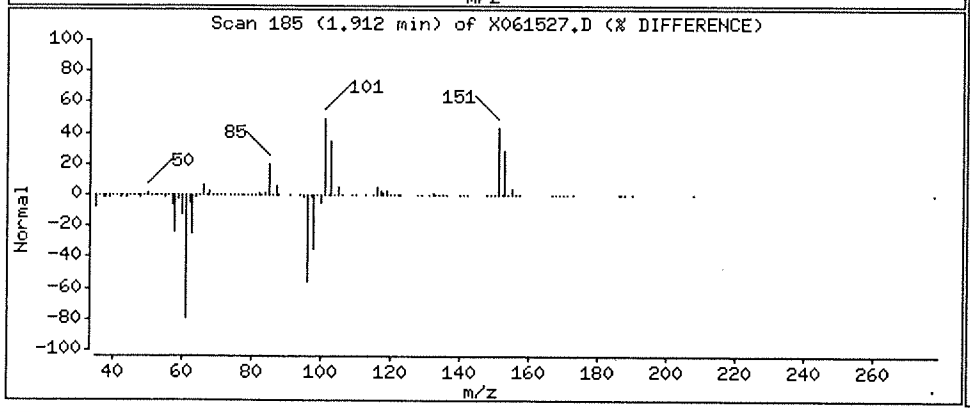












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

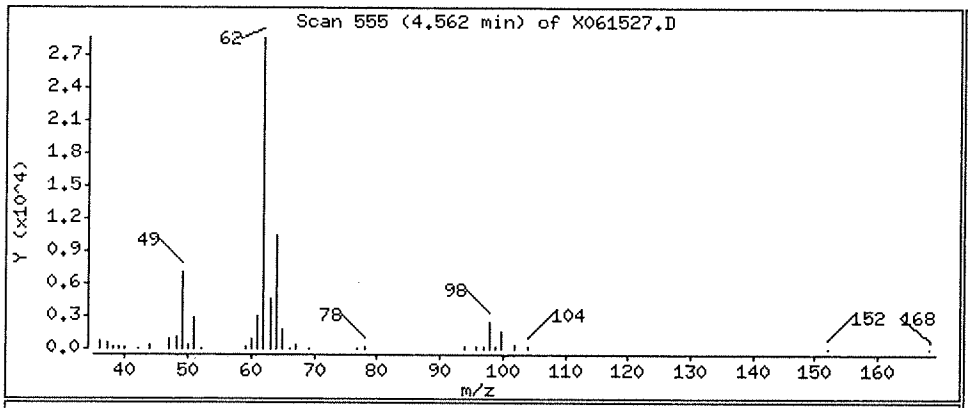
Operator: PC

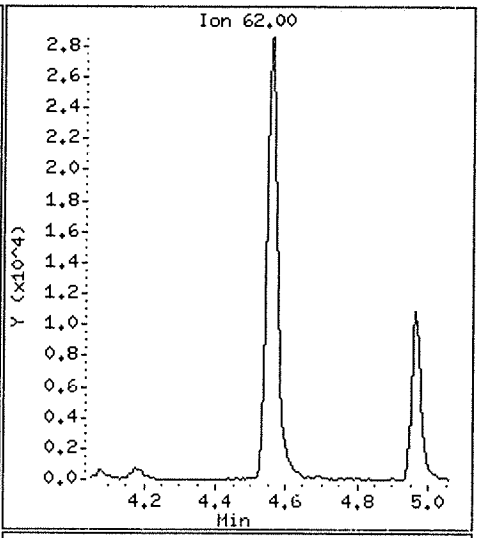
Column phase: DB624

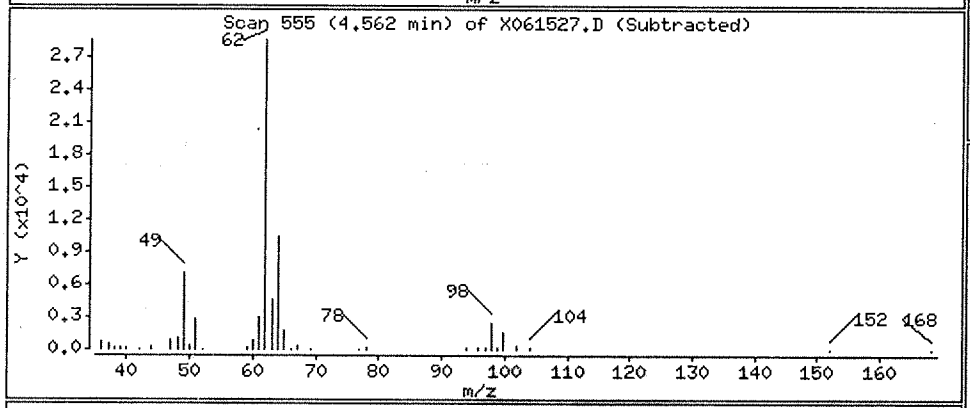
Column diameter: 0.18

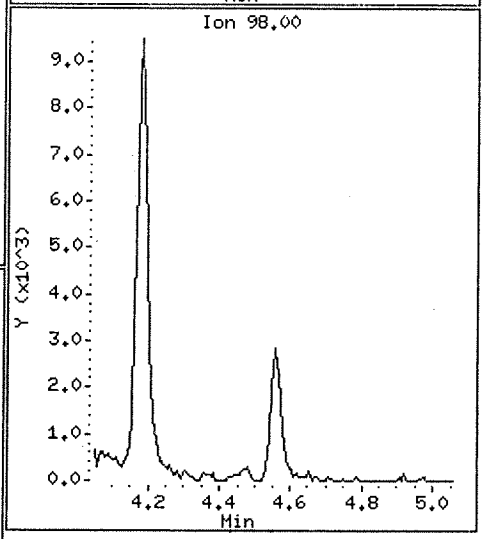
33 1,2-Dichloroethane

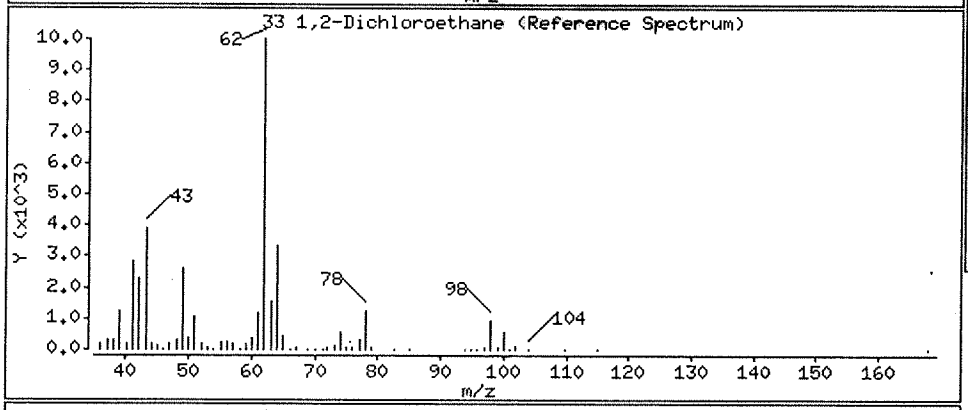
Concentration: 99.60 ug/l

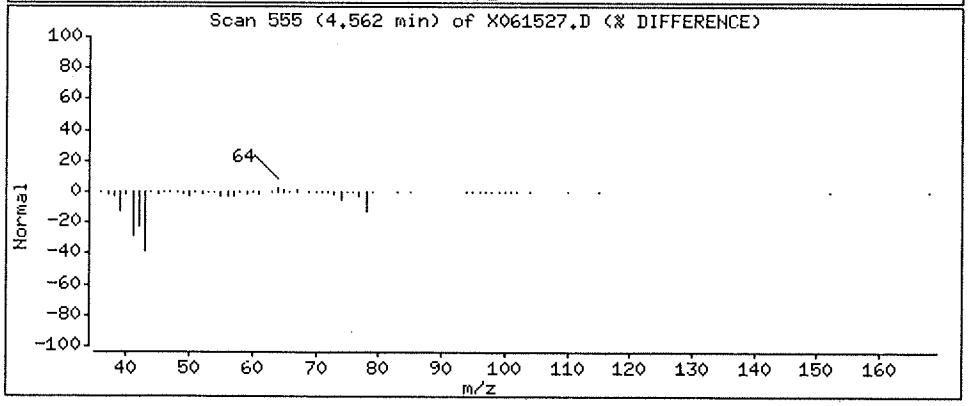












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

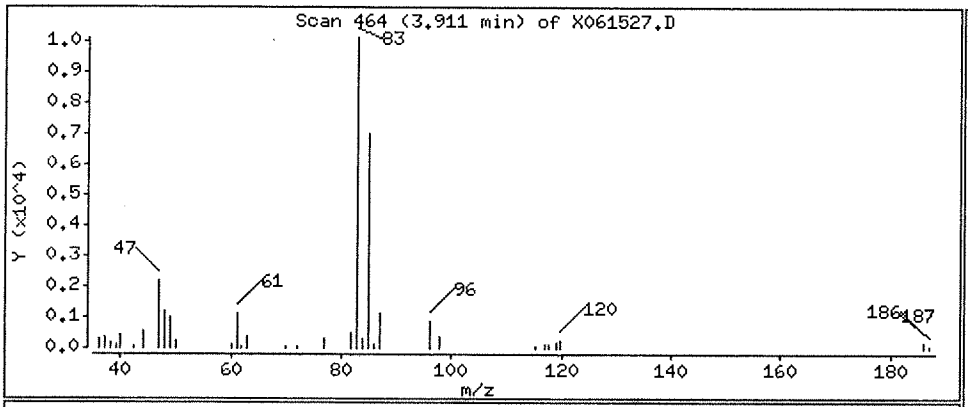
Operator: PC .

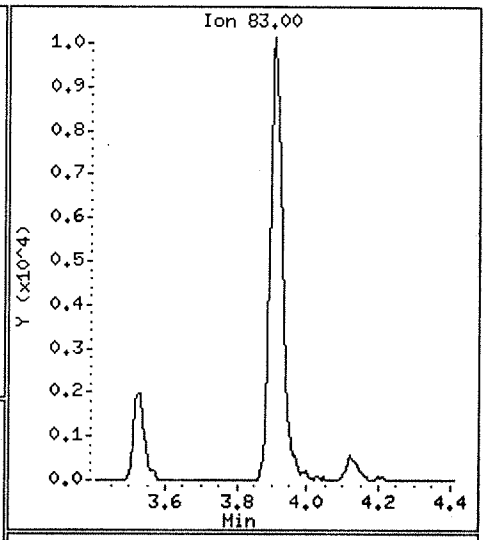
Column phase: DB624

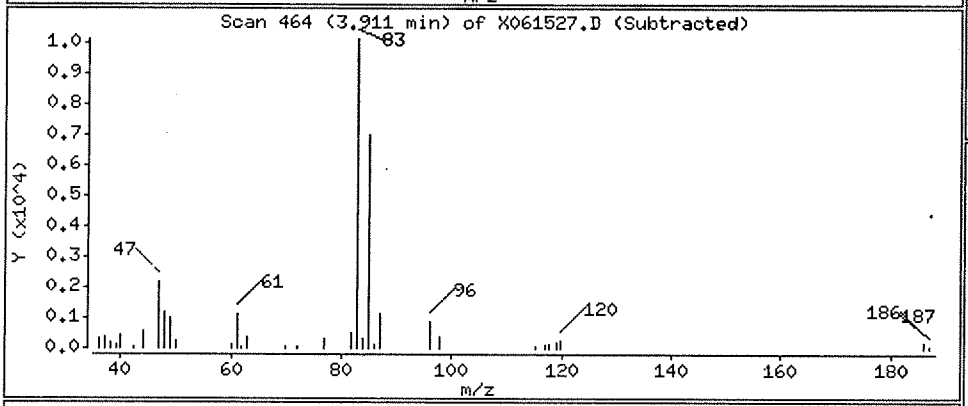
Column diameter: 0.18

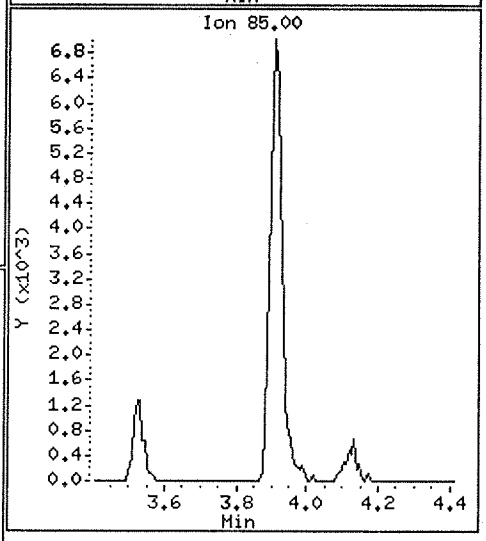
28 Chloroform

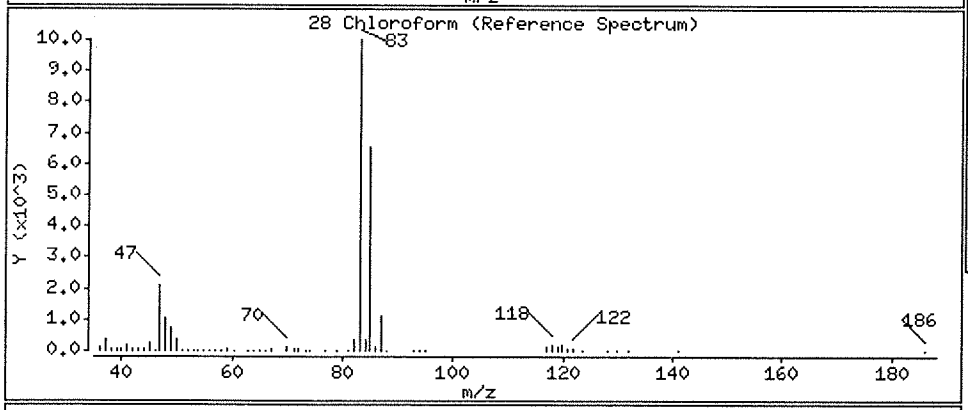
Concentration: 24.91 ug/l

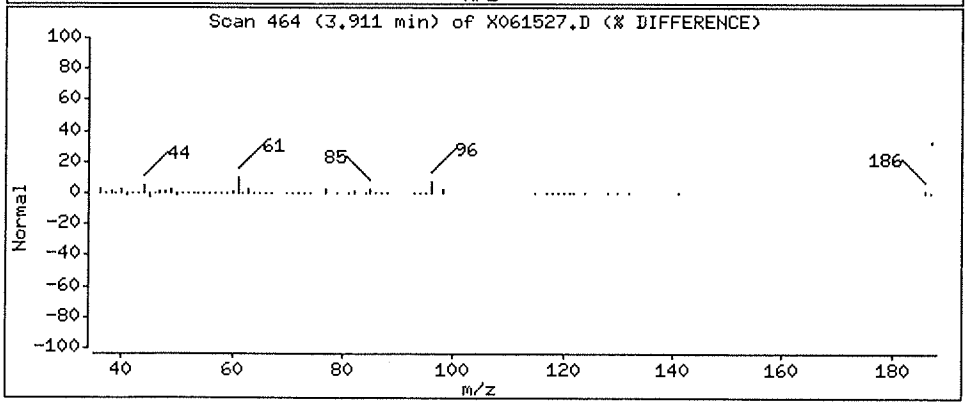












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

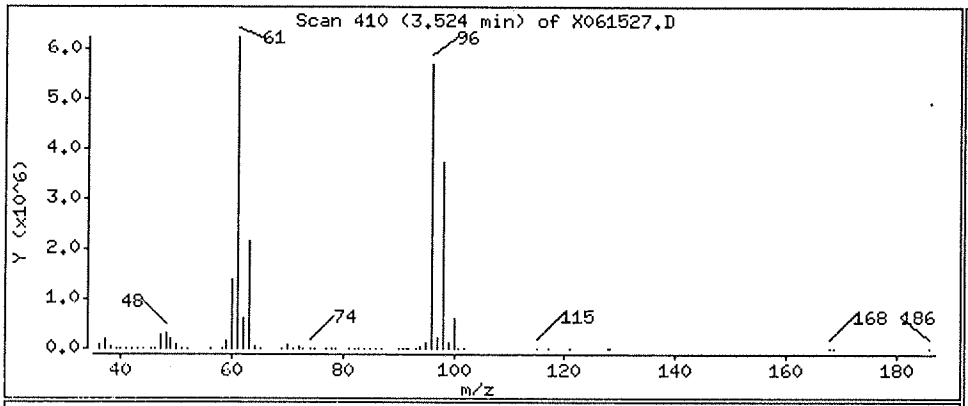
Operator: PC

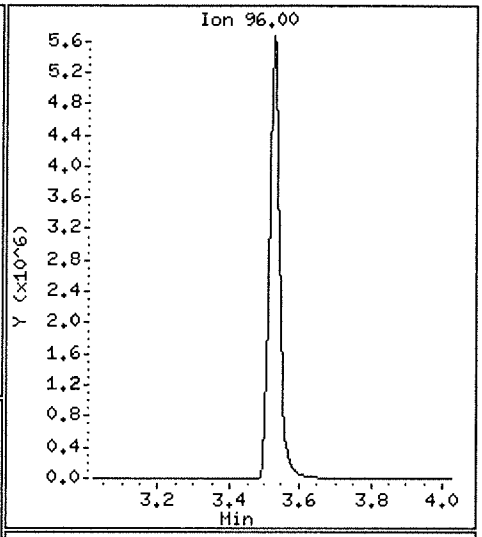
Column phase: DB624

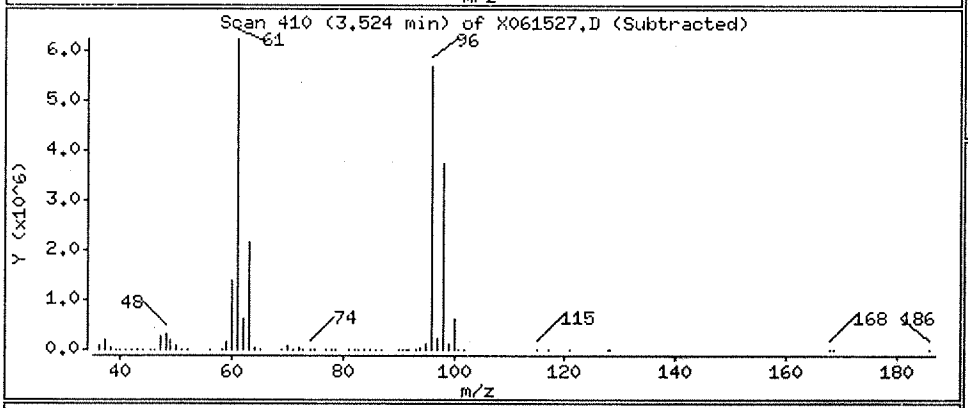
Column diameter: 0.18

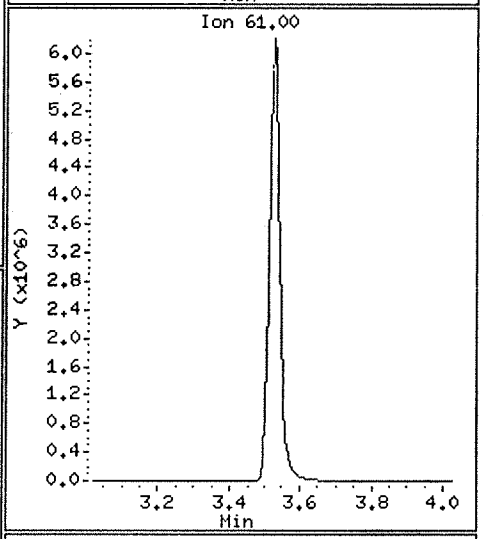
27 cis-1,2-Dichloroethene

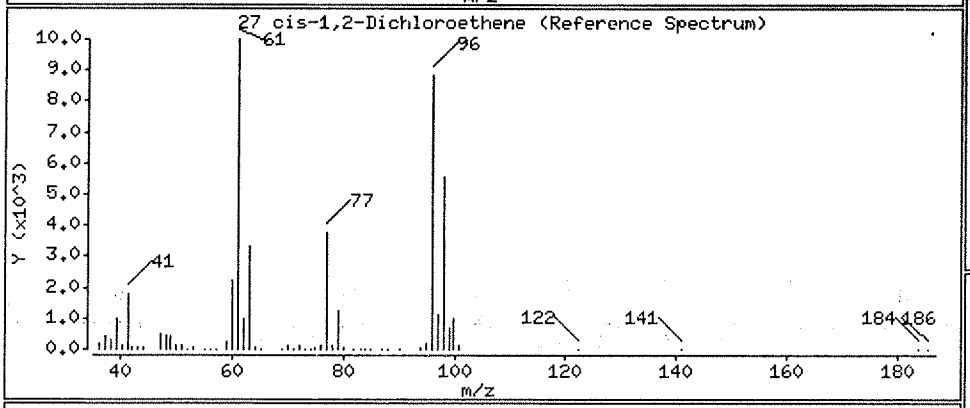
Concentration: 19784.61 ug/l

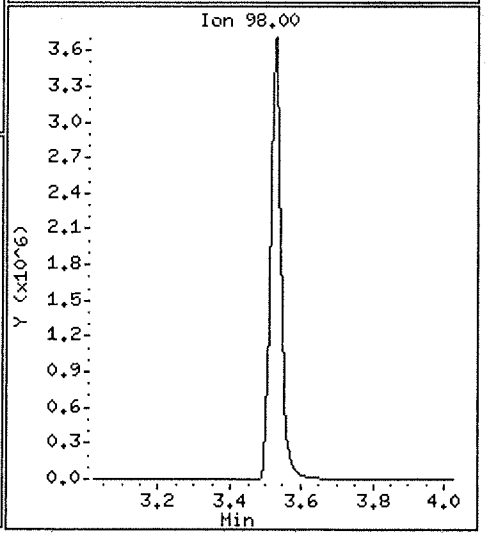


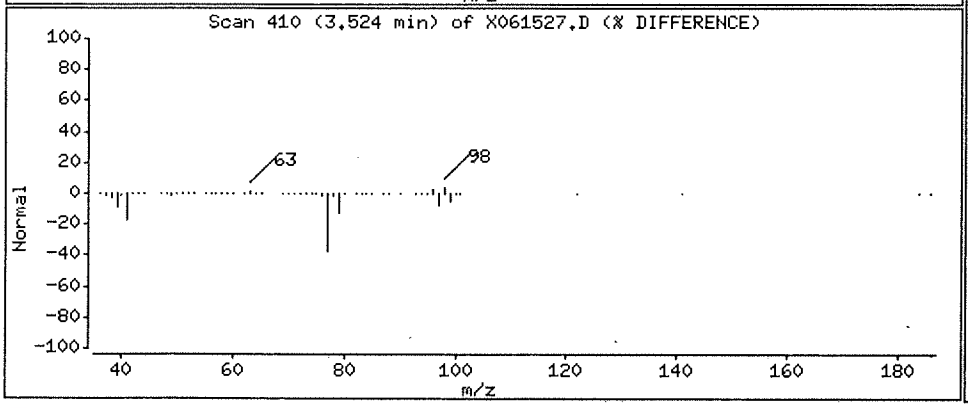












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

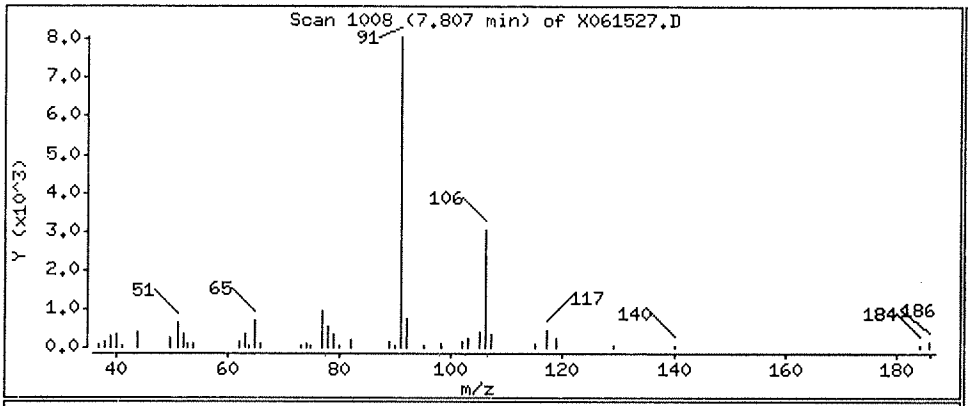
Operator: PC

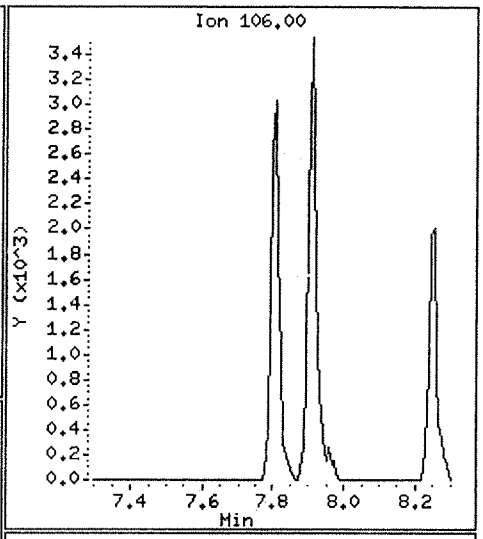
Column phase: DB624

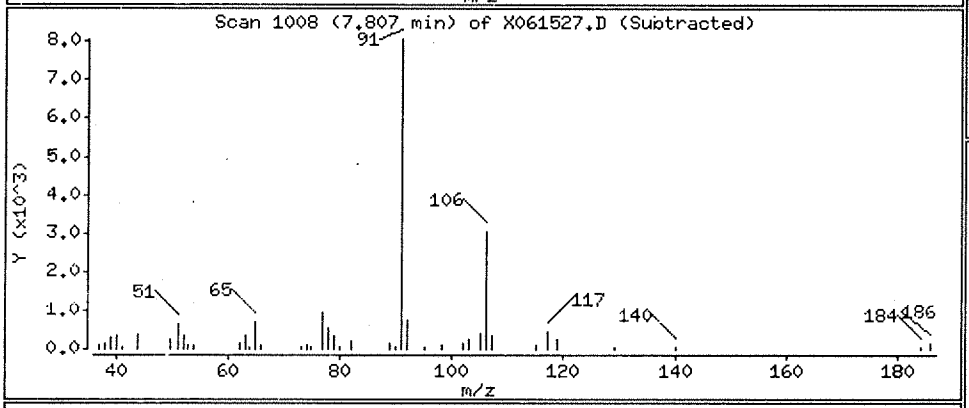
Column diameter: 0.18

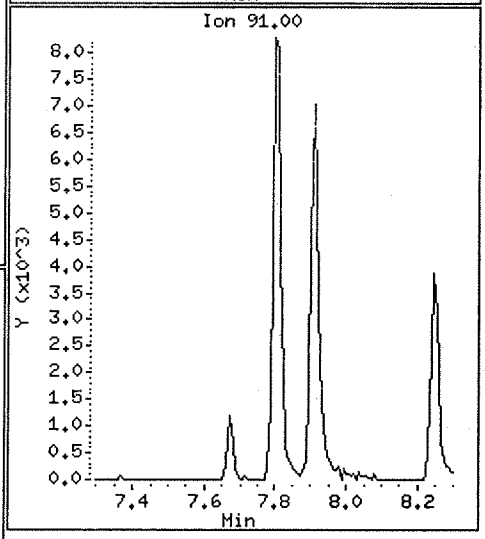
61 Ethylbenzene

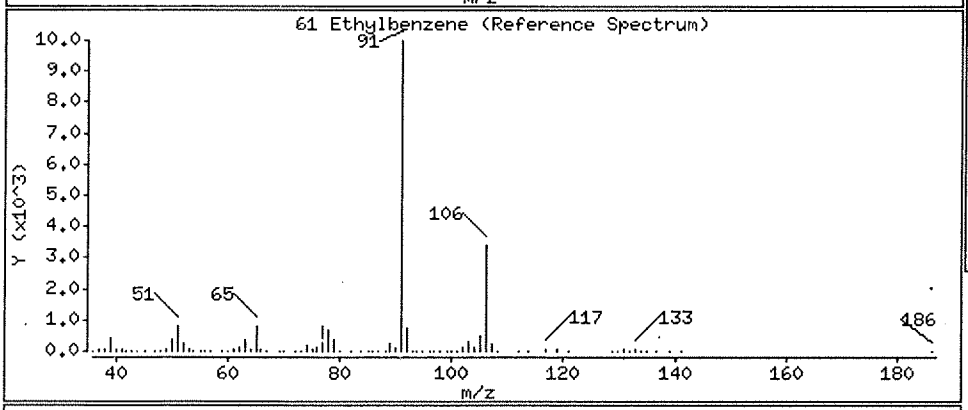
Concentration: 7.21 ug/l

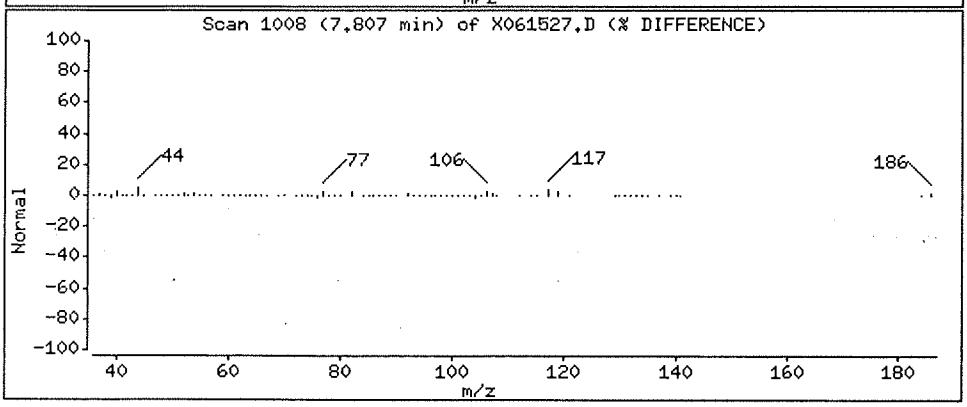












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

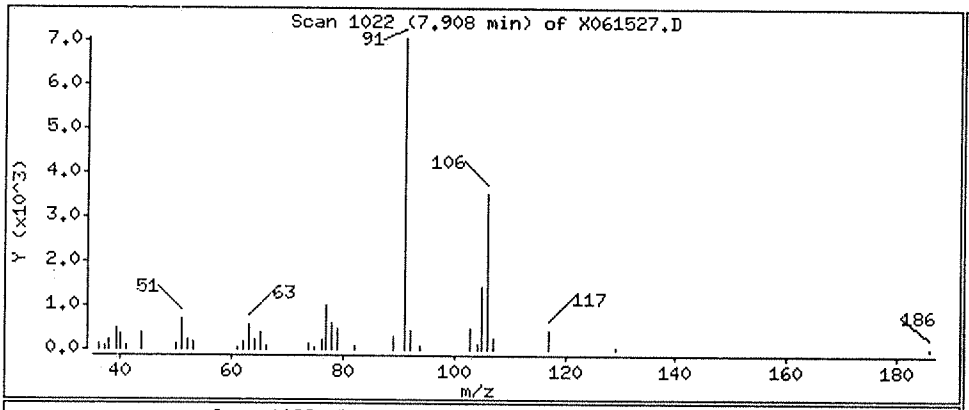
Operator: PC

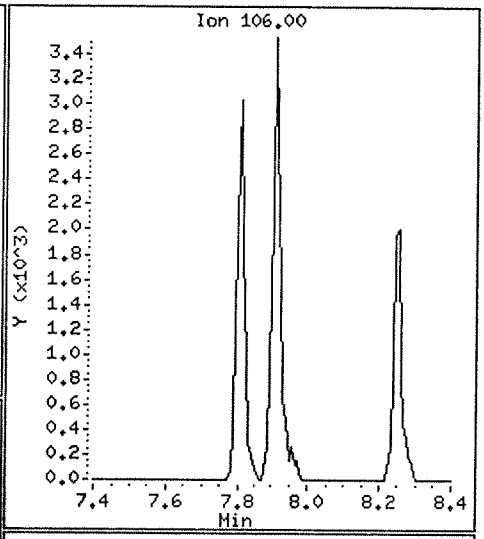
Column phase: DB624

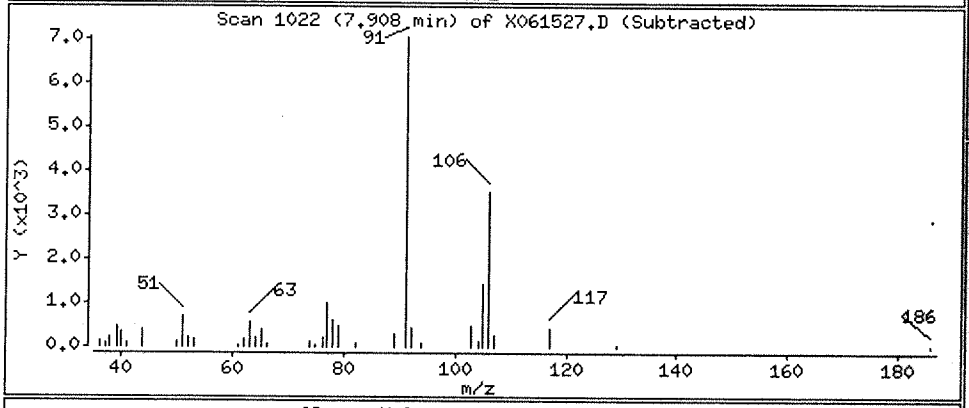
Column diameter: 0.18

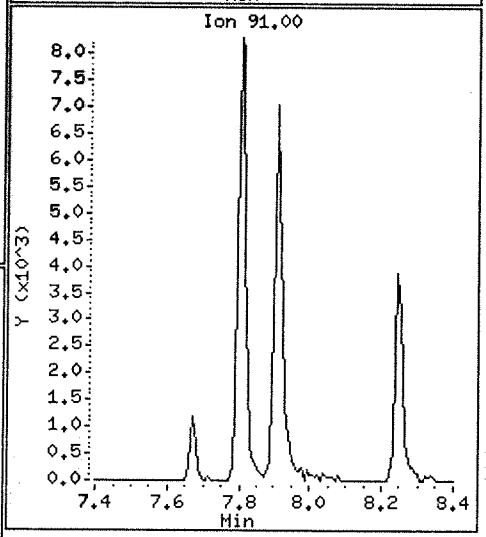
62 m,p-Xylenes

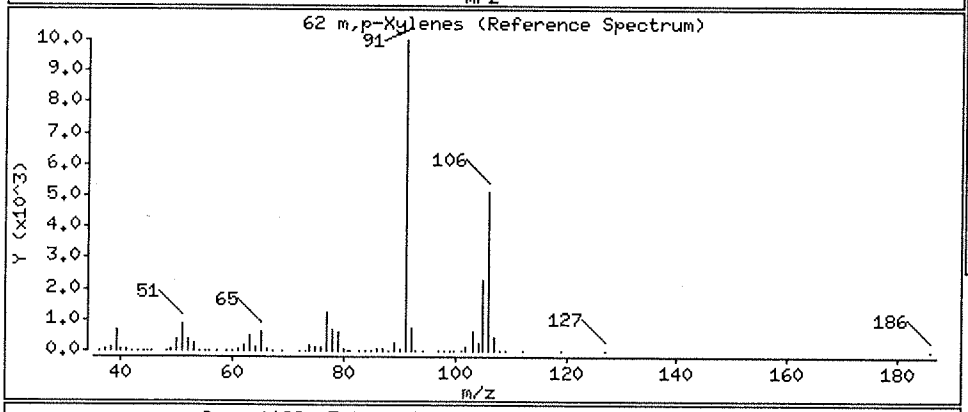
Concentration: 6.80 ug/l

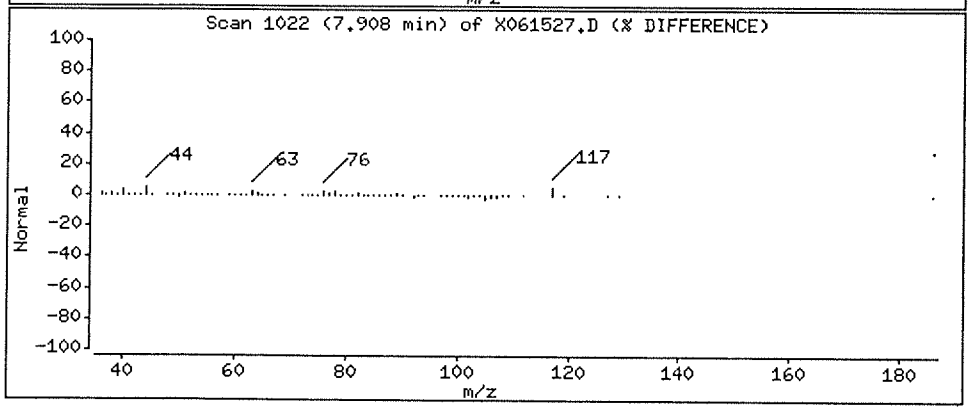












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

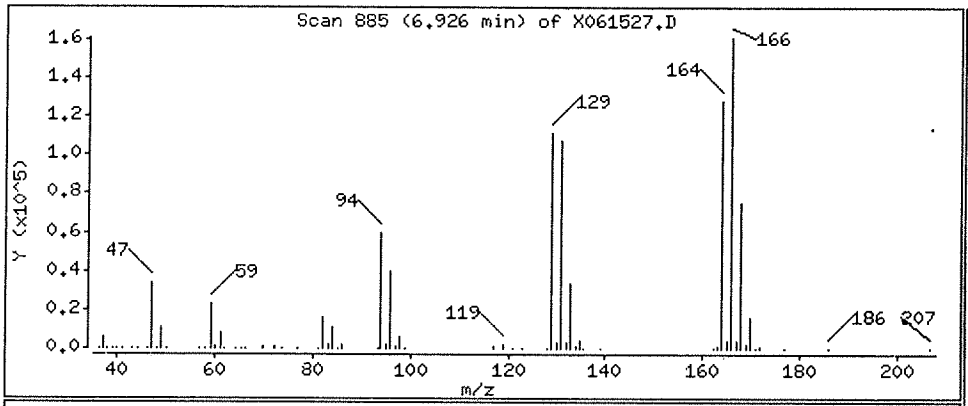
Operator: PC

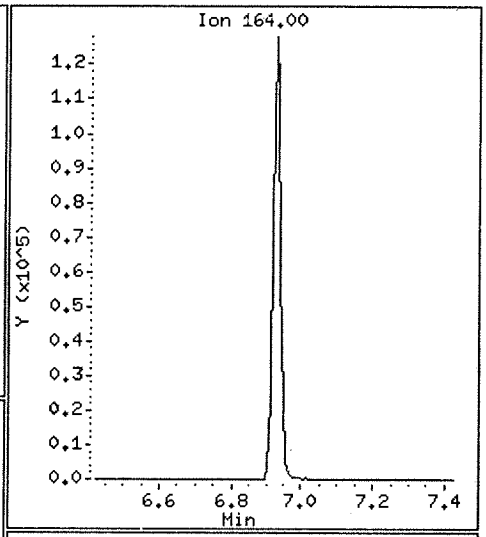
Column phase: DB624

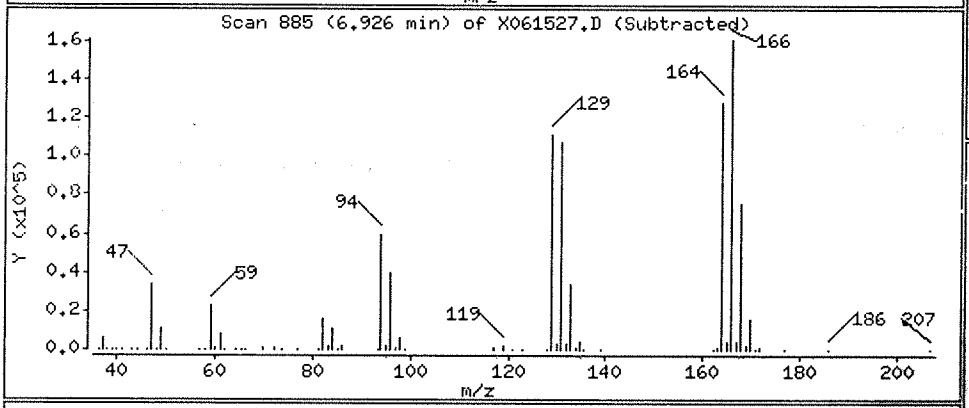
Column diameter: 0.18

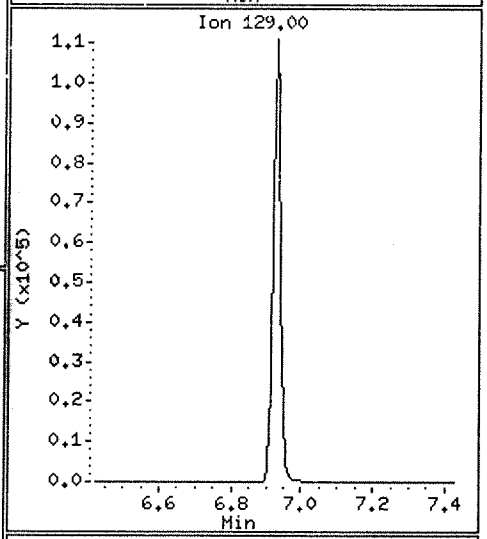
56 Tetrachloroethene

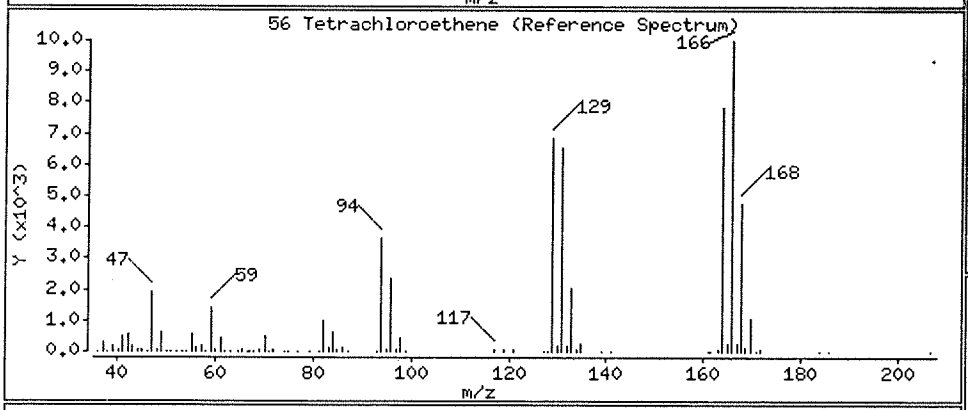
Concentration: 445.01 ug/l

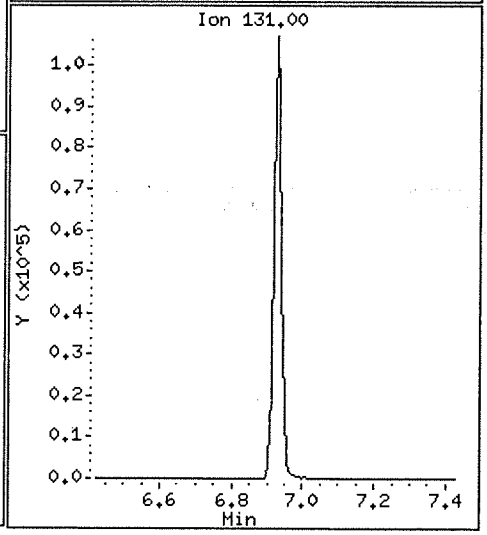


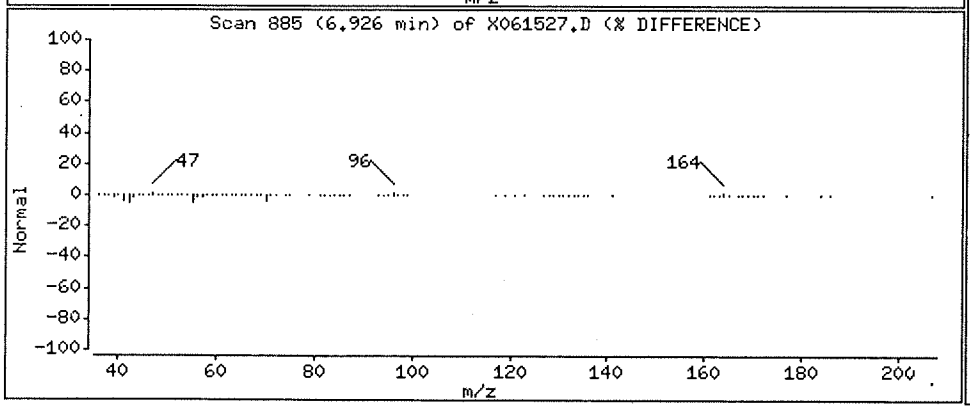












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

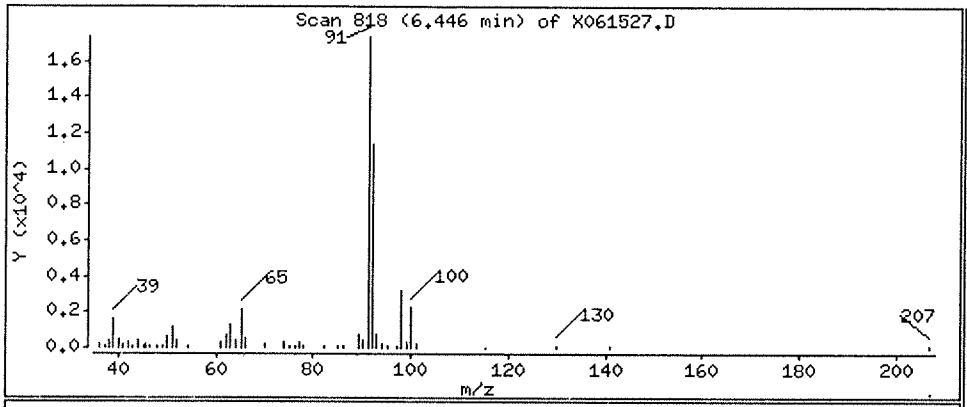
Operator: PC

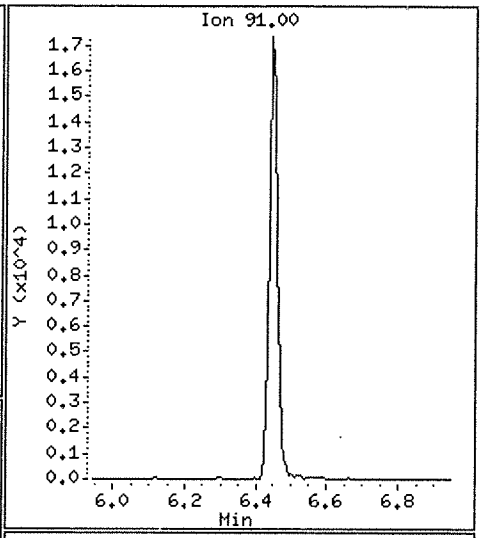
Column phase: DB624

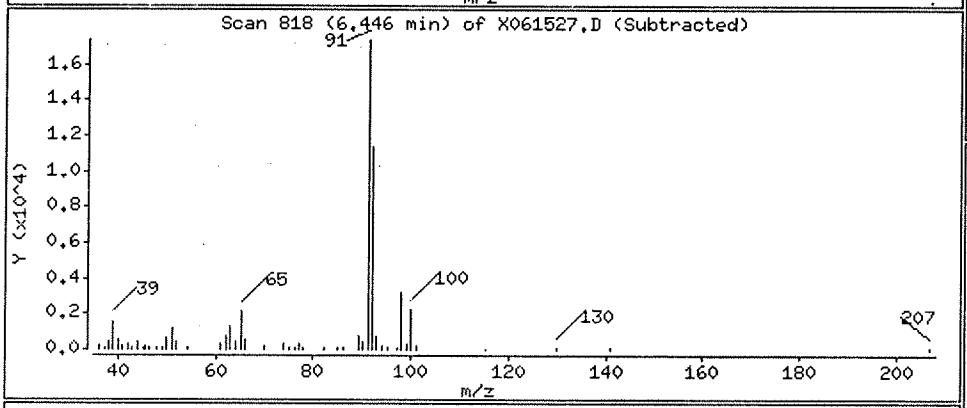
Column diameter: 0.18

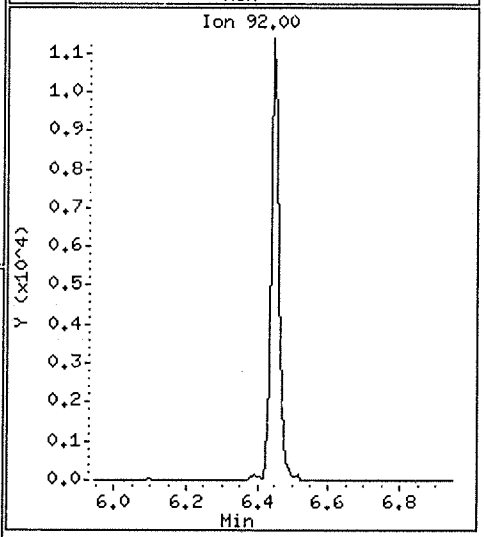
50 Toluene

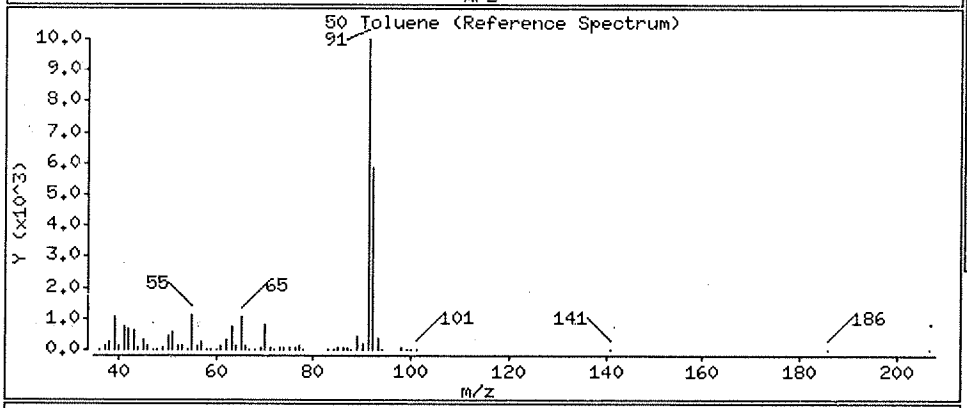
Concentration: 14.21 ug/l

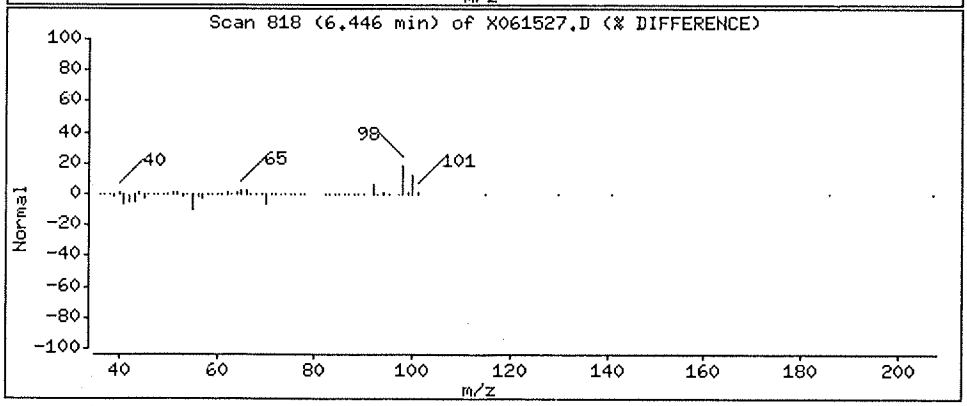












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Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

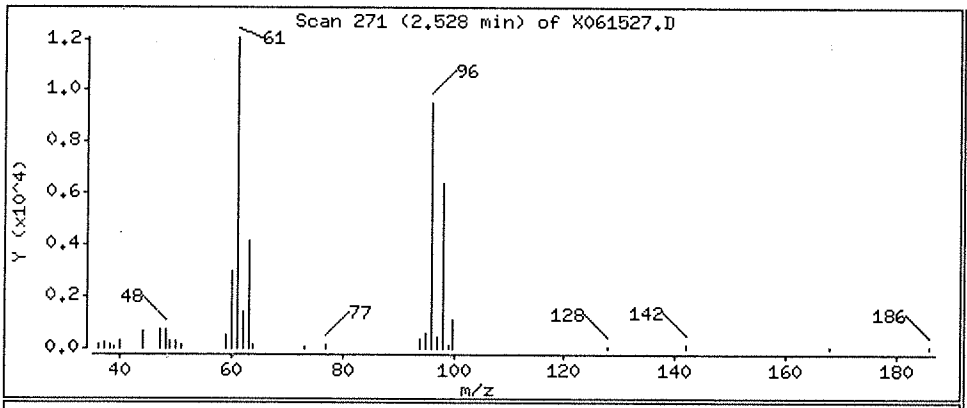
Operator: PC

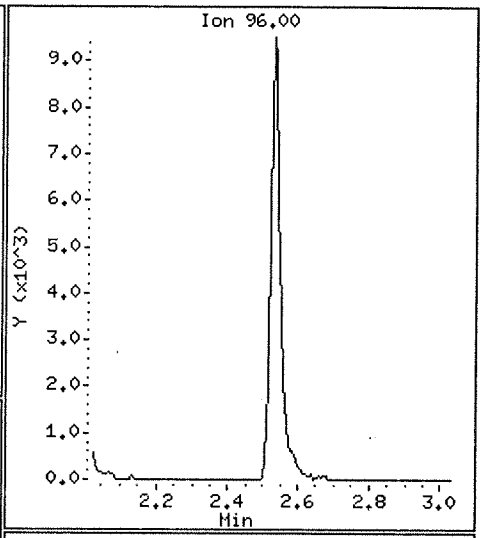
Column phase: DB624

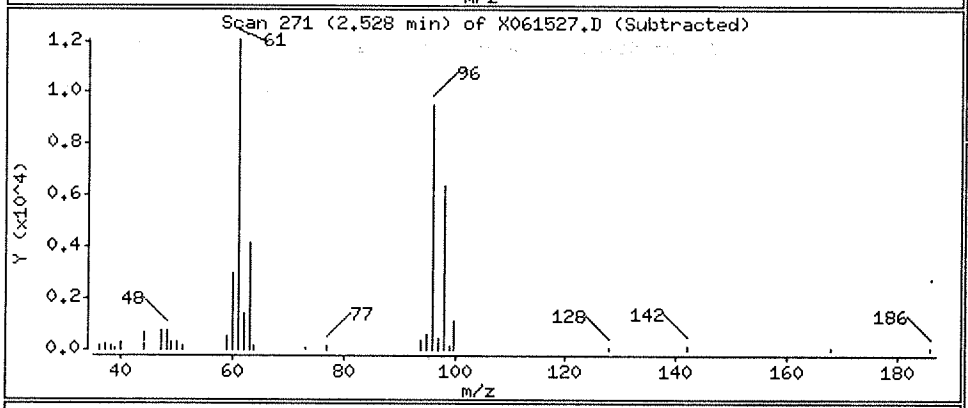
Column diameter: 0.18

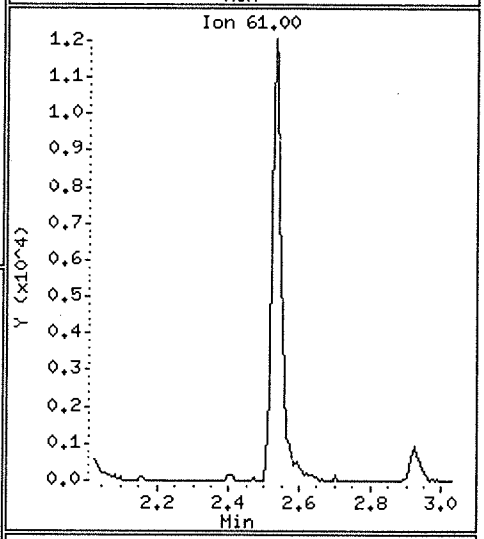
20 trans-1,2-Dichloroethene

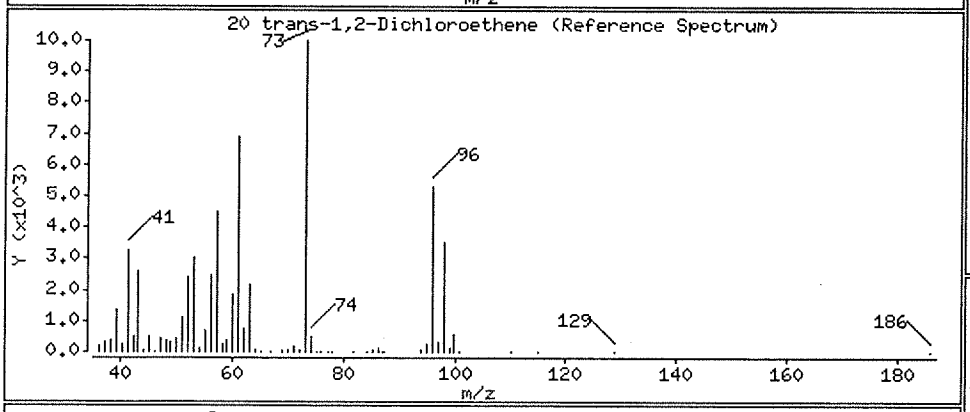
Concentration: 35.52 ug/l

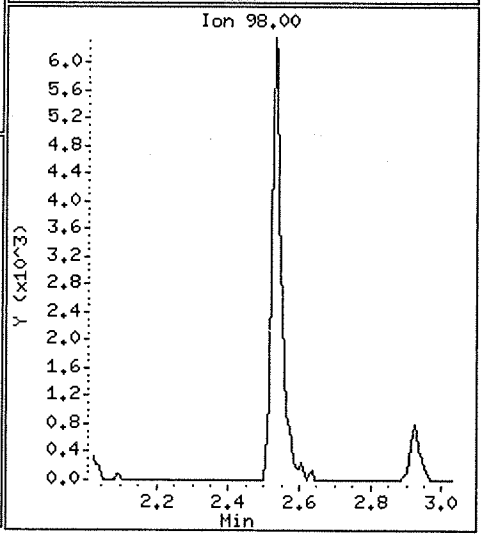


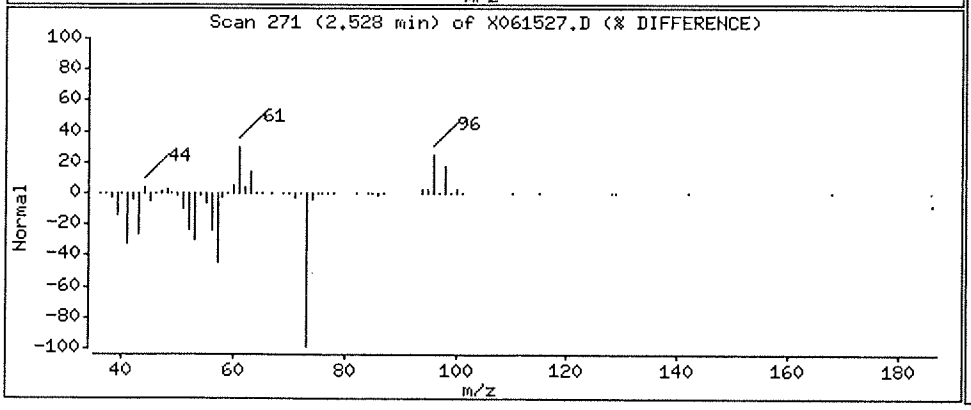












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Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

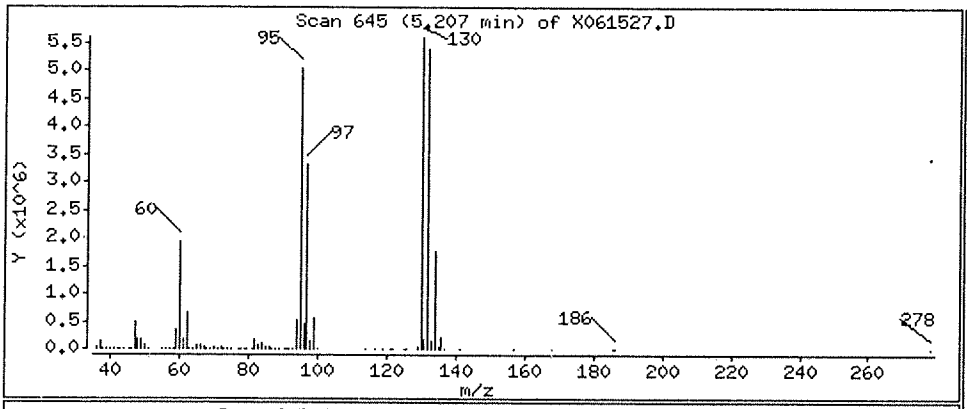
Operator: PC

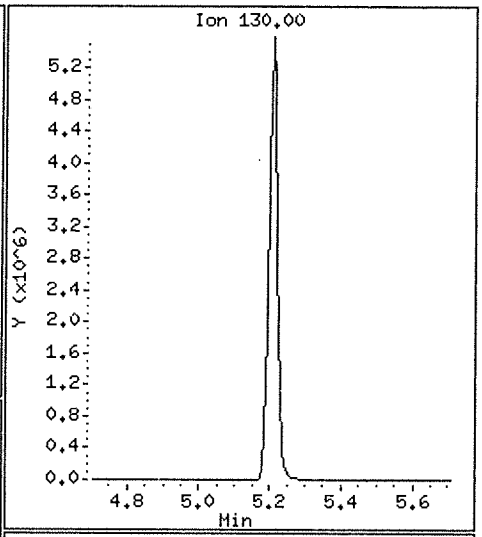
Column phase: DB624

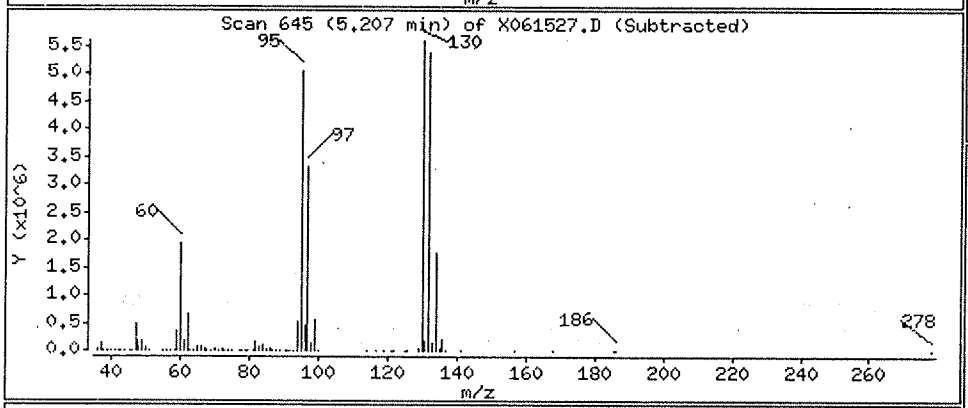
Column diameter: 0.18

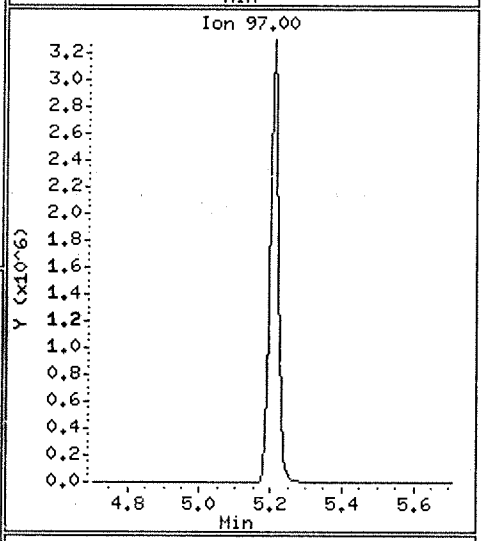
38 Trichloroethene

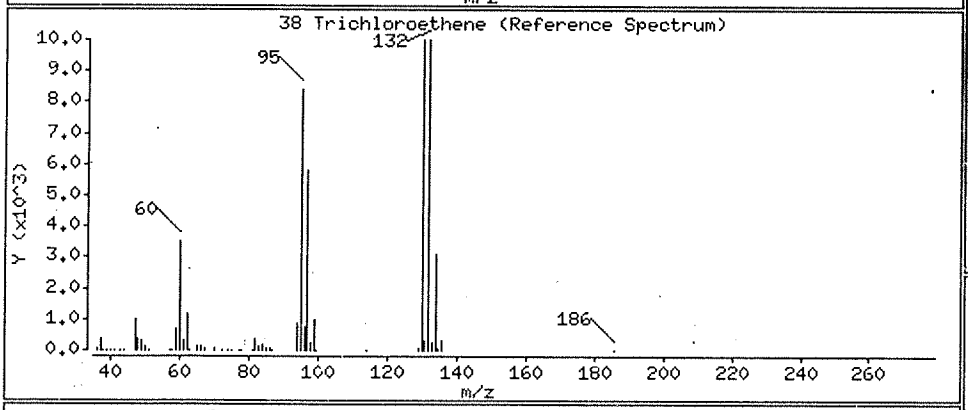
Concentration: 17626.88 ug/l

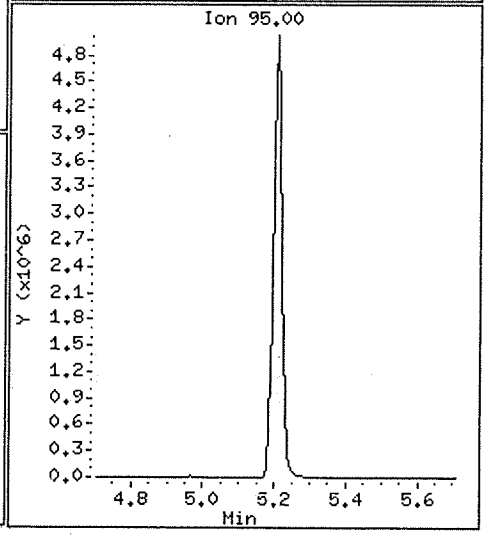


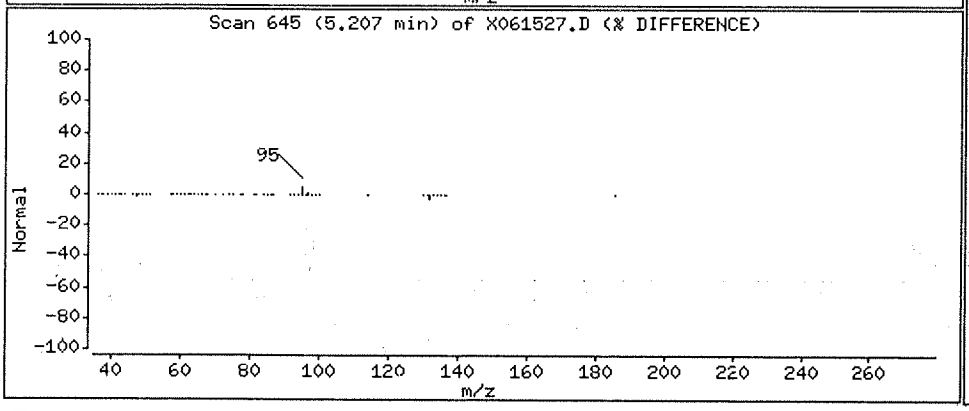












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061527.D

Date : 15-JUN-2021 20:03

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

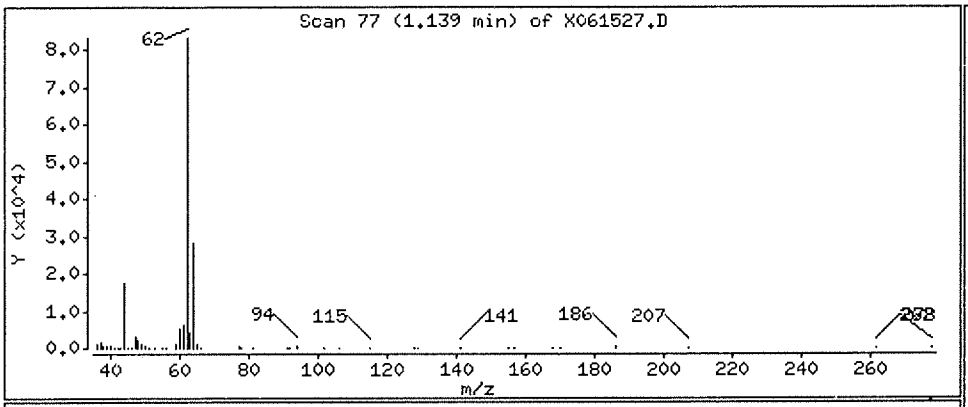
Operator: PC

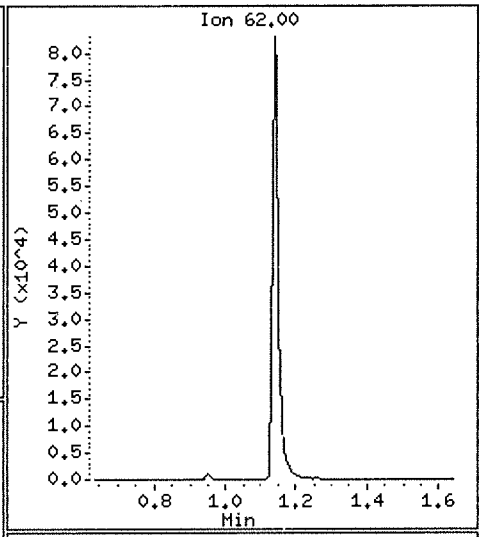
Column phase: DB624

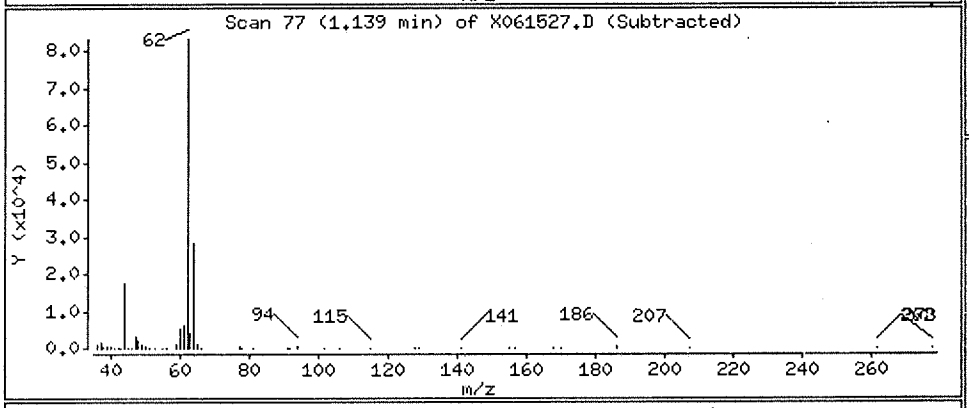
Column diameter: 0.18

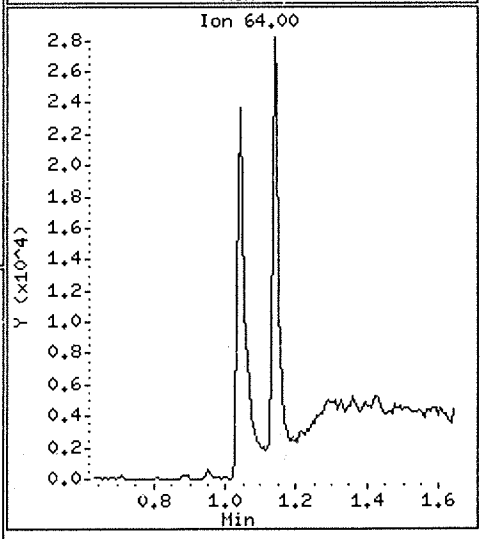
5 Vinyl Chloride

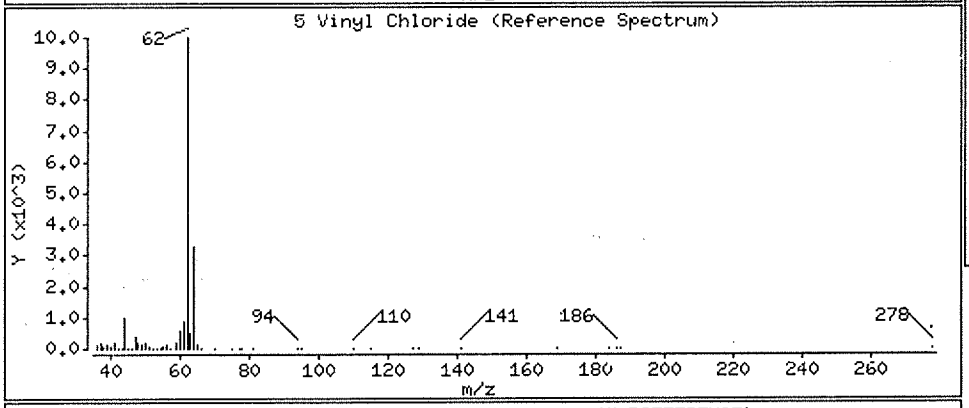
Concentration: 153.56 ug/l

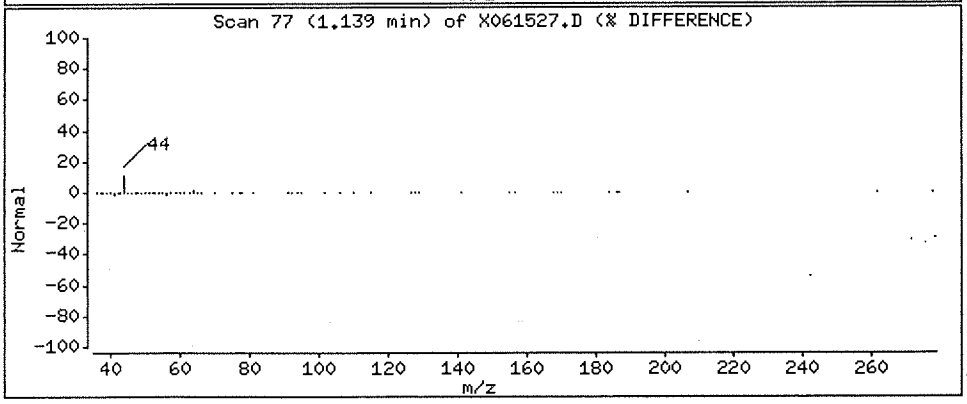












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061528.D
Lab Smp Id: HS21060700-06 Client Smp ID: HS21060700-06
Inj Date : 15-JUN-2021 20:24
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-06;HS21060700-06;;;
Misc Info : HS18090001;WATER;0;100;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 27
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

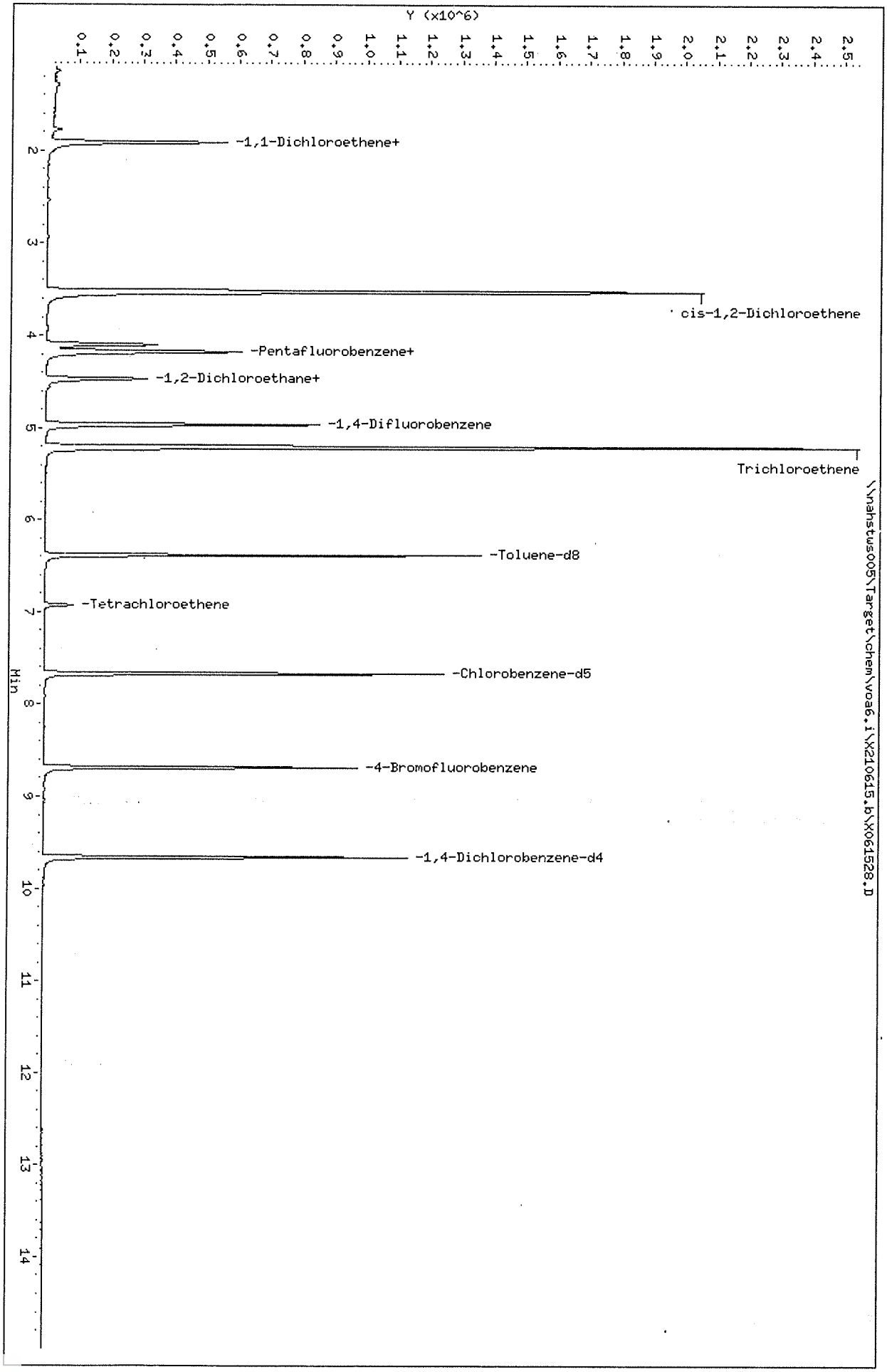
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	558081	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	756432	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	651506	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	302558	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	244665	44.5208	44.52
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	244872	45.8767	45.87
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	855412	52.7103	52.71
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	269586	47.1605	47.16
11 1,1-Dichloroethene	96	1.911	1.912	(0.457)	24856	4.32385	432.38(a)
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	7339	1.21767	121.76(a)
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	1129678	193.126	19312.56
56 Tetrachloroethene	164	6.933	6.926	(0.904)	20397	5.08563	508.56
38 Trichloroethene	130	5.206	5.207	(1.049)	890109	171.449	17144.86
5 Vinyl Chloride	62	1.138	1.138	(0.272)	11381	1.72281	172.28(a)

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061528.D
Date : 15-JUN-2021 20:24
Client ID: HS21060700-06
Sample Info: HS21060700-06;HS21060700-06;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061528.D

Date : 15-JUN-2021 20:24

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

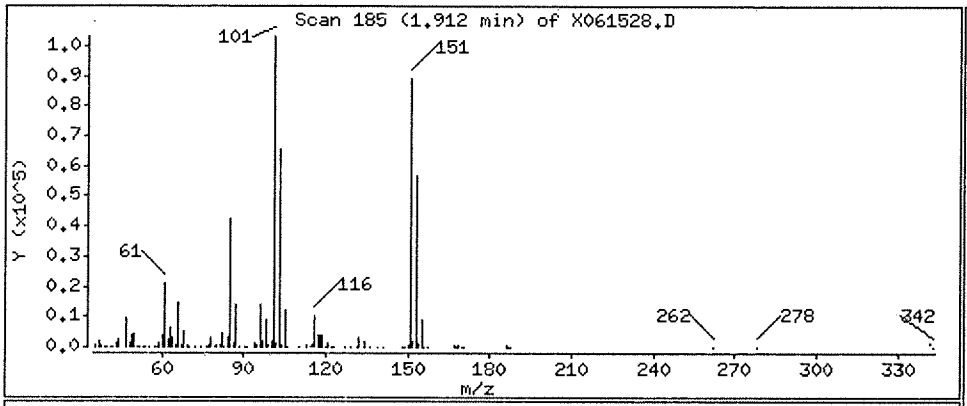
Operator: PC

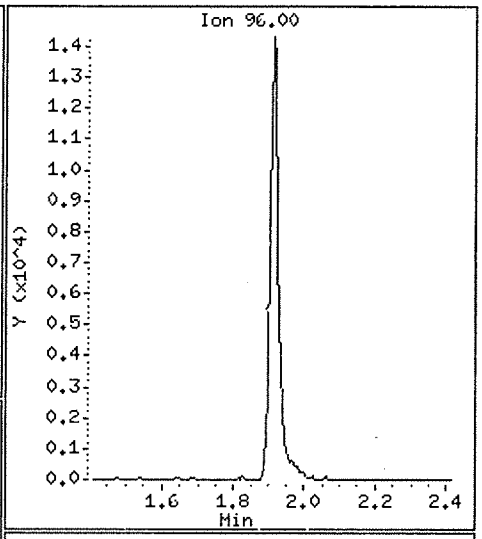
Column phase: DB624

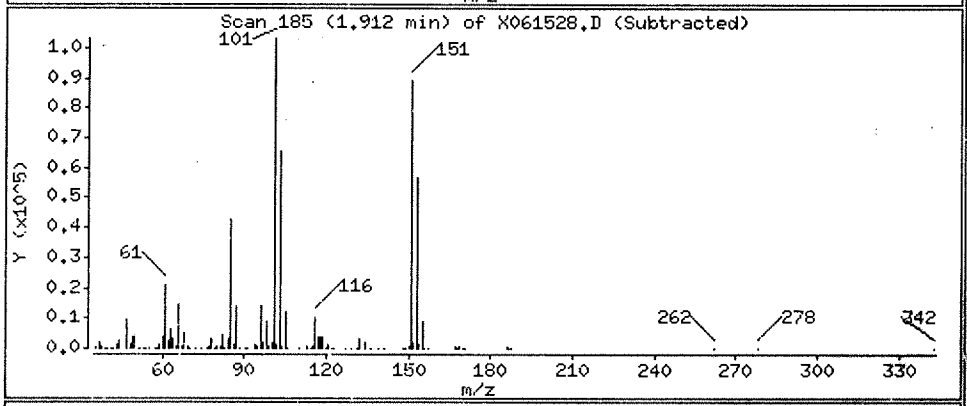
Column diameter: 0.18

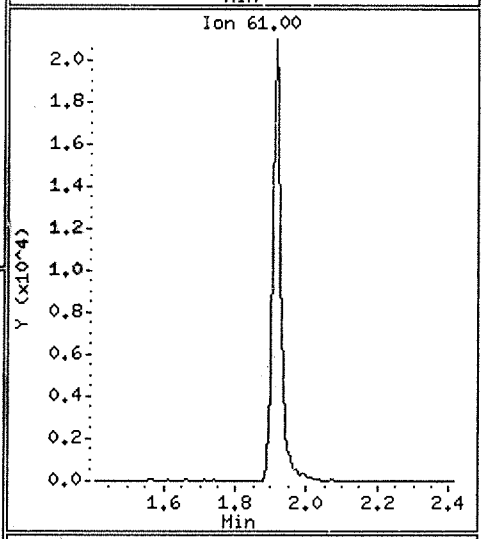
11 1,1-Dichloroethene

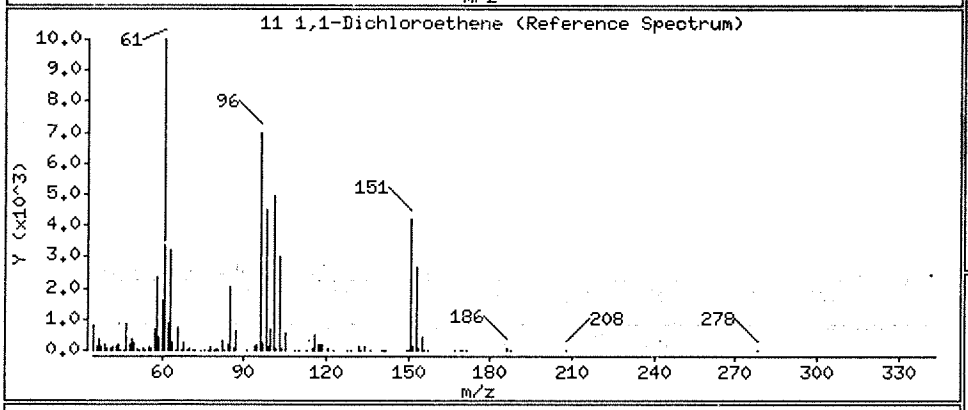
Concentration: 432.38 ug/l

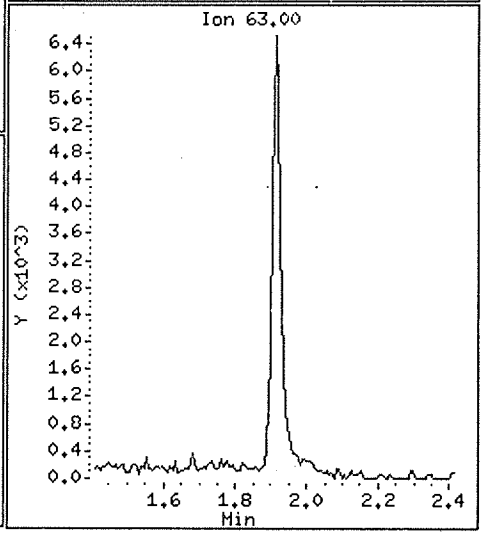


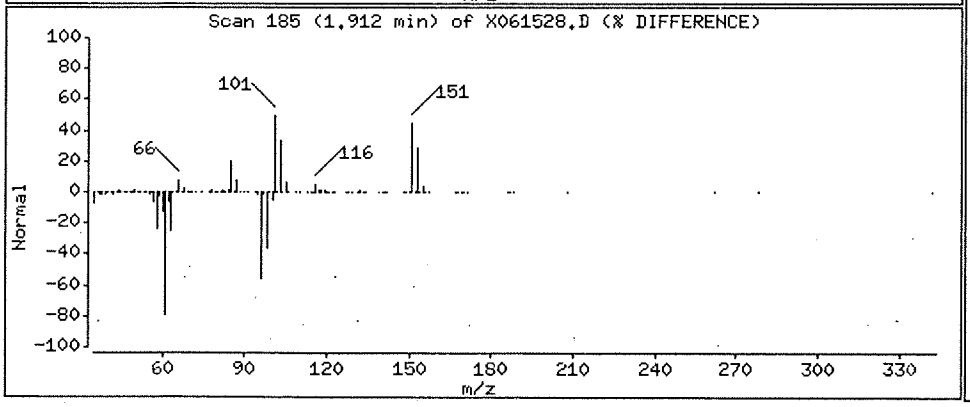












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061528.D

Date : 15-JUN-2021 20:24

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

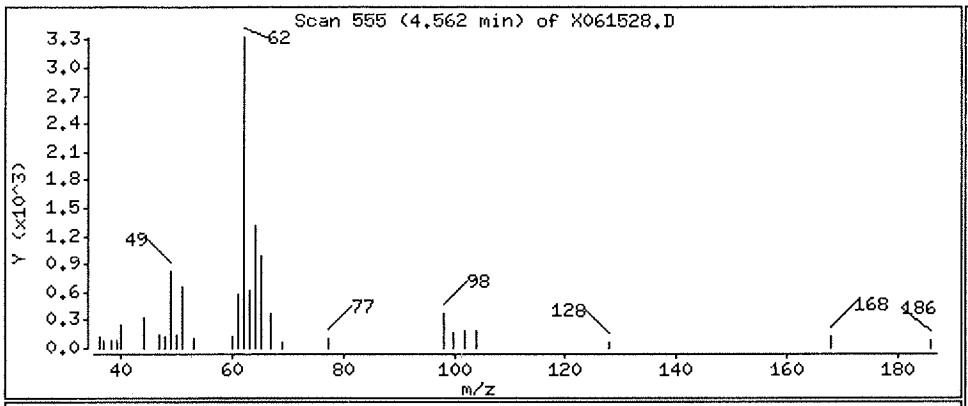
Operator: PC

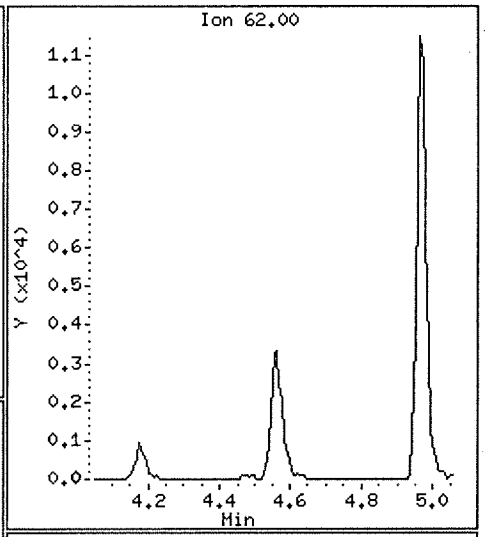
Column phase: DB624

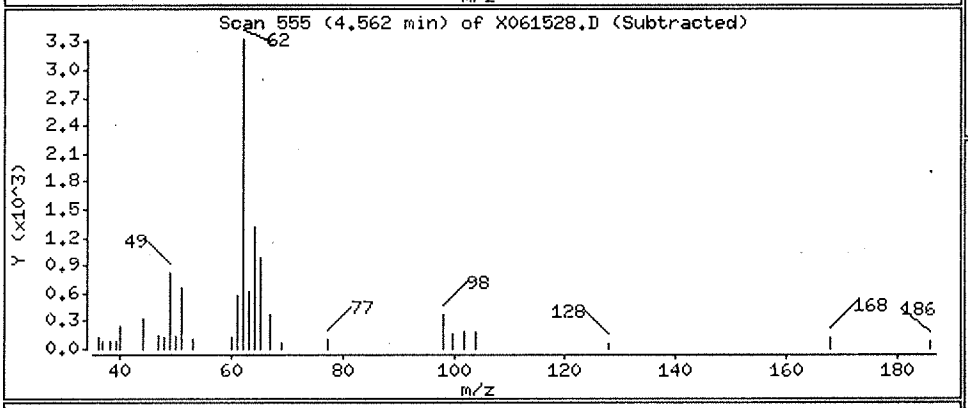
Column diameter: 0.18

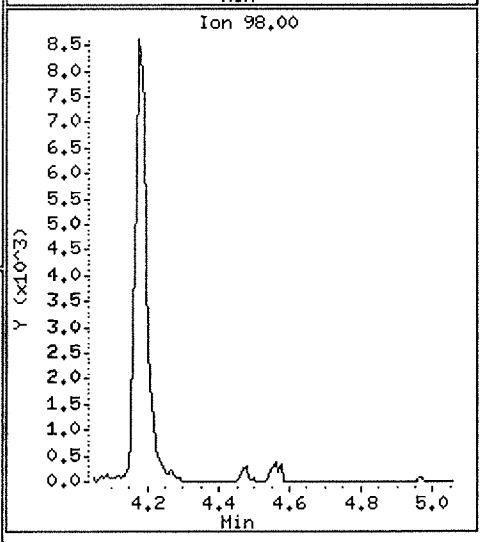
33 1,2-Dichloroethane

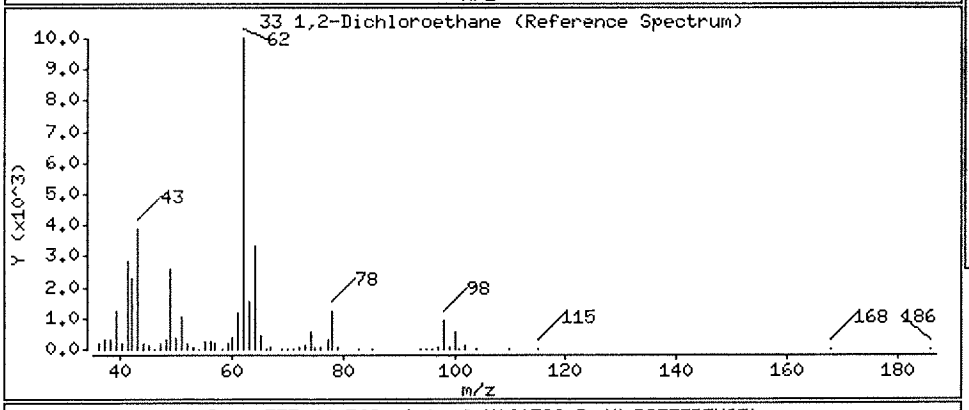
Concentration: 121.76 ug/l

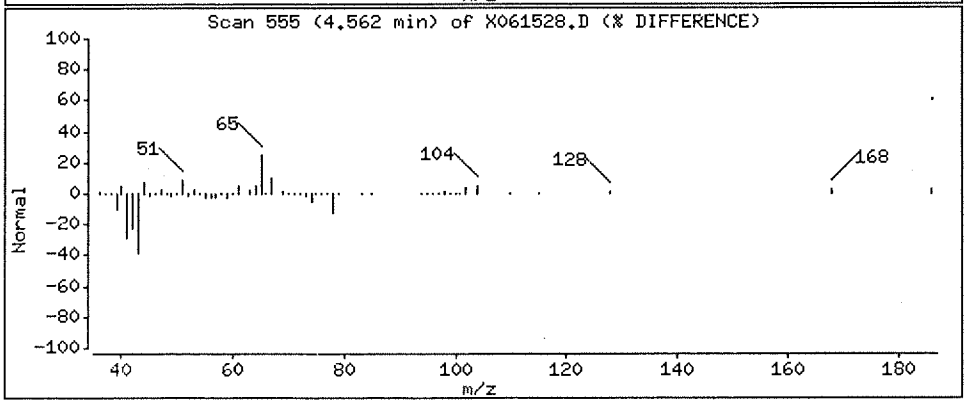












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061528.D Page 5

Date : 15-JUN-2021 20:24

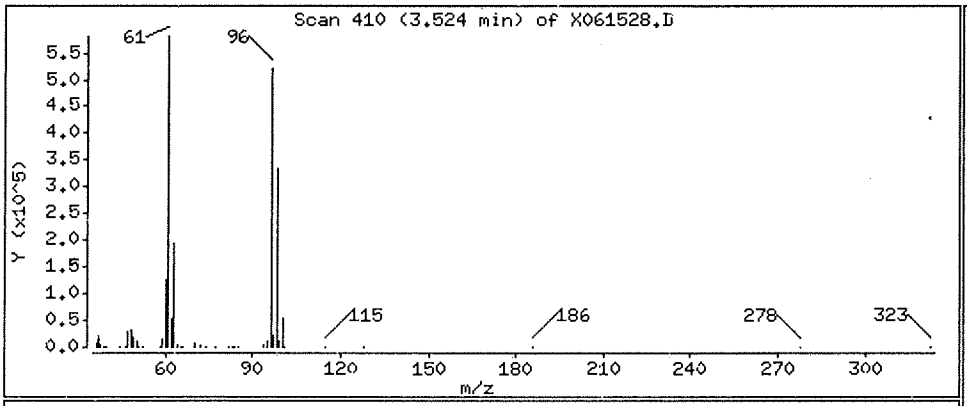
Client ID: HS21060700-06 Instrument: voa6.i

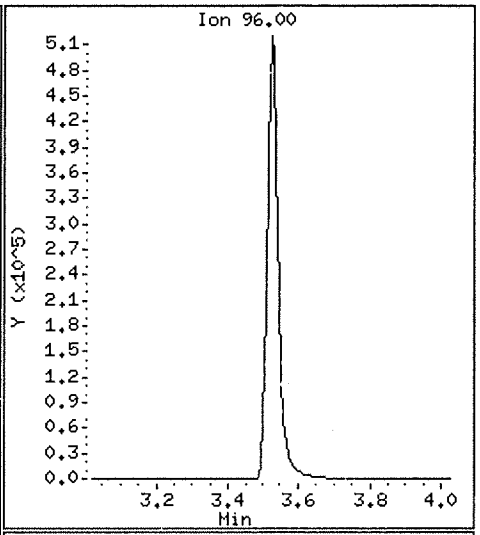
Sample Info: HS21060700-06;HS21060700-06;;;

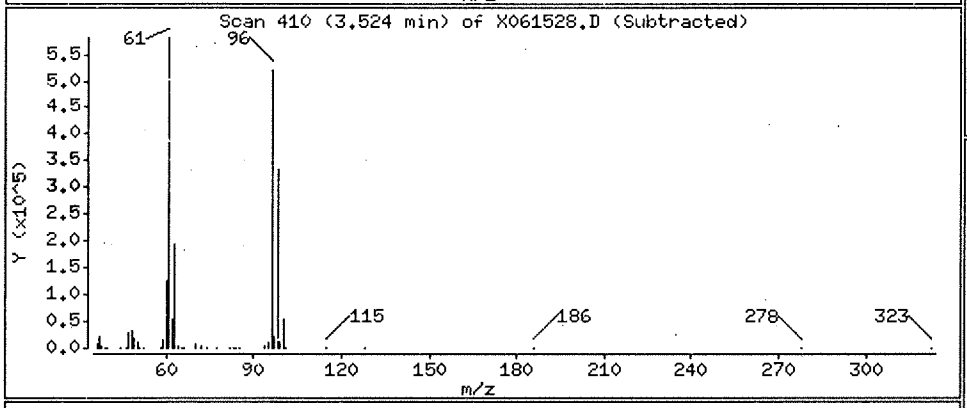
Purge Volume: 5.0 Operator: PC

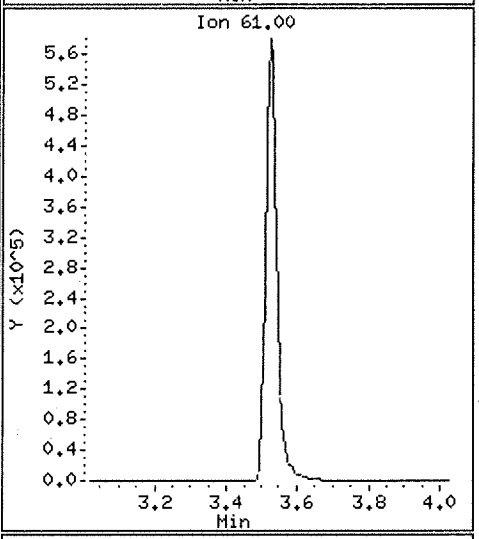
Column phase: DB624 Column diameter: 0.18

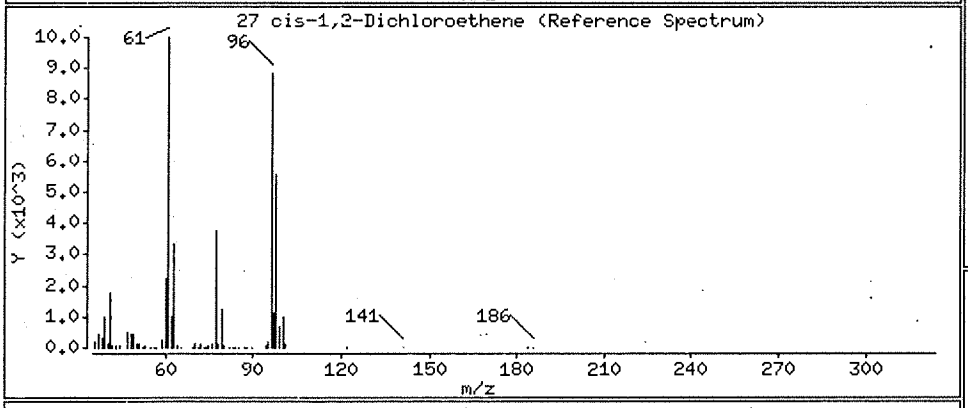
27 cis-1,2-Dichloroethene Concentration: 19312.56 ug/l

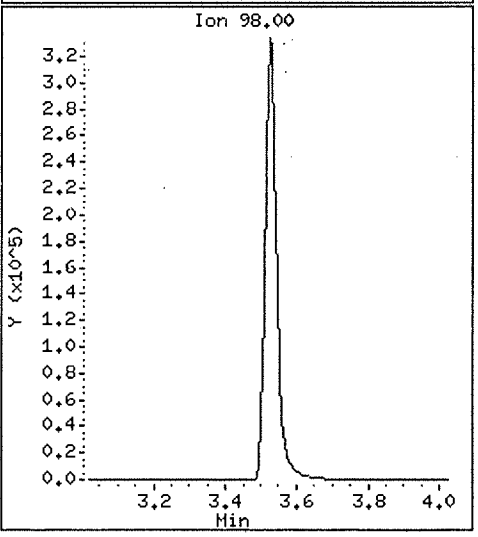


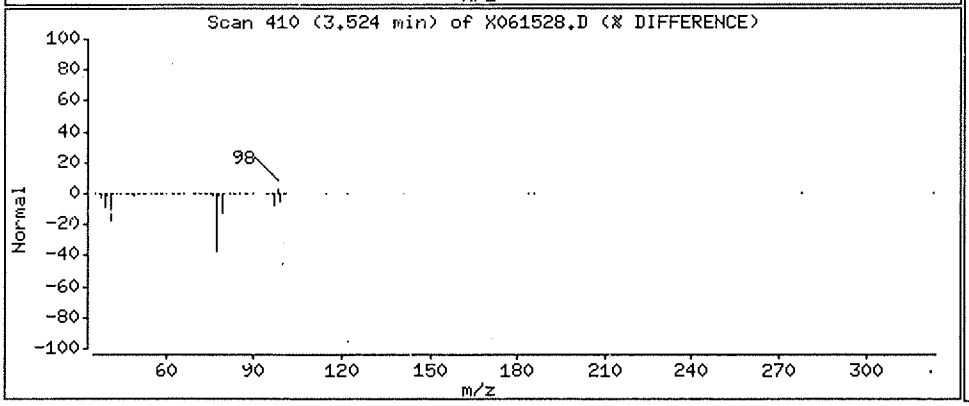












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061528.D

Date : 15-JUN-2021 20:24

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

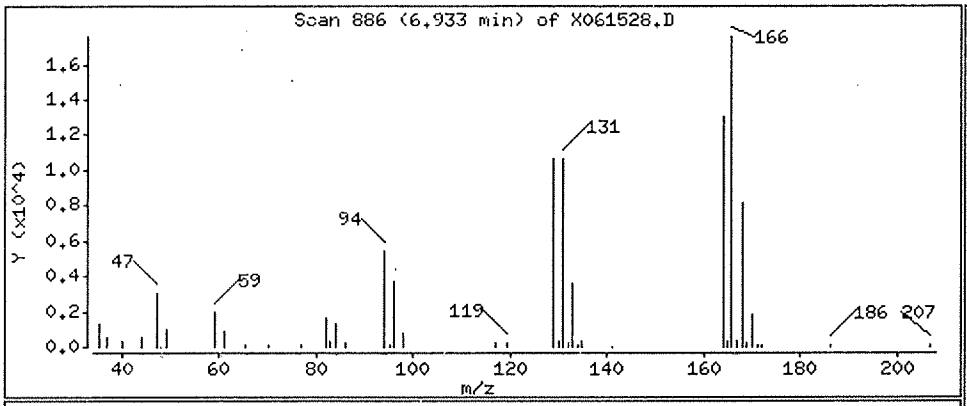
Operator: PC

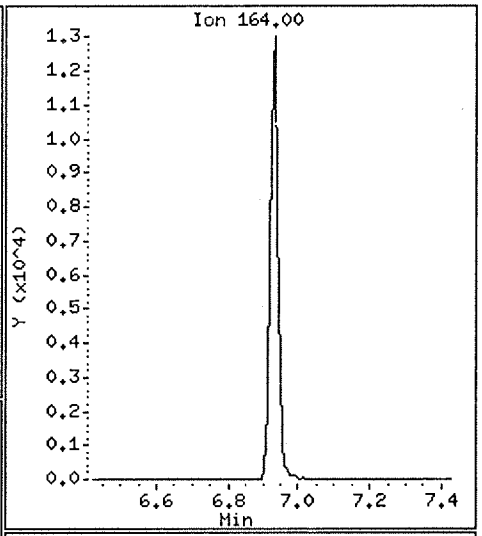
Column phase: DB624

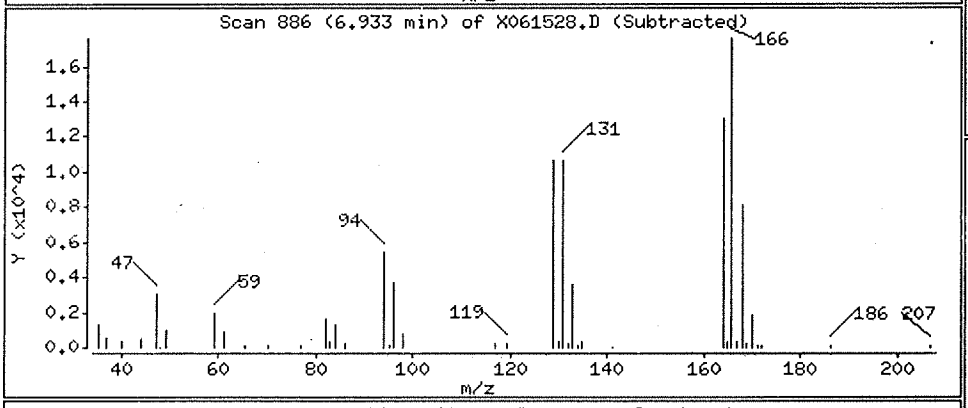
Column diameter: 0.18

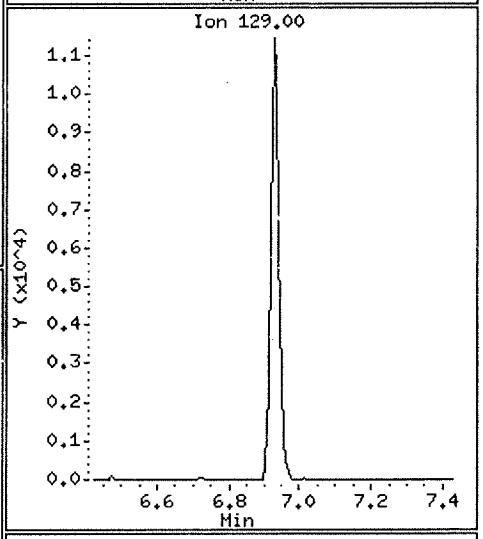
56 Tetrachloroethene

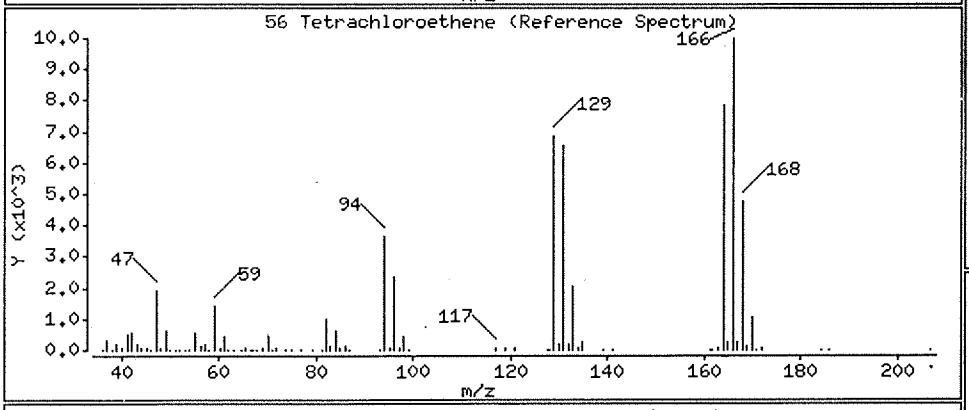
Concentration: 508.56 ug/l

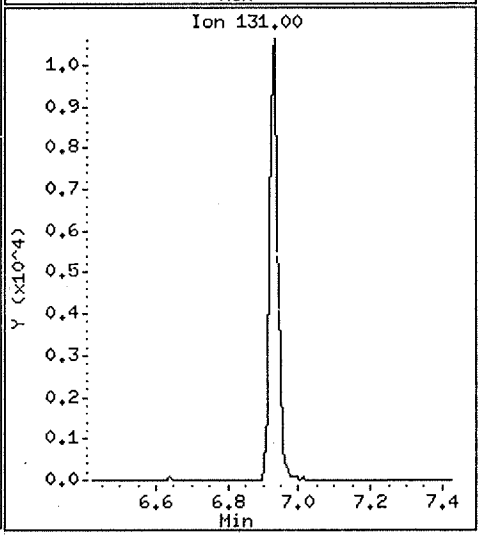


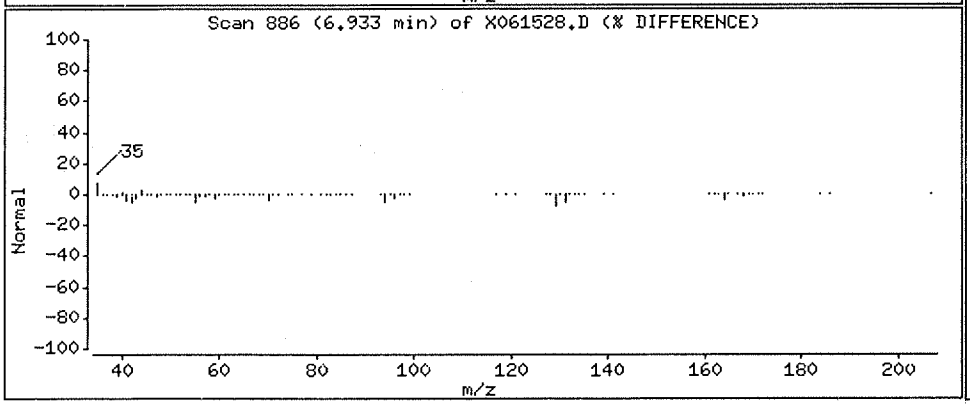












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061528.D

Date : 15-JUN-2021 20:24

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

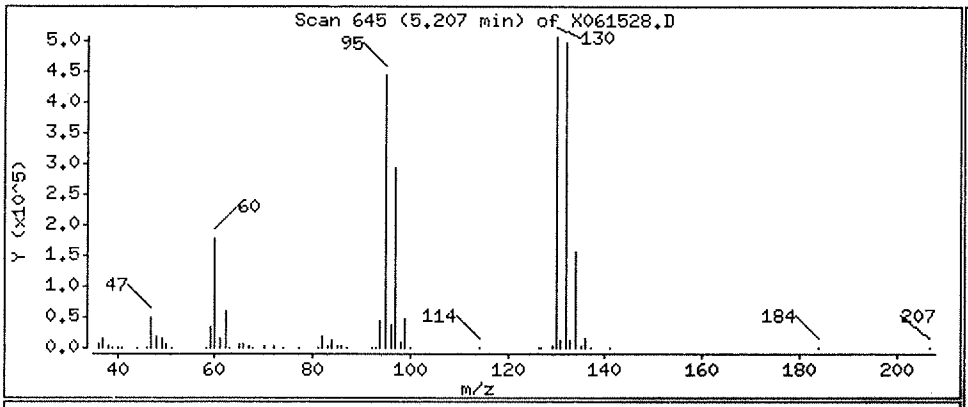
Operator: PC

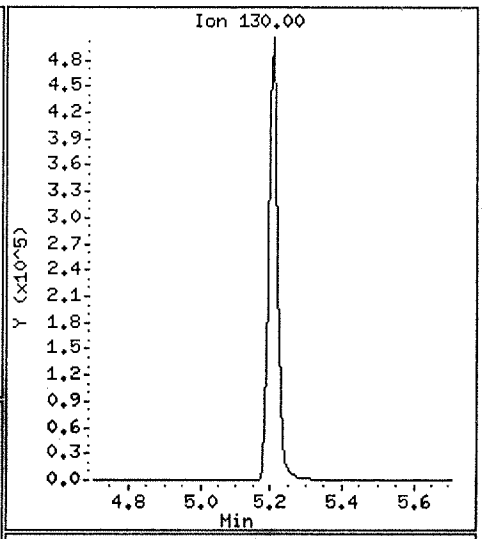
Column phase: DB624

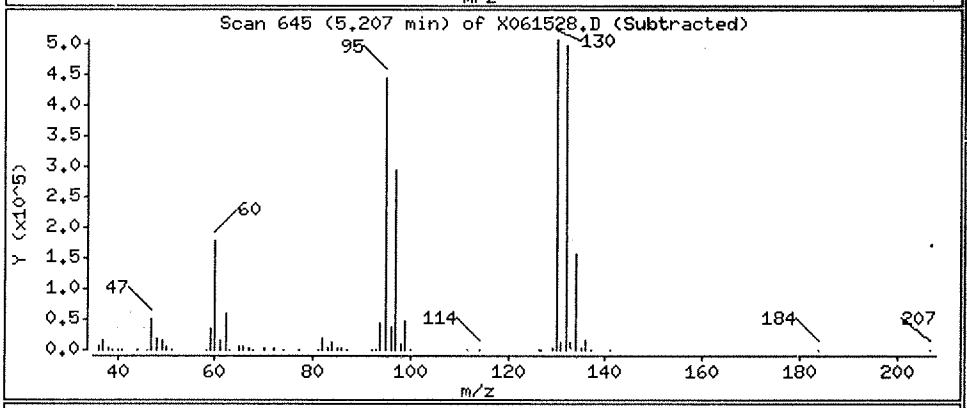
Column diameter: 0.18

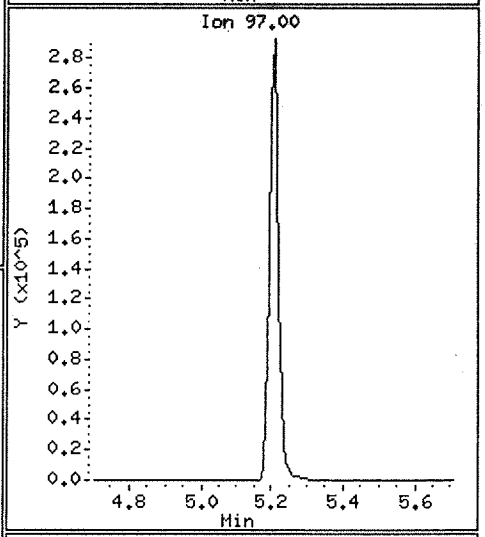
38 Trichloroethene

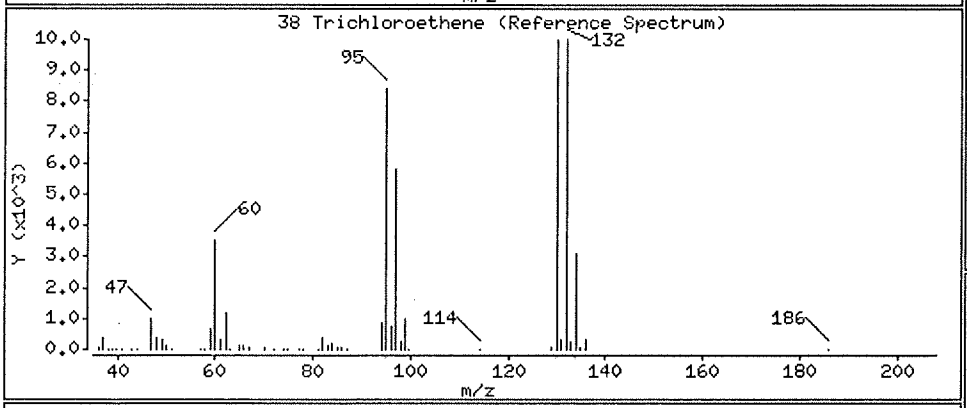
Concentration: 17144.86 ug/l

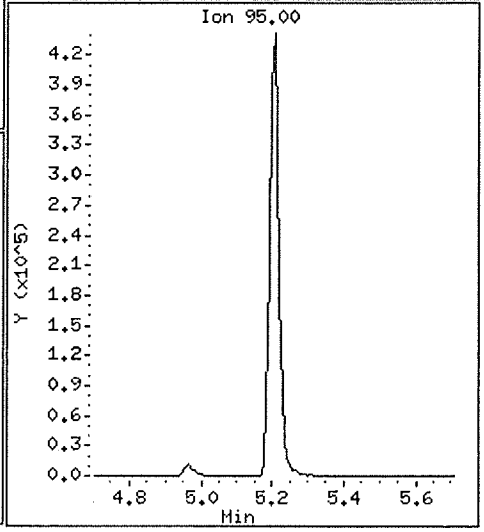


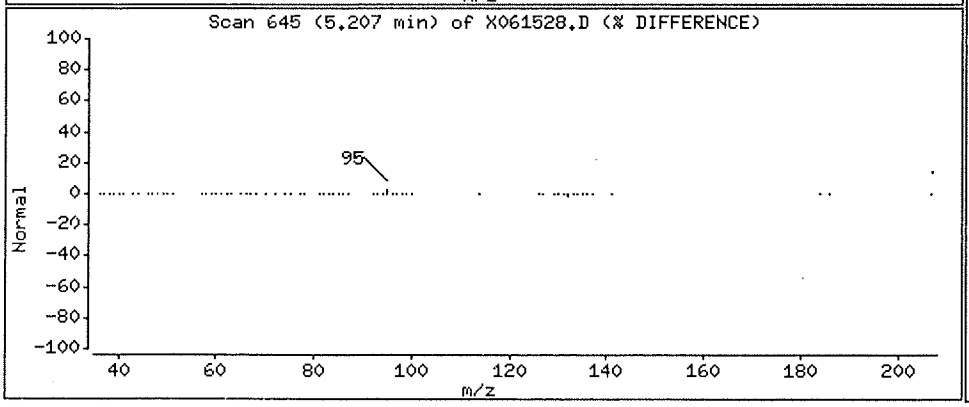












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061528.D

Date : 15-JUN-2021 20:24

Client ID: HS21060700-06

Instrument: voa6.i

Sample Info: HS21060700-06;HS21060700-06;;;

Purge Volume: 5.0

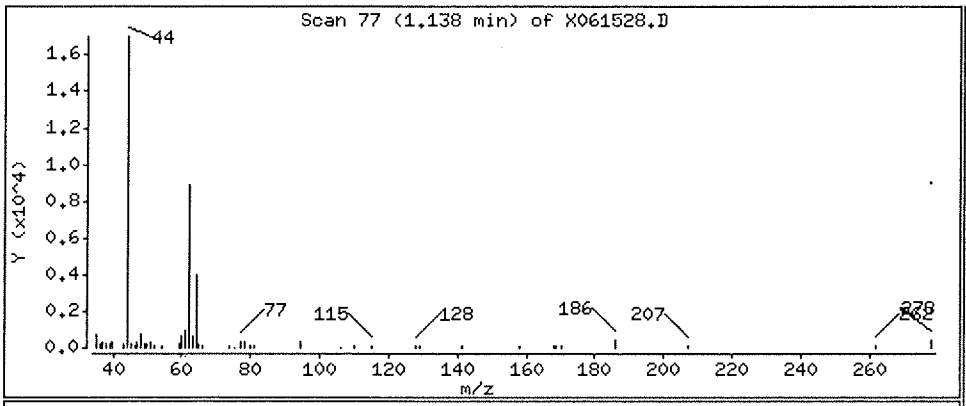
Operator: PC

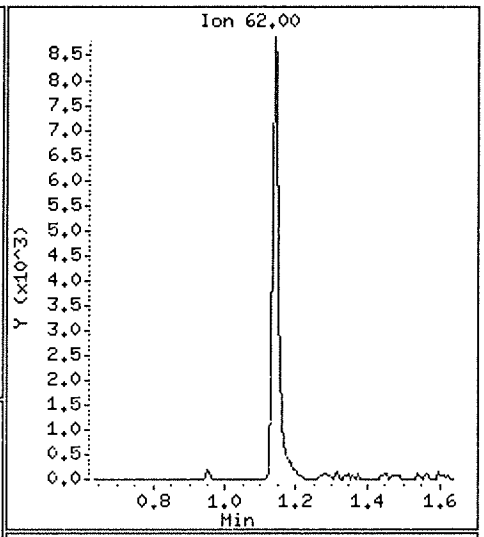
Column phase: DB624

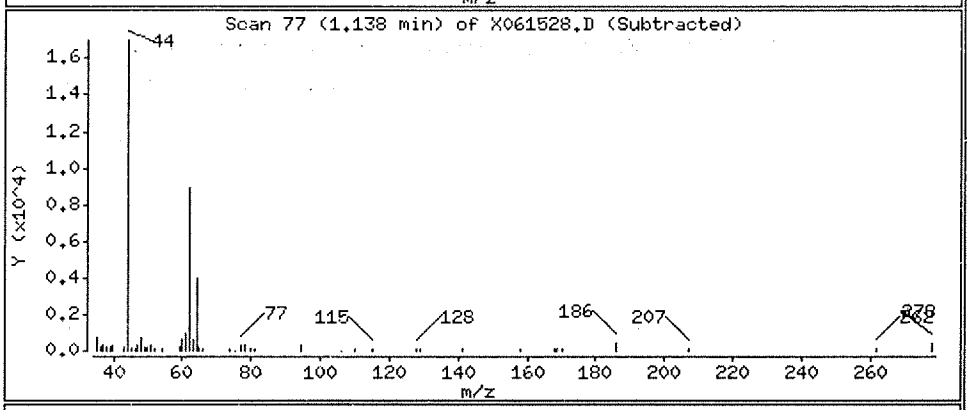
Column diameter: 0.18

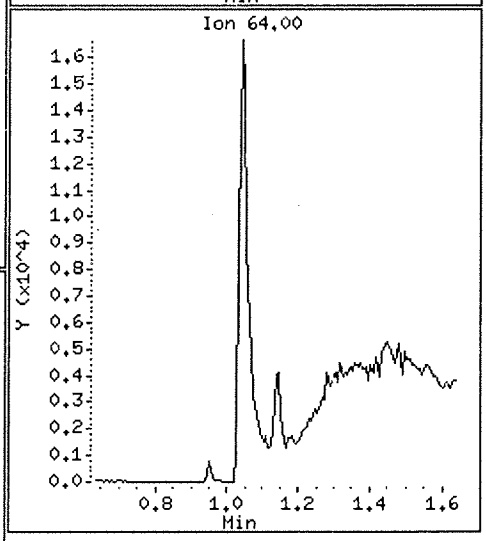
5 Vinyl Chloride

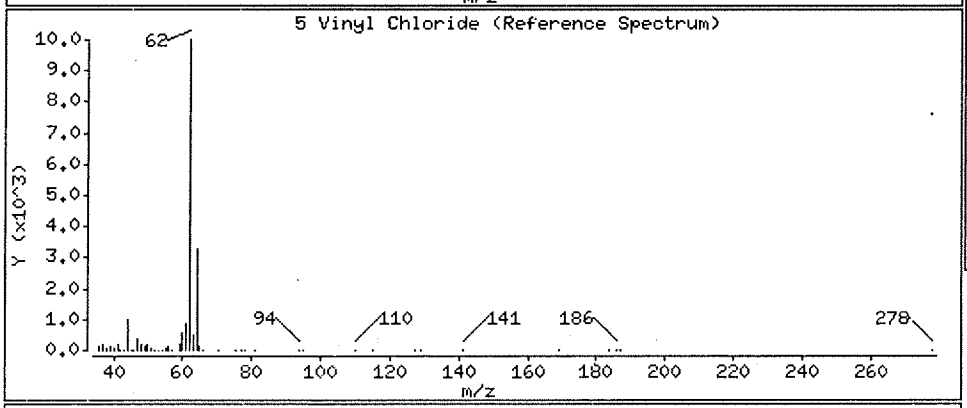
Concentration: 172.28 ug/l

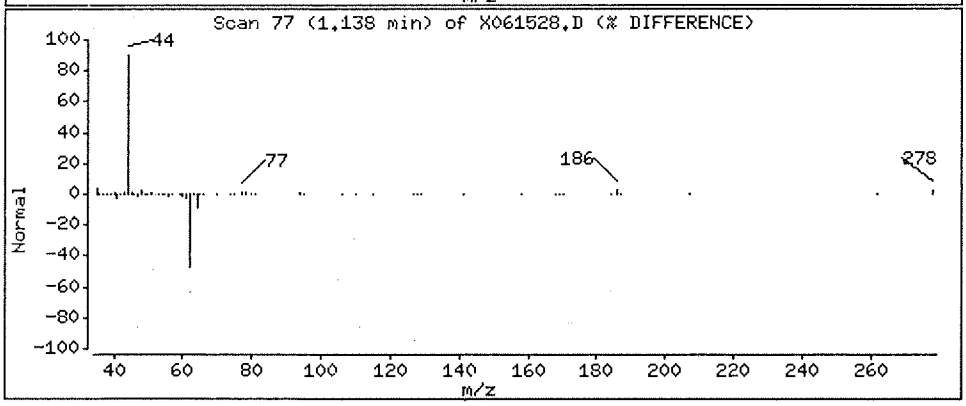












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D Page 1
Report Date: 26-Jul-2021 14:24

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D
Lab Smp Id: HS21060700-12 Client Smp ID: HS21060700-12
Inj Date : 15-JUN-2021 20:45
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-12;HS21060700-12;;;
Misc Info : HS18090001;WATER;0;25;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 28
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

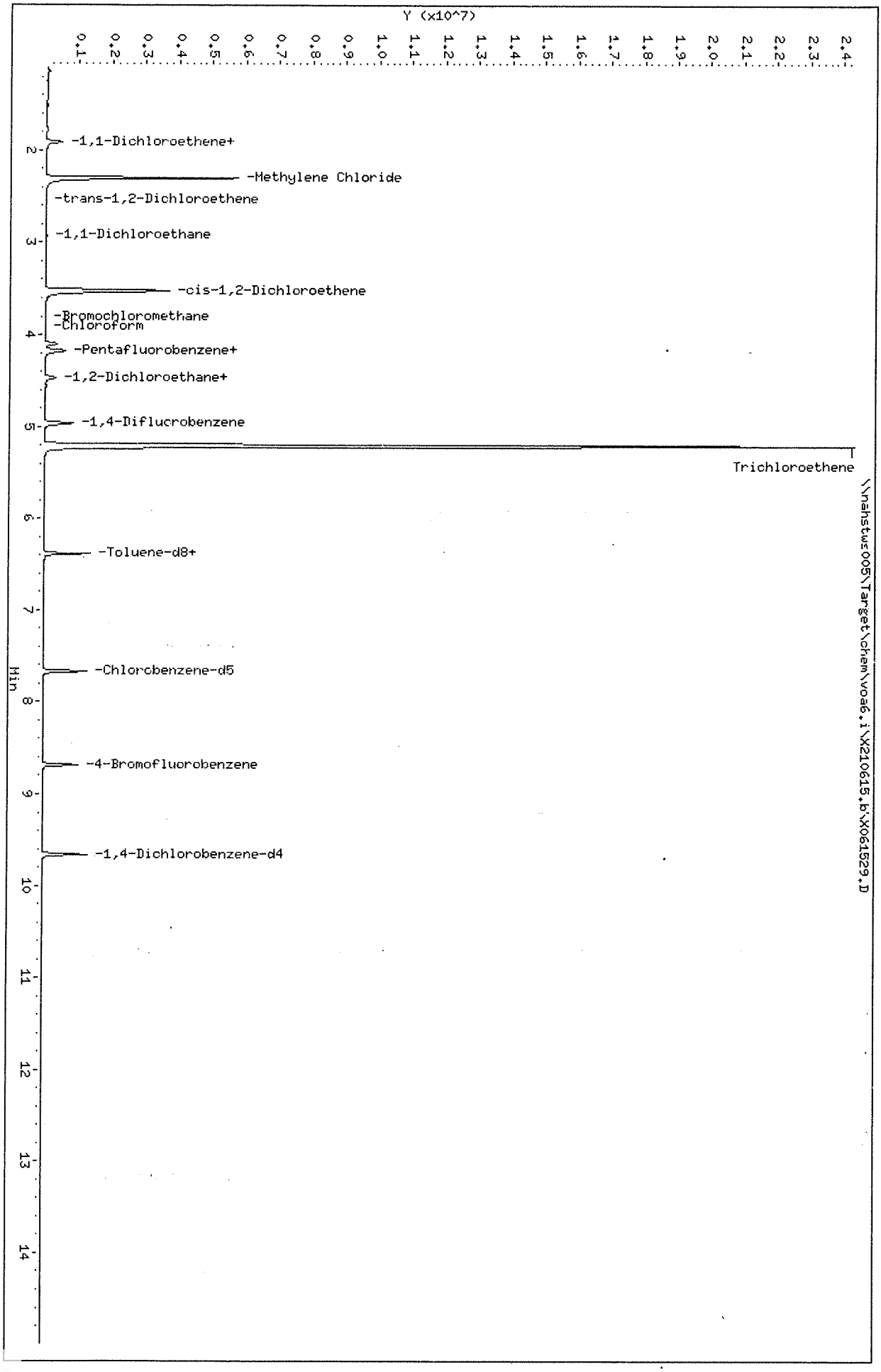
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	564787	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	766779	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	668996	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	343027	50.0000	
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	245201	44.0870	44.08
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	243287	45.0259	45.02
$	48 Toluene-d8	98	6.388	6.388	(0.833)	851059	51.0710	51.07
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	285171	48.5600	48.56
	22 1,1-Dichloroethane	63	2.921	2.922	(0.699)	25154	2.81717	70.42(a)
	11 1,1-Dichloroethene	96	1.911	1.912	(0.457)	71167	12.2329	305.82
	33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	34655	5.67231	141.80
	29 Bromochloromethane	128	3.810	3.795	(0.911)	1991	0.58301	14.57(a)
	28 Chloroform	83	3.910	3.910	(0.935)	16718	1.68323	42.08(a)
	27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	2012535	339.971	8499.26(A)
	17 Methylene Chloride	84	2.298	2.298	(0.550)	2750416	549.945	13748.61(A)
	50 Toluene	91	6.446	6.446	(0.840)	12548	0.64248	16.06(a)
	20 trans-1,2-Dichloroethene	96	2.535	2.528	(0.606)	5036	0.95495	23.87(a)
	38 Trichloroethene	130	5.206	5.207	(1.049)	8103559	1539.81	38495.17(A)
	5 Vinyl Chloride	62	1.138	1.138	(0.272)	72993	10.9182	272.95

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D
Date : 15-JUN-2021 20:45
Client ID: HS21060700-12
Sample Info: HS21060700-12;HS21060700-12;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

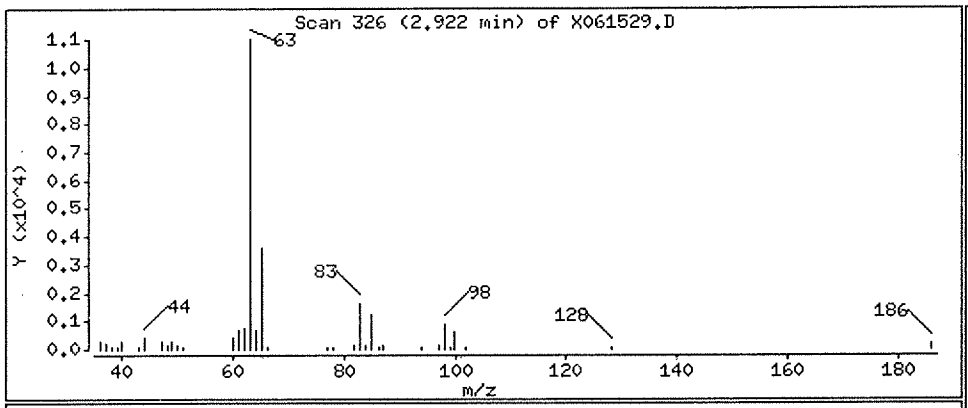
Operator: PC

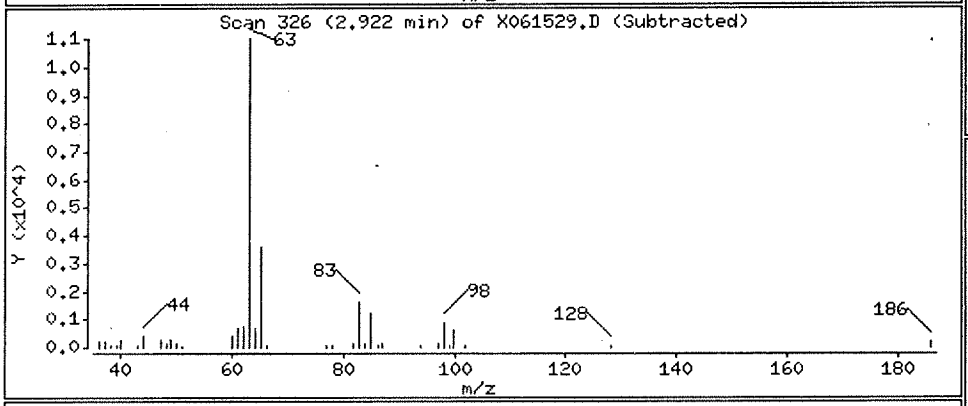
Column phase: DB624

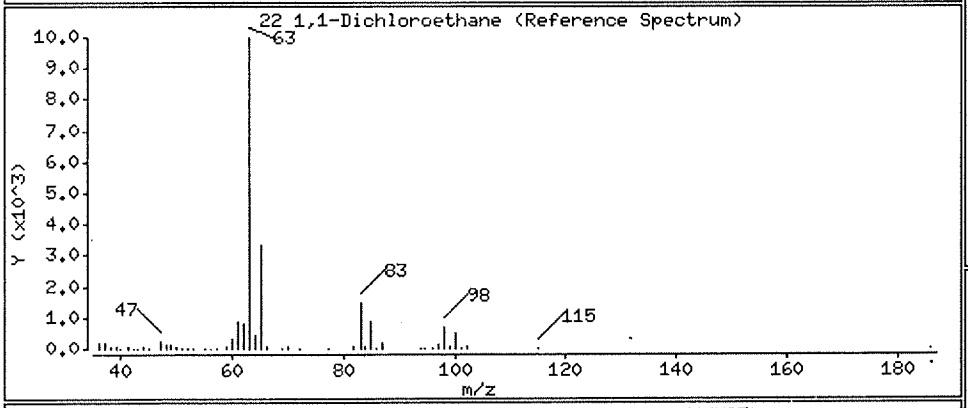
Column diameter: 0.18

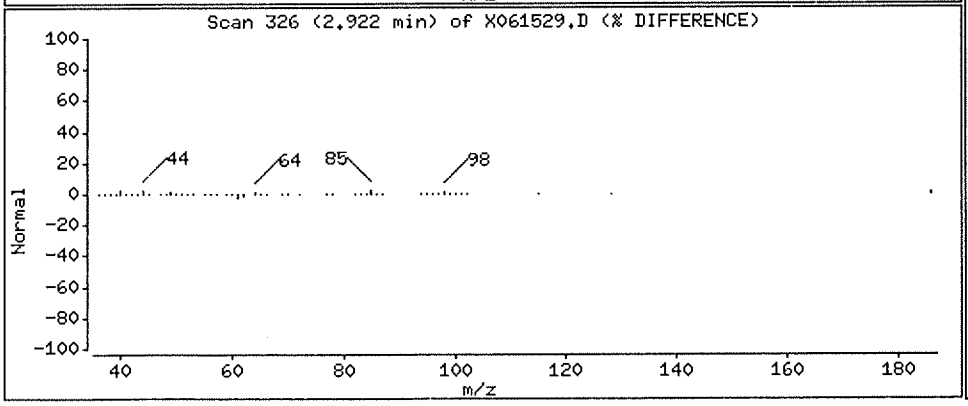
22 1,1-Dichloroethane

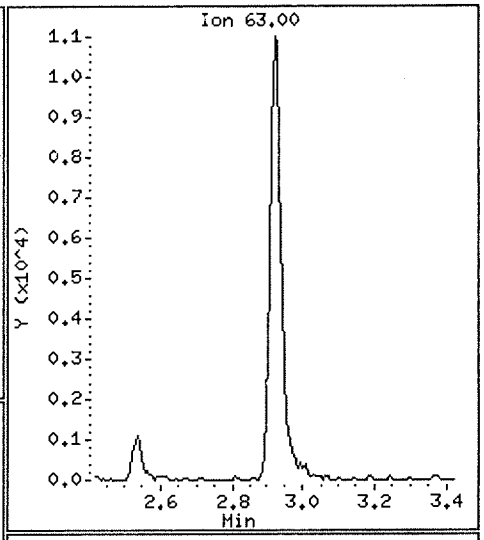
Concentration: 70.42 ug/l

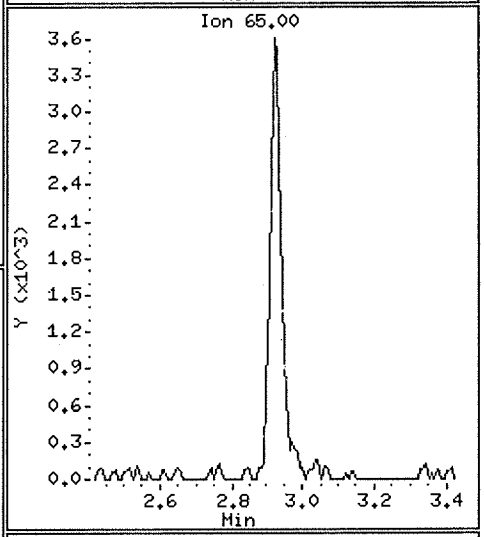


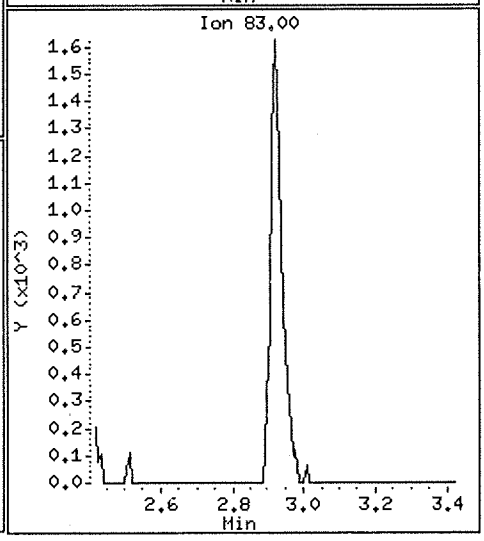












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Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

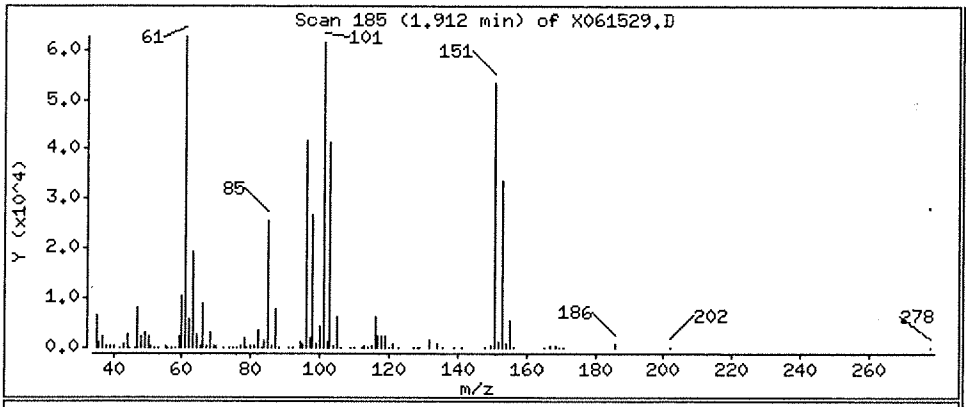
Operator: PC

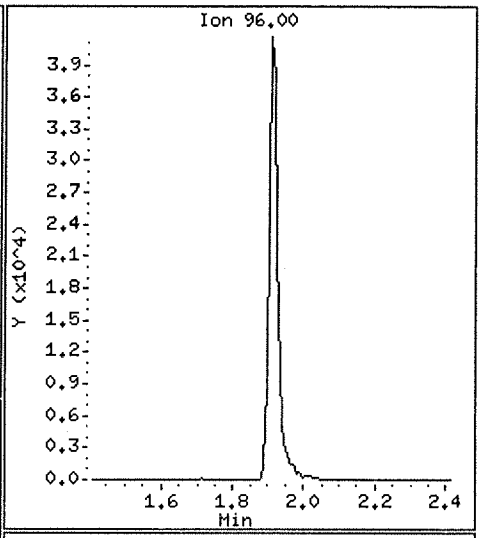
Column phase: DB624

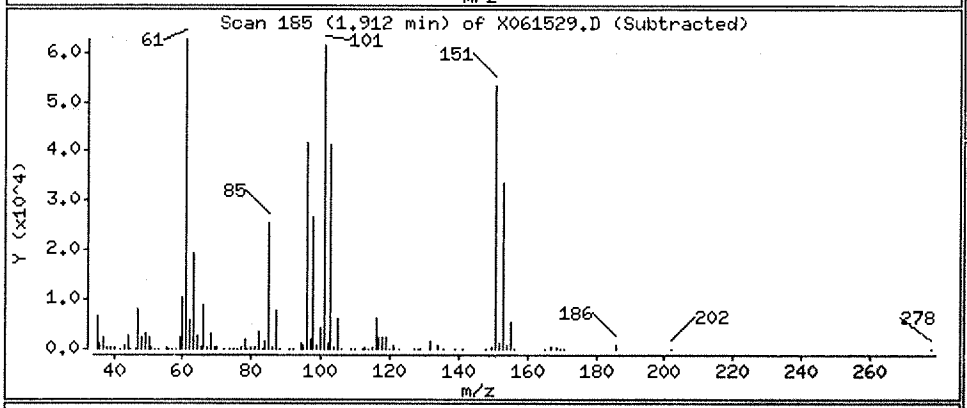
Column diameter: 0.18

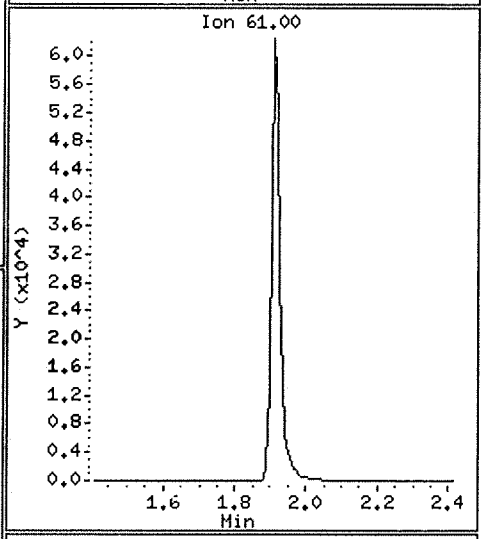
11 1,1-Dichloroethene

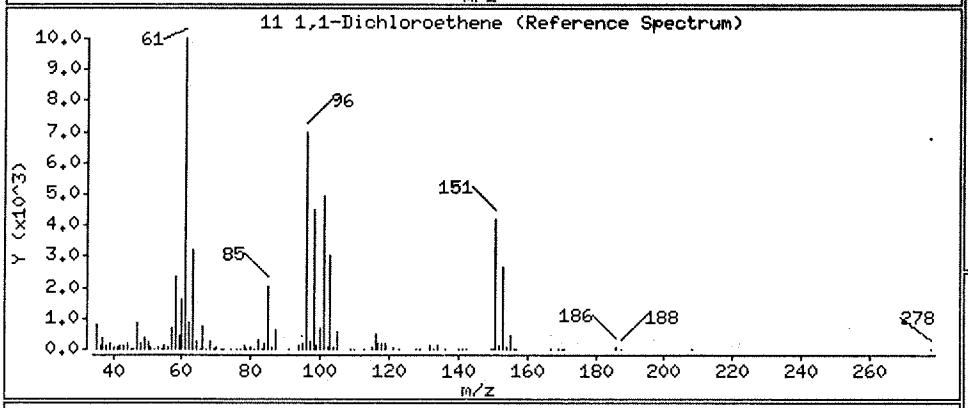
Concentration: 305.82 ug/l

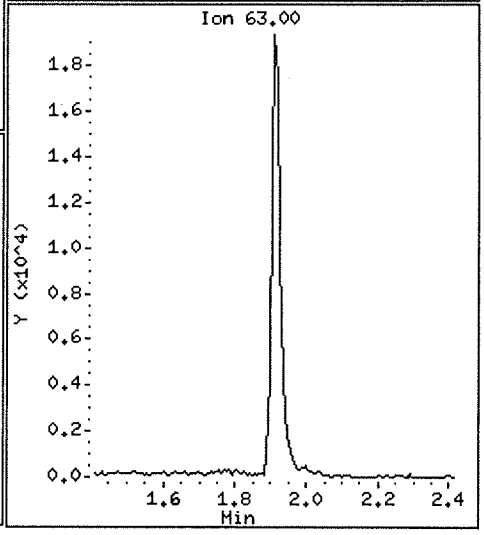


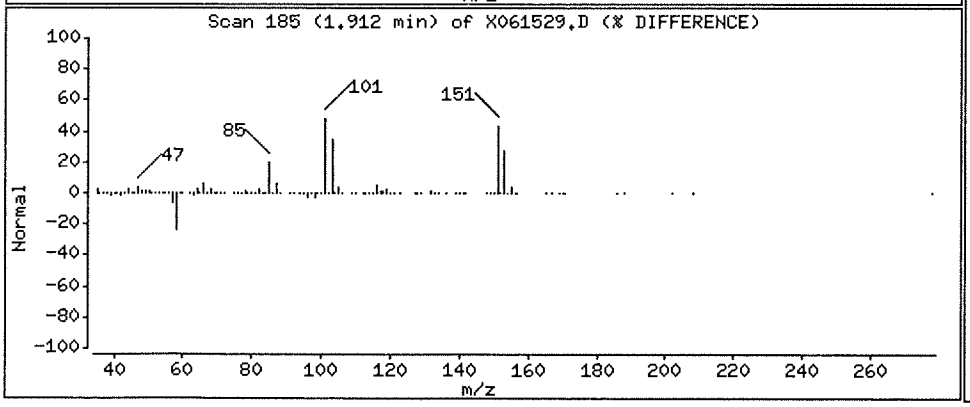












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

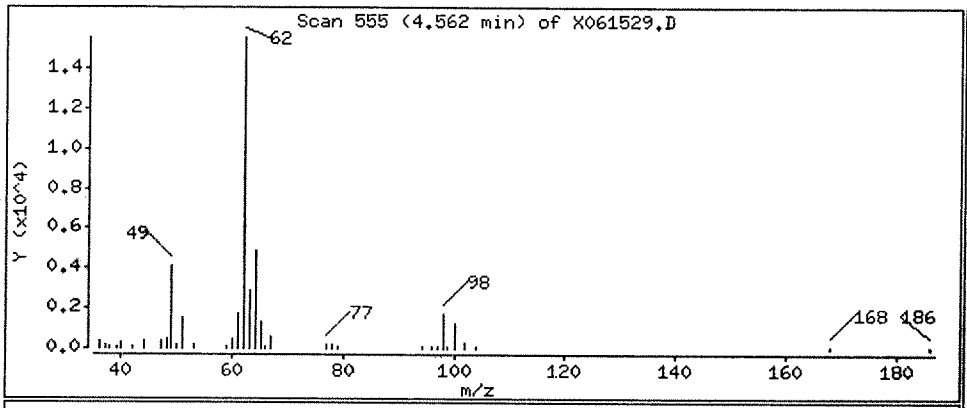
Operator: PC

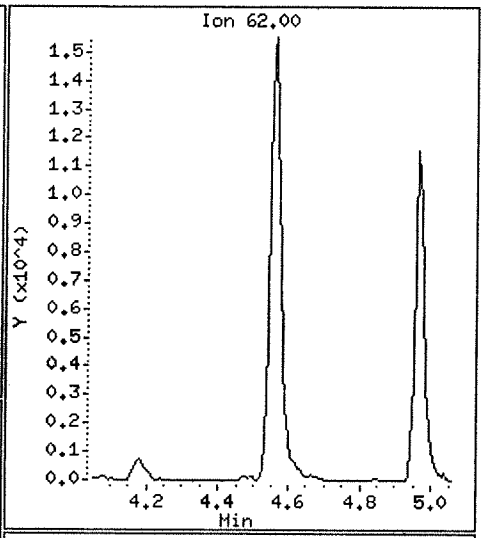
Column phase: DB624

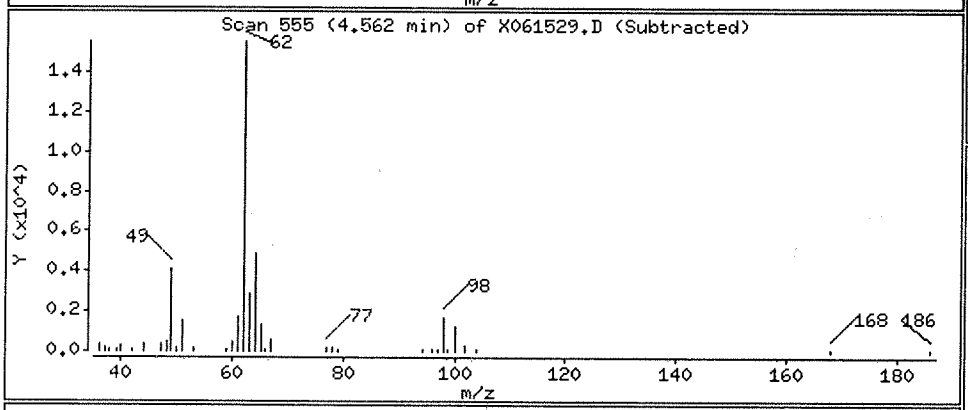
Column diameter: 0.18

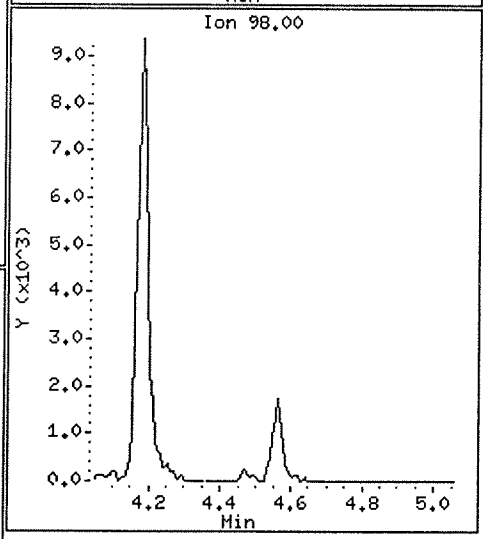
33 1,2-Dichloroethane

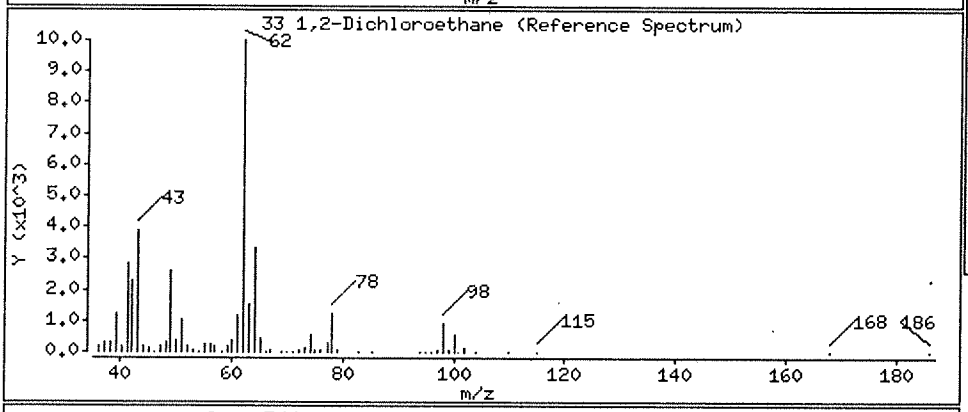
Concentration: 141.80 ug/l

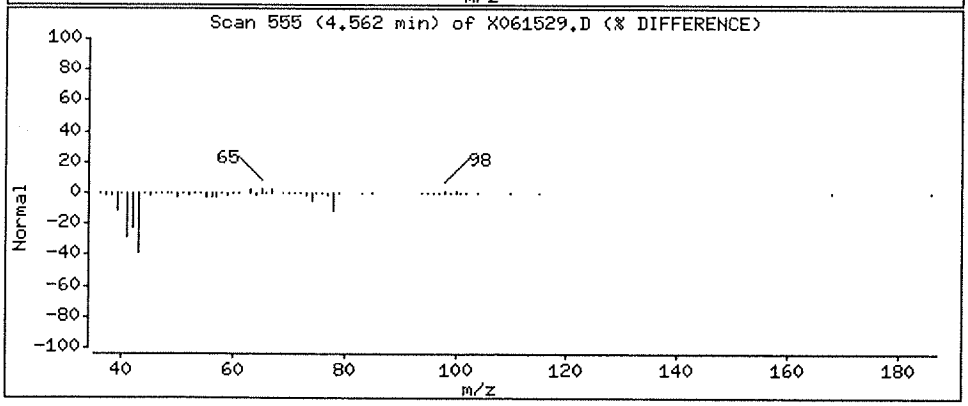












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

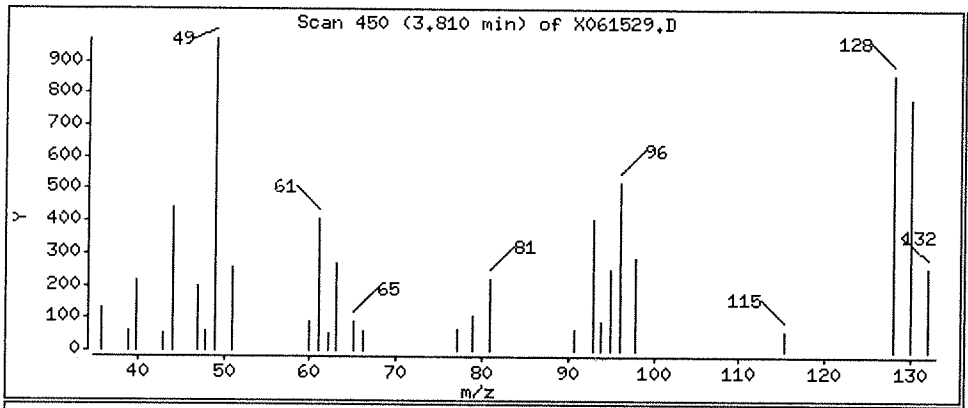
Operator: PC

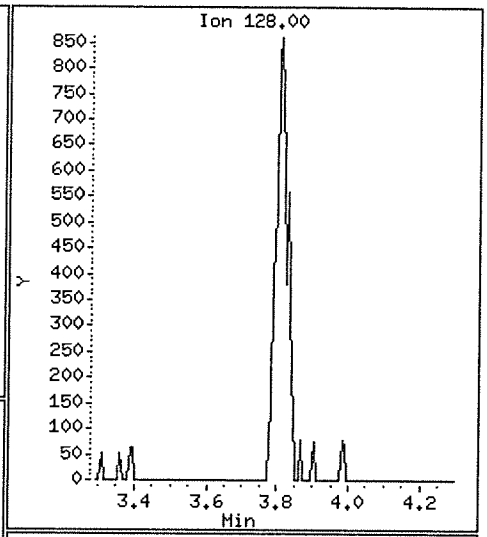
Column phase: DB624

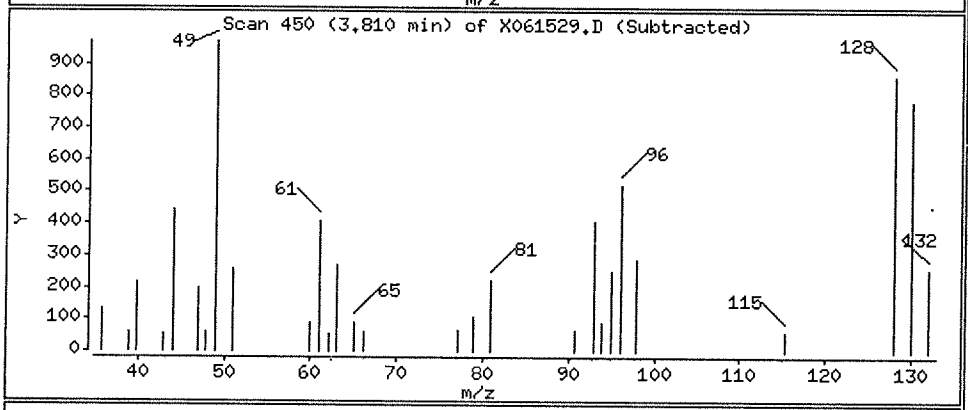
Column diameter: 0.18

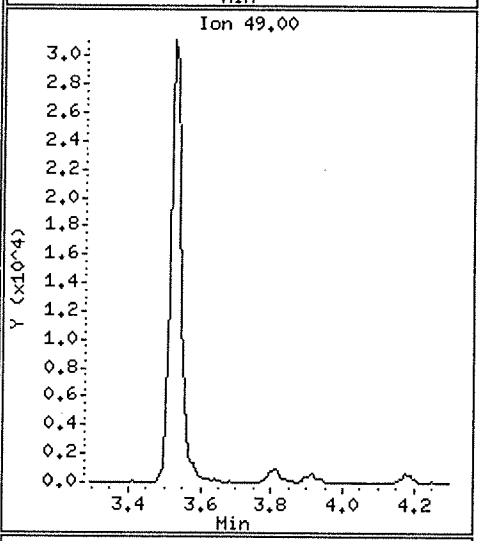
29 Bromochloromethane

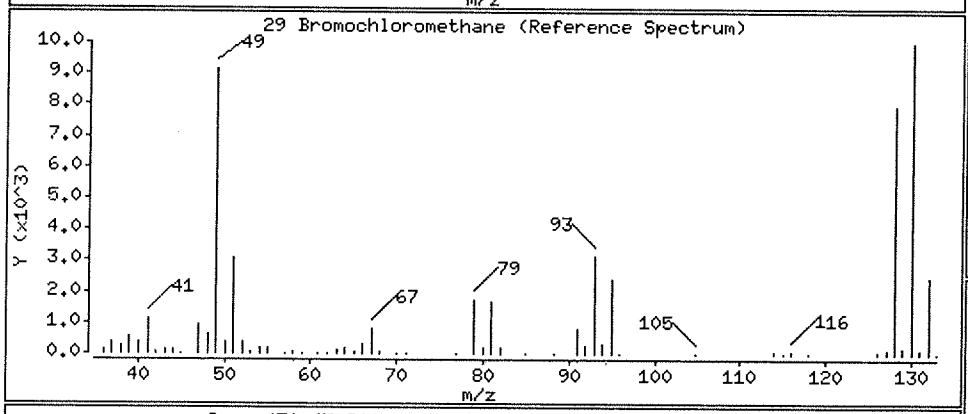
Concentration: 14.57 ug/l

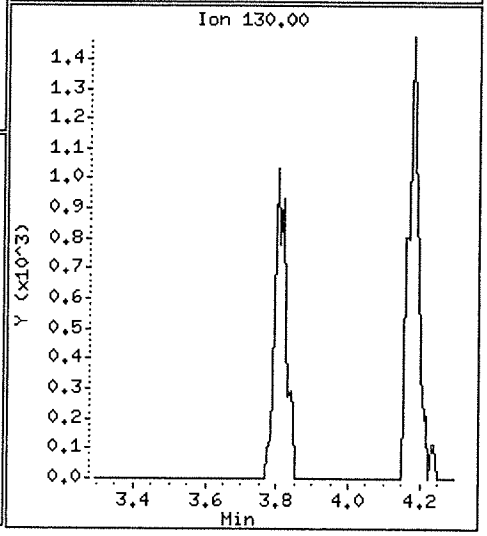


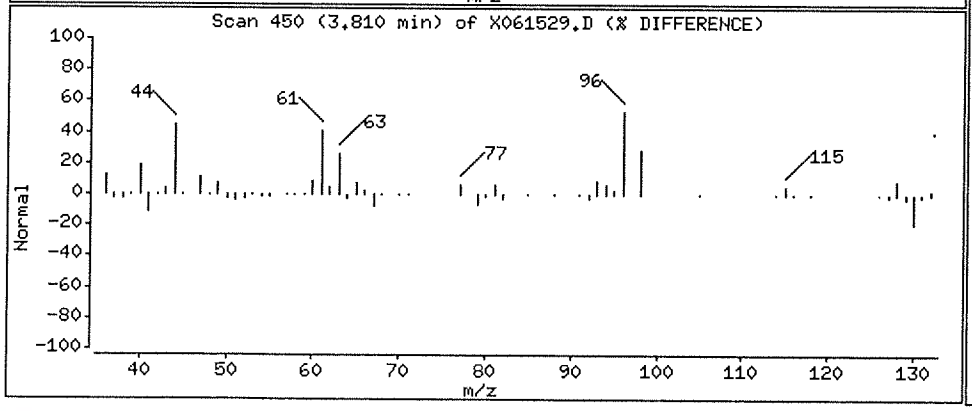












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

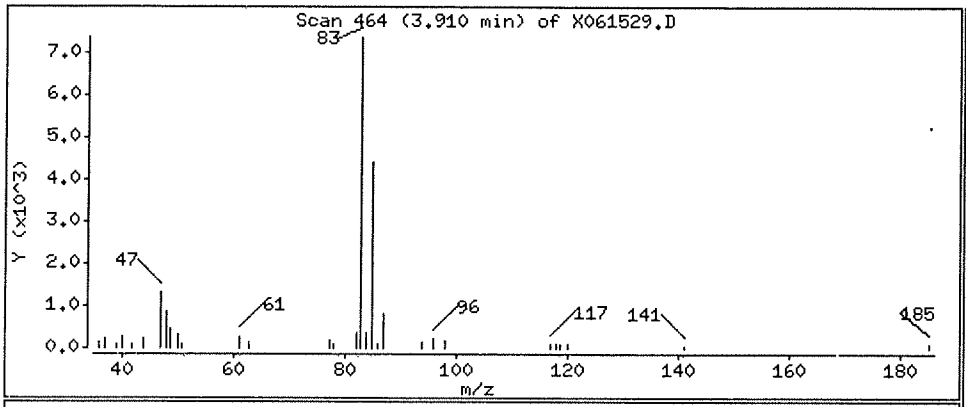
Operator: PC

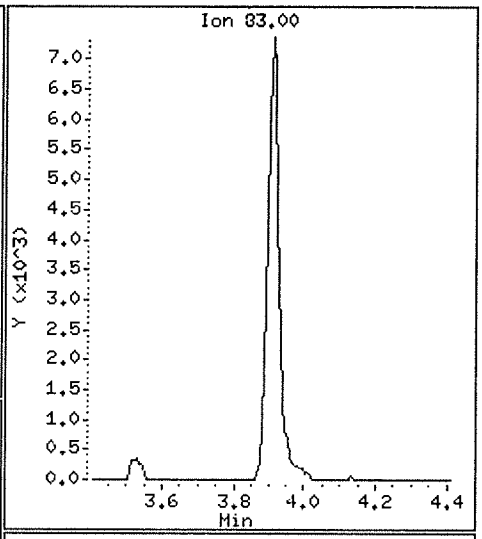
Column phase: DB624

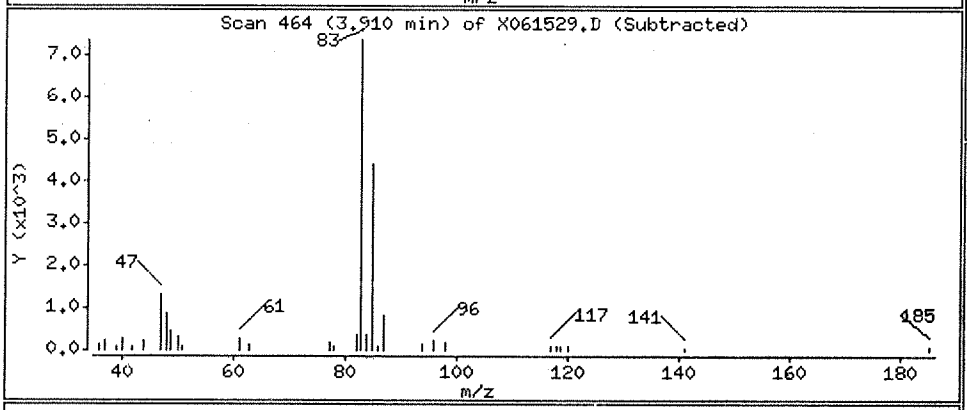
Column diameter: 0.18

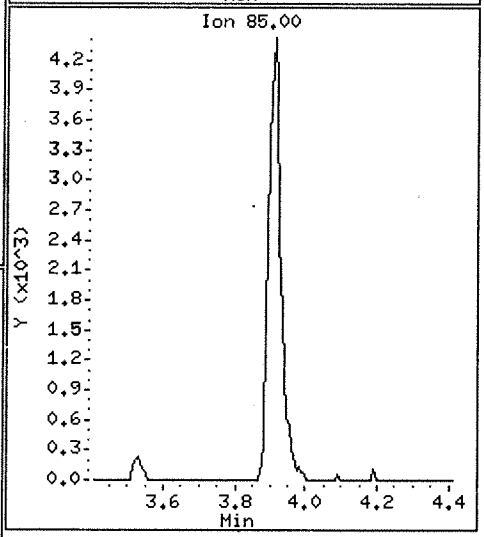
28 Chloroform

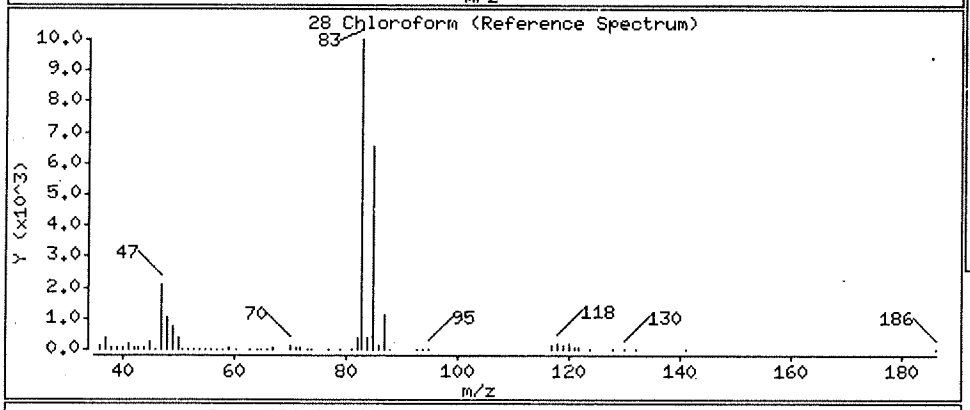
Concentration: 42.08 ug/l

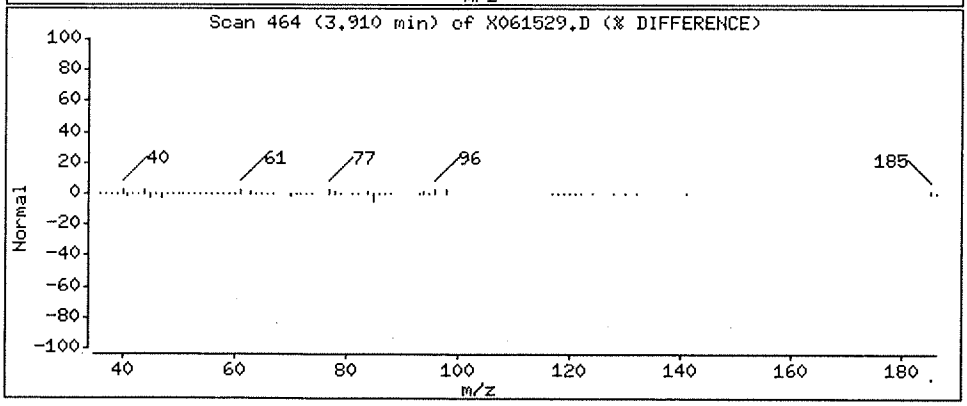












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

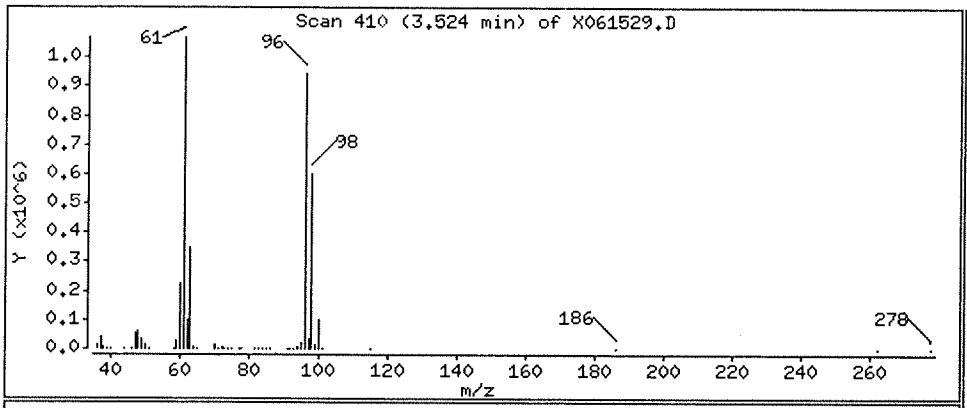
Operator: PC

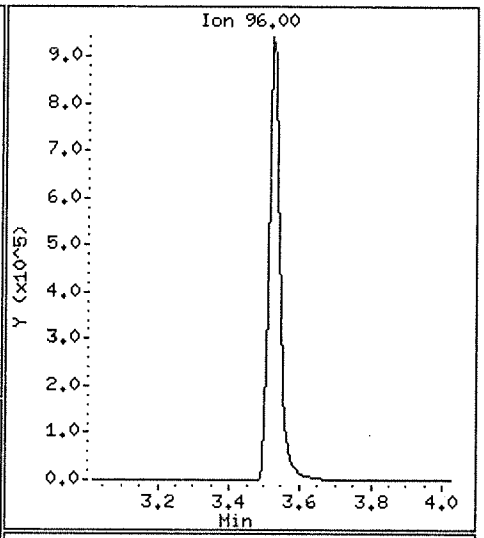
Column phase: DB624

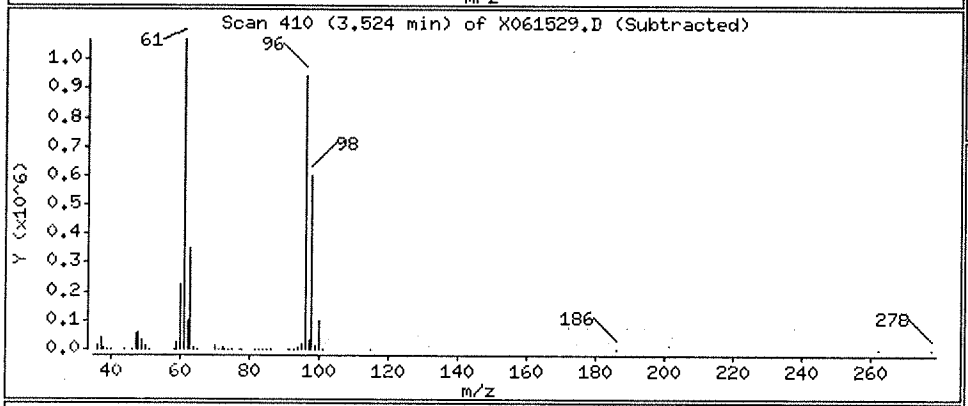
Column diameter: 0.18

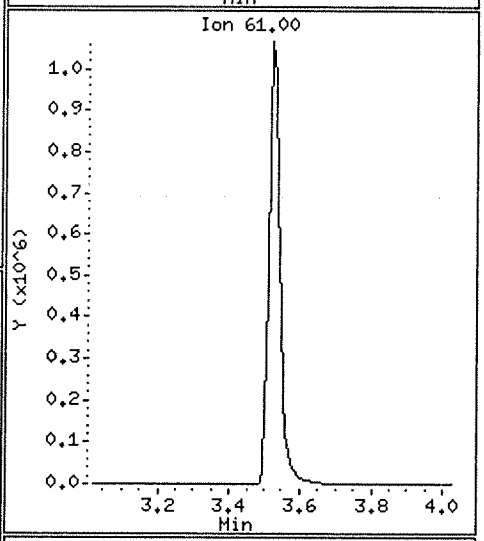
27 cis-1,2-Dichloroethene

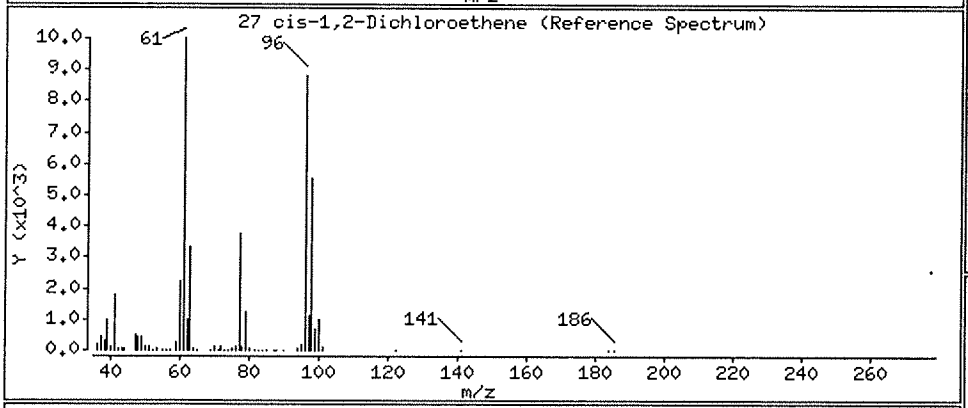
Concentration: 8499.26 ug/l

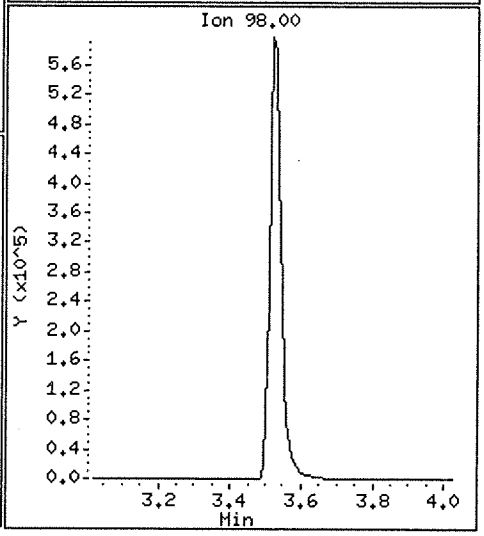


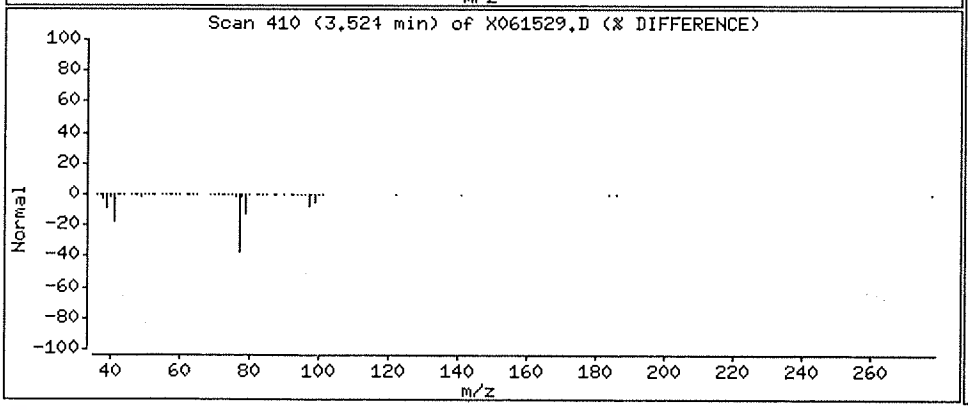












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

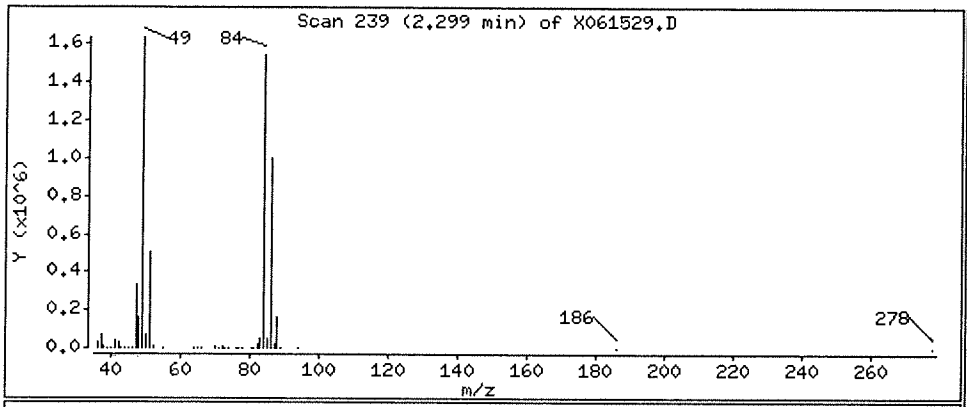
Operator: PC

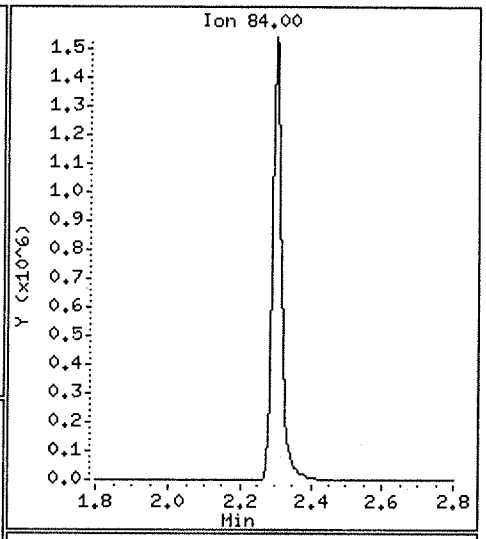
Column phase: DB624

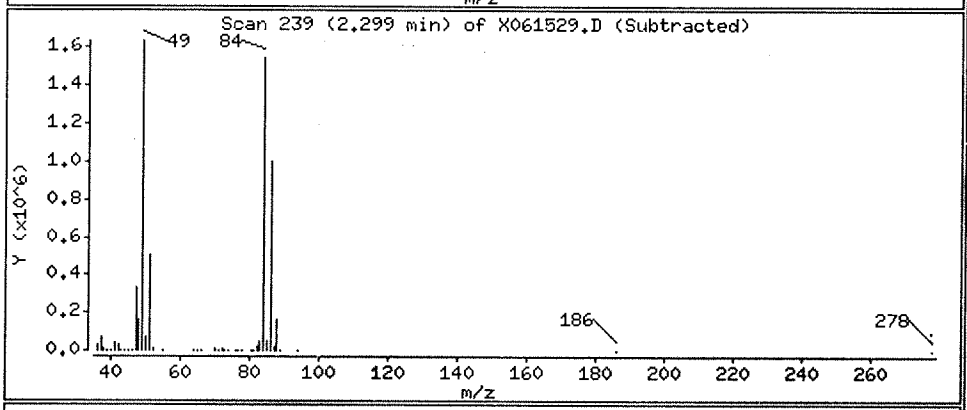
Column diameter: 0.18

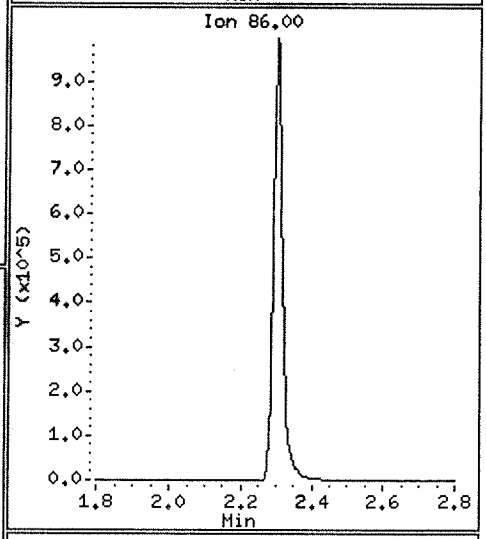
17 Methylene Chloride

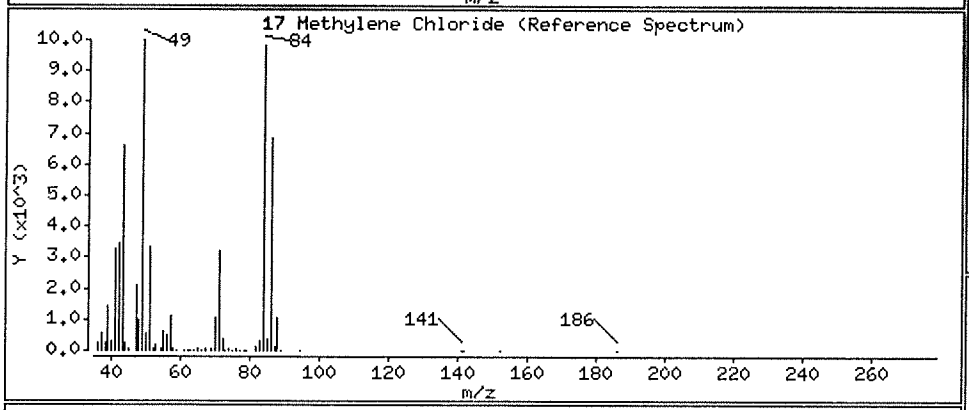
Concentration: 13748.61 ug/l

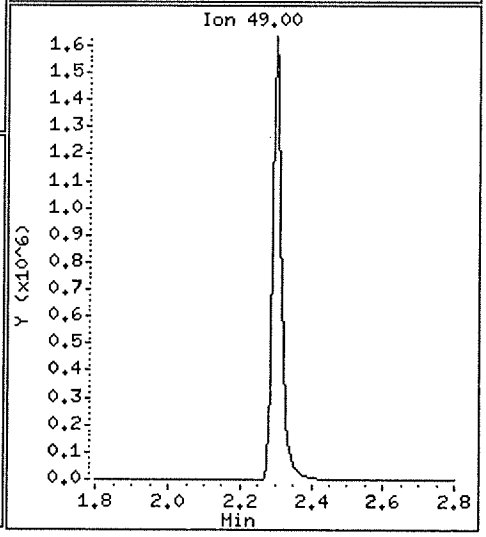


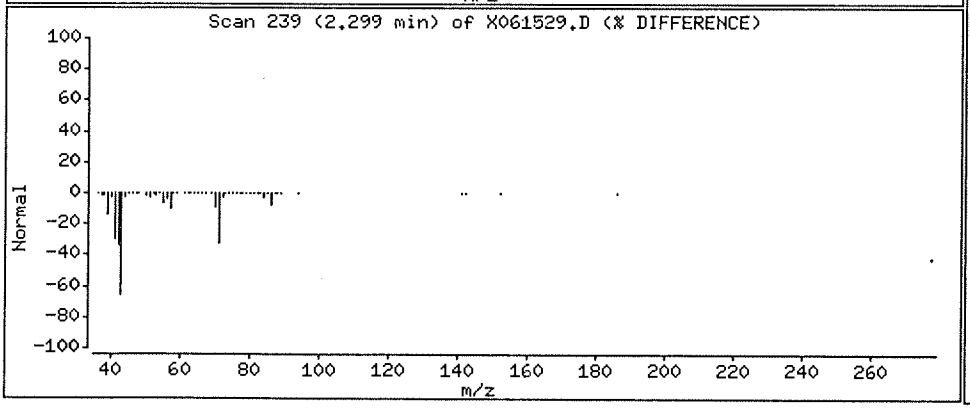












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

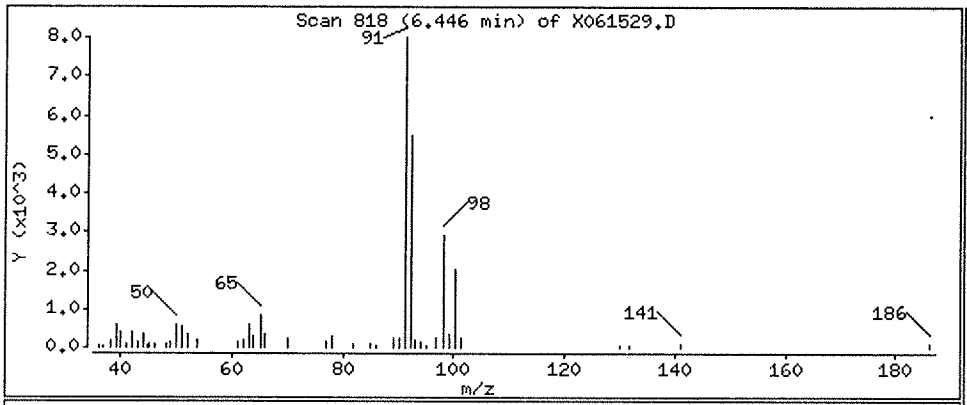
Operator: PC

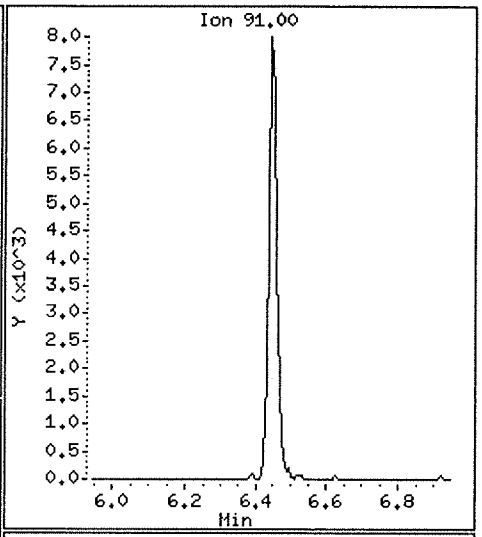
Column phase: DB624

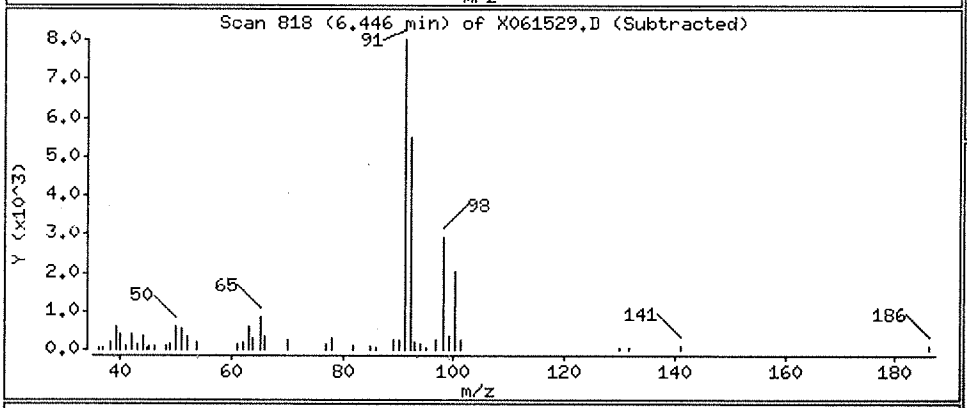
Column diameter: 0.18

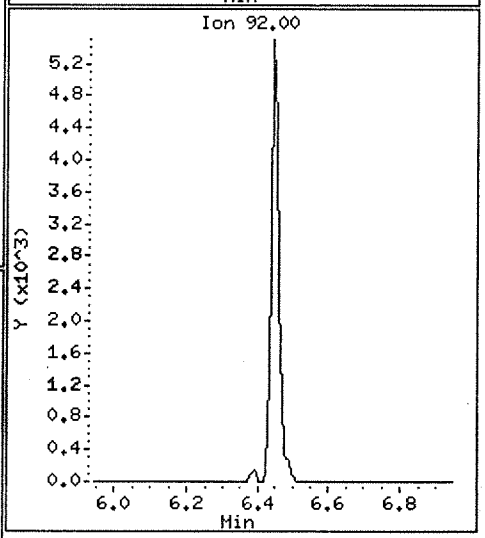
50 Toluene

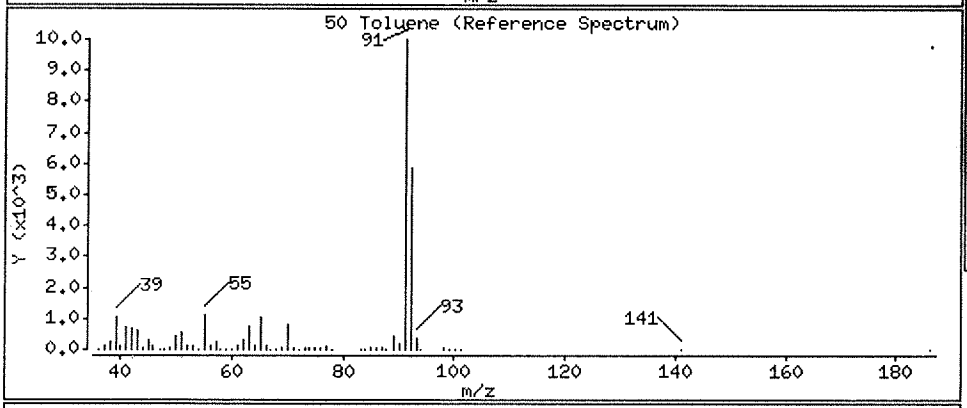
Concentration: 16.06 ug/l

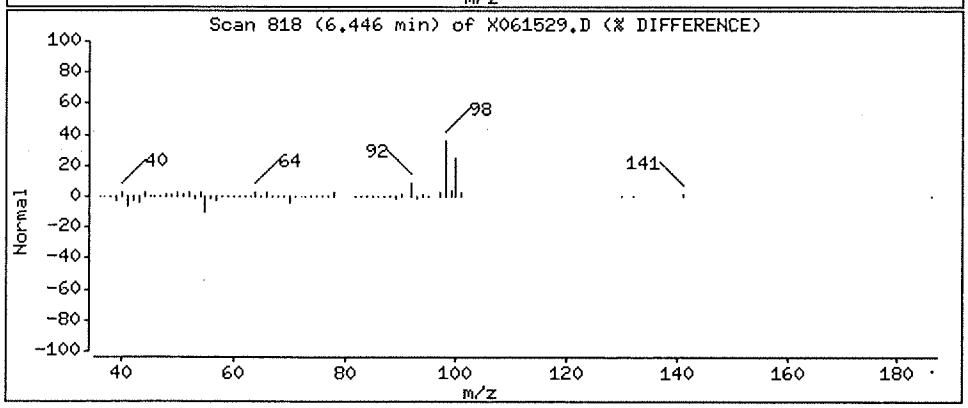












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

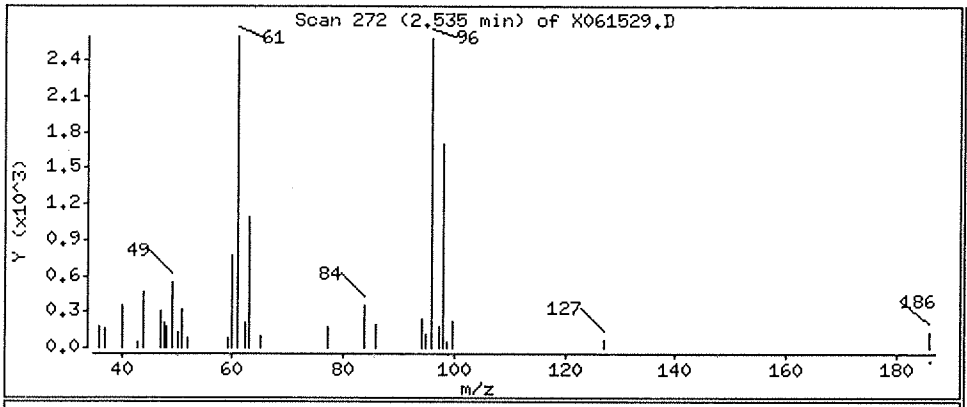
Operator: PC

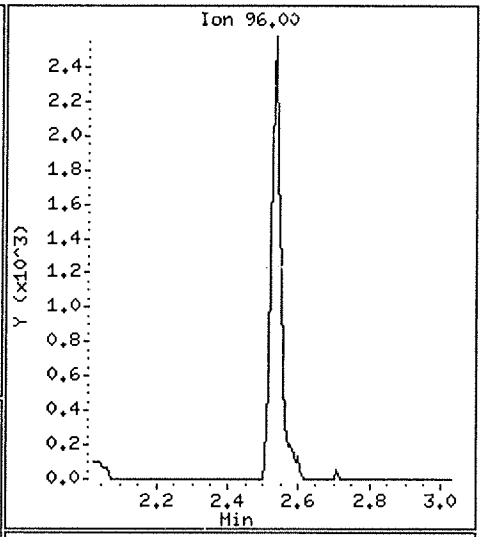
Column phase: DB624

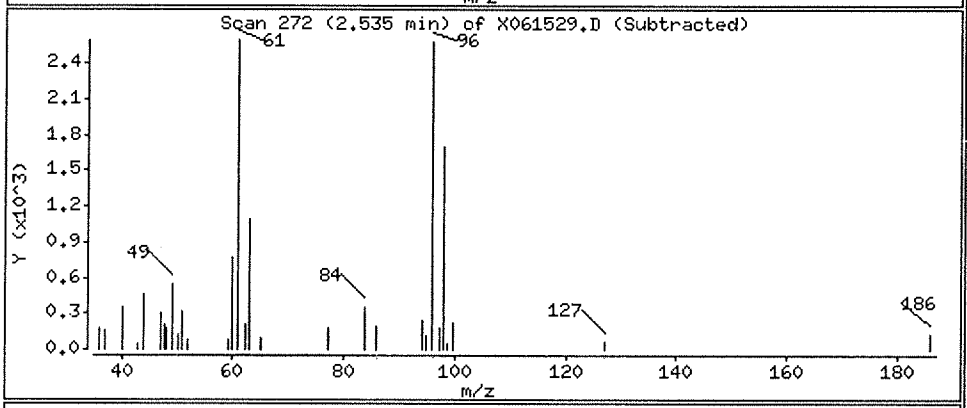
Column diameter: 0.18

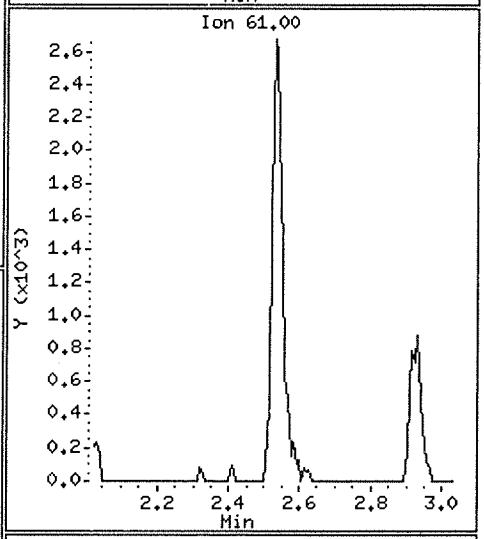
20 trans-1,2-Dichloroethene

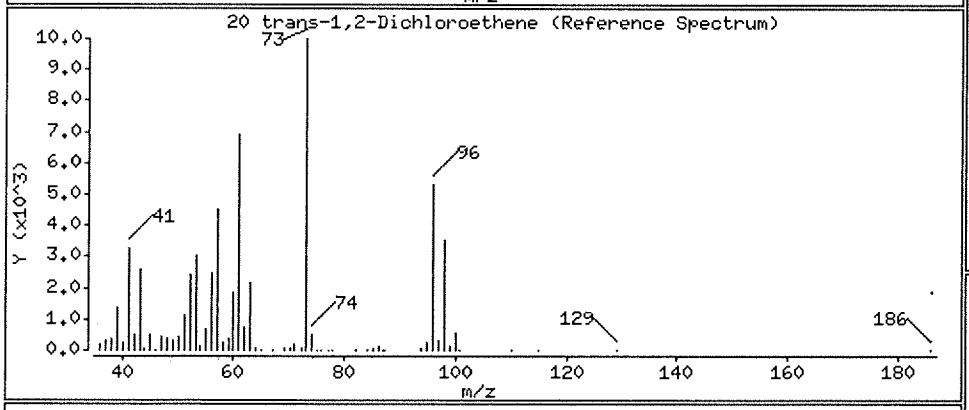
Concentration: 23.87 ug/l

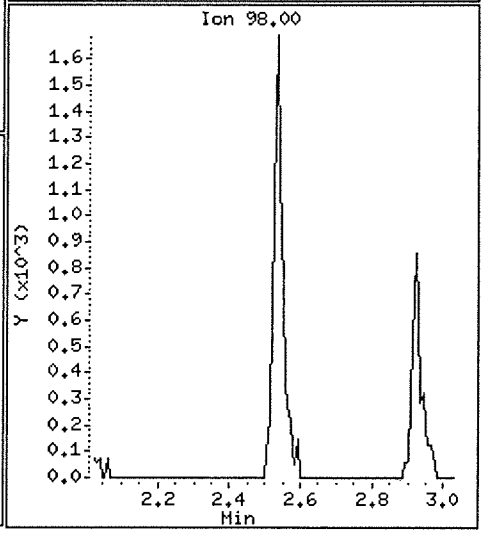


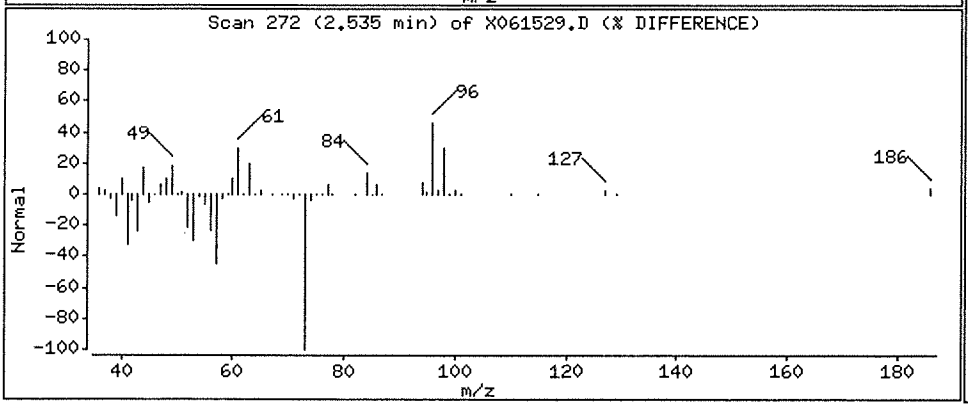












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061529.D

Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

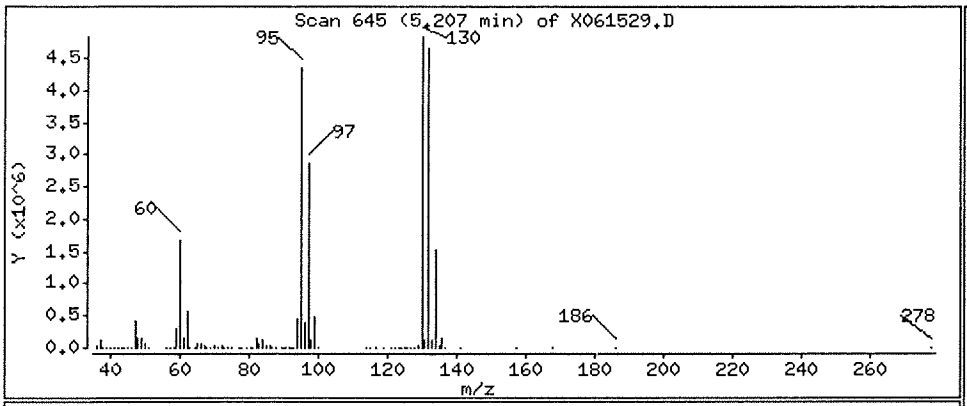
Operator: PC

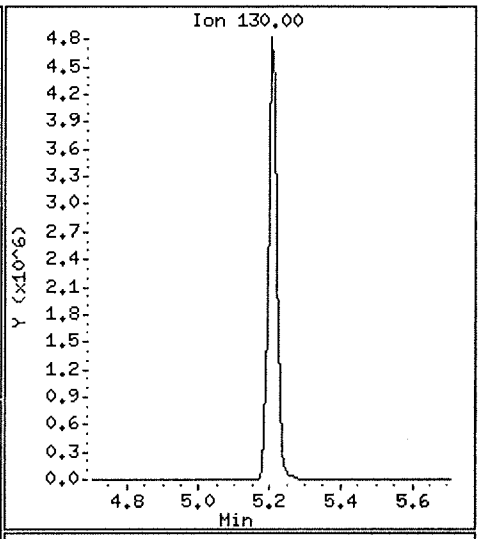
Column phase: DB624

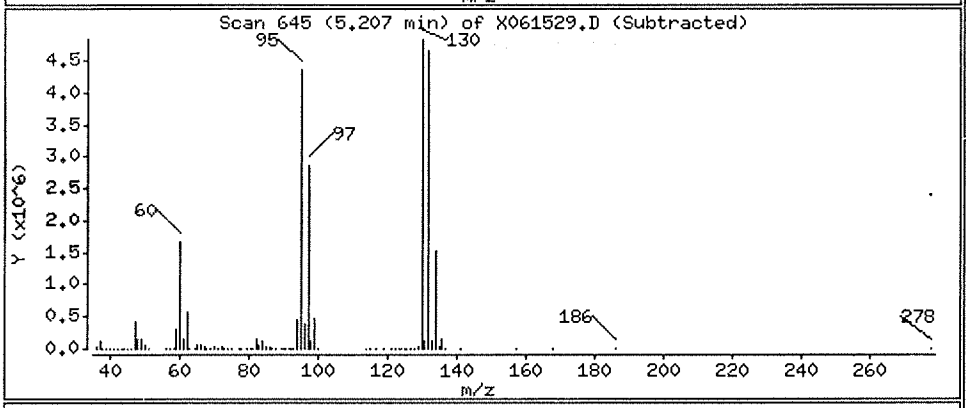
Column diameter: 0.18

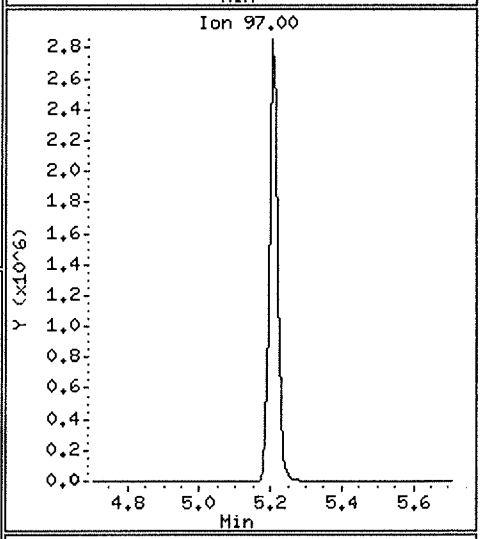
38 Trichloroethene

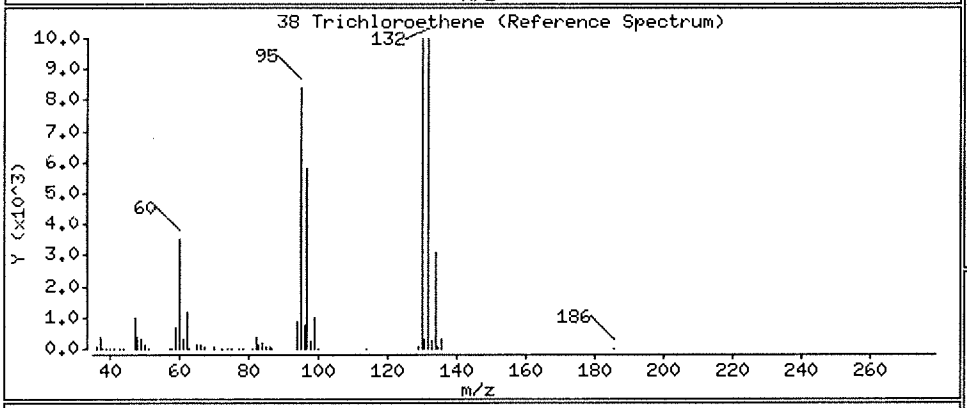
Concentration: 38495.17 ug/l

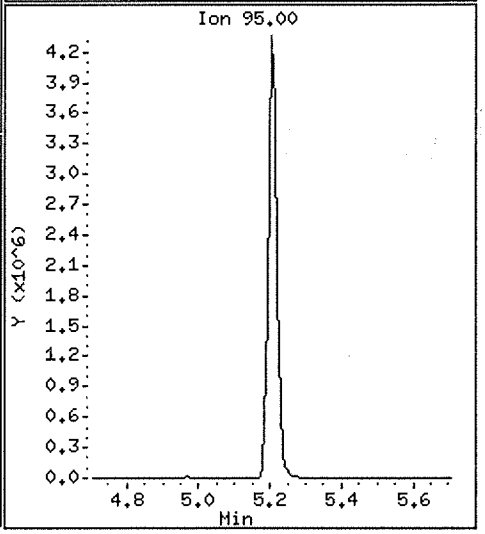


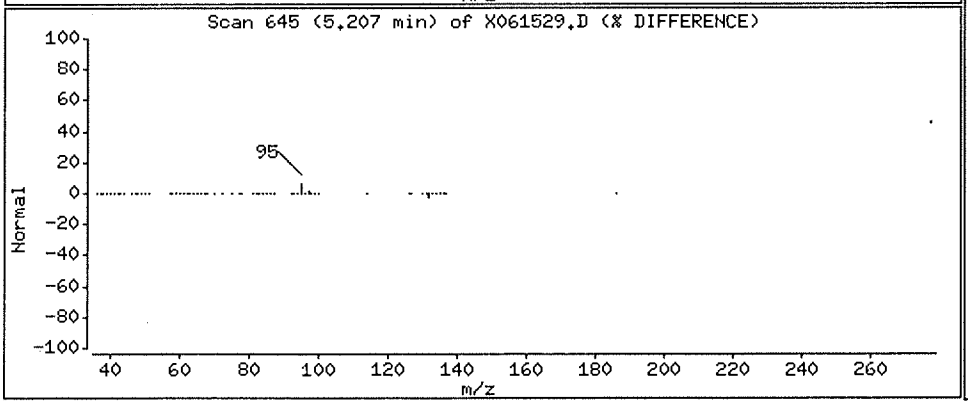












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Date : 15-JUN-2021 20:45

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

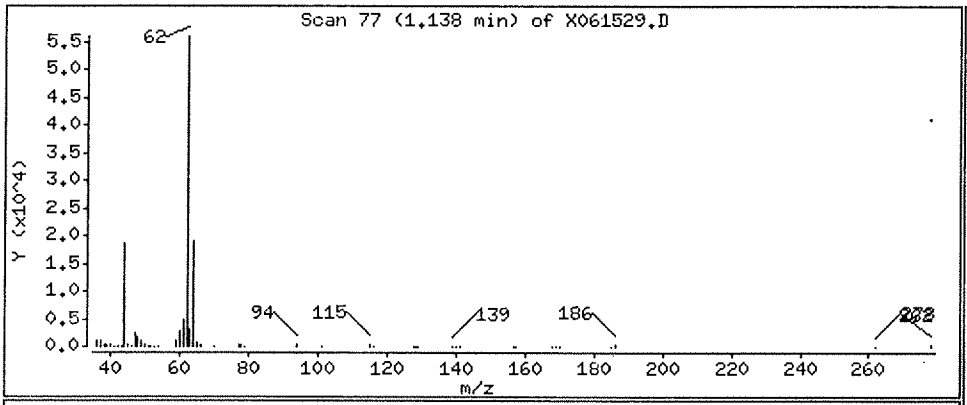
Operator: PC

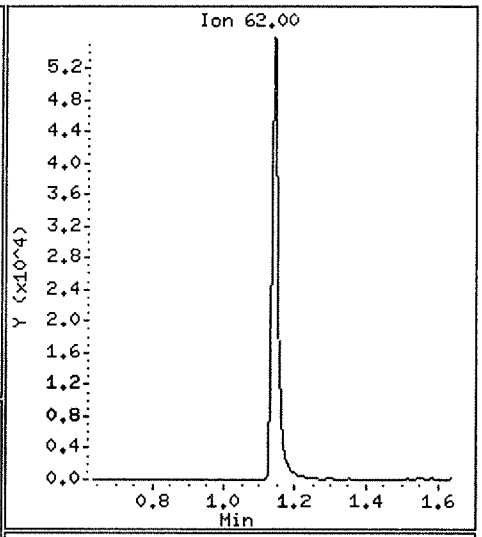
Column phase: DB624

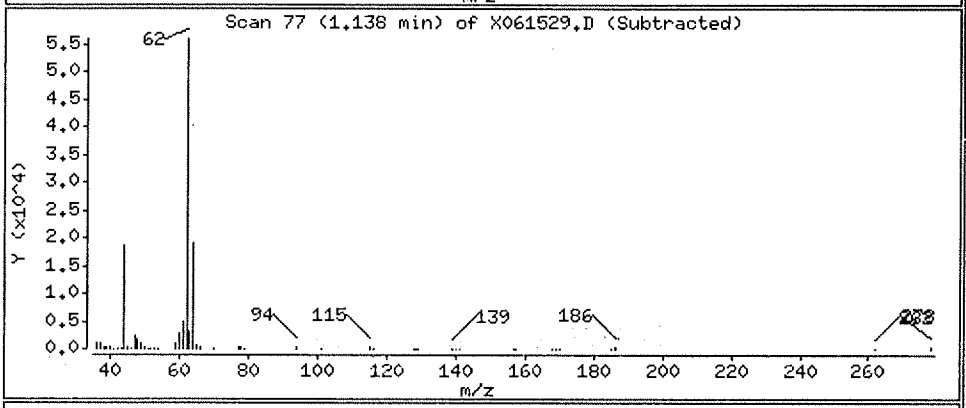
Column diameter: 0.18

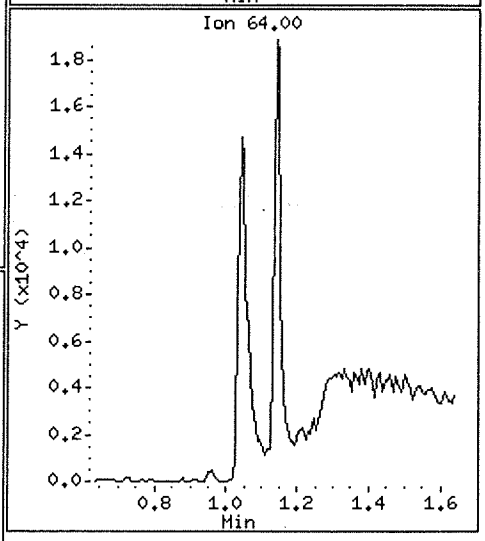
5 Vinyl Chloride

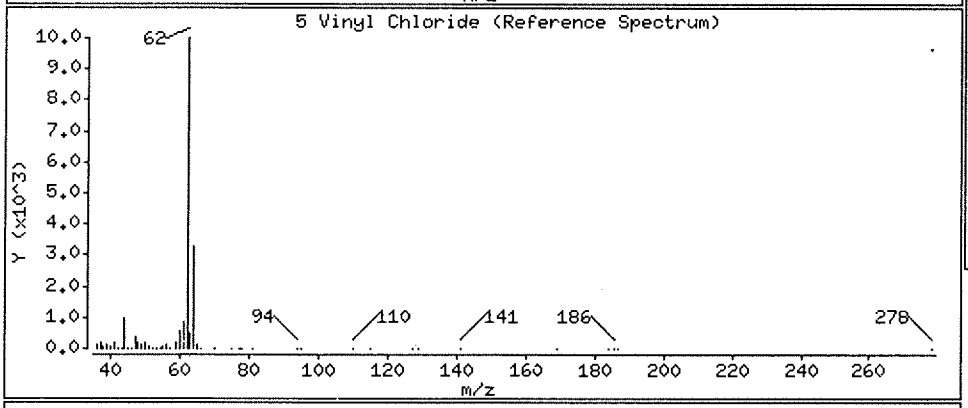
Concentration: 272.95 ug/l

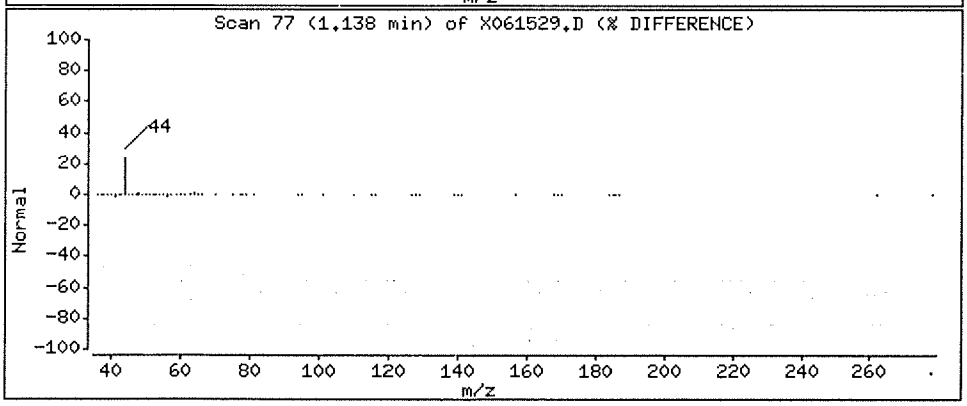












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061530.D Page 1
Report Date: 26-Jul-2021 14:24

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061530.D
Lab Smp Id: HS21060700-12 Client Smp ID: HS21060700-12
Inj Date : 15-JUN-2021 21:06
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-12;HS21060700-12;;;
Misc Info : HS18090001;WATER;0;250;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:20 devak.giga Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 29
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

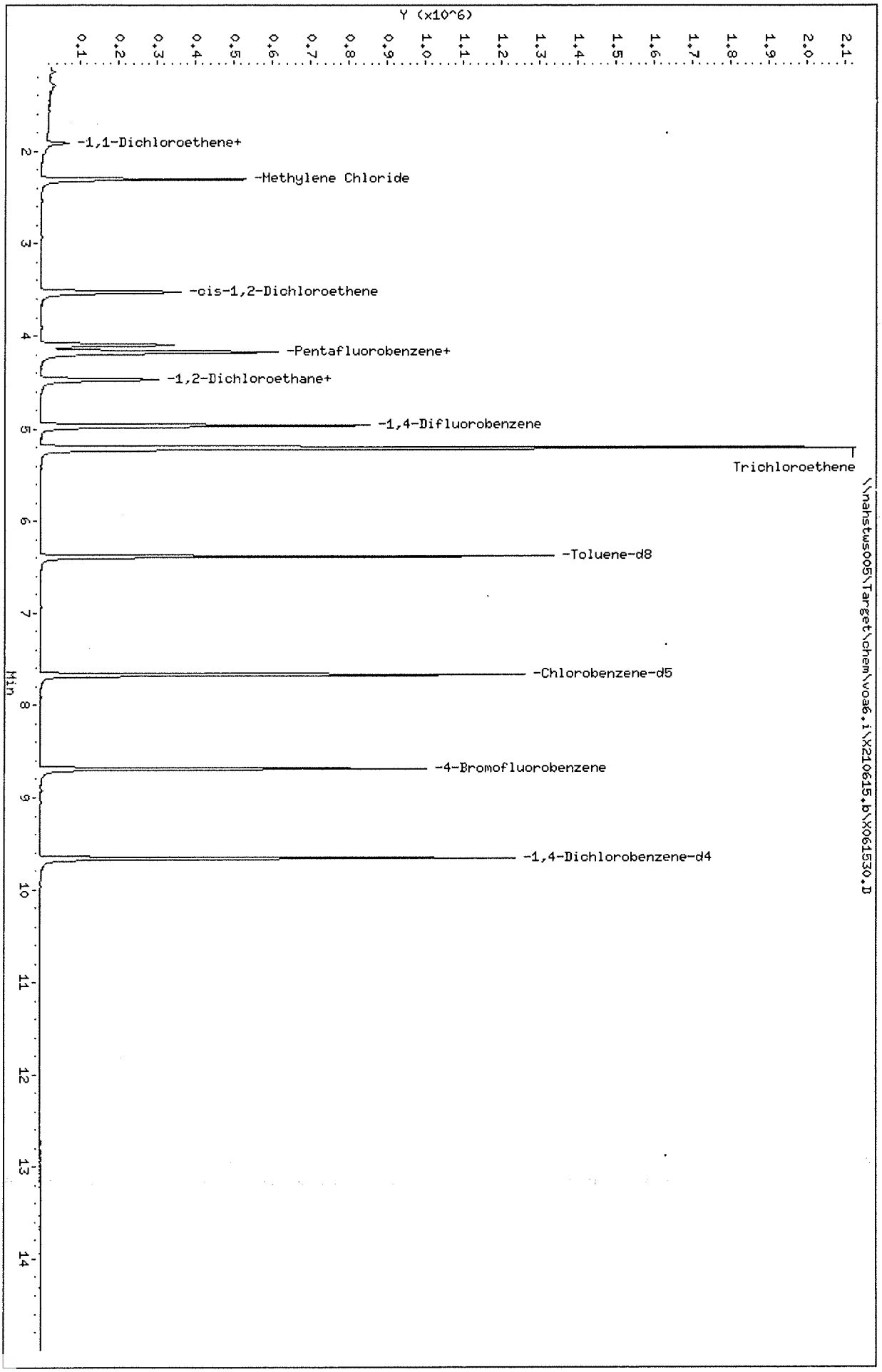
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	558802	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	757272	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	657895	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	318422	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	246471	44.7926	44.79
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	239005	44.7023	44.70
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	851108	51.9358	51.93
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	265383	45.9933	45.99
11 1,1-Dichloroethene	96	1.911	1.912	(0.457)	7796	1.35441	338.60(a)
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	4009	0.66443	166.10(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	204962	34.9943	8748.58
17 Methylene Chloride	84	2.305	2.298	(0.551)	265830	52.5232	13130.78
38 Trichloroethene	130	5.206	5.207	(1.049)	756410	145.535	36383.63
5 Vinyl Chloride	62	1.138	1.138	(0.272)	7972	1.20521	301.30(a)

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061530.D
Date : 15-JUN-2021 21:06
Client ID: HS21060700-12
Sample Info: HS21060700-12;HS21060700-12;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061530.D

Date : 15-JUN-2021 21:06

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

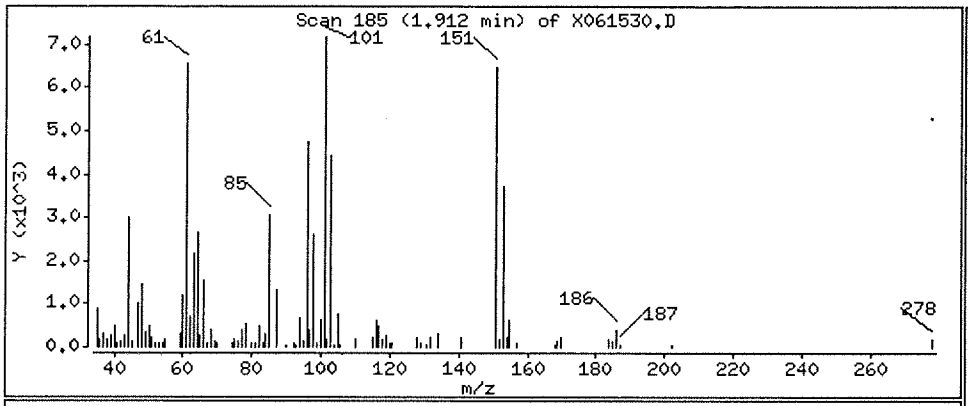
Operator: PC

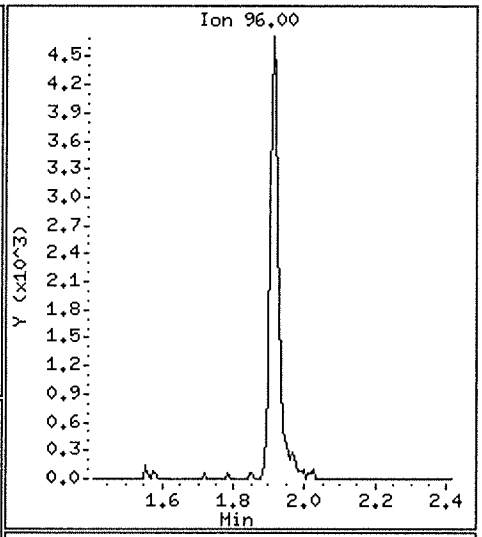
Column phase: DB624

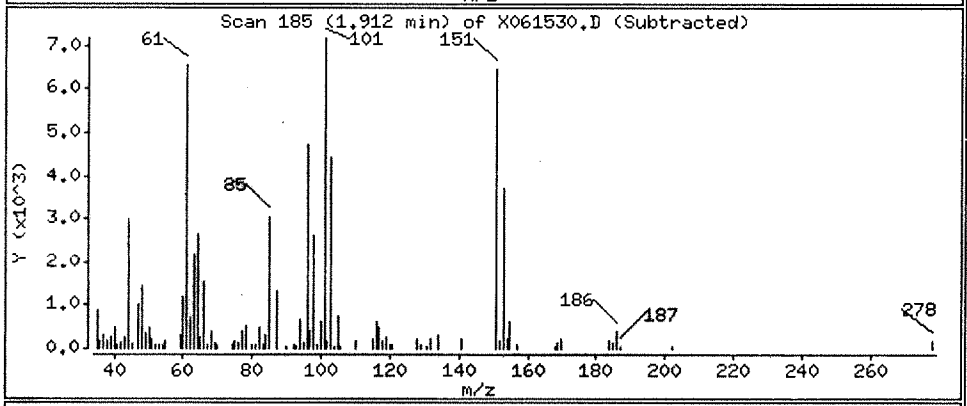
Column diameter: 0.18

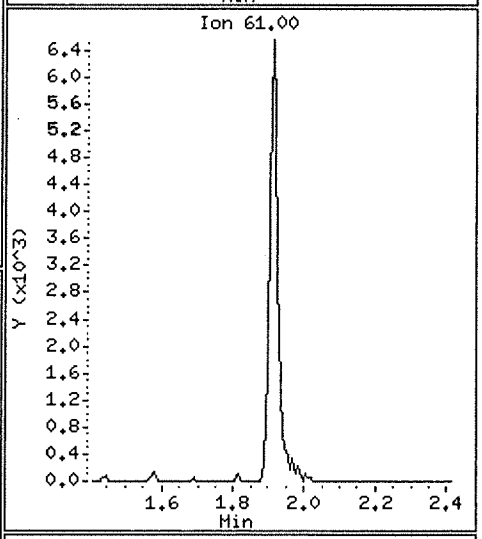
11 1,1-Dichloroethene

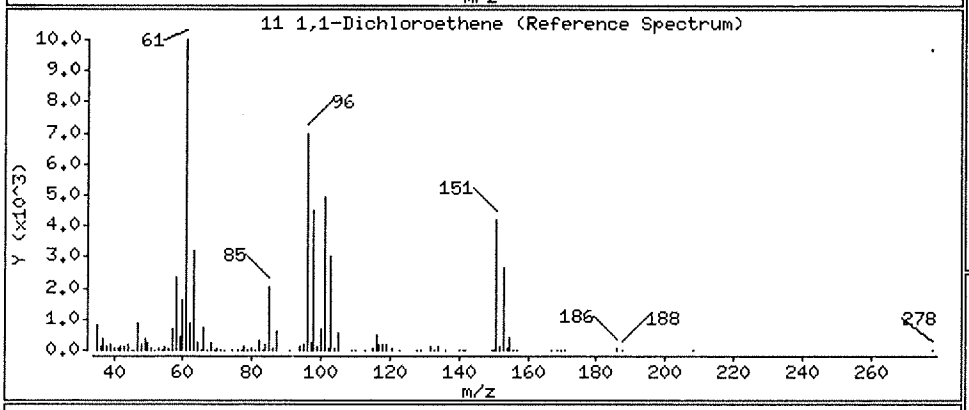
Concentration: 338.60 ug/l

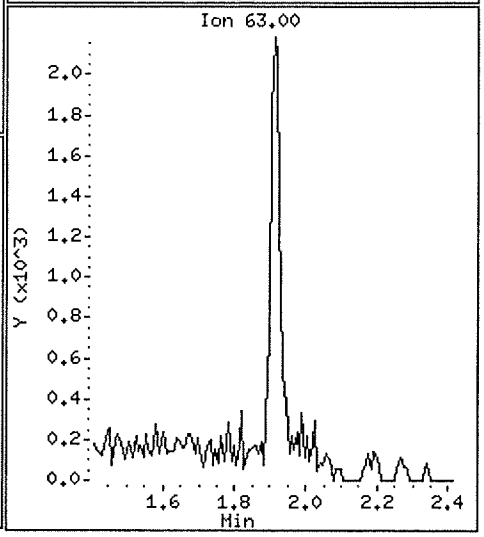


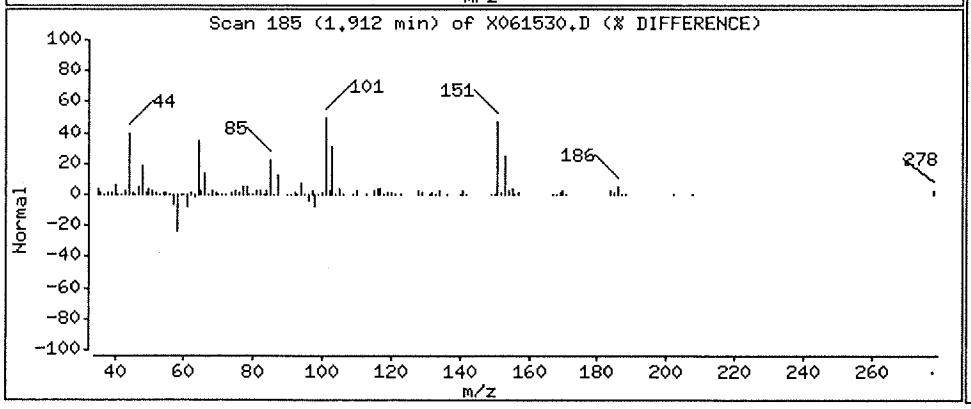












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061530.D

Date : 15-JUN-2021 21:06

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

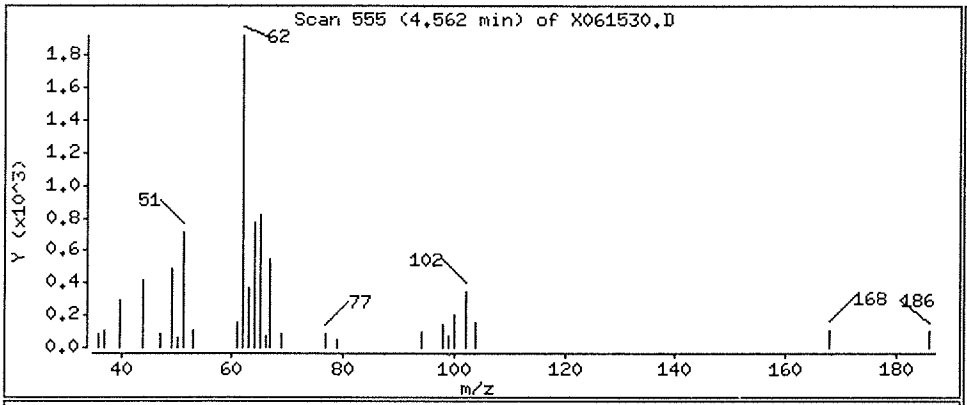
Operator: PC

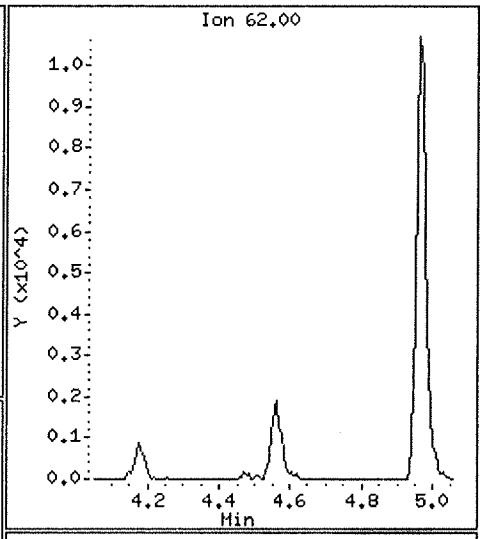
Column phase: DB624

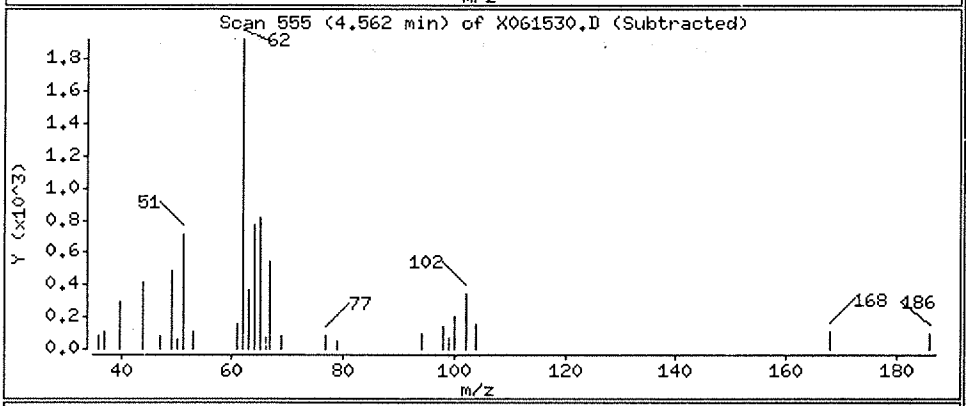
Column diameter: 0.18

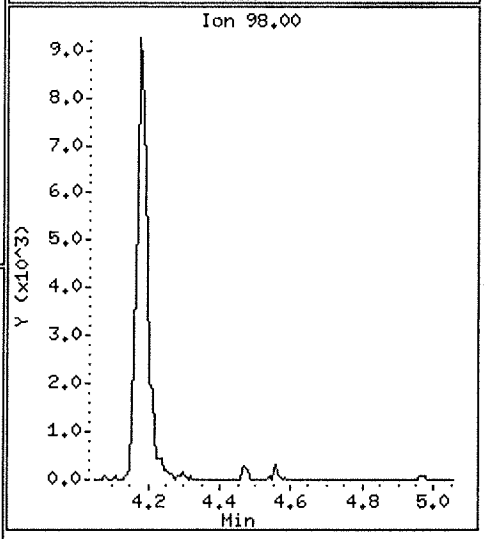
33 1,2-Dichloroethane

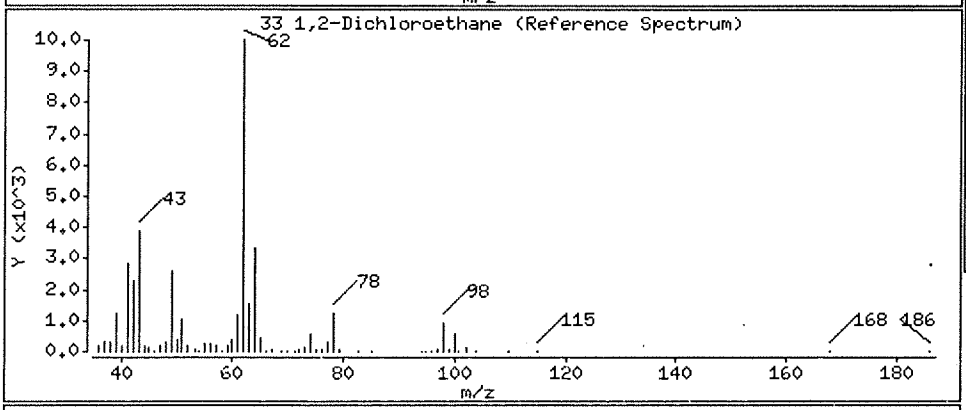
Concentration: 166.10 ug/l

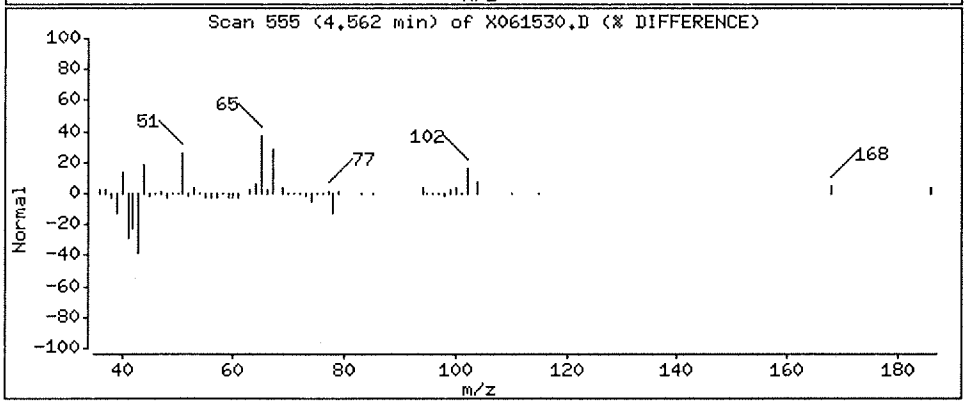












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061530.D

Date : 15-JUN-2021 21:06

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

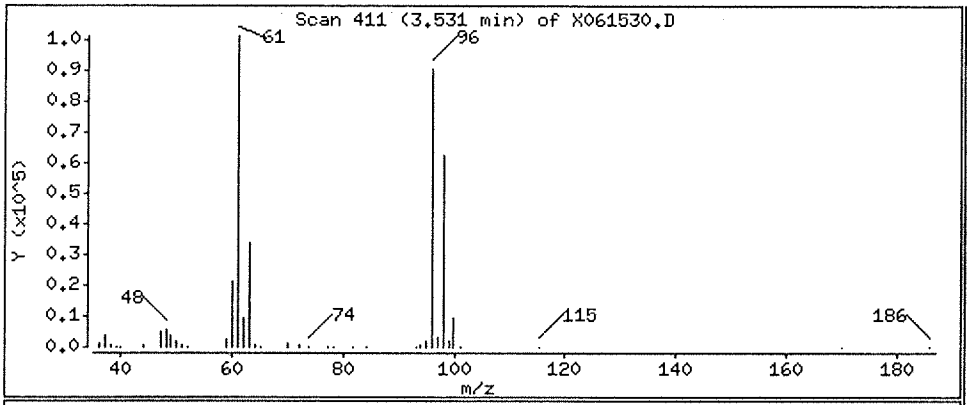
Operator: PC

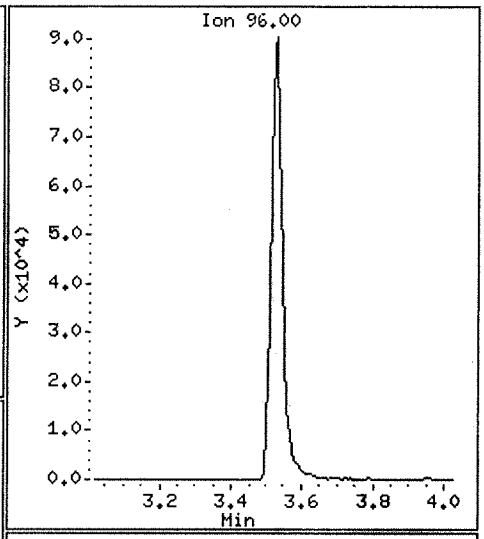
Column phase: DB624

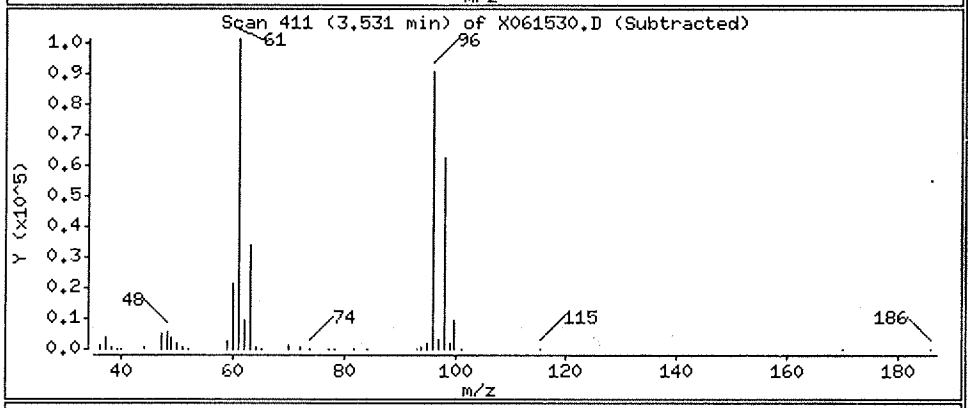
Column diameter: 0.18

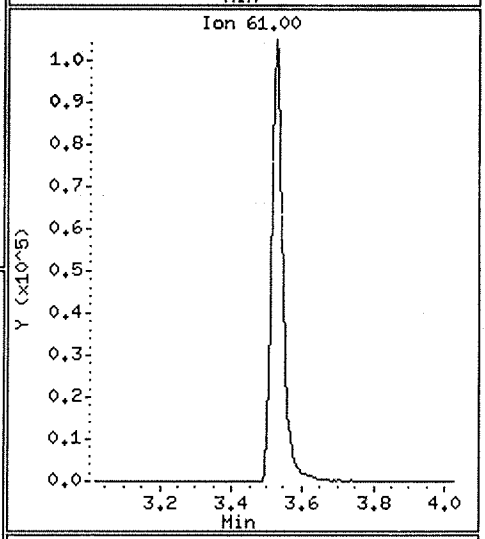
27 cis-1,2-Dichloroethene

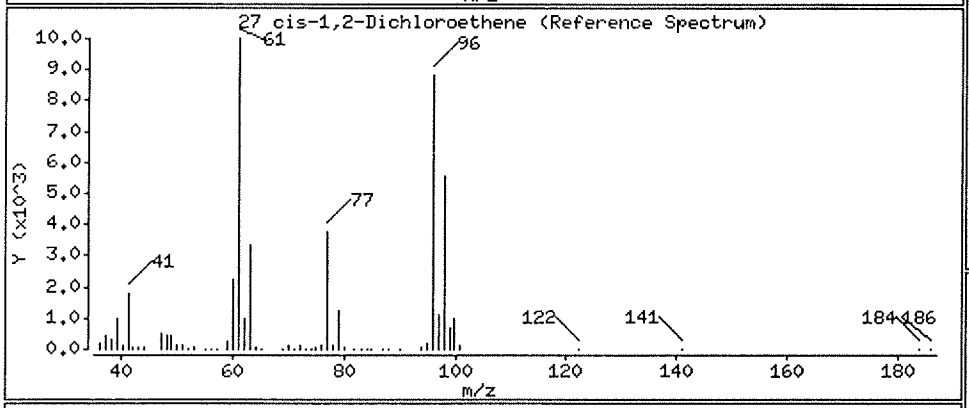
Concentration: 8748.58 ug/l

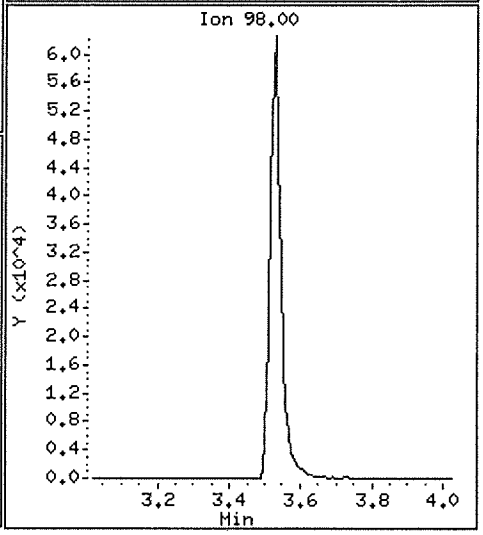


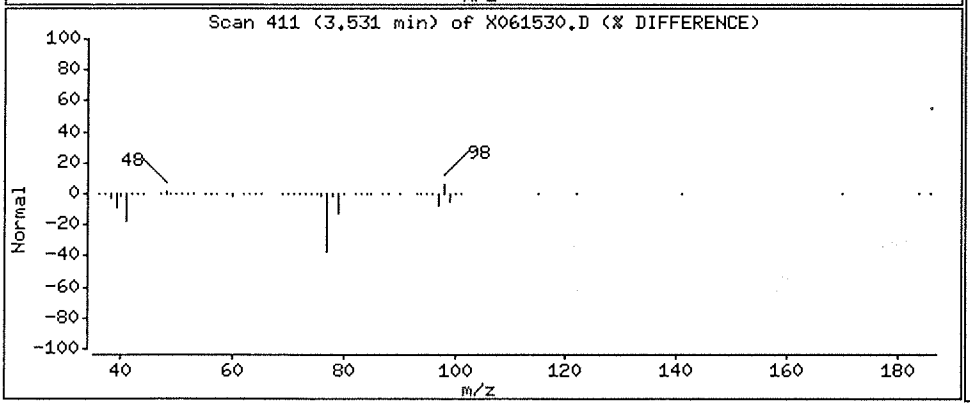












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061530.D

Date : 15-JUN-2021 21:06

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

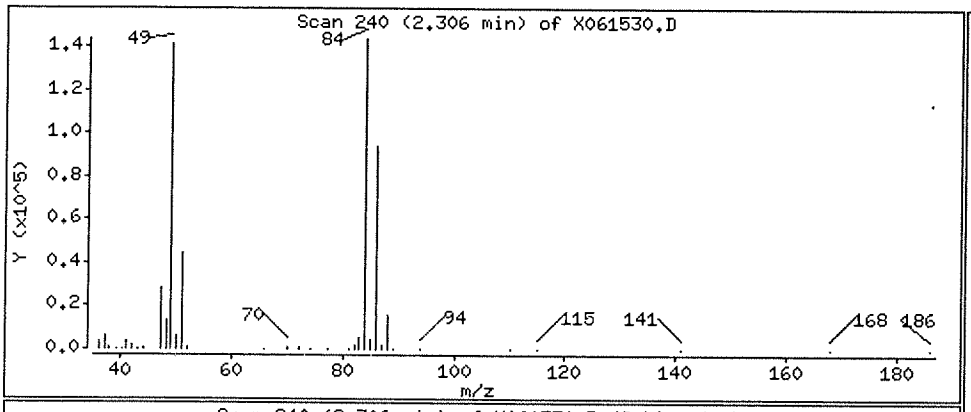
Operator: PC

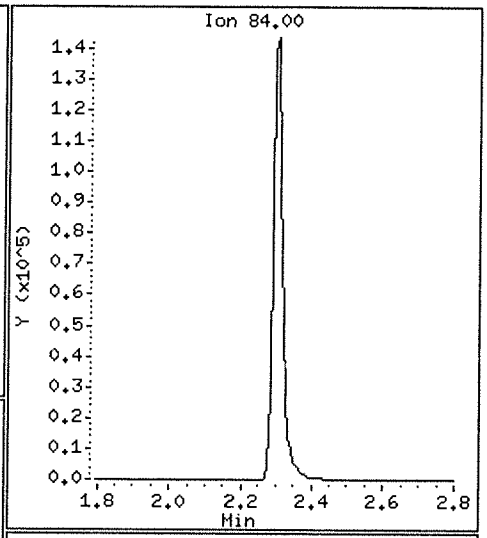
Column phase: DB624

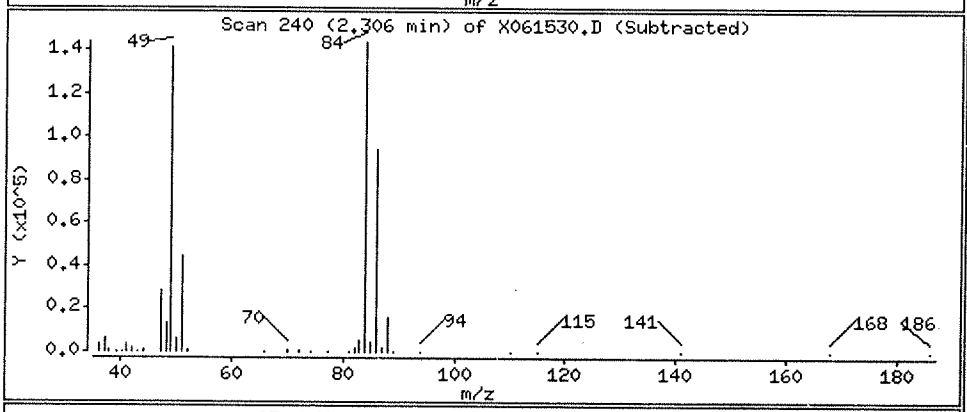
Column diameter: 0.18

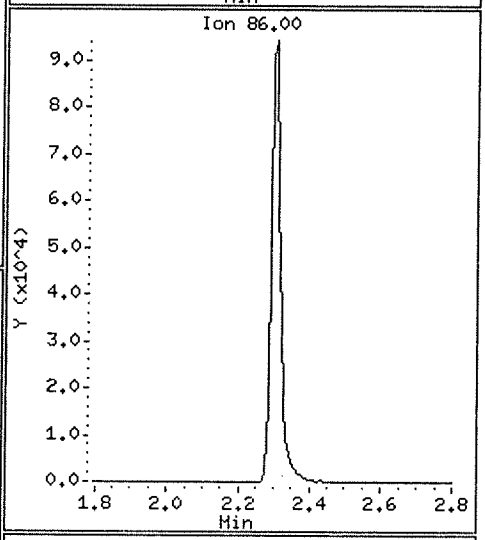
17 Methylene Chloride

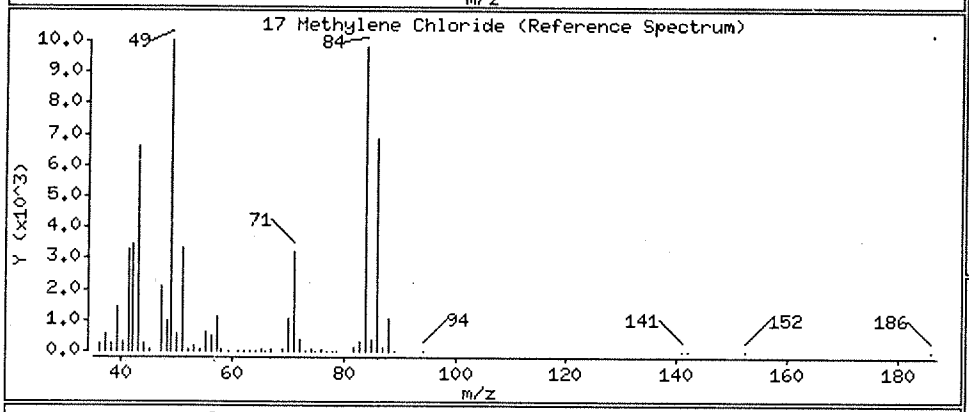
Concentration: 13130.78 ug/l

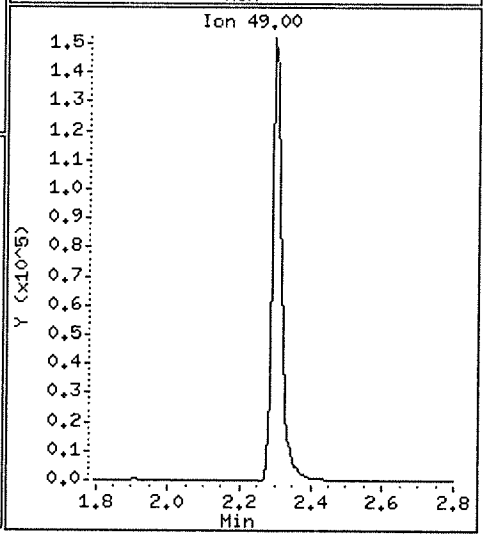


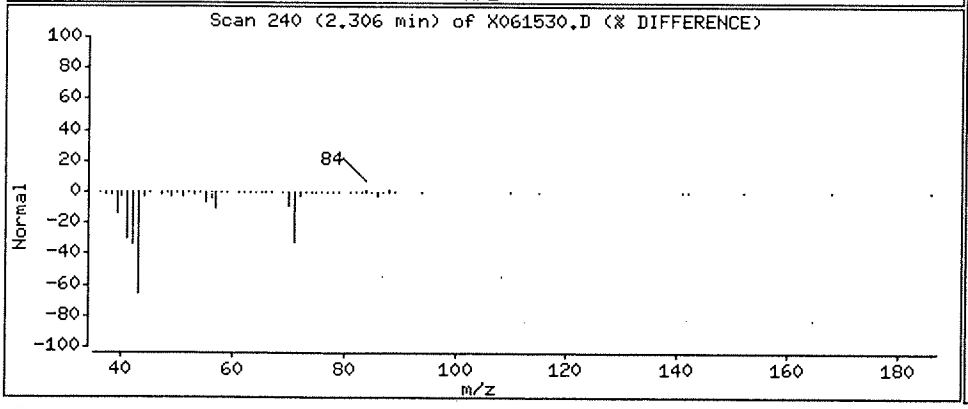












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061530.D

Date : 15-JUN-2021 21:06

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

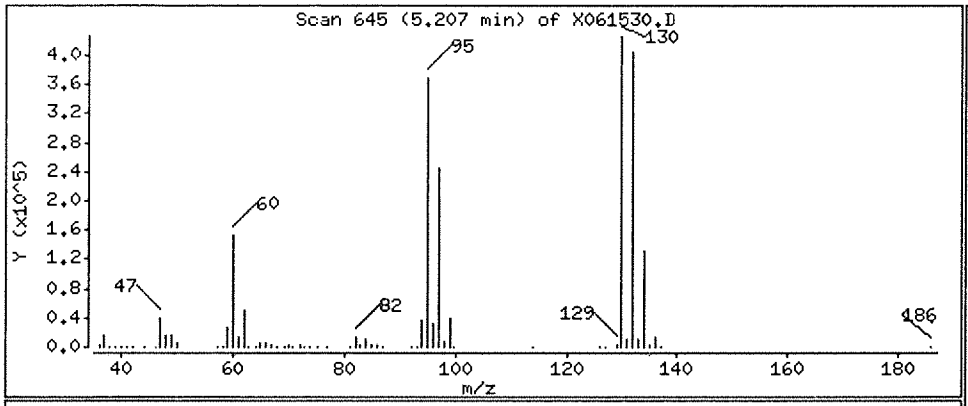
Operator: PC

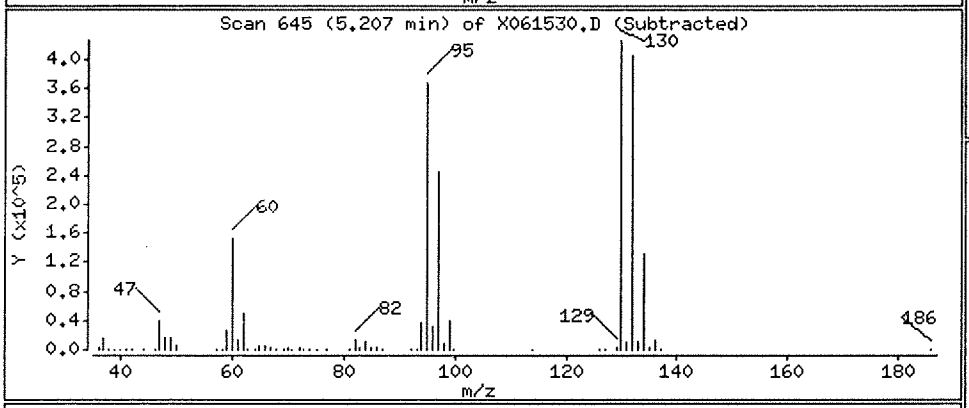
Column phase: DB624

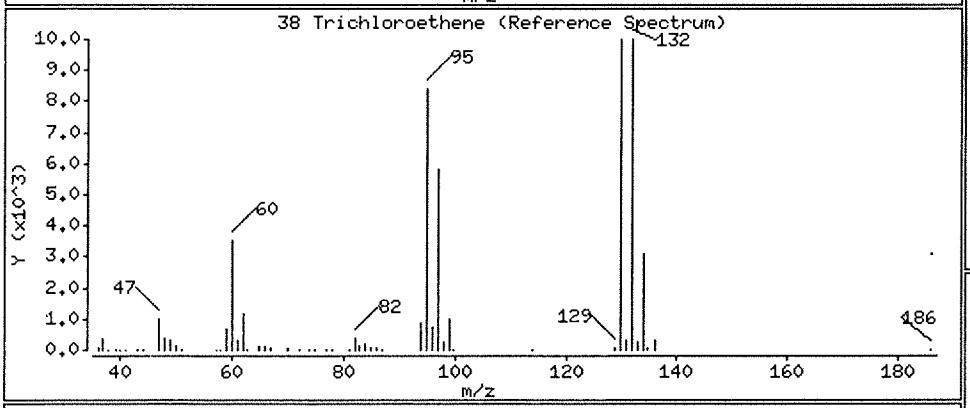
Column diameter: 0.18

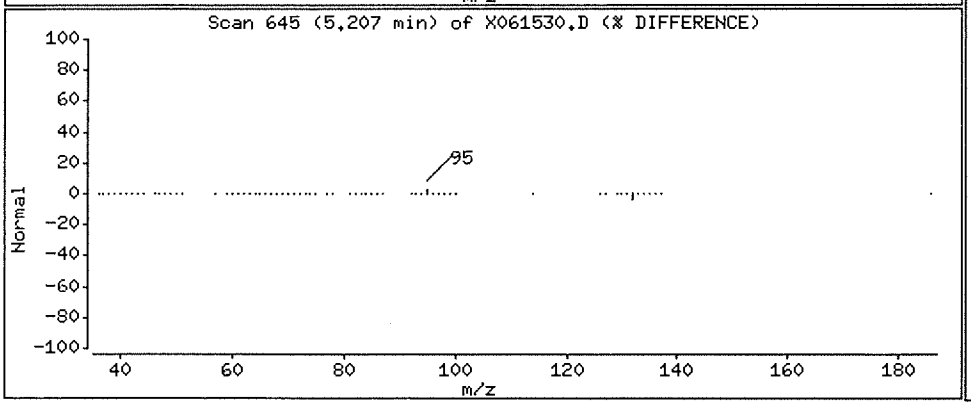
38 Trichloroethene

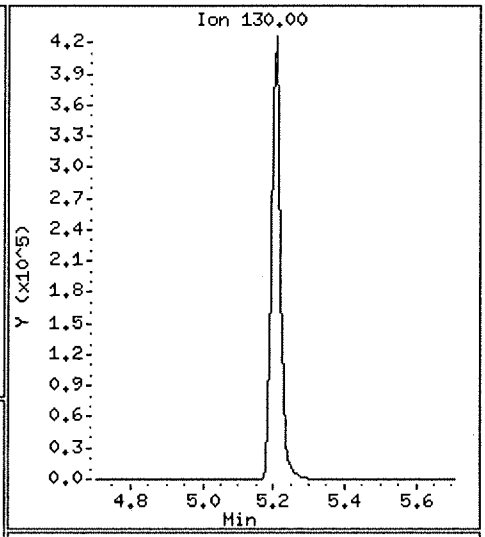
Concentration: 36383.63 ug/l

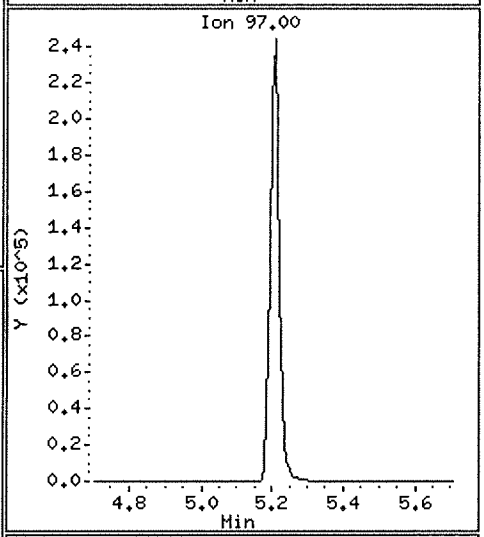


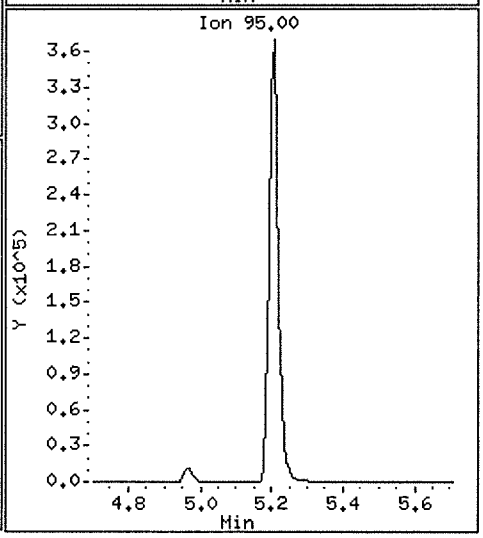












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Date : 15-JUN-2021 21:06

Client ID: HS21060700-12

Instrument: voa6.i

Sample Info: HS21060700-12;HS21060700-12;;;

Purge Volume: 5.0

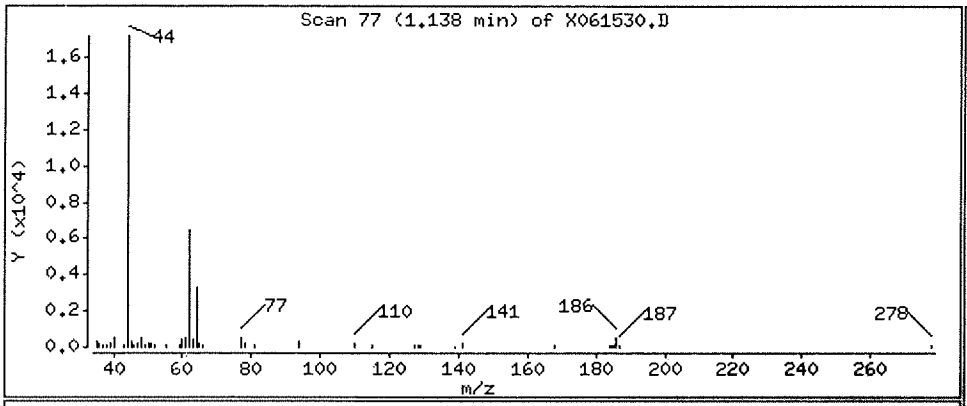
Operator: PC

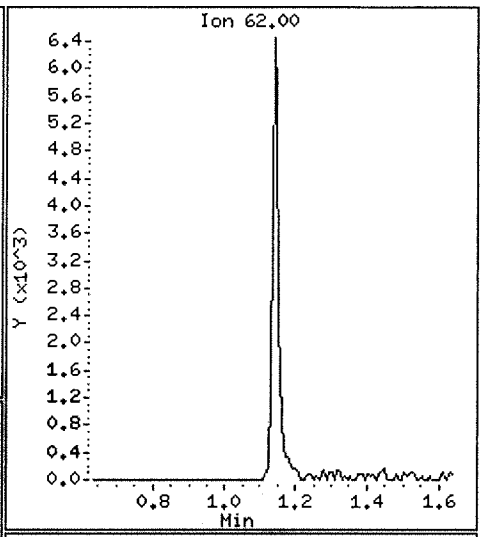
Column phase: DB624

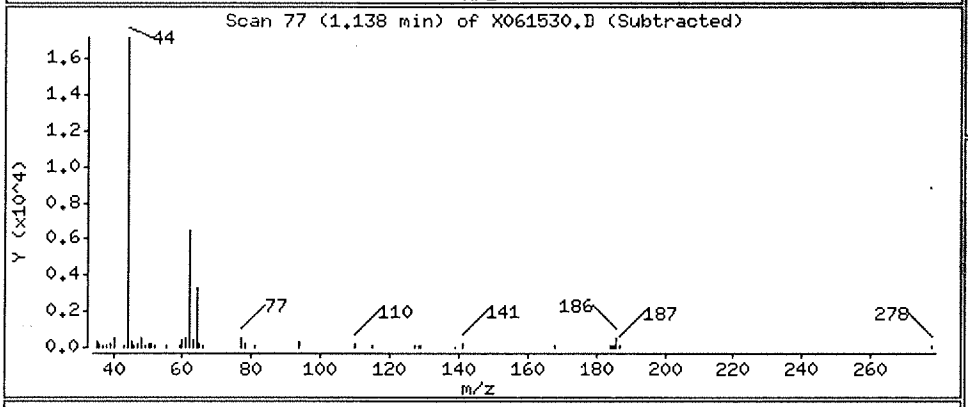
Column diameter: 0.18

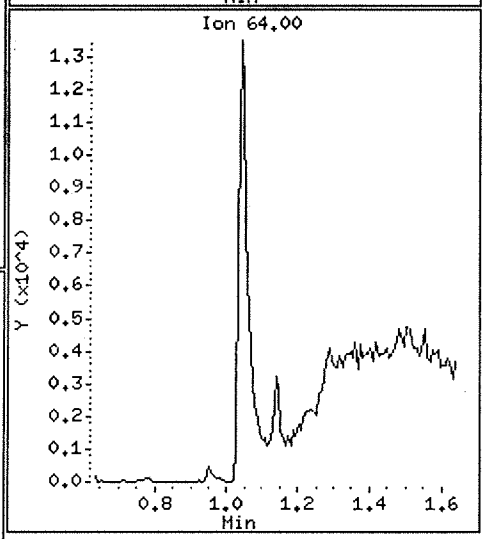
5 Vinyl Chloride

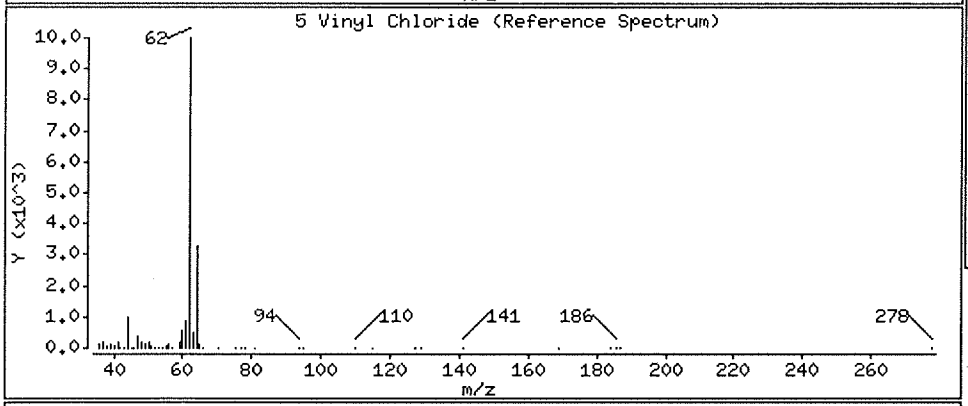
Concentration: 301.30 ug/l

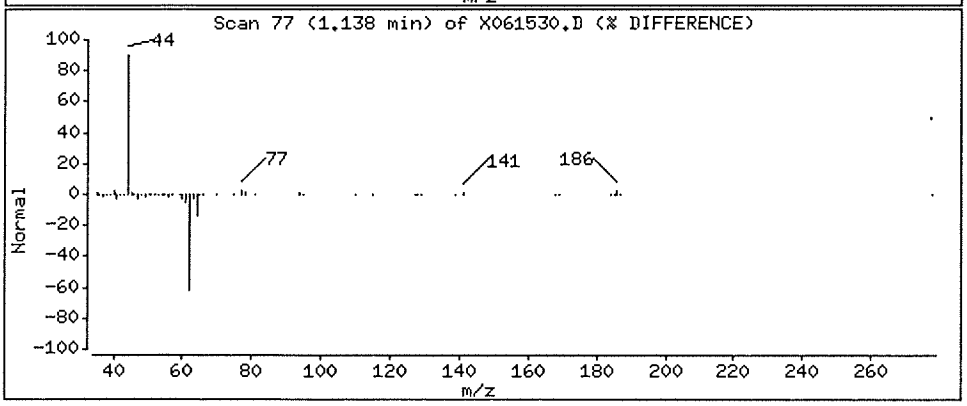












Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061531.D Page 1
Report Date: 26-Jul-2021 14:34

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210615.b\X061531.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 15-JUN-2021 21:27
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210615.b\8260W.m
Meth Date : 26-Jul-2021 14:34 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

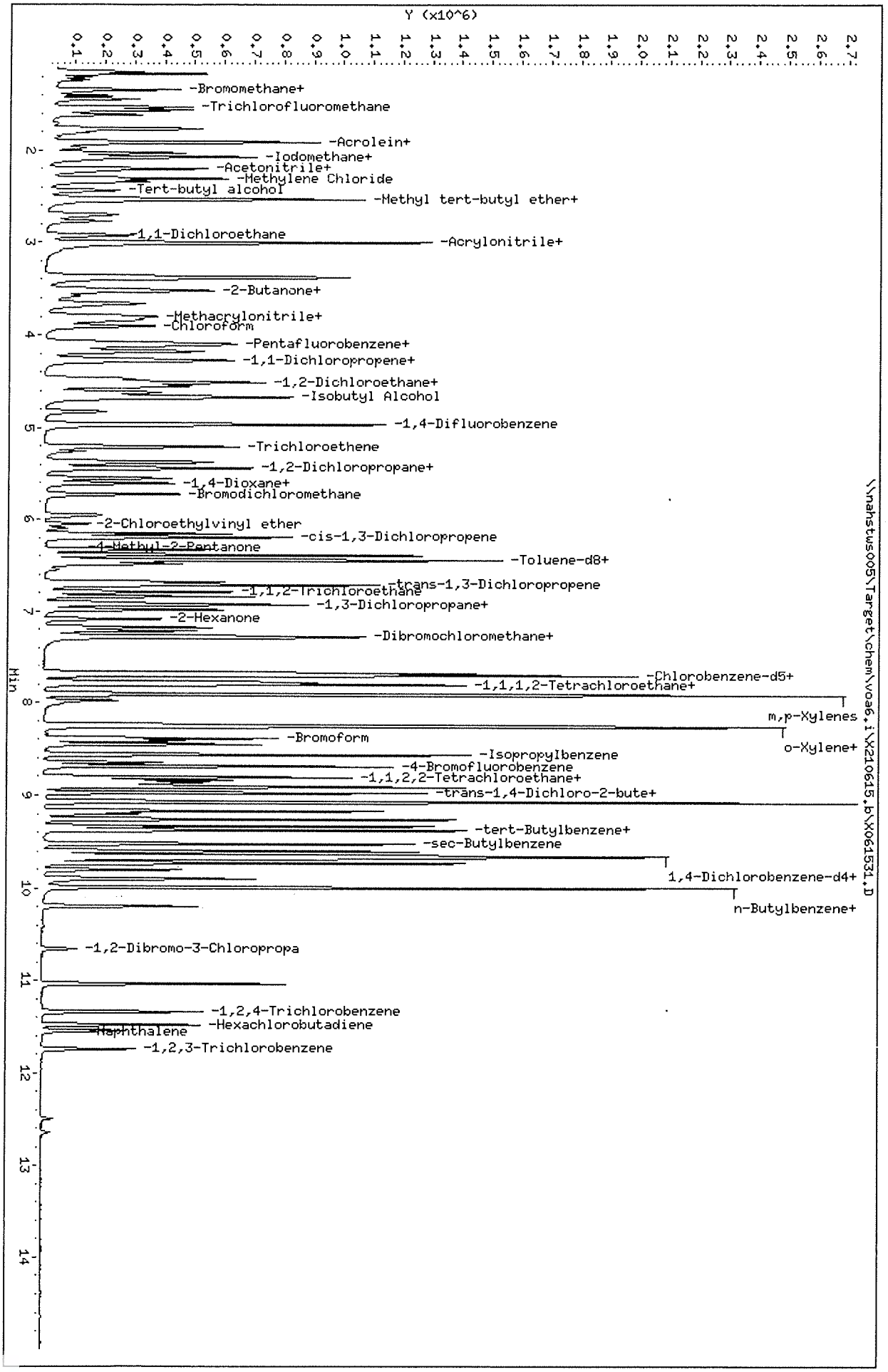
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.182	4.182	(1.000)	467493	50.0000	
* 36	1,4-Difluorobenzene	114	4.963	4.963	(1.000)	702504	50.0000	
* 47	Chlorobenzene-d5	117	7.671	7.671	(1.000)	670240	50.0000	
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	371781	50.0000	
$ 30	Dibromofluoromethane	113	4.096	4.096	(0.979)	229898	50.0000	49.96
$ 35	1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	226748	50.0000	50.78
$ 48	Toluene-d8	98	6.388	6.388	(0.833)	777890	50.0000	46.59
$ 69	4-Bromofluorobenzene	95	8.688	8.688	(1.133)	296703	50.0000	50.40
60	1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	227343	50.0000	45.86
31	1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	283681	50.0000	41.06
68	1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	244641	50.0000	47.57
53	1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	158638	50.0000	43.69
22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	298035	50.0000	40.32
11	1,1-Dichloroethene	96	1.912	1.912	(0.457)	181181	50.0000	37.62
32	1,1-Dichloropropene	75	4.282	4.282	(0.863)	223650	50.0000	41.56
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	99459	50.0000	44.19
71	1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	203586	50.0000	43.92(M)
90	1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	165540	50.0000	45.03
79	1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	691837	50.0000	40.79
89	1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	26366	50.0000	44.75
57	1,2-Dibromoethane	107	7.262	7.262	(0.947)	214246	50.0000	43.41
88	1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	432854	50.0000	42.92

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\X061531.D Page 2
Report Date: 26-Jul-2021 14:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	252985	50.0000	45.19
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	181812	50.0000	43.96
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	674323	50.0000	39.95
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	451718	50.0000	43.07
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	311396	50.0000	43.13
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	463592	50.0000	42.36
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	214874	50.0000	33.59
24	2-Butanone	43	3.581	3.581	(0.856)	118321	100.000	83.18
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	574073	50.0000	41.25
52	2-Hexanone	43	7.083	7.083	(0.923)	213945	100.000	85.93
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	678757	50.0000	40.95
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	670197	50.0000	38.98
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	317333	100.000	82.21
10	Acetone	43	1.976	1.976	(0.473)	96897	100.000	80.02
37	Benzene	78	4.512	4.512	(0.909)	697378	50.0000	43.21
74	Bromobenzene	156	8.802	8.802	(0.911)	278595	50.0000	45.16
29	Bromochloromethane	128	3.795	3.795	(0.908)	124479	50.0000	44.03
39	Bromodichloromethane	83	5.722	5.722	(1.153)	266734	50.0000	44.16
66	Bromoform	173	8.408	8.408	(1.096)	174078	50.0000	46.57
6	Bromomethane	94	1.338	1.338	(0.320)	194975	50.0000	40.40
19	Carbon Disulfide	76	2.069	2.069	(0.495)	857624	100.000	75.10
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	244541	50.0000	41.99
59	Chlorobenzene	112	7.692	7.692	(1.003)	580215	50.0000	41.58
7	Chloroethane	64	1.403	1.403	(0.336)	174917	50.0000	53.44
28	Chloroform	83	3.910	3.910	(0.935)	342889	50.0000	41.70
3	Chloromethane	50	1.073	1.073	(0.257)	175591	50.0000	41.10
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	211259	50.0000	43.11
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	314654	50.0000	44.21
55	Dibromochloromethane	129	7.176	7.176	(0.936)	251106	50.0000	45.51
44	Dibromomethane	93	5.550	5.550	(1.118)	138813	50.0000	44.66
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	175251	50.0000	40.77
61	Ethylbenzene	106	7.800	7.800	(1.017)	283291	50.0000	44.01
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	94692	50.0000	41.73
67	Isopropylbenzene	105	8.559	8.559	(1.116)	805454	50.0000	40.95
62	m,p-Xylenes	106	7.900	7.900	(1.030)	709980	100.000	84.61
17	Methylene Chloride	84	2.305	2.305	(0.551)	187057	50.0000	43.96
87	n-Butylbenzene	91	9.991	9.991	(1.034)	534941	50.0000	36.98
73	n-Propylbenzene	91	8.910	8.910	(0.922)	908018	50.0000	39.15
92	Naphthalene	128	11.539	11.539	(1.194)	212221	50.0000	39.94
63	o-Xylene	106	8.244	8.244	(1.075)	352855	50.0000	43.12
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	746925	50.0000	38.26
64	Styrene	104	8.258	8.258	(1.077)	609885	50.0000	44.60
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	565556	50.0000	39.09
56	Tetrachloroethene	164	6.926	6.926	(0.903)	175753	50.0000	42.59
50	Toluene	91	6.446	6.446	(0.840)	794748	50.0000	40.61
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	176524	50.0000	40.43
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	276011	50.0000	44.95
38	Trichloroethene	130	5.207	5.207	(1.049)	228769	50.0000	47.44
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	319211	50.0000	37.82
5	Vinyl Chloride	62	1.138	1.138	(0.272)	218628	50.0000	39.50

QC Flag Legend

M - Compound response manually integrated.



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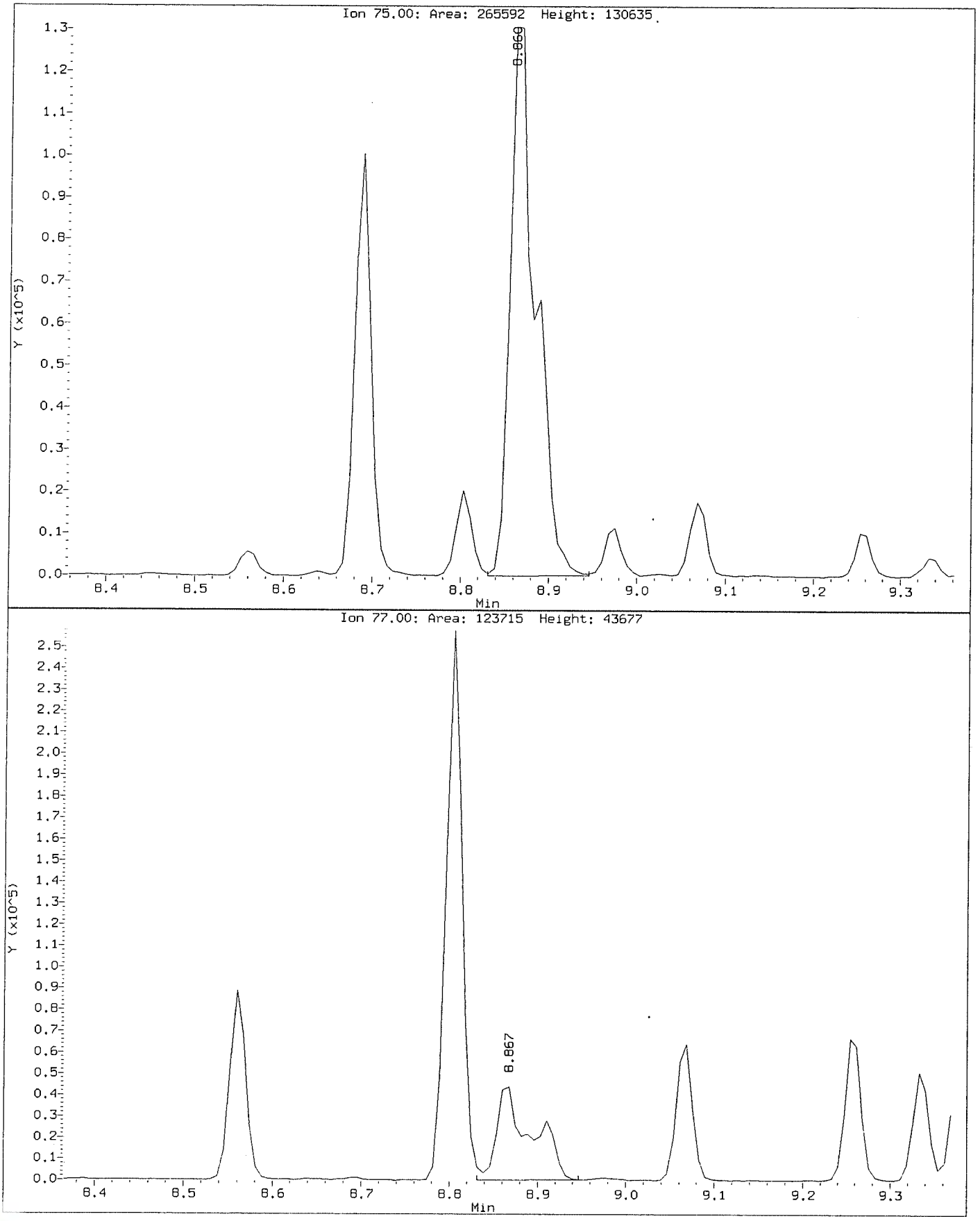
Date : 15-JUN-2021 21:27
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210615.b\Before\X061531.D
Injection Date: 15-JUN-2021 21:27
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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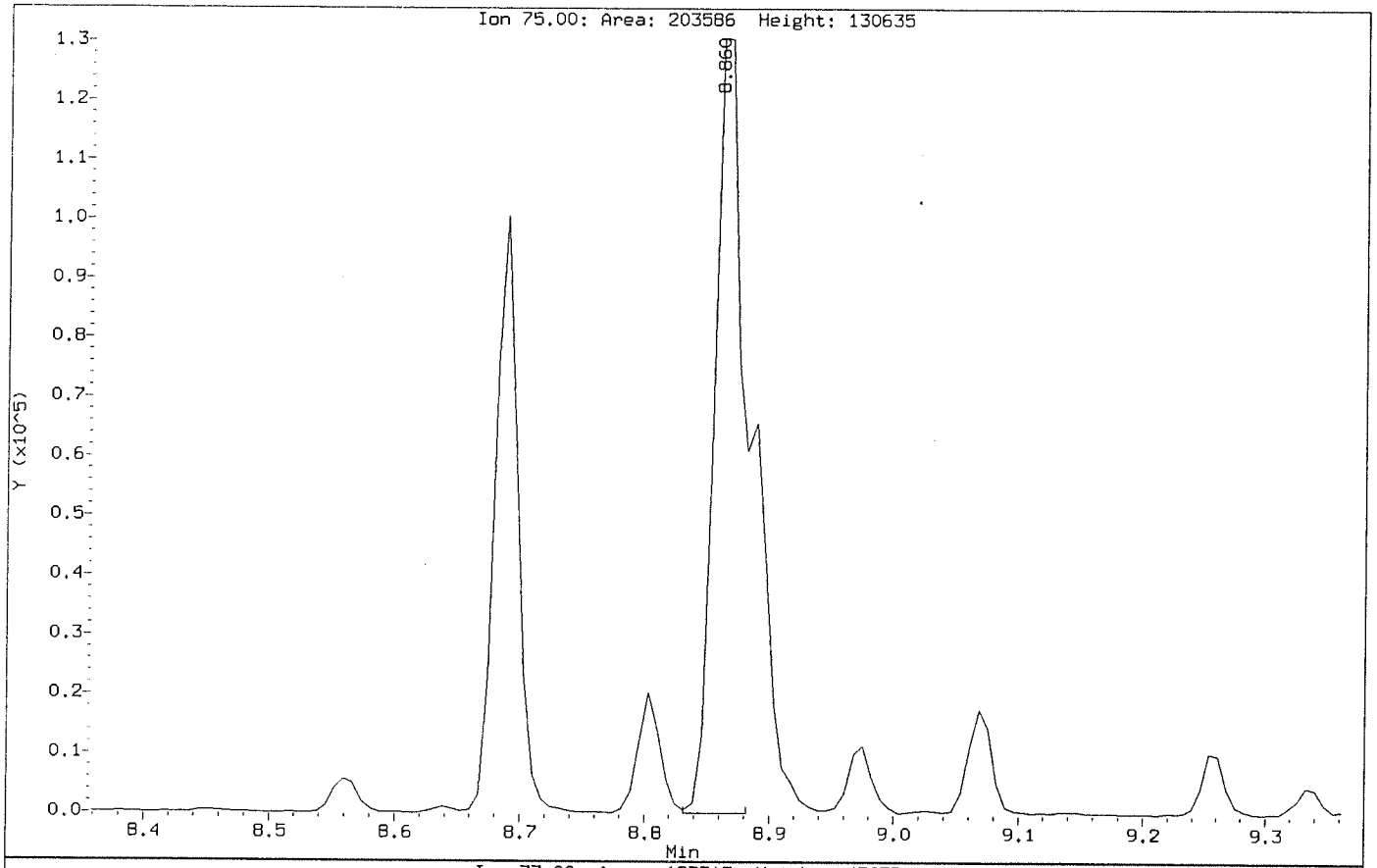
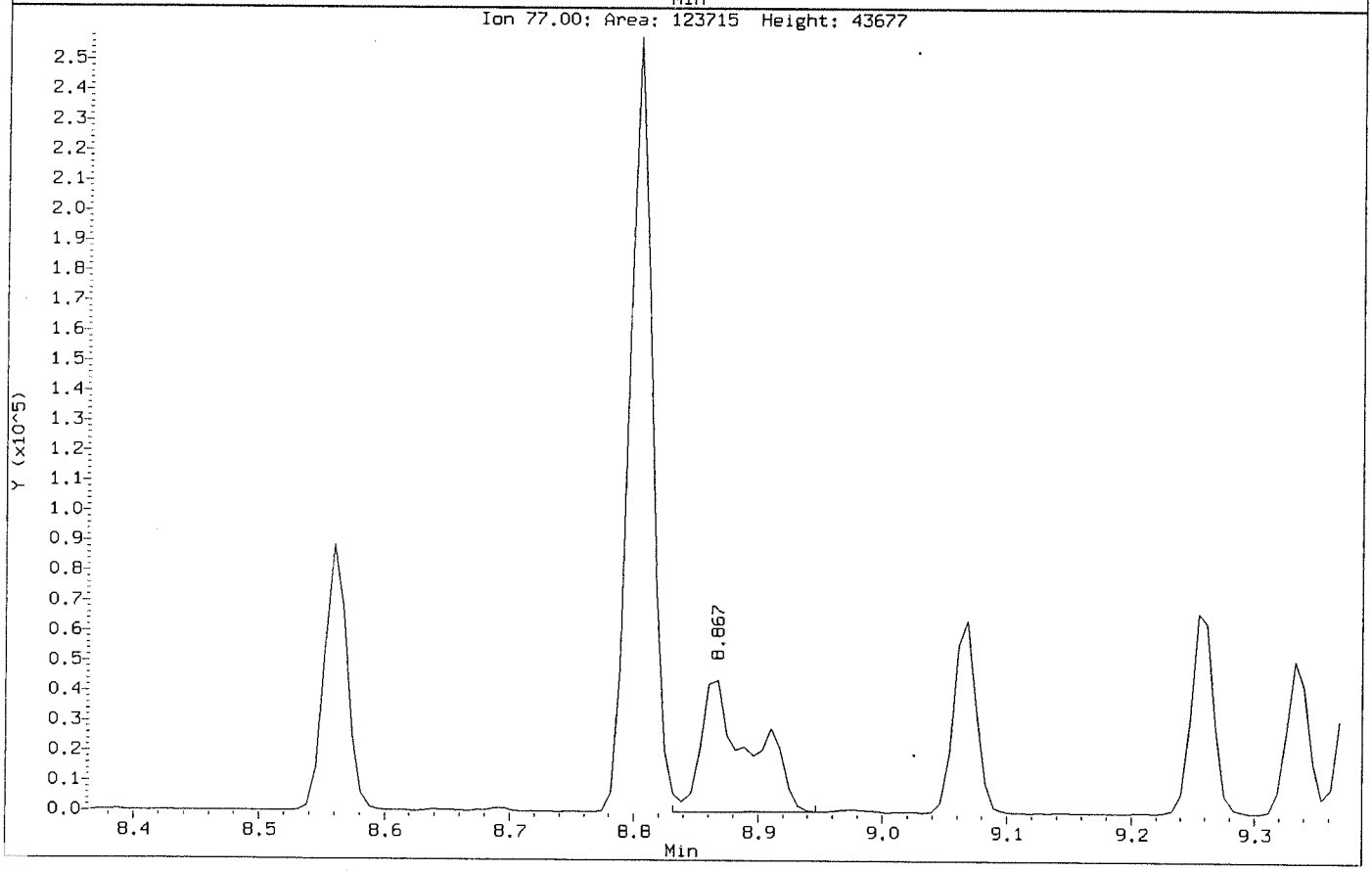
Injection Date: 15-JUN-2021 21:27
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





MSVOA06 -Logbook

Batch: 45169 **Analyst:** Presenta Cabascango

Date: 06-16-2021 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	06-16-2021 10:24 am	1.00	50 mL	50 mL	X061601.D	Liquid	Y	NA
2	CCV	CCV	06-16-2021 10:45 am	1.00	50 mL	50 mL	X061602.D	Liquid	Y	NA
3	BLANK	SAMP	06-16-2021 11:06 am	1.00	50 mL	50 mL	X061603.D	Liquid	Y	NA
4	CCB	SAMP	06-16-2021 11:27 am	1.00	50 mL	50 mL	X061604.D	Liquid	Y	NA
5	CCB	SAMP	06-16-2021 11:48 am	1.00	50 mL	50 mL	X061605.D	Liquid	Y	NA
6	VLCSW-210616	LCS	06-16-2021 12:09 pm	1.00	50 mL	50 mL	X061606.D	Liquid	Y	NA
7	BLANK	SAMP	06-16-2021 12:30 pm	1.00	50 mL	50 mL	X061607.D	Liquid	Y	NA
8	VBLKW-210616	MBLK	06-16-2021 12:51 pm	1.00	50 mL	50 mL	X061608.D	Liquid	Y	NA
9	HS21060700-09	SAMP	06-16-2021 01:12 pm	1.00	50 mL	50 mL	X061609.D	Liquid	Y	NA
10	HS21060700-14n/r	SAMP	06-16-2021 01:33 pm	1.00	50 mL	50 mL	X061610.D	Liquid	Y	NA
11	HS21060700-16	SAMP	06-16-2021 01:54 pm	1.00	50 mL	50 mL	X061611.D	Liquid	Y	NA
12	HS21060700-15	SAMP	06-16-2021 02:15 pm	1.00	50 mL	50 mL	X061612.D	Liquid	Y	NA
13	HS21060700-24	SAMP	06-16-2021 02:36 pm	1.00	50 mL	50 mL	X061613.D	Liquid	Y	NA
14	HS21060700-09MS	MS	06-16-2021 02:57 pm	1.00	50 mL	50 mL	X061614.D	Liquid	Y	NA
15	HS21060700-09MSD	MSD	06-16-2021 03:18 pm	1.00	50 mL	50 mL	X061615.D	Liquid	Y	NA
16	HS21060700-24	SAMP	06-16-2021 03:39 pm	10.00	5 mL	50 mL	X061616.D	Liquid	Y	NA
17	HS21060700-15	SAMP	06-16-2021 04:01 pm	10.00	5 mL	50 mL	X061617.D	Liquid	Y	NA
18	HS21060700-16	SAMP	06-16-2021 04:22 pm	10.00	5 mL	50 mL	X061618.D	Liquid	Y	NA
19	HS21060700-10n/r	SAMP	06-16-2021 04:43 pm	5.00	10 mL	50 mL	X061619.D	Liquid	Y	NA
20	HS21060700-10n/r	SAMP	06-16-2021 05:04 pm	50.00	1 mL	50 mL	X061620.D	Liquid	Y	NA
21	HS21060700-11n/r	SAMP	06-16-2021 05:25 pm	5.00	10 mL	50 mL	X061621.D	Liquid	Y	NA
22	HS21060700-11n/r	SAMP	06-16-2021 05:46 pm	50.00	1 mL	50 mL	X061622.D	Liquid	Y	NA
23	HS21060700-22n/r	SAMP	06-16-2021 06:07 pm	10.00	5 mL	50 mL	X061623.D	Liquid	Y	NA
24	HS21060700-22n/r	SAMP	06-16-2021 06:28 pm	100.0(	500 µL	50 mL	X061624.D	Liquid	Y	NA
25	HS21060700-23n/r	SAMP	06-16-2021 06:49 pm	10.00	5 mL	50 mL	X061625.D	Liquid	Y	NA
26	CCV-END	CCV	06-17-2021 10:12 am	1.00	50 mL	50 mL	X061626.D	Liquid	Y	NA

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 #	SMC3 (TOL) #	OTHER #	TOT OUT
01	VLCSW-210616	105	97	96	100	0
02	VBLKW-210616	94	90	105	95	0
03	HS21060700-09	93	89	105	95	0
04	HS21060700-16	96	88	104	97	0
05	HS21060700-15	92	89	103	94	0
06	HS21060700-24	91	88	105	96	0
07	HS21060700-09MS	94	91	101	100	0
08	HS21060700-09MSD	94	90	101	98	0
09	HS21060700-24	93	90	103	100	0
10	HS21060700-15	93	89	104	94	0
11	HS21060700-16	94	89	104	95	0
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		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(0-130)
SMC2	= Dibromofluoromethane	(0-130)
SMC3 (TOL)	= Toluene-d8	(0-130)
OTHER	= 4-Bromofluorobenzene	(0-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKW-210616

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID: X061608 Lab Sample ID: VBLKW-210616

Date Analyzed: 06/16/21 Time Analyzed: 1251

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCSW-210616	VLCSW-210616	X061606	1209
02	HS21060700-09	HS21060700-09	X061609	1312
03	HS21060700-16	HS21060700-16	X061611	1354
04	HS21060700-15	HS21060700-15	X061612	1415
05	HS21060700-24	HS21060700-24	X061613	1436
06	HS21060700-09MS	HS21060700-09MS	X061614	1457
07	HS21060700-09MSD	HS21060700-09MSD	X061615	1518
08	HS21060700-24	HS21060700-24	X061616	1539
09	HS21060700-15	HS21060700-15	X061617	1601
10	HS21060700-16	HS21060700-16	X061618	1622
11				
12				
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COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID: X061601 BFB Injection Date: 06/16/21

Instrument ID: VOA6 BFB Injection Time: 1024

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	45.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.9 (1.1)1
174	Greater than 50.0% of mass 95	80.5
175	5.0 - 9.0% of mass 174	6.0 (7.4)1
176	95.0 - 101.0% of mass 174	78.6 (97.7)1
177	5.0 - 9.0% of mass 176	5.9 (7.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV	CCV	X061602	06/16/21	1045
02	VLCSW-210616	VLCSW-210616	X061606	06/16/21	1209
03	VBLKW-210616	VBLKW-210616	X061608	06/16/21	1251
04	HS21060700-09	HS21060700-09	X061609	06/16/21	1312
05	HS21060700-16	HS21060700-16	X061611	06/16/21	1354
06	HS21060700-15	HS21060700-15	X061612	06/16/21	1415
07	HS21060700-24	HS21060700-24	X061613	06/16/21	1436
08	HS21060700-09MS	HS21060700-09MS	X061614	06/16/21	1457
09	HS21060700-09MSD	HS21060700-09MSD	X061615	06/16/21	1518
10	HS21060700-24	HS21060700-24	X061616	06/16/21	1539
11	HS21060700-15	HS21060700-15	X061617	06/16/21	1601
12	HS21060700-16	HS21060700-16	X061618	06/16/21	1622
13	CCV-END	CCV-END	X061626	06/17/21	1012
14					
15					
16					
17					
18					
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21					
22					

FORM V VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Instrument ID: VOA6 Calibration Date: 06/16/21 Time: 1045

Lab File ID: X061602 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
cis-1,3-Dichloropropene	0.5060000	0.5404786	0.5404786	0.2	-6.81	20.00	AVRG
trans-1,3-Dichloropropene	0.4370000	0.4637501	0.4637501	0.1	-6.12	20.00	AVRG
1,3-Dichlorobenzene	1.4100000	1.4794464	1.4794464	0.6	-4.92	20.00	AVRG
2,2-Dichloropropane	0.6840000	0.6658706	0.6658706	0.1	2.65	20.00	AVRG
1,1-Dichloropropene	0.3830000	0.4029608	0.4029608	0.1	-5.21	20.00	AVRG
Dibromomethane	0.2210000	0.2179517	0.2179517	0.1	1.38	20.00	AVRG
1,2-Dibromoethane	0.3680000	0.3595845	0.3595845	0.1	2.29	20.00	AVRG
trans-1,2-Dichloroethene	0.4670000	0.4219626	0.4219626	0.1	9.64	20.00	AVRG
1,1,1,2-Tetrachloroethane	0.3700000	0.3838381	0.3838381	0.1	-3.74	20.00	AVRG
1,1,1-Trichloroethane	0.7390000	0.6943341	0.6943341	0.1	6.04	20.00	AVRG
1,1,2,2-Tetrachloroethane	53.163699	50.000000	0.7334352	0.3	-6.33	20.00	LINR
1,1,2-Trichloroethane	0.2710000	0.2688372	0.2688372	0.1	0.80	20.00	AVRG
1,1-Dichloroethane	0.7900000	0.6944319	0.6944319	0.2	12.10	20.00	AVRG
1,1-Dichloroethene	0.5150000	0.4497572	0.4497572	0.1	12.67	20.00	AVRG
Trichloroethene	0.3430000	0.3718389	0.3718389	0.2	-8.41	20.00	AVRG
1,2,3-Trichlorobenzene	0.3030000	0.3281334	0.3281334	0.01	-8.29	20.00	AVRG
Trichlorofluoromethane	0.9020000	0.8124713	0.8124713	0.1	9.92	20.00	AVRG
1,2,4-Trichlorobenzene	0.4940000	0.5753640	0.5753640	0.1	-16.47	20.00	AVRG
1,2,4-Trimethylbenzene	2.2800000	2.3602413	2.3602413	0.1	-3.52	20.00	AVRG
Tetrachloroethene	0.3080000	0.3459742	0.3459742	0.2	-12.33	20.00	AVRG
1,2-Dichlorobenzene	1.3560000	1.3923732	1.3923732	0.4	-2.68	20.00	AVRG
1,2-Dichloroethane	0.3980000	0.4016201	0.4016201	0.1	-0.91	20.00	AVRG
1,2-Dichloropropane	0.2940000	0.2932063	0.2932063	0.1	0.27	20.00	AVRG
1,3,5-Trimethylbenzene	2.2700000	2.3482155	2.3482155	0.1	-3.44	20.00	AVRG
1,3-Dichloropropane	0.5390000	0.5250780	0.5250780	0.1	2.58	20.00	AVRG
1,4-Dichlorobenzene	1.4720000	1.4945467	1.4945467	0.4	-1.53	20.00	AVRG
Toluene	1.4600000	1.4195316	1.4195316	0.4	2.77	20.00	AVRG
2-Butanone	0.1520000	0.1385142	0.1385142	0.1	8.87	20.00	AVRG
2-Chlorotoluene	1.8720000	1.9128733	1.9128733	0.1	-2.18	20.00	AVRG
2-Hexanone	0.1860000	0.1829935	0.1829935	0.1	1.62	20.00	AVRG
4-Chlorotoluene	2.2280000	2.2610888	2.2610888	0.1	-1.48	20.00	AVRG
tert-Butylbenzene	1.9460000	2.1278973	2.1278973	0.1	-9.35	20.00	AVRG
4-Methyl-2-Pentanone	0.2880000	0.2626279	0.2626279	0.1	8.81	20.00	AVRG
Acetone	102.49484	100.00000	0.1307201	0.1	-2.49	20.00	LINR
Benzene	1.1480000	1.1591692	1.1591692	0.5	-0.97	20.00	AVRG
Bromobenzene	0.8300000	0.8566124	0.8566124	0.1	-3.21	20.00	AVRG
Bromochloromethane	0.3020000	0.2807249	0.2807249	0.1	7.04	20.00	AVRG
Bromodichloromethane	0.4300000	0.4351166	0.4351166	0.2	-1.19	20.00	AVRG
Bromoform	0.2790000	0.2900740	0.2900740	0.1	-3.97	20.00	AVRG
Bromomethane	41.144781	50.000000	0.4247008	0.1	17.71	20.00	LINR
Carbon Disulfide	1.2210000	1.0430003	1.0430003	0.1	14.58	20.00	AVRG
Carbon Tetrachloride	0.4140000	0.4515803	0.4515803	0.1	-9.08	20.00	AVRG

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS2106070

Instrument ID: VOA6 Calibration Date: 06/16/21 Time: 1045

Lab File ID: X061602 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chlorobenzene	1.0410000	1.0158145	1.0158145	0.5	2.42	20.00	AVRG	
Chloroethane	47.471397	50.000000	0.3333901	0.1	5.06	20.00	LINR	
Chloroform	0.8790000	0.8000575	0.8000575	0.2	8.98	20.00	AVRG	
Chloromethane	48.836386	50.000000	0.4418380	0.1	2.33	20.00	LINR	
cis-1,2-Dichloroethene	0.5240000	0.4889915	0.4889915	0.1	6.68	20.00	AVRG	
Dibromochloromethane	0.4120000	0.4282985	0.4282985	0.1	-3.96	20.00	AVRG	
Dichlorodifluoromethane	53.334715	50.000000	0.4898051	0.1	-6.67	20.00	LINR	
Ethylbenzene	0.4800000	0.5201641	0.5201641	0.1	-8.37	20.00	AVRG	
Hexachlorobutadiene	70.386949	50.000000	0.4448089	0.1	-40.77	20.00	2RDR	<-
Isopropylbenzene	1.4670000	1.5945753	1.5945753	0.1	-8.70	20.00	AVRG	
m,p-Xylenes	0.6260000	0.6508921	0.6508921	0.1	-3.98	20.00	AVRG	
Methylene Chloride	47.623796	50.000000	0.4324342	0.1	4.75	20.00	LINR	
n-Butylbenzene	1.9450000	2.2355067	2.2355067	0.5	-14.94	20.00	AVRG	
n-Propylbenzene	3.1190000	3.2910143	3.2910143	0.1	-5.52	20.00	AVRG	
Naphthalene	0.7140000	0.7252399	0.7252399	0.2	-1.57	20.00	AVRG	
o-Xylene	0.6100000	0.6271535	0.6271535	0.3	-2.81	20.00	AVRG	
sec-Butylbenzene	2.6250000	2.9145829	2.9145829	0.1	-11.03	20.00	AVRG	
Styrene	1.0200000	1.0717118	1.0717118	0.3	-5.07	20.00	AVRG	
Vinyl Chloride	0.5920000	0.5372501	0.5372501	0.1	9.25	20.00	AVRG	
1,2,3-Trichloropropane	0.6230000	0.6170482	0.6170482	0.1	0.96	20.00	AVRG	
p-Isopropyltoluene	2.3120000	2.5532892	2.5532892	0.1	-10.44	20.00	AVRG	
1,2-Dibromo-3-Chloropropane	51.881032	50.000000	8.23e-002	0.05	-3.76	20.00	LINR	
1,2-Dichloroethane-d4	47.245583	50.000000	0.4516720	0.1	5.51	20.00	LINR	
Dibromofluoromethane	47.619570	50.000000	0.4688052	0.1	4.76	20.00	LINR	
Toluene-d8	1.2450000	1.1910271	1.1910271	0.1	4.34	20.00	AVRG	
4-Bromofluorobenzene	50.535403	50.000000	0.4438794	0.1	-1.07	20.00	LINR	

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Instrument ID: VOA6 Calibration Date: 06/17/21 Time: 1012

Lab File ID: X061626 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
cis-1,3-Dichloropropene	0.5060000	0.4423328	0.4423328	0.2	12.58	50.00	AVRG
trans-1,3-Dichloropropene	0.4370000	0.3961904	0.3961904	0.1	9.34	50.00	AVRG
1,3-Dichlorobenzene	1.4100000	1.1353833	1.1353833	0.6	19.48	50.00	AVRG
2,2-Dichloropropane	0.6840000	0.3778476	0.3778476	0.1	44.76	50.00	AVRG
1,1-Dichloropropene	0.3830000	0.3195697	0.3195697	0.1	16.56	50.00	AVRG
Dibromomethane	0.2210000	0.2003961	0.2003961	0.1	9.32	50.00	AVRG
1,2-Dibromoethane	0.3680000	0.3304430	0.3304430	0.1	10.20	50.00	AVRG
trans-1,2-Dichloroethene	0.4670000	0.3905014	0.3905014	0.1	16.38	50.00	AVRG
1,1,1,2-Tetrachloroethane	0.3700000	0.3441878	0.3441878	0.1	6.98	50.00	AVRG
1,1,1-Trichloroethane	0.7390000	0.6320855	0.6320855	0.1	14.47	50.00	AVRG
1,1,2,2-Tetrachloroethane	48.261913	50.000000	0.6672998	0.3	3.48	50.00	LINR
1,1,2-Trichloroethane	0.2710000	0.2408229	0.2408229	0.1	11.14	50.00	AVRG
1,1-Dichloroethane	0.7900000	0.6751241	0.6751241	0.2	14.54	50.00	AVRG
1,1-Dichloroethene	0.5150000	0.4266862	0.4266862	0.1	17.15	50.00	AVRG
Trichloroethene	0.3430000	0.3589360	0.3589360	0.2	-4.65	50.00	AVRG
1,2,3-Trichlorobenzene	0.3030000	0.2566985	0.2566985	0.01	15.28	50.00	AVRG
Trichlorofluoromethane	0.9020000	0.7490458	0.7490458	0.1	16.96	50.00	AVRG
1,2,4-Trichlorobenzene	0.4940000	0.4190047	0.4190047	0.1	15.18	50.00	AVRG
1,2,4-Trimethylbenzene	2.2800000	1.6998781	1.6998781	0.1	25.44	50.00	AVRG
Tetrachloroethene	0.3080000	0.2487453	0.2487453	0.2	19.24	50.00	AVRG
1,2-Dichlorobenzene	1.3560000	1.1134296	1.1134296	0.4	17.89	50.00	AVRG
1,2-Dichloroethane	0.3980000	0.3866188	0.3866188	0.1	2.86	50.00	AVRG
1,2-Dichloropropane	0.2940000	0.2652724	0.2652724	0.1	9.77	50.00	AVRG
1,3,5-Trimethylbenzene	2.2700000	1.7043754	1.7043754	0.1	24.92	50.00	AVRG
1,3-Dichloropropane	0.5390000	0.4763094	0.4763094	0.1	11.63	50.00	AVRG
1,4-Dichlorobenzene	1.4720000	1.1571746	1.1571746	0.4	21.39	50.00	AVRG
Toluene	1.4600000	1.1520511	1.1520511	0.4	21.09	50.00	AVRG
2-Butanone	0.1520000	0.1324318	0.1324318	0.1	12.87	50.00	AVRG
2-Chlorotoluene	1.8720000	1.4456825	1.4456825	0.1	22.77	50.00	AVRG
2-Hexanone	0.1860000	0.1600473	0.1600473	0.1	13.95	50.00	AVRG
4-Chlorotoluene	2.2280000	1.7081467	1.7081467	0.1	23.33	50.00	AVRG
tert-Butylbenzene	1.9460000	1.4440189	1.4440189	0.1	25.80	50.00	AVRG
4-Methyl-2-Pentanone	0.2880000	0.2378053	0.2378053	0.1	17.43	50.00	AVRG
Acetone	92.468564	100.00000	0.1186358	0.1	7.53	50.00	LINR
Benzene	1.1480000	1.0345673	1.0345673	0.5	9.88	50.00	AVRG
Bromobenzene	0.8300000	0.7407311	0.7407311	0.1	10.76	50.00	AVRG
Bromochloromethane	0.3020000	0.2884794	0.2884794	0.1	4.48	50.00	AVRG
Bromodichloromethane	0.4300000	0.4023321	0.4023321	0.2	6.43	50.00	AVRG
Bromoform	0.2790000	0.2833021	0.2833021	0.1	-1.54	50.00	AVRG
Bromomethane	45.490958	50.000000	0.4697297	0.1	9.02	50.00	LINR
Carbon Disulfide	1.2210000	0.8658342	0.8658342	0.1	29.09	50.00	AVRG
Carbon Tetrachloride	0.4140000	0.3681822	0.3681822	0.1	11.07	50.00	AVRG

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS2106070

Instrument ID: VOA6 Calibration Date: 06/17/21 Time: 1012

Lab File ID: X061626 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Chlorobenzene	1.0410000	0.8406567	0.8406567	0.5	19.24	50.00	AVRG
Chloroethane	50.224748	50.000000	0.3521665	0.1	-0.45	50.00	LINR
Chloroform	0.8790000	0.7822559	0.7822559	0.2	11.01	50.00	AVRG
Chloromethane	51.737355	50.000000	0.4666878	0.1	-3.47	50.00	LINR
cis-1,2-Dichloroethene	0.5240000	0.4935548	0.4935548	0.1	5.81	50.00	AVRG
Dibromochloromethane	0.4120000	0.3992270	0.3992270	0.1	3.10	50.00	AVRG
Dichlorodifluoromethane	47.676024	50.000000	0.4380419	0.1	4.65	50.00	LINR
Ethylbenzene	0.4800000	0.3944760	0.3944760	0.1	17.82	50.00	AVRG
Hexachlorobutadiene	40.749918	50.000000	0.2483472	0.1	18.50	50.00	2RDR
Isopropylbenzene	1.4670000	1.1421541	1.1421541	0.1	22.14	50.00	AVRG
m,p-Xylenes	0.6260000	0.4958809	0.4958809	0.1	20.78	50.00	AVRG
Methylene Chloride	46.365051	50.000000	0.4213148	0.1	7.27	50.00	LINR
n-Butylbenzene	1.9450000	1.3045090	1.3045090	0.5	32.93	50.00	AVRG
n-Propylbenzene	3.1190000	2.2399039	2.2399039	0.1	28.18	50.00	AVRG
Naphthalene	0.7140000	0.6003051	0.6003051	0.2	15.92	50.00	AVRG
o-Xylene	0.6100000	0.4960036	0.4960036	0.3	18.69	50.00	AVRG
sec-Butylbenzene	2.6250000	1.8564308	1.8564308	0.1	29.28	50.00	AVRG
Styrene	1.0200000	0.8919065	0.8919065	0.3	12.56	50.00	AVRG
Vinyl Chloride	0.5920000	0.5210596	0.5210596	0.1	11.98	50.00	AVRG
1,2,3-Trichloropropane	0.6230000	0.5510824	0.5510824	0.1	11.54	50.00	AVRG
p-Isopropyltoluene	2.3120000	1.6424020	1.6424020	0.1	28.96	50.00	AVRG
1,2-Dibromo-3-Chloropropane	48.874171	50.000000	7.75e-002	0.05	2.25	50.00	LINR
1,2-Dichloroethane-d4	53.115891	50.000000	0.5069808	0.1	-6.23	50.00	LINR
Dibromofluoromethane	52.882544	50.000000	0.5204393	0.1	-5.76	50.00	LINR
Toluene-d8	1.2450000	1.1467455	1.1467455	0.1	7.89	50.00	AVRG
4-Bromofluorobenzene	51.375110	50.000000	0.4513662	0.1	-2.75	50.00	LINR

FORM VII VOA

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID (Standard): X061602 Date Analyzed: 06/16/21

Instrument ID: VOA6 Time Analyzed: 1045

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	680516	7.67	720554	4.96	374363	9.66
	UPPER LIMIT	1361032	8.17	1441108	5.46	748726	10.16
	LOWER LIMIT	340258	7.17	360277	4.46	187182	9.16
	CLIENT SAMPLE NO.						
01	VLCSW-210616	644886	7.67	681300	4.96	353523	9.66
02	VBLKW-210616	657835	7.67	772176	4.96	321858	9.66
03	HS21060700-09	665008	7.67	772365	4.96	333690	9.66
04	HS21060700-16	677257	7.67	785469	4.96	343791	9.66
05	HS21060700-15	680647	7.67	777499	4.96	341127	9.66
06	HS21060700-24	673753	7.67	778533	4.96	333075	9.66
07	HS21060700-09MS	710546	7.67	790501	4.96	376601	9.66
08	HS21060700-09MSD	733893	7.67	821721	4.96	384401	9.66
09	HS21060700-24	697984	7.67	798337	4.96	358632	9.66
10	HS21060700-15	685592	7.67	794471	4.96	342763	9.66
11	HS21060700-16	682799	7.67	793787	4.96	345717	9.66
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID (Standard): X061602 Date Analyzed: 06/16/21

Instrument ID: VOA6 Time Analyzed: 1045

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	511287	4.18				
	UPPER LIMIT	1022574	4.68				
	LOWER LIMIT	255644	3.68				
	CLIENT SAMPLE NO.						
01	VLCSW-210616	476503	4.18				
02	VBLKW-210616	559223	4.18				
03	HS21060700-09	566474	4.18				
04	HS21060700-16	575887	4.18				
05	HS21060700-15	571281	4.18				
06	HS21060700-24	567583	4.18				
07	HS21060700-09MS	576412	4.18				
08	HS21060700-09MSD	599926	4.18				
09	HS21060700-24	582785	4.18				
10	HS21060700-15	577498	4.18				
11	HS21060700-16	574063	4.18				
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 = Pentafluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061601.D

Date : 16-JUN-2021 10:24

Client ID: BFB

Instrument: voa6.i

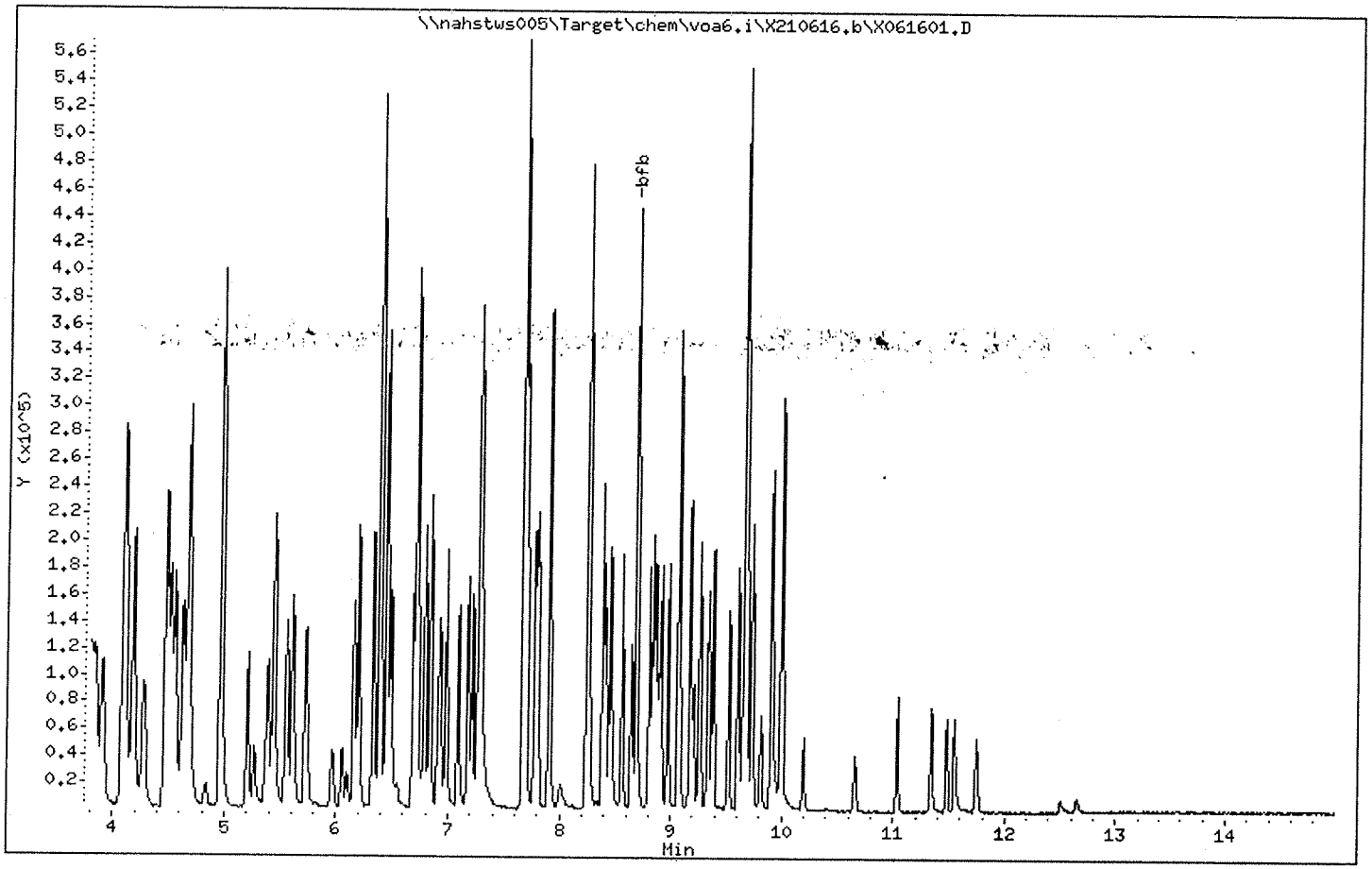
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061601.D

Date : 16-JUN-2021 10:24

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

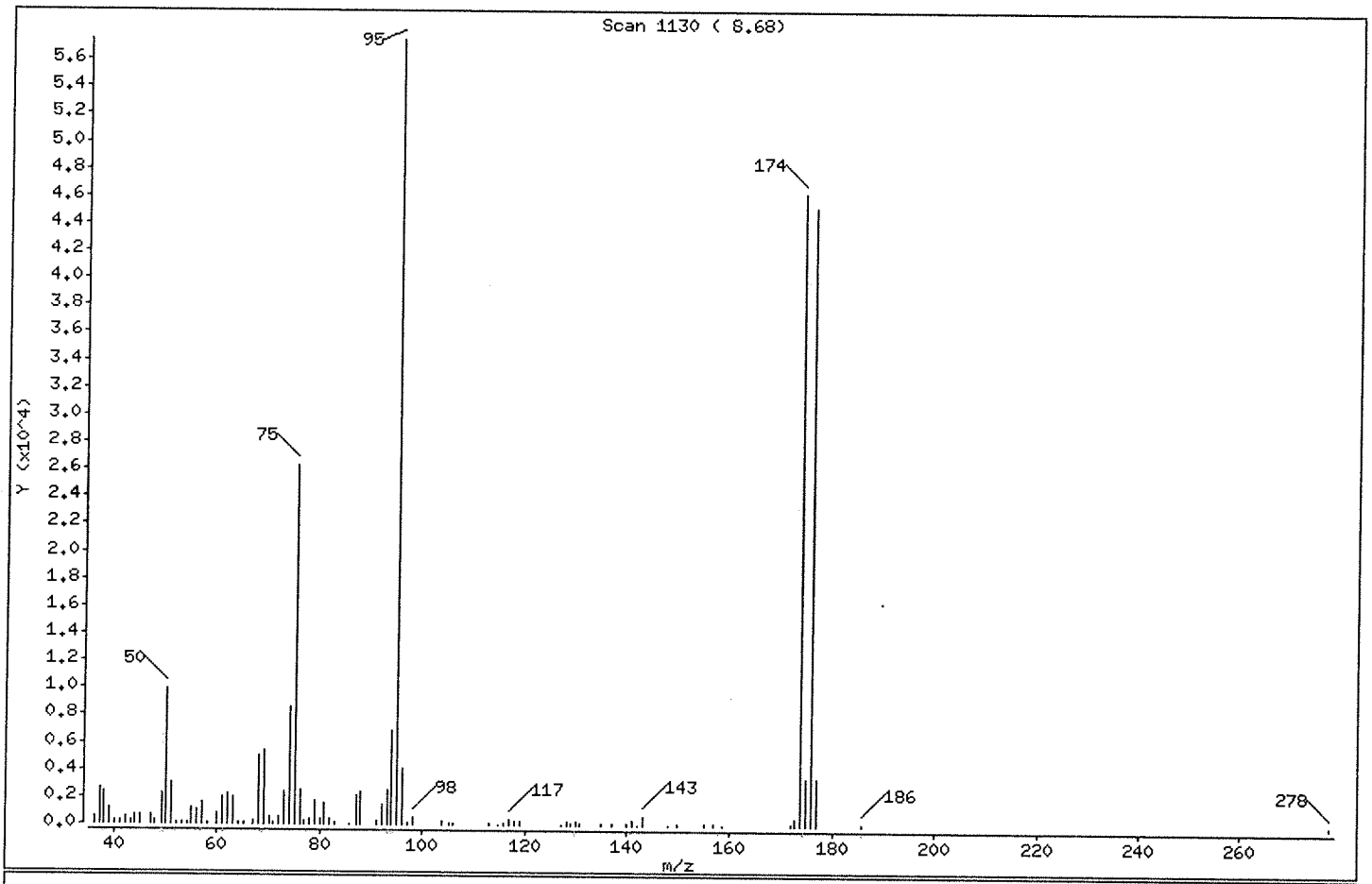
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.15
75	30.00 - 60.00% of mass 95	45.82
96	5.00 - 9.00% of mass 95	7.24
173	Less than 2.00% of mass 174	0.90 (1.11)
174	Greater than 50.00% of mass 95	80.45
175	5.00 - 9.00% of mass 174	5.96 (7.40)
176	95.00 - 101.00% of mass 174	78.60 (97.70)
177	5.00 - 9.00% of mass 176	5.87 (7.47)

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061601.D

Date : 16-JUN-2021 10:24

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: X061601.D
Spectrum: Scan 1130 (8.68)
Location of Maximum: 95.00
Number of points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	519	61.10	1968	87.00	2109	130.70	67
37.10	2610	62.10	2272	88.00	2341	135.00	181
38.10	2377	63.00	2019	90.90	321	136.90	148
39.10	1205	64.00	147	92.00	1485	139.80	69
39.90	295	65.20	100	93.00	2562	140.90	459
41.10	230	67.00	220	94.00	6855	141.80	50
42.00	572	68.00	5060	95.00	57464	142.90	608
43.10	330	69.10	5367	96.10	4159	147.90	58
44.10	617	70.10	488	97.00	83	149.90	97
45.10	620	70.90	108	98.10	534	154.90	119
47.00	670	72.00	464	103.90	246	156.90	165
48.00	257	73.00	2403	105.10	149	158.60	51
49.10	2240	74.00	8616	105.90	160	171.90	122
50.10	9856	75.00	26328	112.90	73	172.90	515
51.10	3033	76.00	2454	114.80	62	173.90	46232
52.10	77	77.00	281	115.80	173	174.90	3422
53.00	79	78.00	441	116.90	396	175.90	45168
54.10	109	78.90	1662	117.90	279	176.90	3372
55.00	1194	80.00	407	118.90	318	185.90	131
56.00	1026	80.90	1575	127.00	51	277.90	77
57.00	1597	81.80	377	128.00	317		
58.00	176	82.90	122	128.90	141		
60.00	740	85.80	65	129.90	215		

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061602.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 16-JUN-2021 10:45
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:46 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

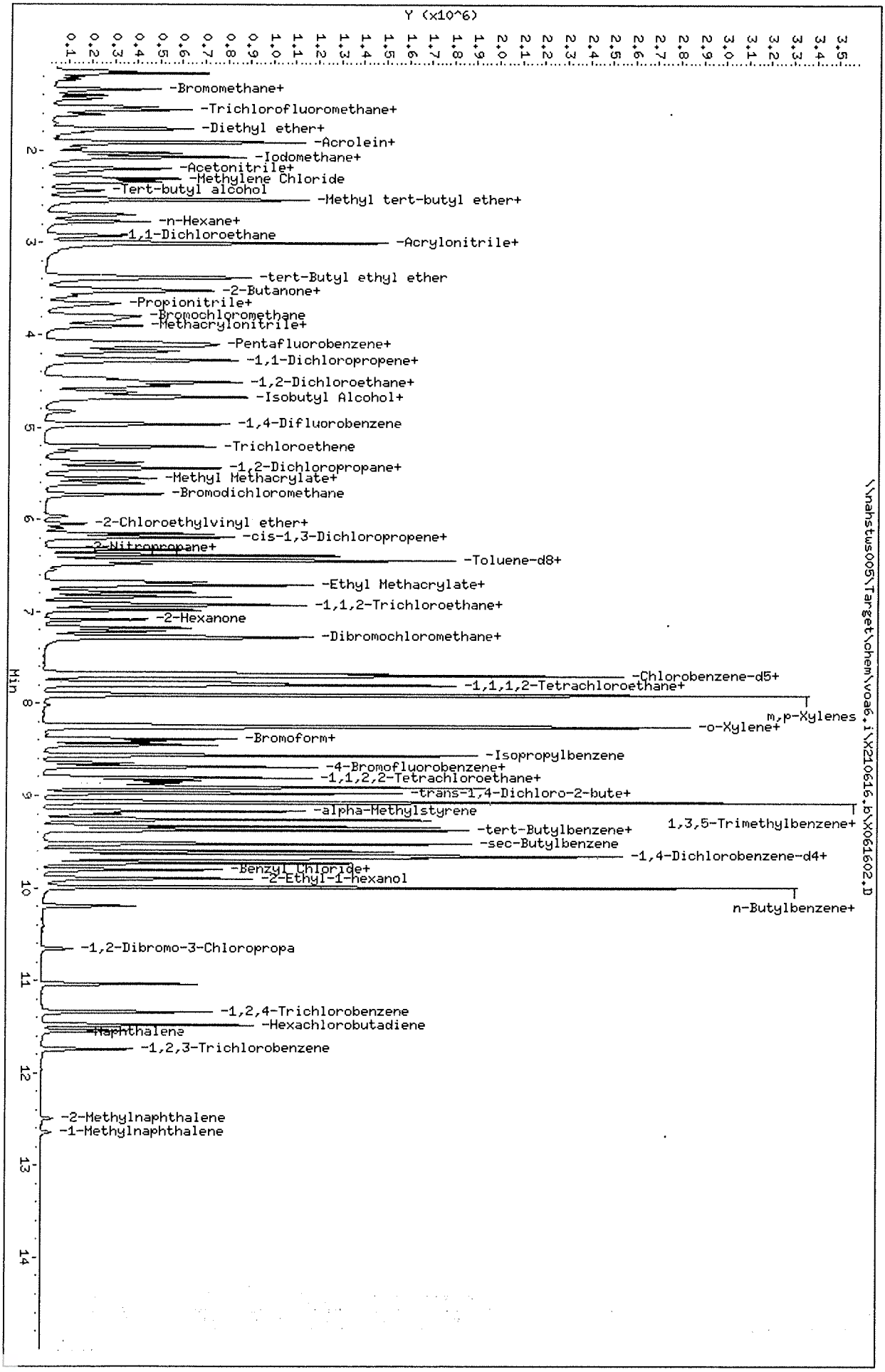
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	511287	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	720554	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	680516	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	374363	50.0000	
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	239694	50.0000	47.61
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	230934	50.0000	47.24
$	48 Toluene-d8	98	6.389	6.389	(0.833)	810513	50.0000	47.81
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	302067	50.0000	50.53
	60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	261208	50.0000	51.90
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	355004	50.0000	46.98
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	274571	50.0000	53.16
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	182948	50.0000	49.62
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	355054	50.0000	43.92
	11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	229955	50.0000	43.66
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	290355	50.0000	52.61
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	122841	50.0000	54.20
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	231000	50.0000	49.49(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	215395	50.0000	58.19
	79 1,2,4-Trimethylbenzene	105	9.376	9.376	(0.970)	883587	50.0000	51.74
	89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	30823	50.0000	51.88
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	244703	50.0000	48.84
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	521253	50.0000	51.33

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061602.D Page 2
Report Date: 26-Jul-2021 14:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	289389	50.0000	50.40
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	211271	50.0000	49.81
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	879085	50.0000	51.73
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	553850	50.0000	52.45
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	357324	50.0000	48.74
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	559503	50.0000	50.77
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	340451	50.0000	48.67
24	2-Butanone	43	3.581	3.581	(0.856)	141641	100.000	91.05
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	716109	50.0000	51.10
52	2-Hexanone	43	7.083	7.083	(0.923)	249060	100.000	98.52
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	846468	50.0000	50.72
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	955857	50.0000	55.22
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	357445	100.000	91.21
10	Acetone	43	1.976	1.976	(0.473)	133671	100.000	102.49
37	Benzene	78	4.512	4.512	(0.909)	835244	50.0000	50.45
74	Bromobenzene	156	8.802	8.802	(0.911)	320684	50.0000	51.63
29	Bromochloromethane	128	3.796	3.796	(0.908)	143531	50.0000	46.42
39	Bromodichloromethane	83	5.722	5.722	(1.153)	313525	50.0000	50.61
66	Bromoform	173	8.408	8.408	(1.096)	197400	50.0000	52.01
6	Bromomethane	94	1.339	1.339	(0.320)	217144	50.0000	41.14
19	Carbon Disulfide	76	2.069	2.069	(0.495)	1066545	100.000	85.39
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	325388	50.0000	54.47
59	Chlorobenzene	112	7.692	7.692	(1.003)	691278	50.0000	48.79
7	Chloroethane	64	1.403	1.403	(0.336)	170458	50.0000	47.47
28	Chloroform	83	3.910	3.910	(0.935)	409059	50.0000	45.49
3	Chloromethane	50	1.074	1.074	(0.257)	225906	50.0000	48.83
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	250015	50.0000	46.65
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	389444	50.0000	53.35
55	Dibromochloromethane	129	7.176	7.176	(0.936)	291464	50.0000	52.03
44	Dibromomethane	93	5.550	5.550	(1.118)	157046	50.0000	49.27
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	250431	50.0000	53.33
61	Ethylbenzene	106	7.800	7.800	(1.017)	353980	50.0000	54.16
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	166520	50.0000	70.38
67	Isopropylbenzene	105	8.559	8.559	(1.116)	1085134	50.0000	54.34
62	m,p-Xylenes	106	7.900	7.900	(1.030)	885885	100.000	103.97
17	Methylene Chloride	84	2.306	2.306	(0.551)	221098	50.0000	47.62
87	n-Butylbenzene	91	9.992	9.992	(1.034)	836891	50.0000	57.46
73	n-Propylbenzene	91	8.910	8.910	(0.922)	1232034	50.0000	52.75
92	Naphthalene	128	11.539	11.539	(1.194)	271503	50.0000	50.75
63	o-Xylene	106	8.244	8.244	(1.075)	426788	50.0000	51.37
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	1091112	50.0000	55.50
64	Styrene	104	8.258	8.258	(1.077)	729317	50.0000	52.53
78	tert-Butylbenzene	119	9.333	9.333	(0.966)	796606	50.0000	54.68
56	Tetrachloroethene	164	6.926	6.926	(0.903)	235441	50.0000	56.20
50	Toluene	91	6.446	6.446	(0.840)	966014	50.0000	48.62
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	215744	50.0000	45.19
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	334157	50.0000	53.06
38	Trichloroethene	130	5.207	5.207	(1.049)	267930	50.0000	54.17
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	415406	50.0000	45.01
5	Vinyl Chloride	62	1.138	1.138	(0.272)	274689	50.0000	45.38

QC Flag Legend

M - Compound response manually integrated.



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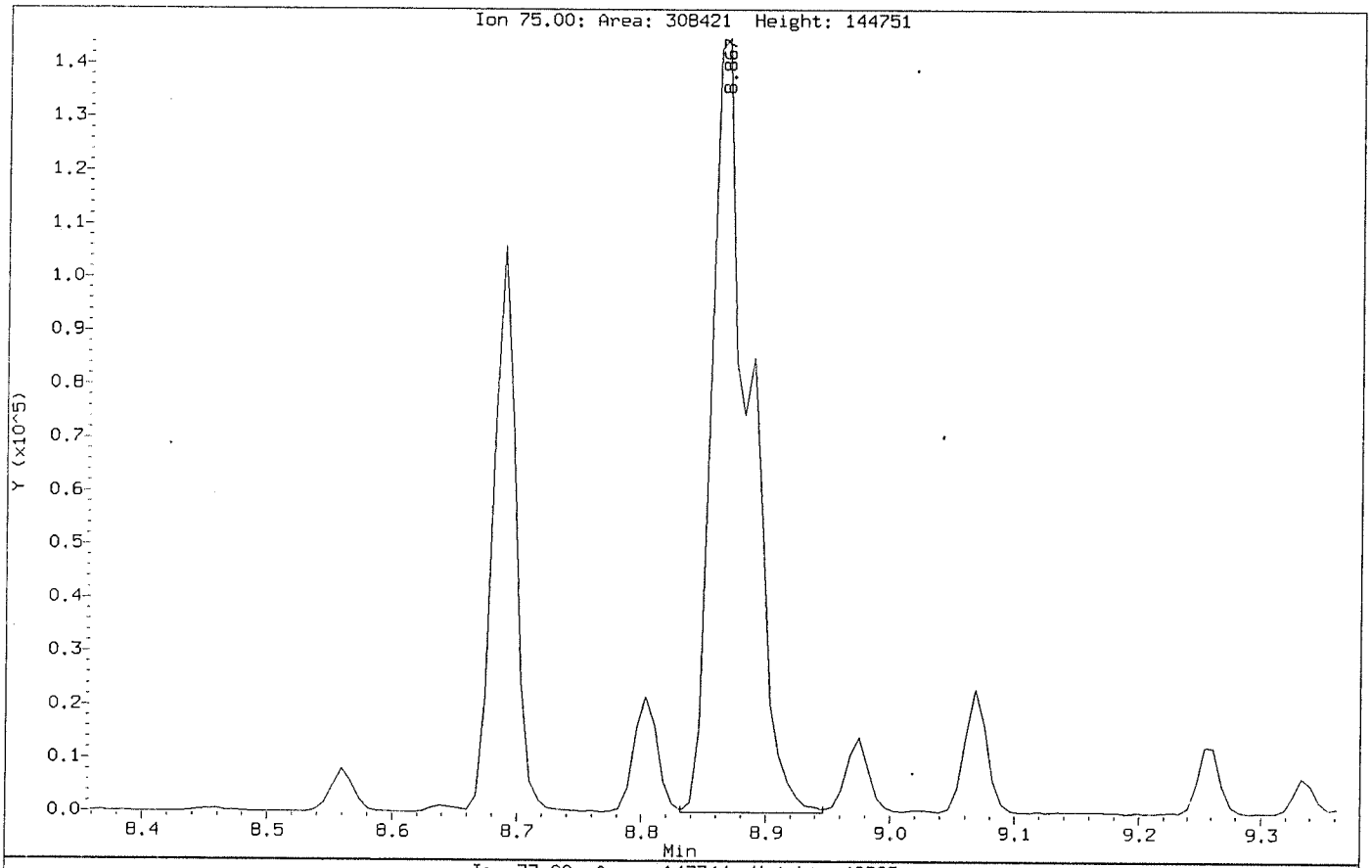
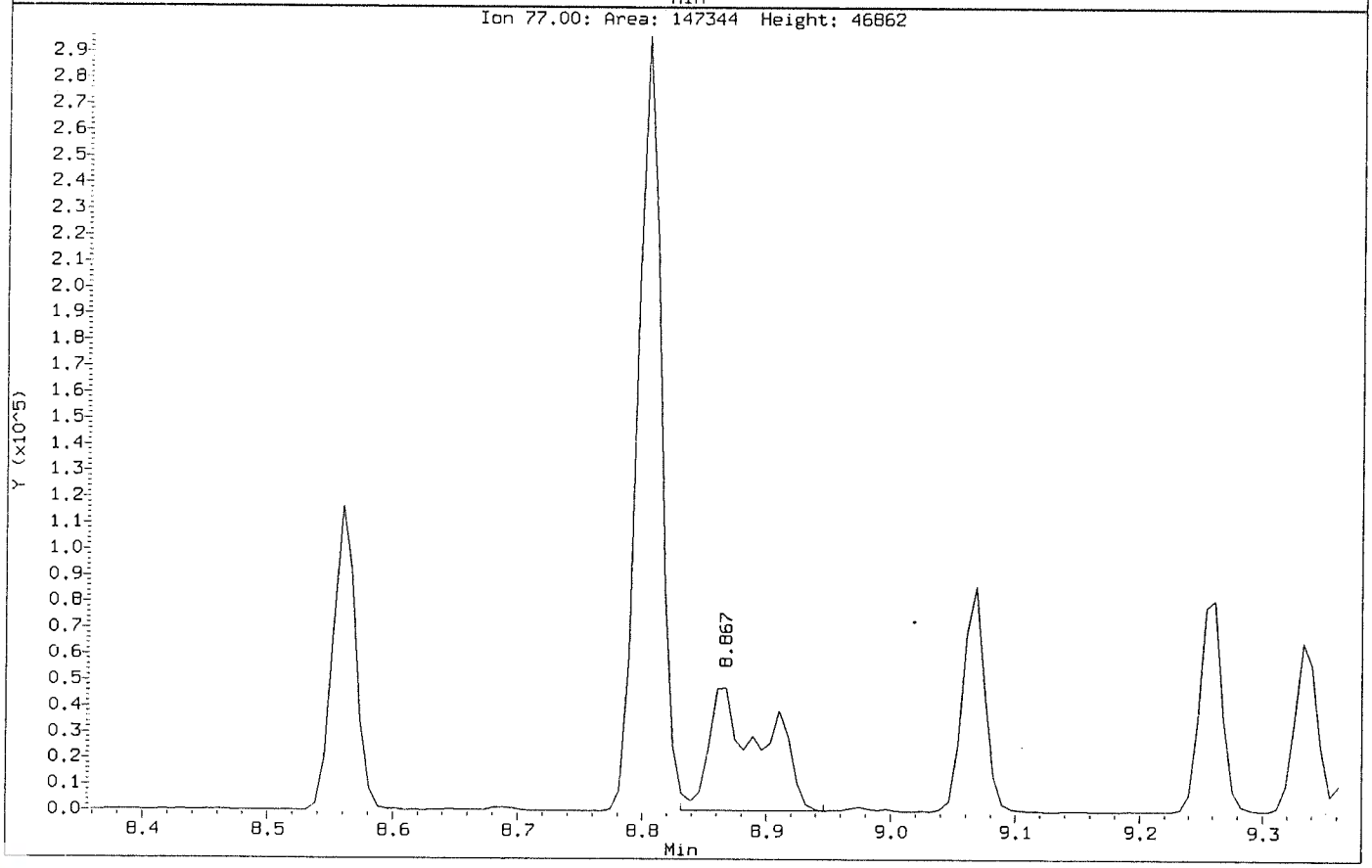
Date : 16-JUN-2021 10:45
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\Before\X061602.D
Injection Date: 16-JUN-2021 10:45
Instrument: voa6.i
Client Sample ID: CCV

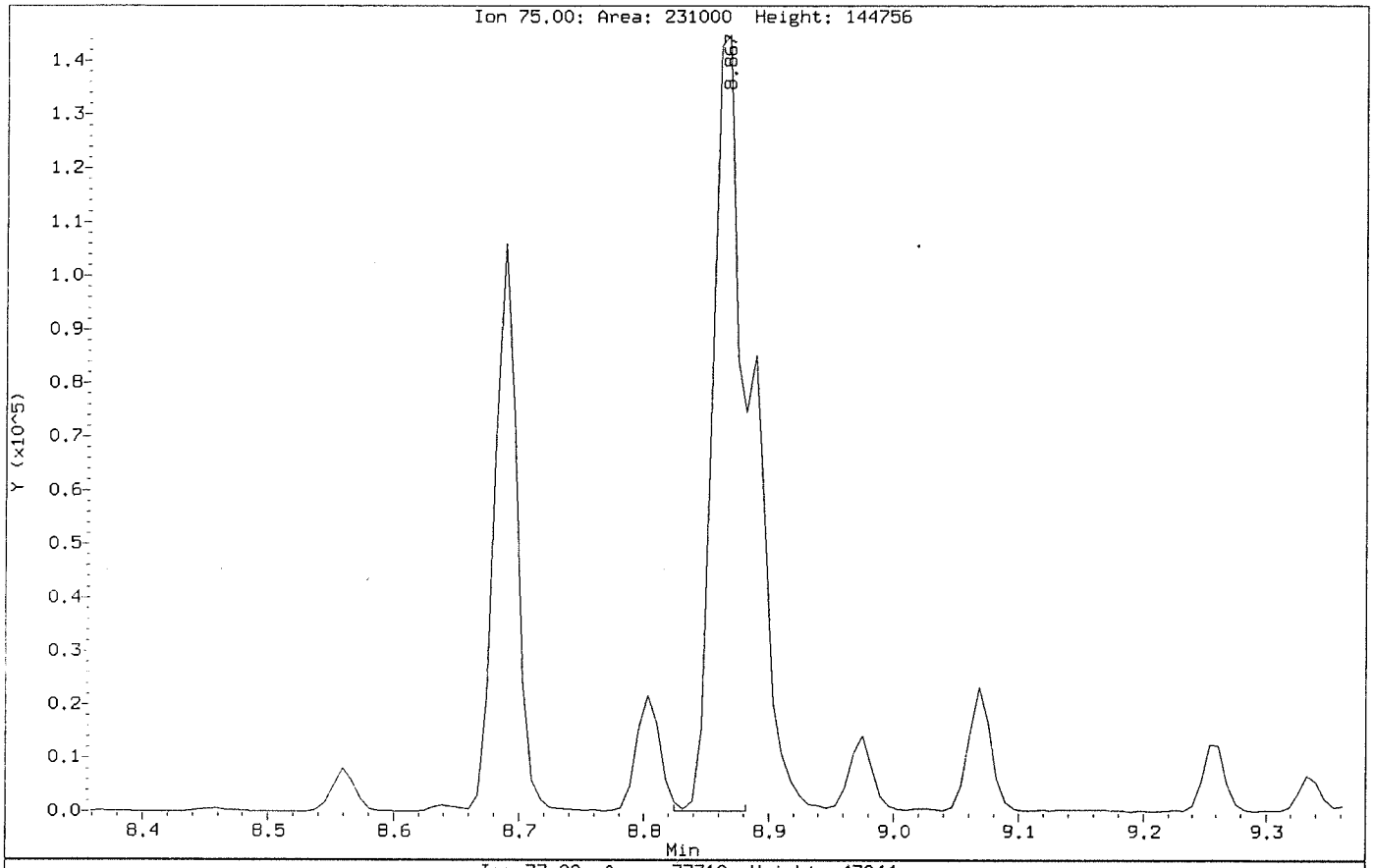
Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4

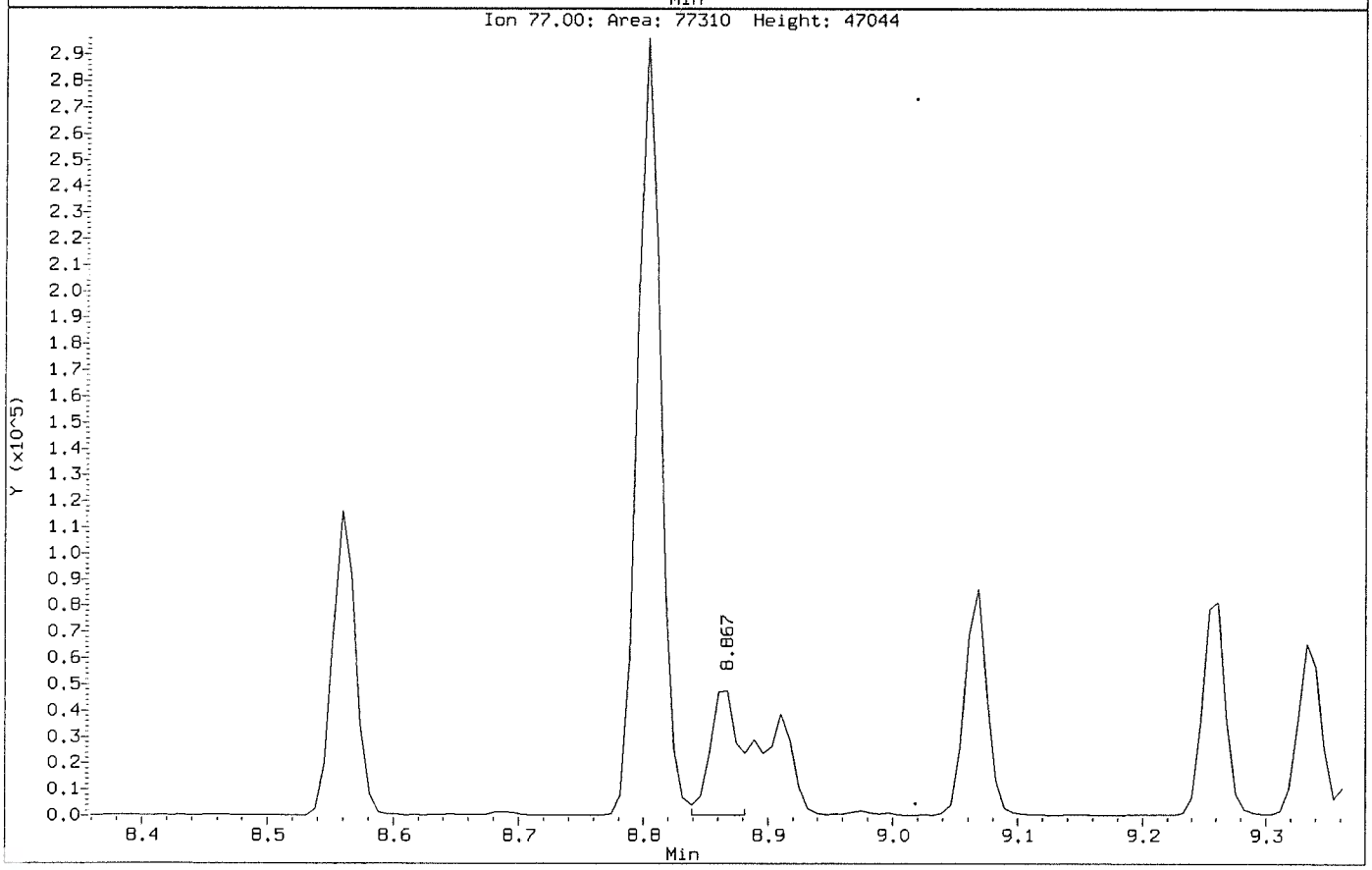




Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061602.D
Injection Date: 16-JUN-2021 10:45
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061606.D Page 1
Report Date: 26-Jul-2021 14:46

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061606.D
Lab Smp Id: VLCSW-210616 Client Smp ID: VLCSW-210616
Inj Date : 16-JUN-2021 12:09
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-210616;VLCSW-210616;3;;LCS
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:46 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

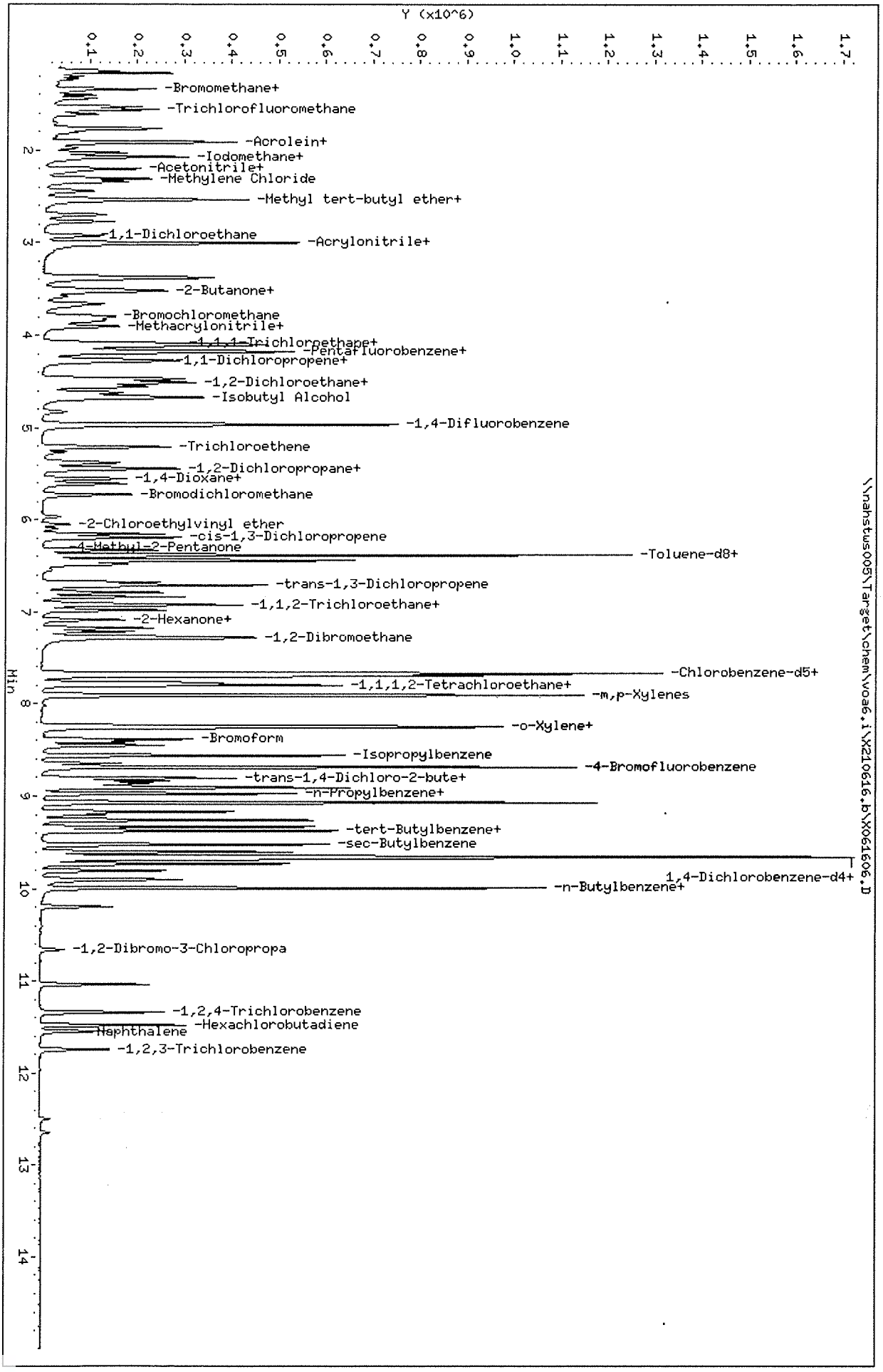
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	476503	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	681300	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	644886	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	353523	50.0000	
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	227726	48.5477	48.54
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	238983	52.5379	52.53
$	48 Toluene-d8	98	6.388	6.389	(0.833)	768606	47.8475	47.84
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	284419	50.2167	50.21
	60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	92781	19.4545	19.45
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	129499	18.3900	18.38
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	104866	20.7889	20.78
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	66262	18.9679	18.96
	22 1,1-Dichloroethane	63	2.921	2.922	(0.699)	134156	17.8088	17.80
	11 1,1-Dichloroethene	96	1.911	1.912	(0.457)	83754	17.0638	17.06
	32 1,1-Dichloropropene	75	4.282	4.283	(0.863)	103398	19.8156	19.81
	93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	50231	23.4707	23.47
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	85076	19.3023	19.30(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	78194	22.3717	22.37
	79 1,2,4-Trimethylbenzene	105	9.375	9.376	(0.970)	303807	18.8415	18.84
	89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	12102	21.8703	21.87
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	91356	19.2412	19.24
	88 1,2-Dichlorobenzene	146	9.991	9.992	(1.034)	183639	19.1513	19.15

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061606.D Page 2
Report Date: 26-Jul-2021 14:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	109148	20.1067	20.10
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	77108	19.2272	19.22
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	300763	18.7427	18.74
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	192211	19.2761	19.27
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	132272	19.0417	19.04
84	1,4-Dichlorobenzene	146	9.683	9.684	(1.002)	196401	18.8751	18.87
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	121299	18.6066	18.60
24	2-Butanone	43	3.580	3.581	(0.856)	53316	36.7763	36.77
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	245563	18.5580	18.55
52	2-Hexanone	43	7.090	7.083	(0.924)	95704	39.9506	39.95
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	290258	18.4197	18.41
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	314159	19.2190	19.21
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	137137	36.9282	36.92
10	Acetone	43	1.976	1.976	(0.473)	54482	41.4698	41.46
37	Benzene	78	4.512	4.512	(0.909)	300121	19.1753	19.17
74	Bromobenzene	156	8.802	8.802	(0.911)	114896	19.5887	19.58
29	Bromochloromethane	128	3.795	3.796	(0.908)	52875	18.3515	18.35
39	Bromodichloromethane	83	5.722	5.722	(1.153)	114118	19.4838	19.48
66	Bromoform	173	8.408	8.408	(1.096)	71711	19.9417	19.94
6	Bromomethane	94	1.338	1.339	(0.320)	97126	19.8265	19.82
19	Carbon Disulfide	76	2.069	2.069	(0.495)	374300	32.1572	32.15
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	112288	19.8819	19.88
59	Chlorobenzene	112	7.692	7.692	(1.003)	247667	18.4485	18.44
7	Chloroethane	64	1.403	1.403	(0.336)	62258	17.7428	17.74 (M)
28	Chloroform	83	3.910	3.910	(0.935)	146529	17.4864	17.48
3	Chloromethane	50	1.081	1.074	(0.258)	80115	16.8838	16.88
27	cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	91648	18.3502	18.35
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	138363	20.0477	20.04
55	Dibromochloromethane	129	7.176	7.176	(0.936)	105119	19.8046	19.80
44	Dibromomethane	93	5.550	5.550	(1.118)	58298	19.3437	19.34
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	91922	20.8785	20.87
61	Ethylbenzene	106	7.799	7.800	(1.017)	123250	19.9002	19.90
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	55911	26.6064	26.60
67	Isopropylbenzene	105	8.559	8.559	(1.116)	365717	19.3261	19.32
62	m,p-Xylenes	106	7.900	7.900	(1.030)	304012	37.6543	37.65
17	Methylene Chloride	84	2.305	2.306	(0.551)	81869	18.1209	18.12
87	n-Butylbenzene	91	9.991	9.992	(1.034)	270617	19.6769	19.67
73	n-Propylbenzene	91	8.910	8.910	(0.922)	418040	18.9569	18.95
92	Naphthalene	128	11.546	11.539	(1.195)	110964	21.9645	21.96
63	o-Xylene	106	8.244	8.244	(1.075)	149800	19.0277	19.02
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	360099	19.3982	19.39
64	Styrene	104	8.258	8.258	(1.077)	252535	19.1962	19.19
78	tert-Butylbenzene	119	9.332	9.333	(0.966)	260308	18.9214	18.92
56	Tetrachloroethene	164	6.926	6.926	(0.903)	82215	20.7093	20.70
50	Toluene	91	6.446	6.446	(0.840)	344011	18.2724	18.27
20	trans-1,2-Dichloroethene	96	2.527	2.528	(0.604)	77006	17.3077	17.30
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	119814	20.1237	20.12
38	Trichloroethene	130	5.206	5.207	(1.049)	97061	20.7571	20.75
8	Trichlorofluoromethane	101	1.560	1.561	(0.373)	147592	17.1594	17.15
5	Vinyl Chloride	62	1.138	1.138	(0.272)	100475	17.8134	17.81

QC Flag Legend

M - Compound response manually integrated.



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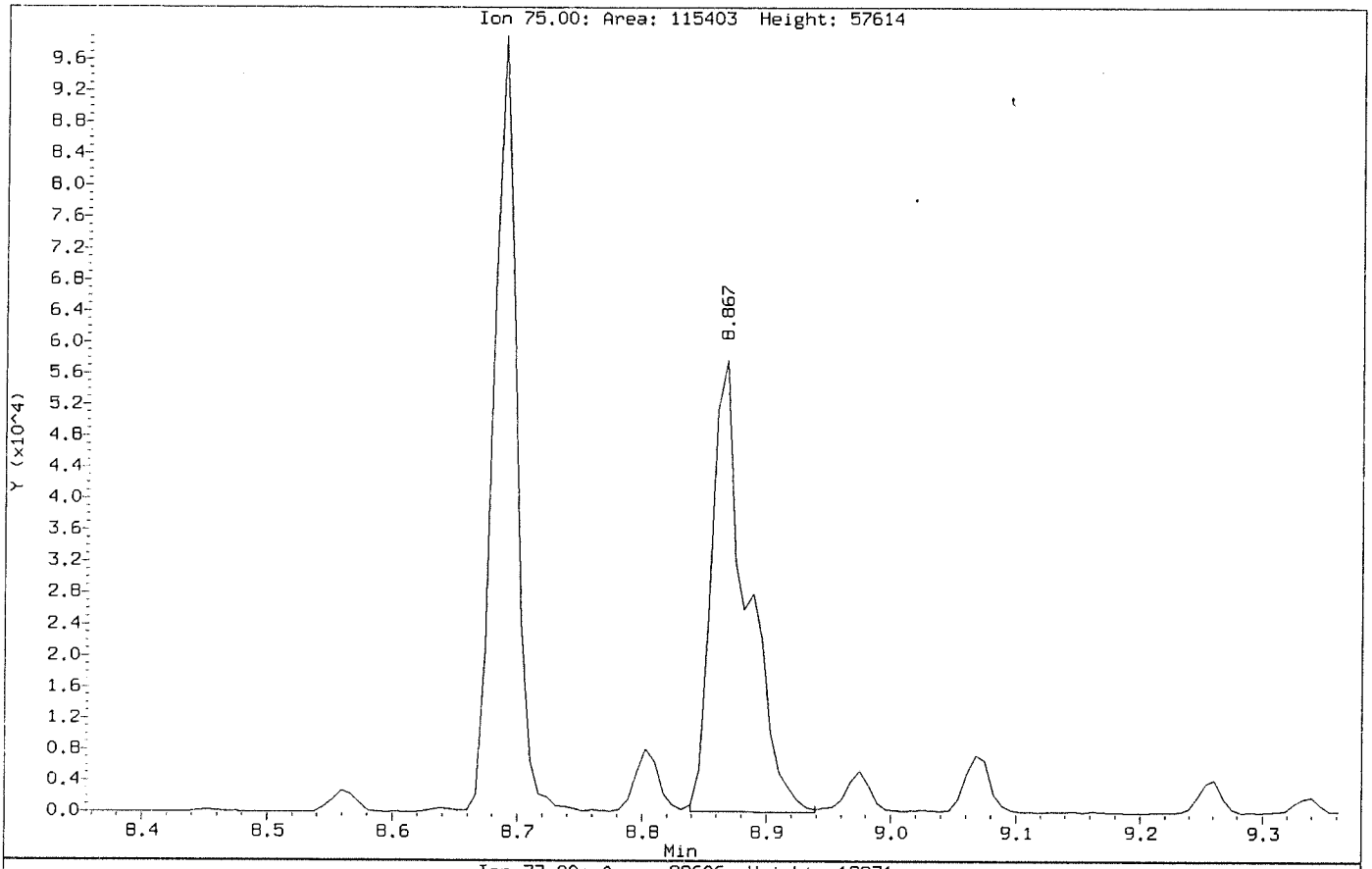
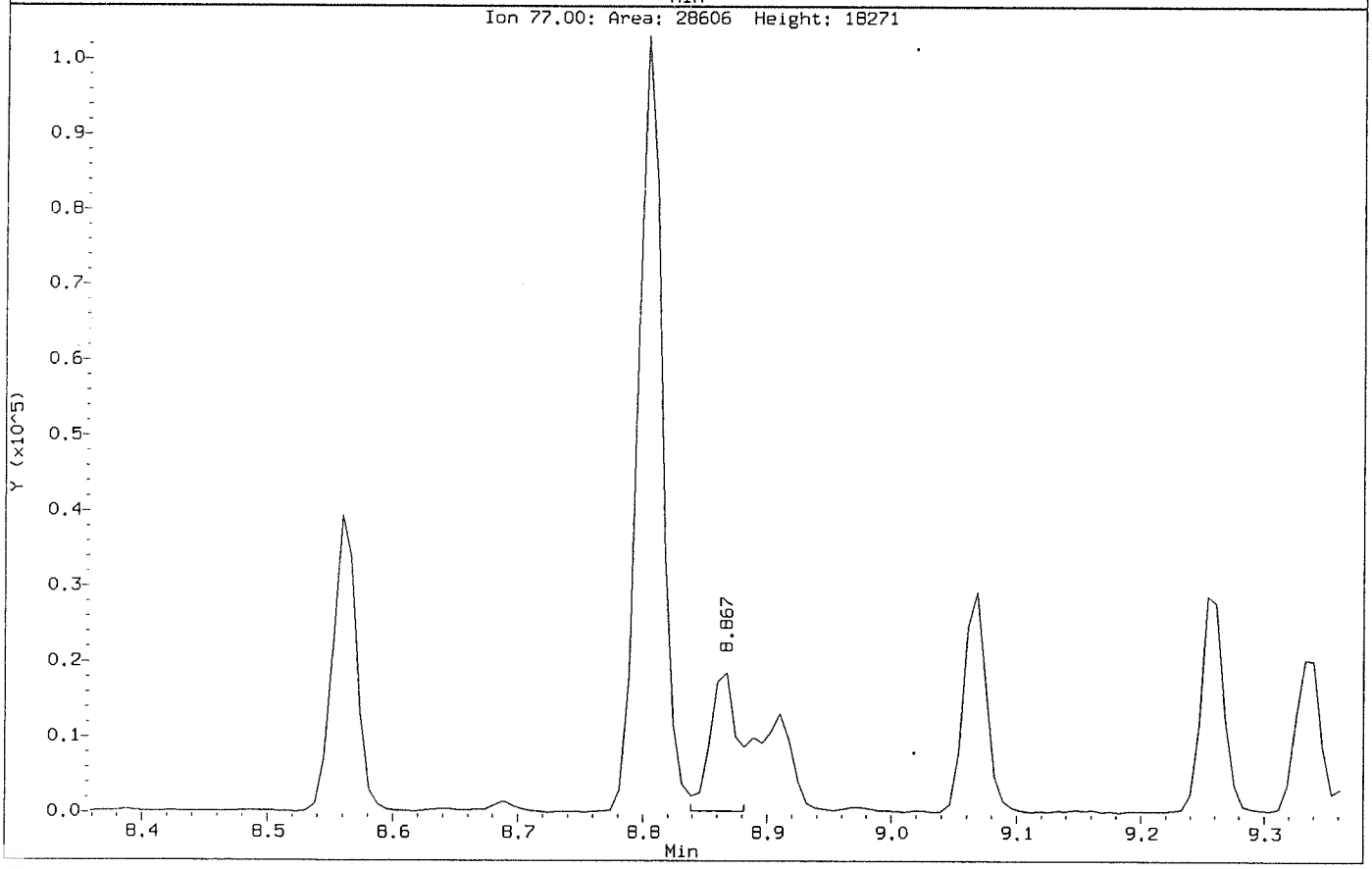
Client ID: VLCSW-210616
Sample Info: VLCSW-210616;VLCSW-210616;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\Before\X061606.D
Injection Date: 16-JUN-2021 12:09
Instrument: voa6.i
Client Sample ID: VLCSW-210616

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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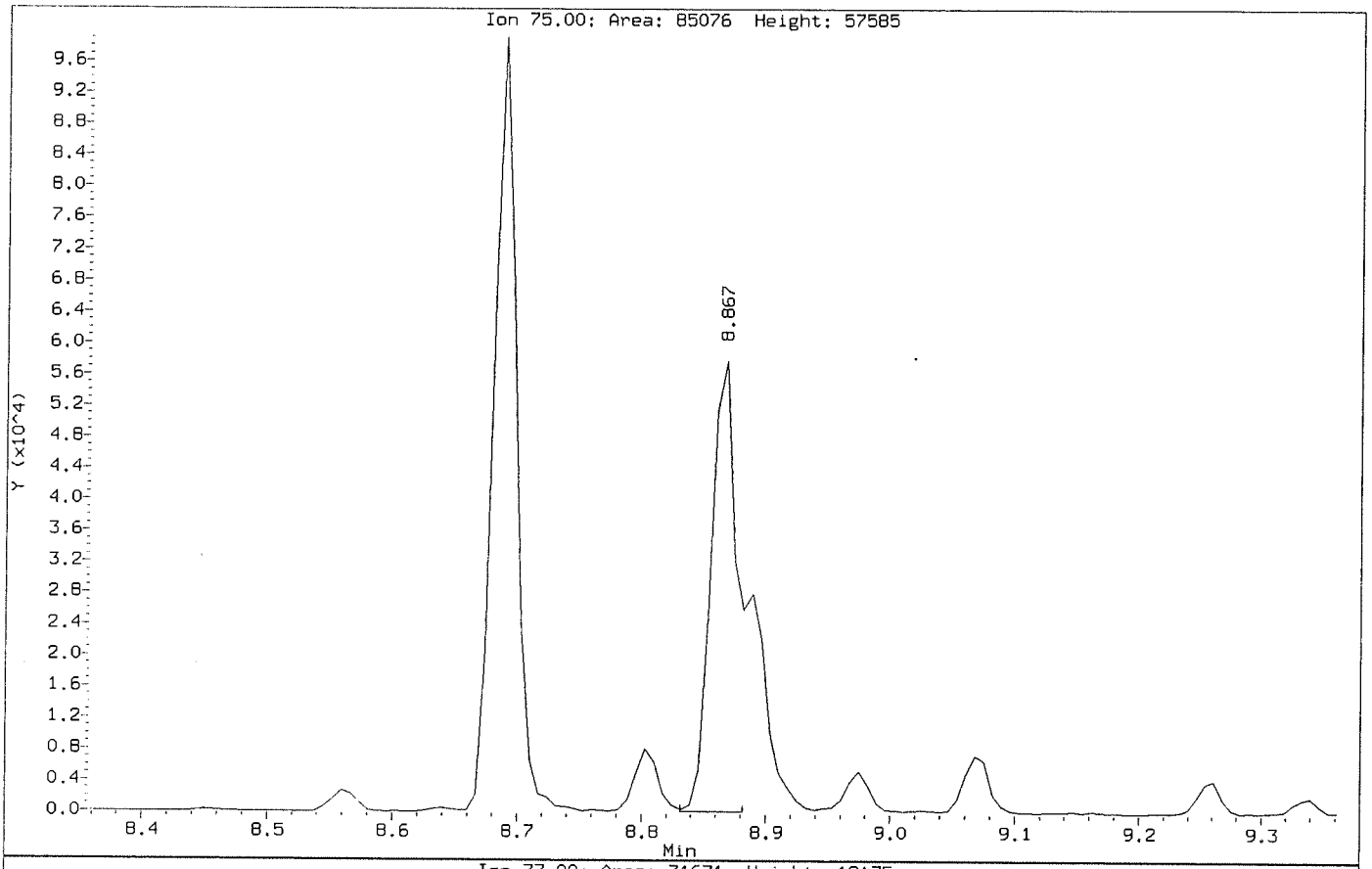
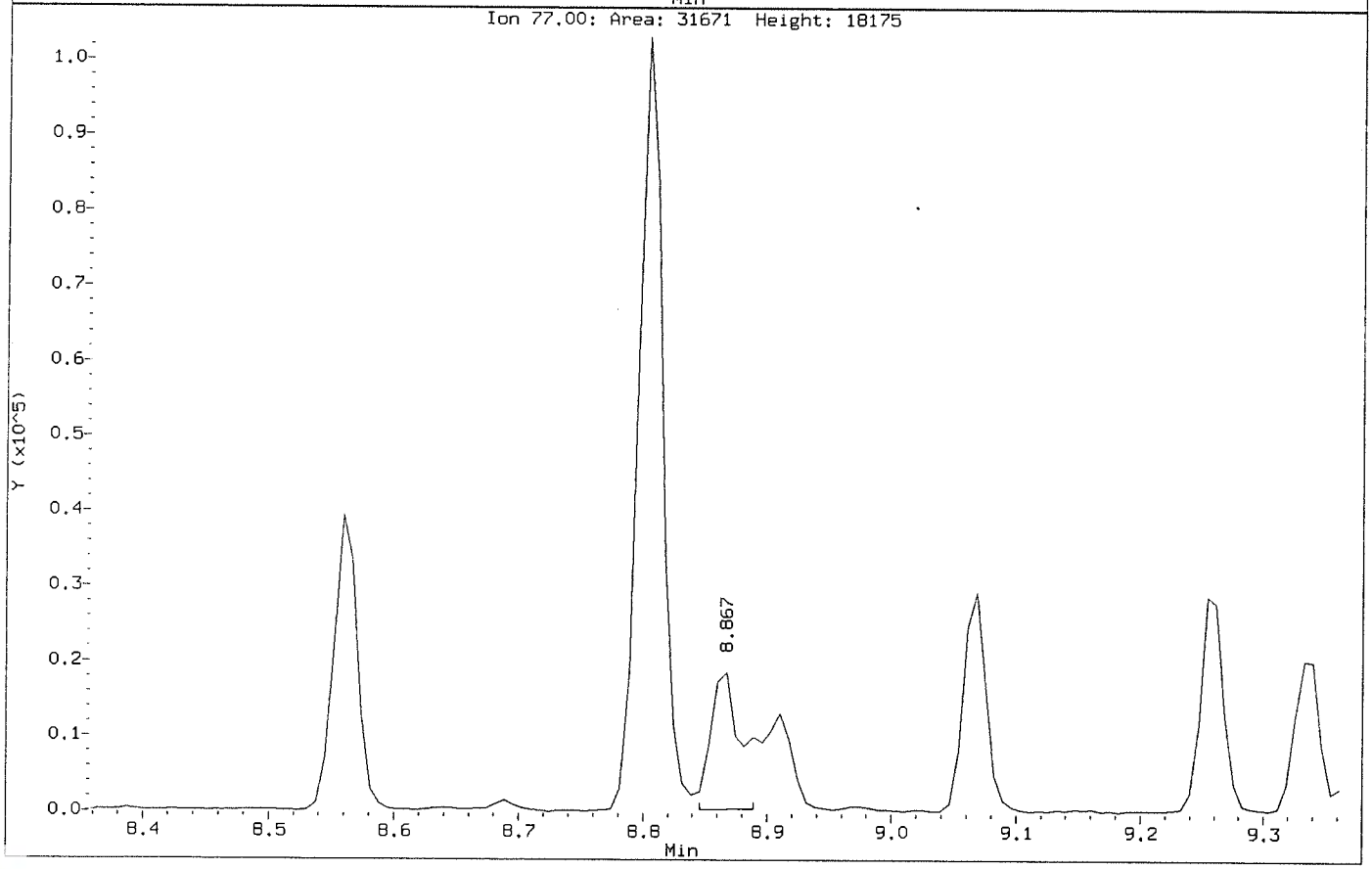
Injection Date: 16-JUN-2021 12:09
Instrument: voa6.i
Client Sample ID: VLCSW-210616

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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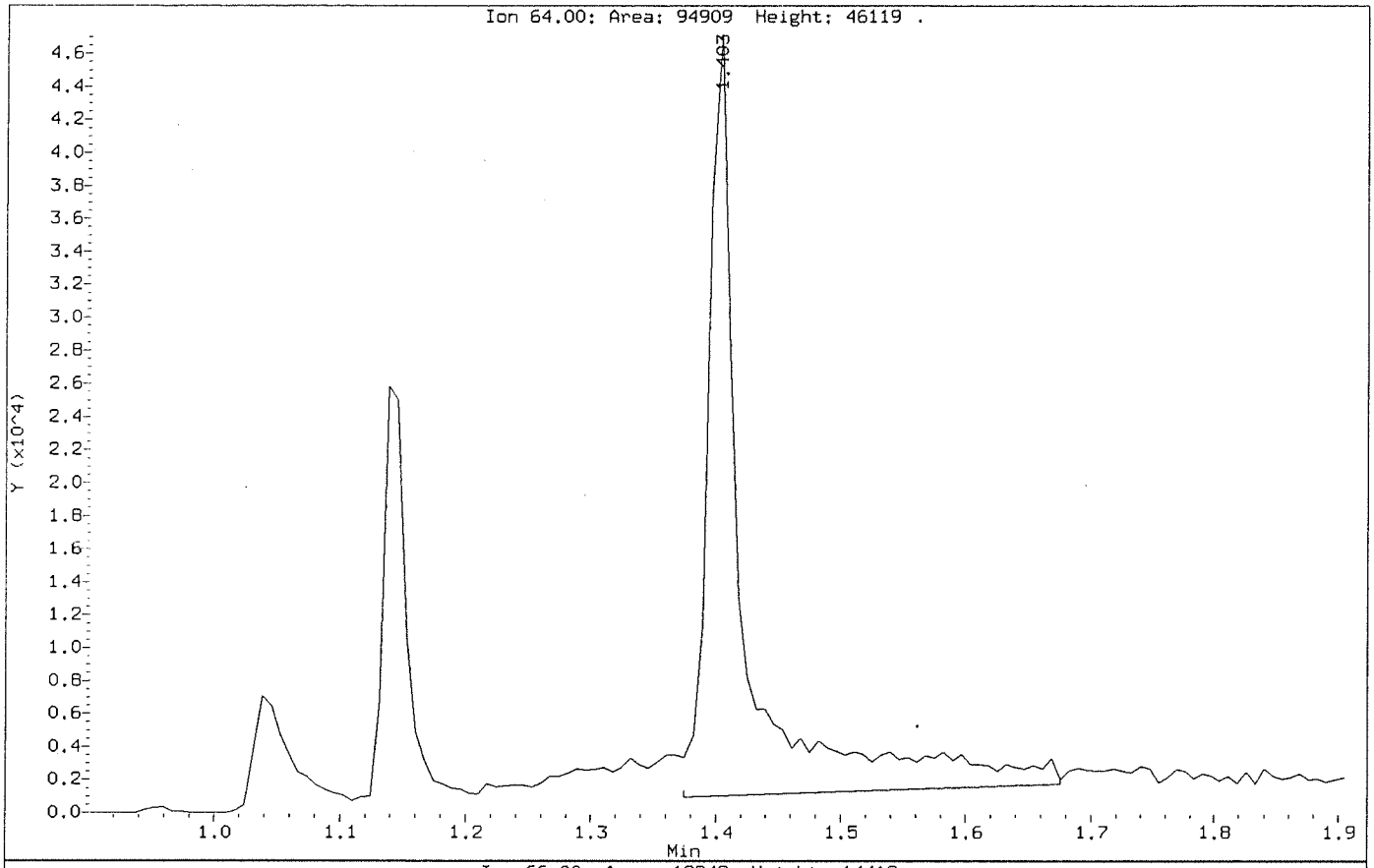
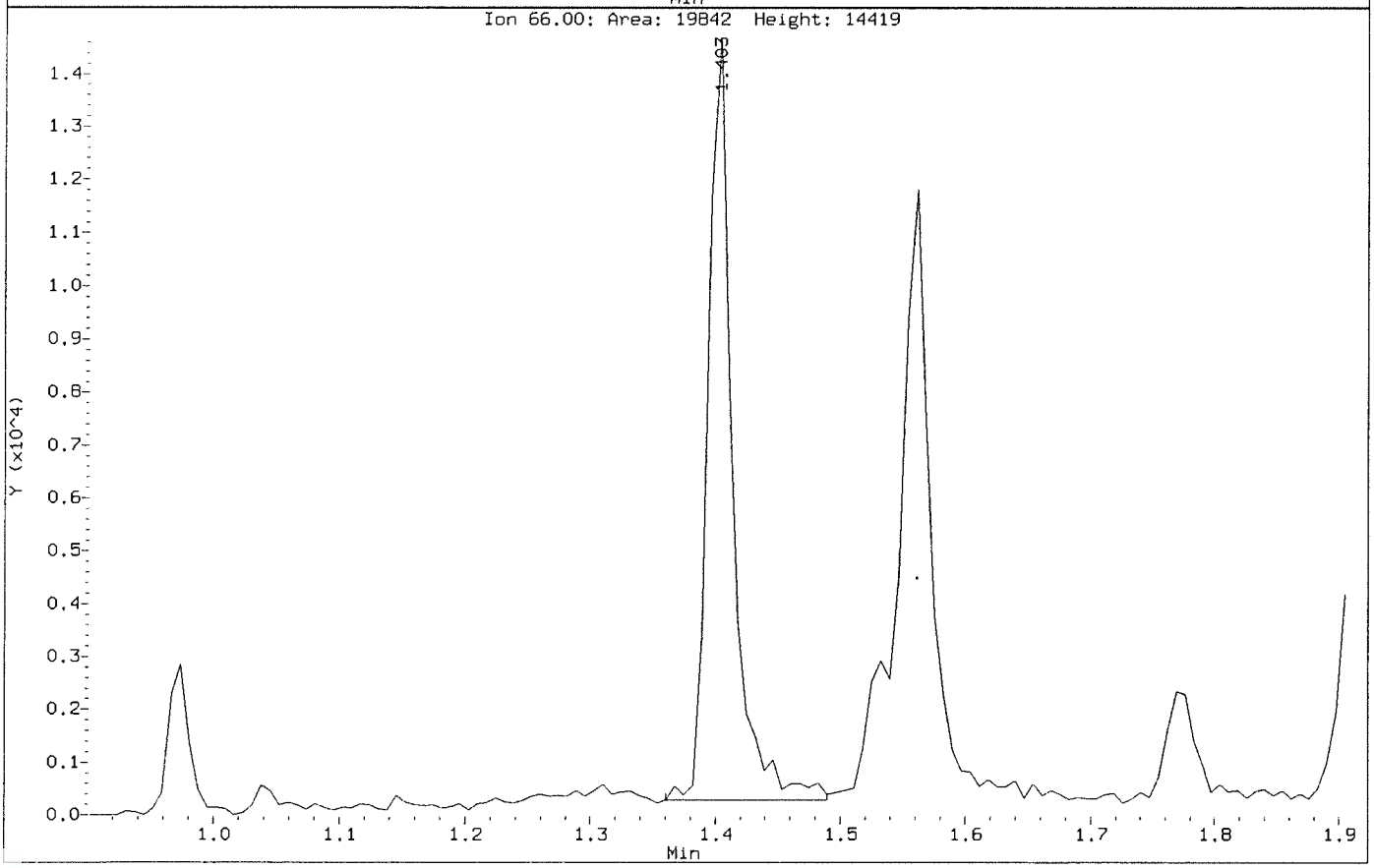
Injection Date: 16-JUN-2021 12:09
Instrument: voa6.i
Client Sample ID: VLCSW-210616

Compound: Chloroethane
CAS Number: 75-00-3





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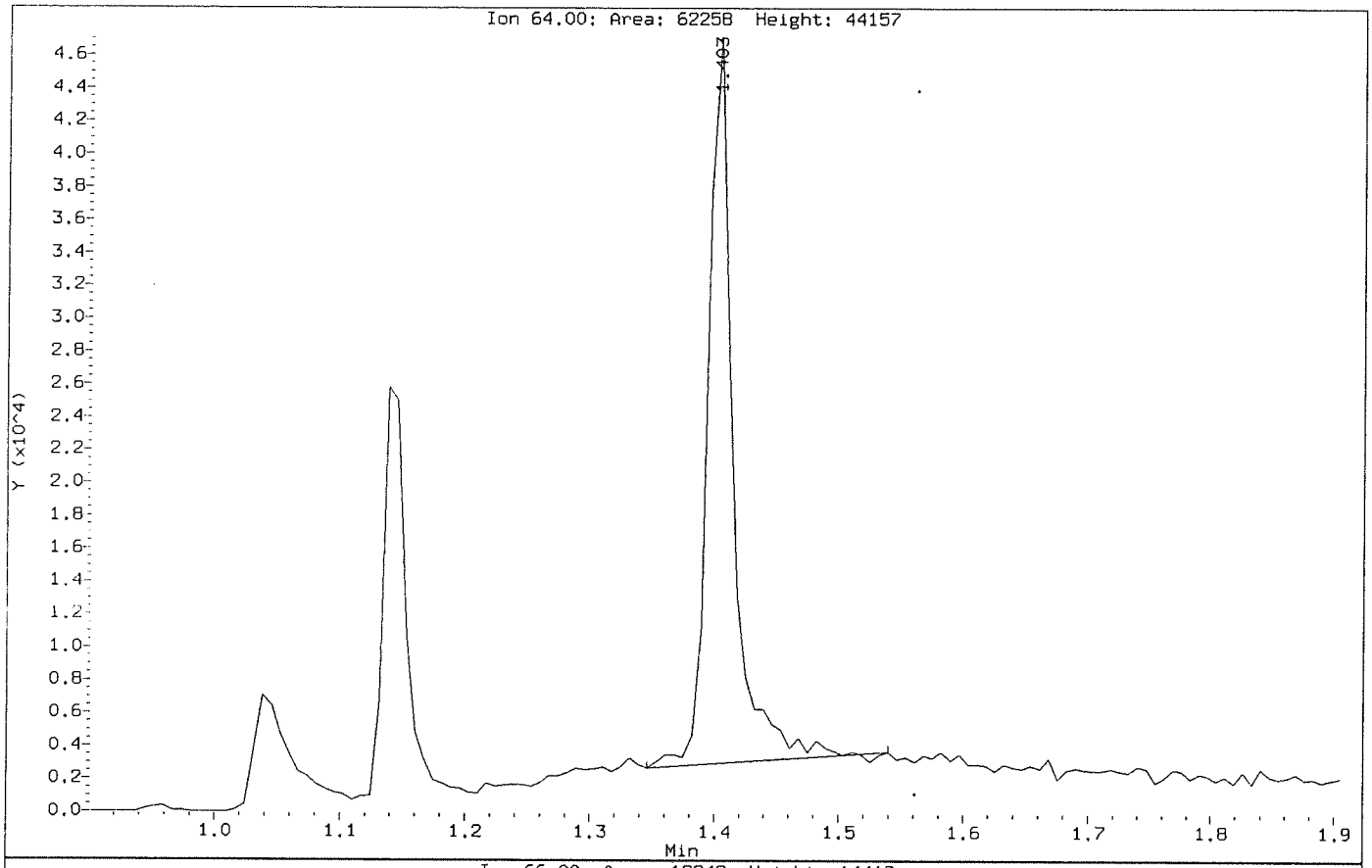
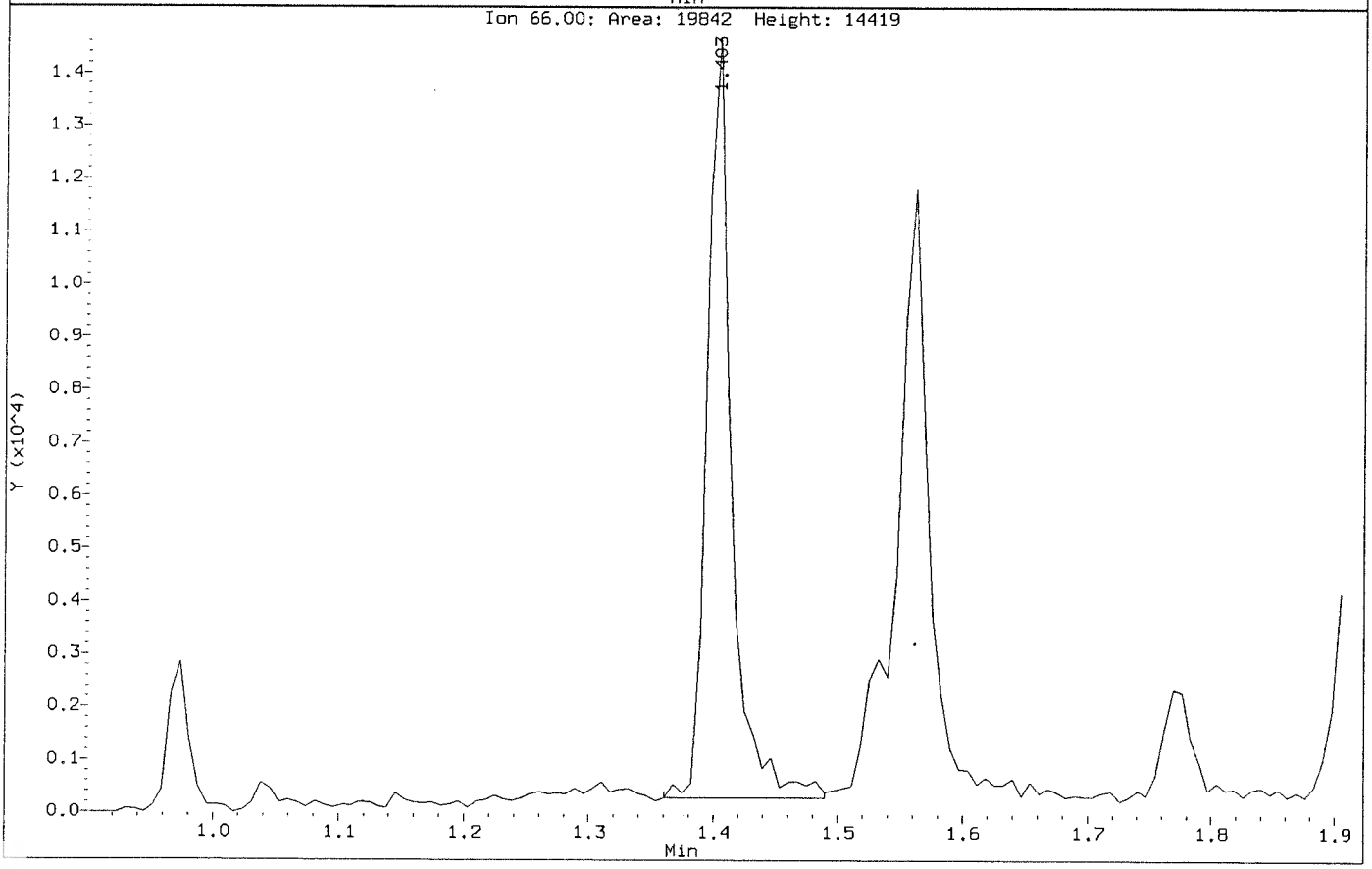
Injection Date: 16-JUN-2021 12:09
Instrument: voa6.i
Client Sample ID: VLCSW-210616

Compound: Chloroethane
CAS Number: 75-00-3





ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061608.D
Lab Smp Id: VBLKW-210616 Client Smp ID: VBLKW-210616
Inj Date : 16-JUN-2021 12:51
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-210616;VBLKW-210616;3;;BLANK
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:46 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

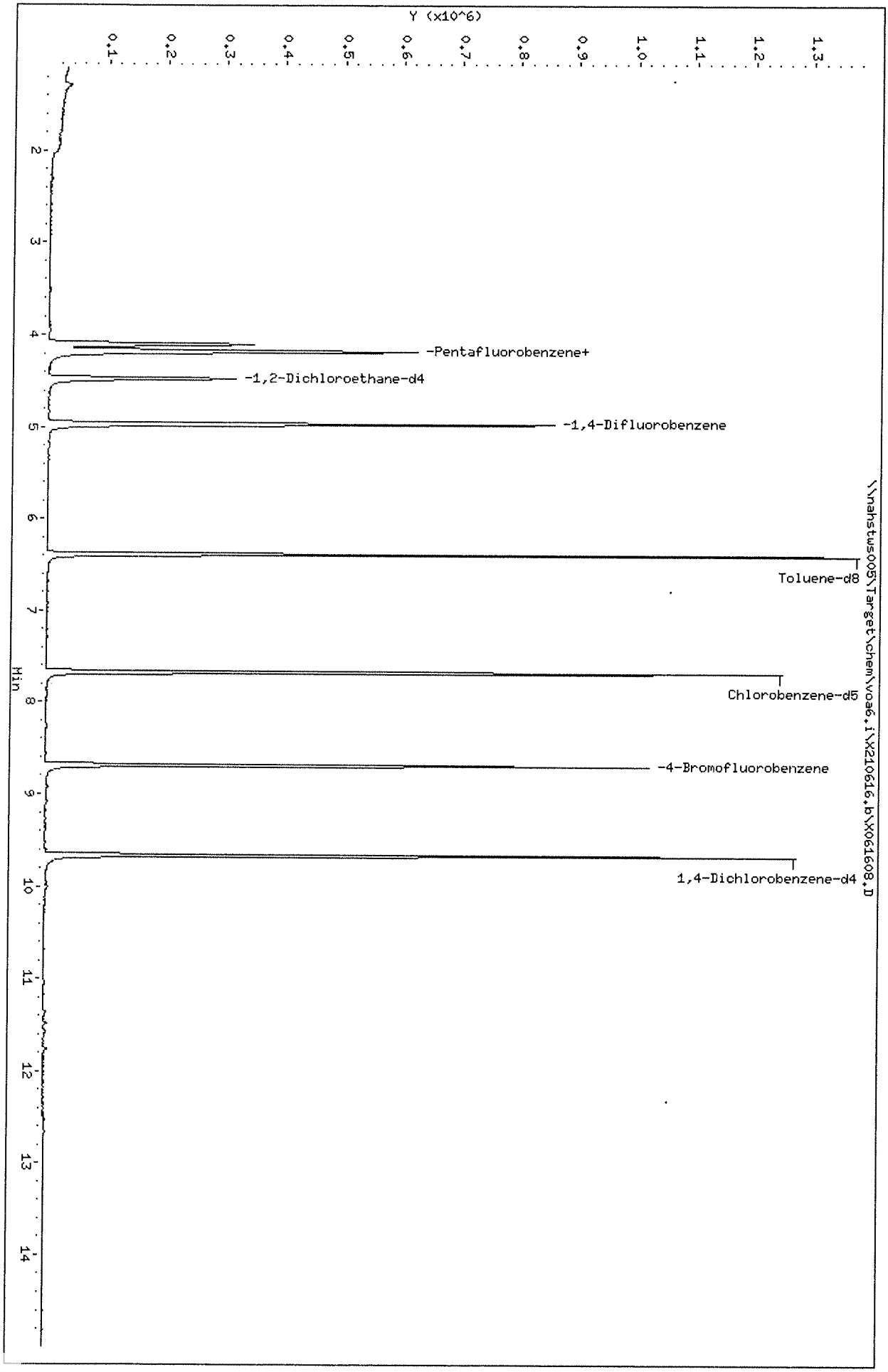
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	559223	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	772176	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	657835	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	321858	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	249192	45.2547	45.25
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	252475	47.2246	47.22
$ 48 Toluene-d8	98	6.388	6.389	(0.833)	859473	52.4510	52.45
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	275561	47.7327	47.73

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061608.D
Date : 16-JUN-2021 12:51
Client ID: VBLKW-210616
Sample Info: VBLKW-210616;VBLKW-210616;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

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



ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061609.D
Lab Smp Id: HS21060700-09 Client Smp ID: HS21060700-09
Inj Date : 16-JUN-2021 13:12
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-09;HS21060700-09;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:40 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

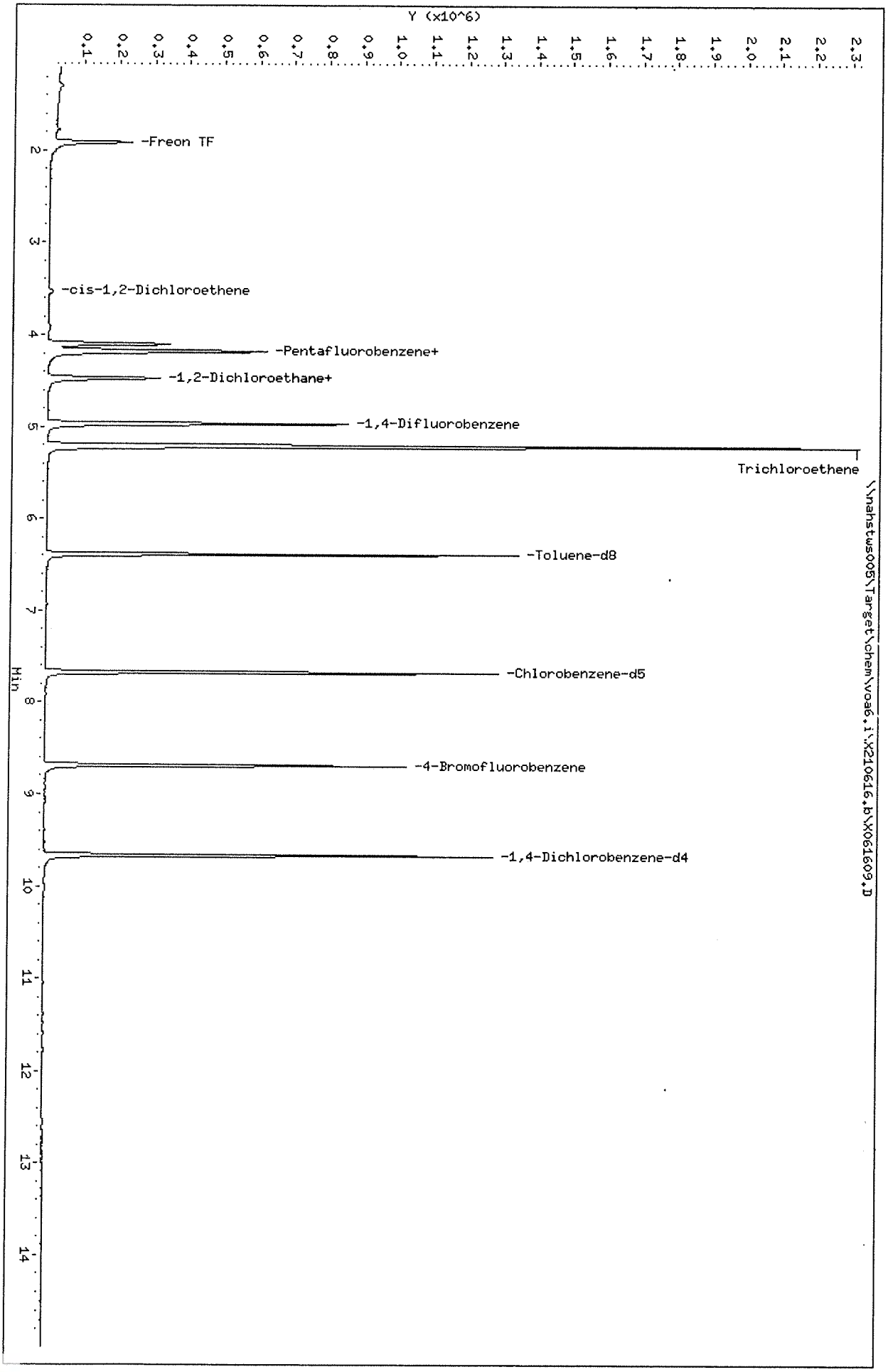
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	566474	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	772365	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	665008	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	333690	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	248986	44.6363	44.63
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	251182	46.3690	46.36
$ 48 Toluene-d8	98	6.388	6.381	(0.833)	869062	52.4641	52.46
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	278630	47.7436	47.74
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	3506	0.56971	0.56(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	7583	1.27715	1.27(a)
38 Trichloroethene	130	5.206	5.206	(1.049)	805248	151.904	151.90

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061609.D
Date : 16-JUN-2021 13:12
Client ID: HS21060700-09
Sample Info: HS21060700-09;HS21060700-09;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061609.D

Date : 16-JUN-2021 13:12

Client ID: HS21060700-09

Instrument: voa6.i

Sample Info: HS21060700-09;HS21060700-09;;;

Purge Volume: 5.0

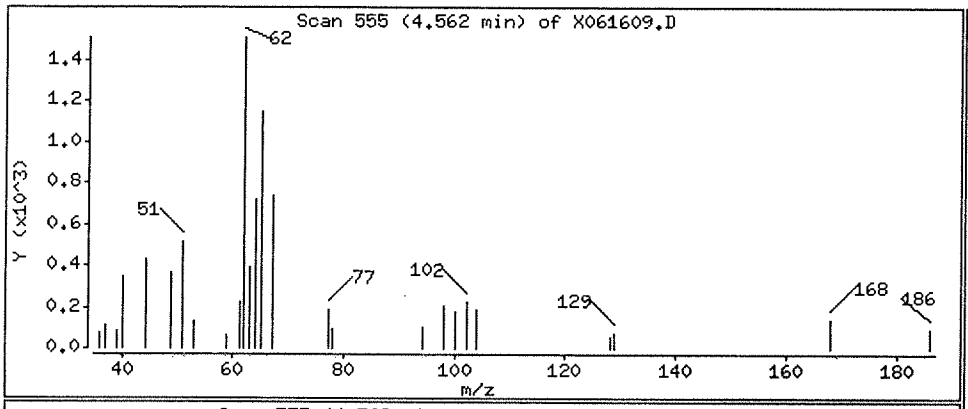
Operator: PC

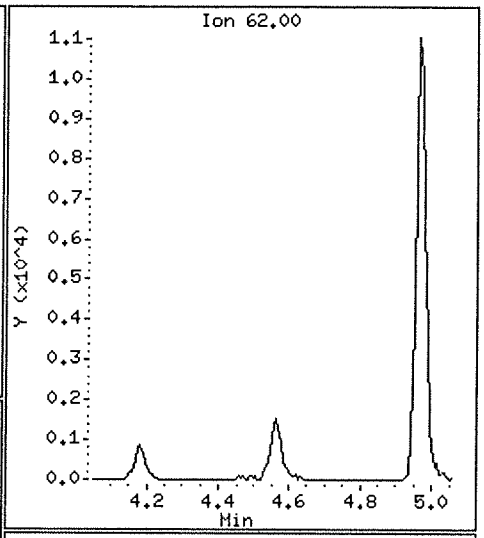
Column phase: DB624

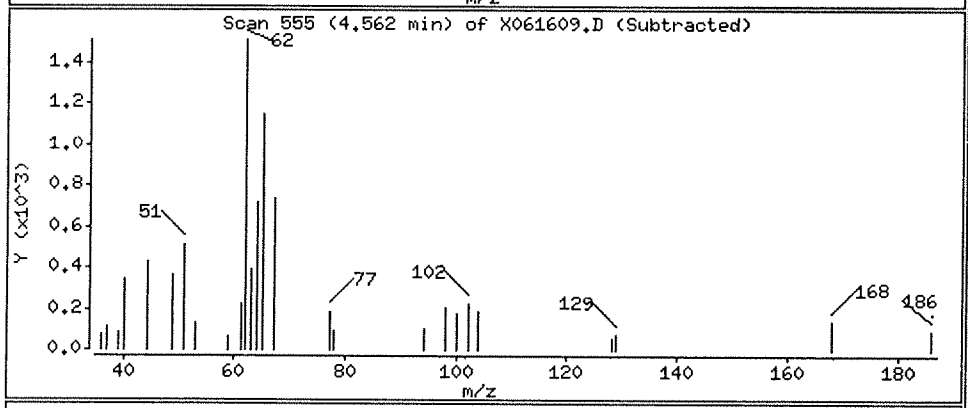
Column diameter: 0.18

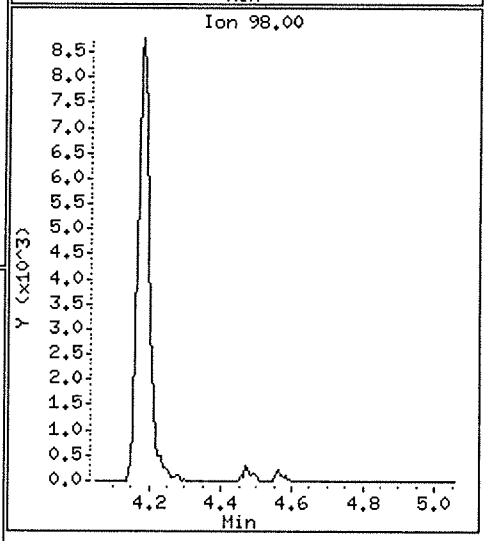
33 1,2-Dichloroethane

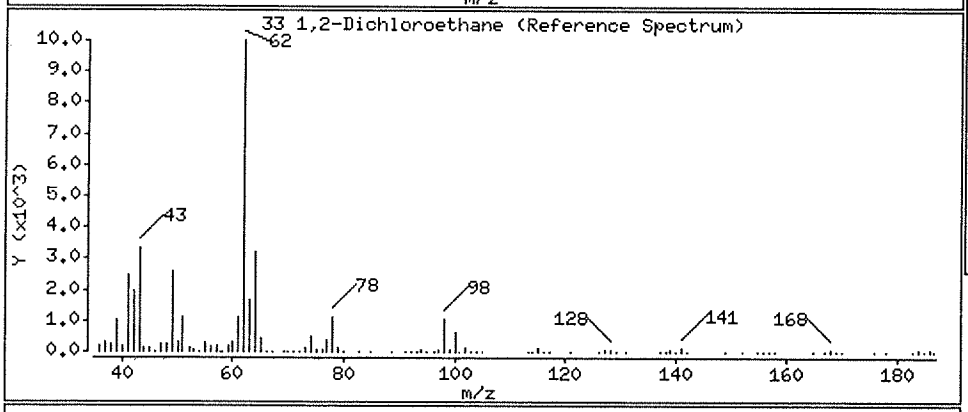
Concentration: 0.56 ug/l

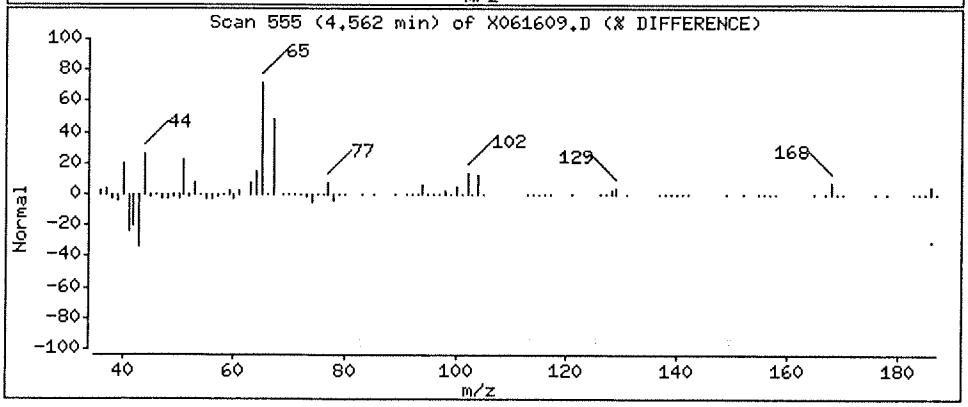












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061609.D

Date : 16-JUN-2021 13:12

Client ID: HS21060700-09

Instrument: voa6.i

Sample Info: HS21060700-09;HS21060700-09;;;

Purge Volume: 5.0

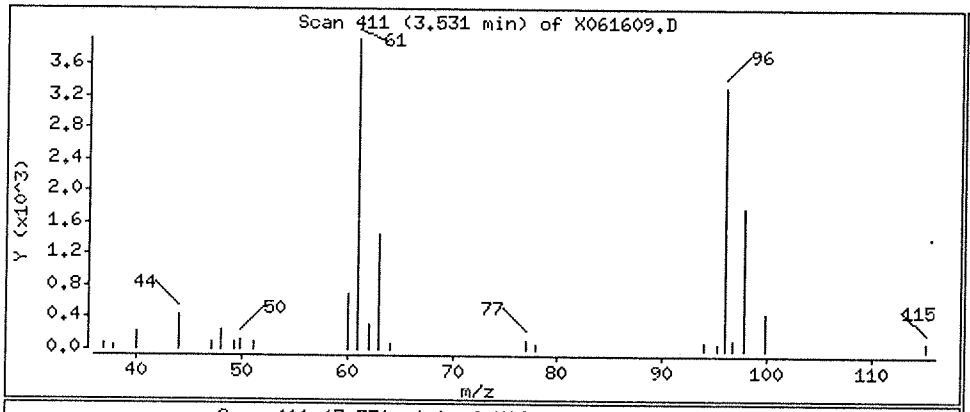
Operator: PC

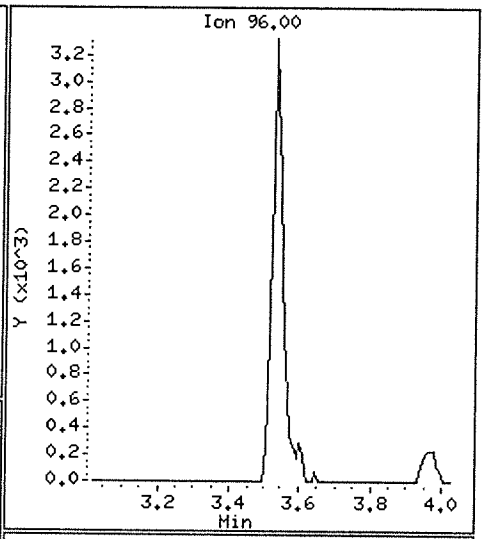
Column phase: DB624

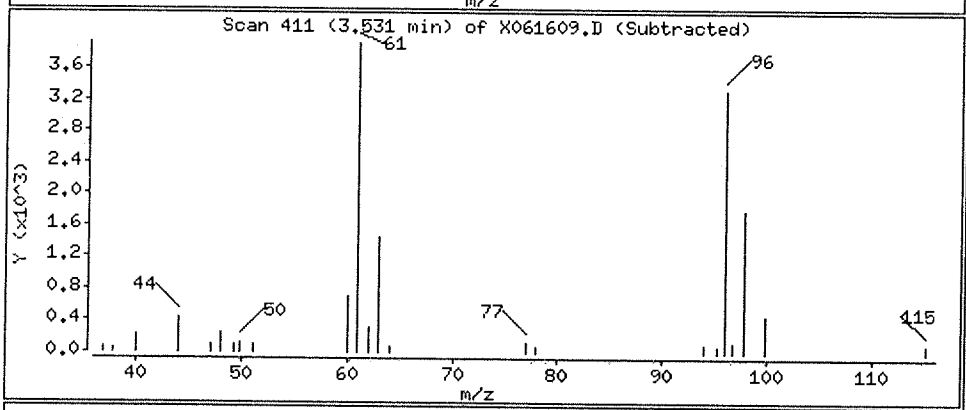
Column diameter: 0.18

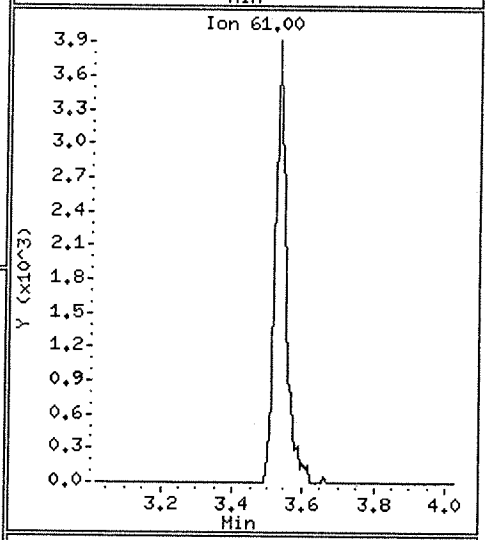
27 cis-1,2-Dichloroethene

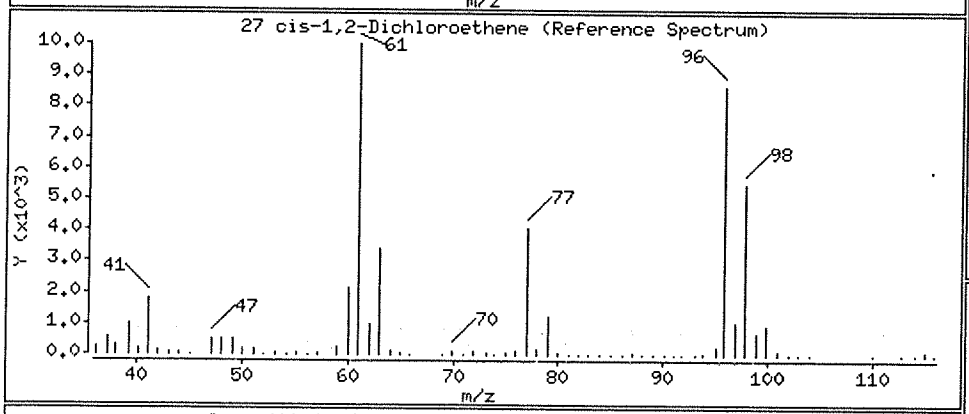
Concentration: 1.27 ug/l

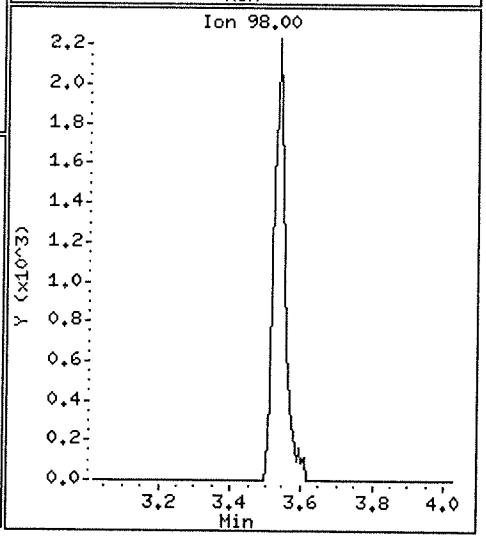


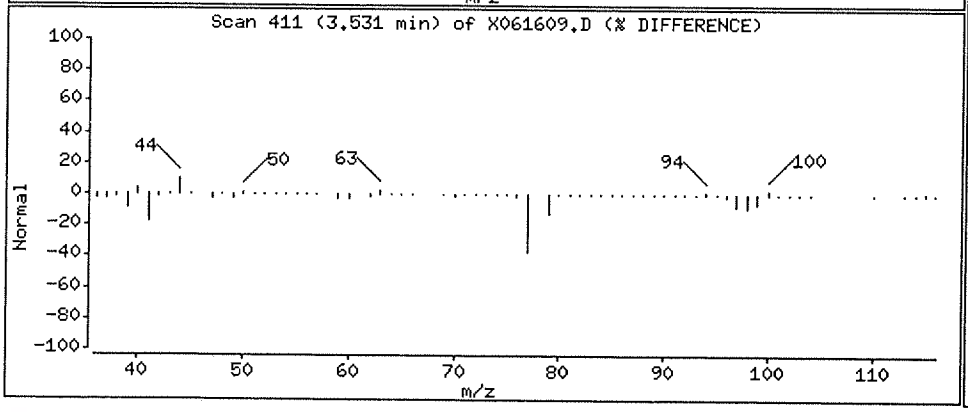












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061609.D

Date : 16-JUN-2021 13:12

Client ID: HS21060700-09

Instrument: voa6.i

Sample Info: HS21060700-09;HS21060700-09;;;

Purge Volume: 5.0

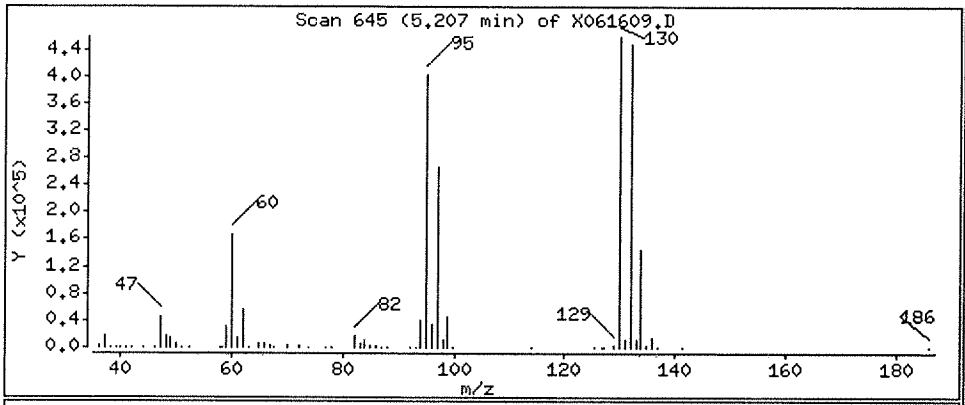
Operator: PC

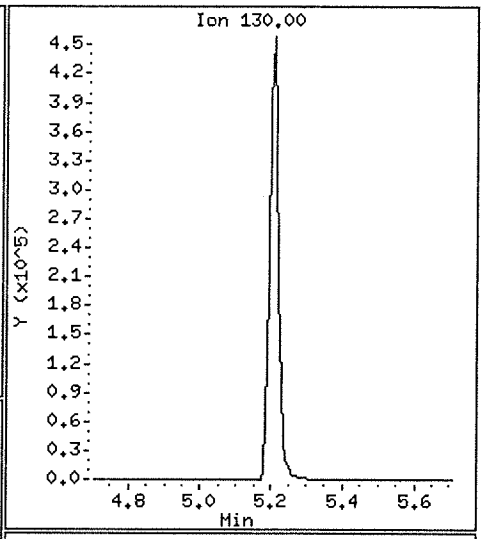
Column phase: DB624

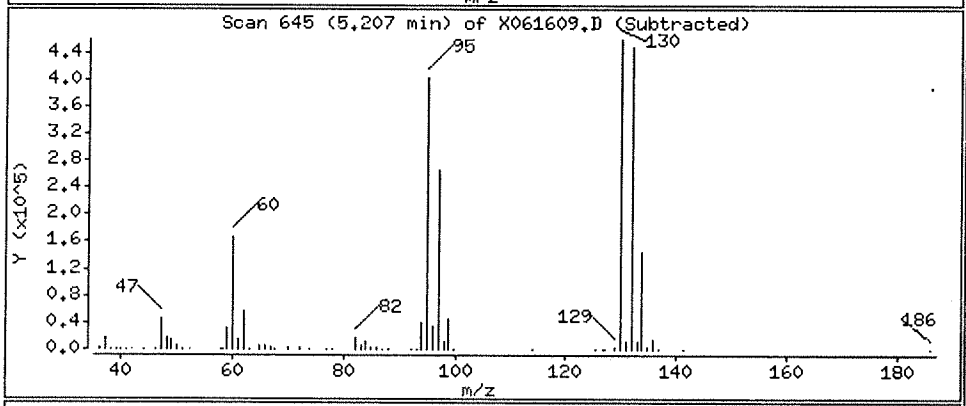
Column diameter: 0.18

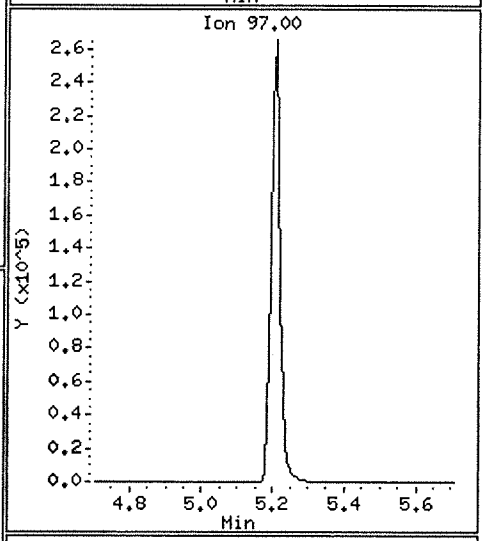
38 Trichloroethene

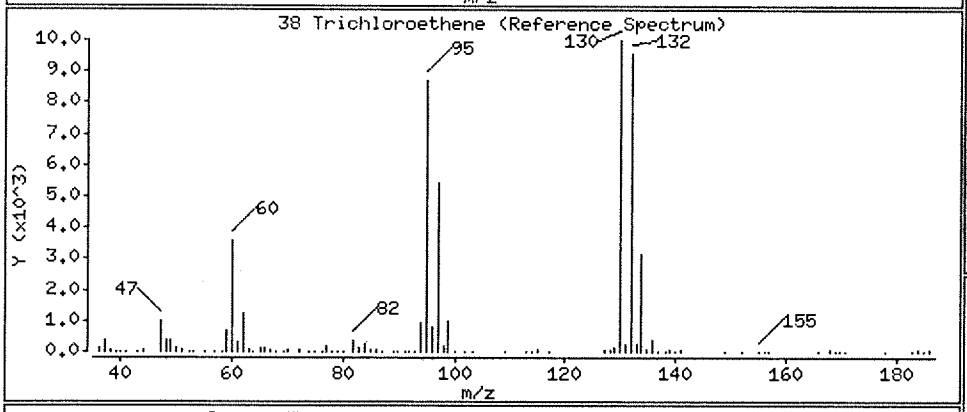
Concentration: 151.90 ug/l

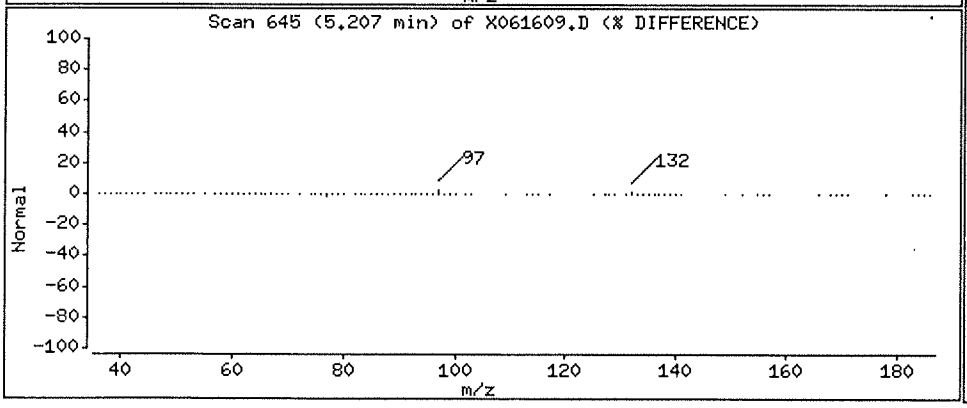


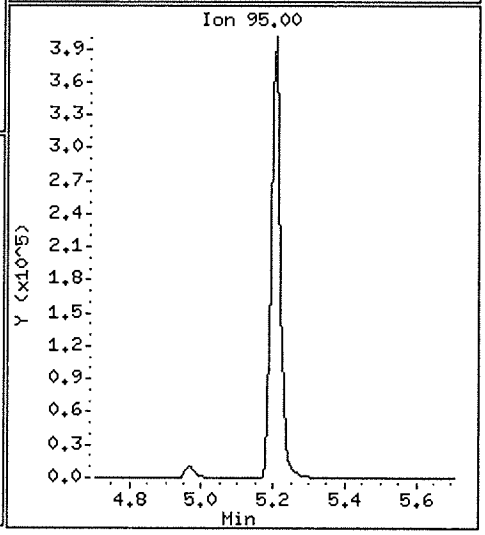












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061611.D Page 1
Report Date: 26-Jul-2021 14:42

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061611.D
Lab Smp Id: HS21060700-16 Client Smp ID: HS21060700-16
Inj Date : 16-JUN-2021 13:54
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-16;HS21060700-16;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:40 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

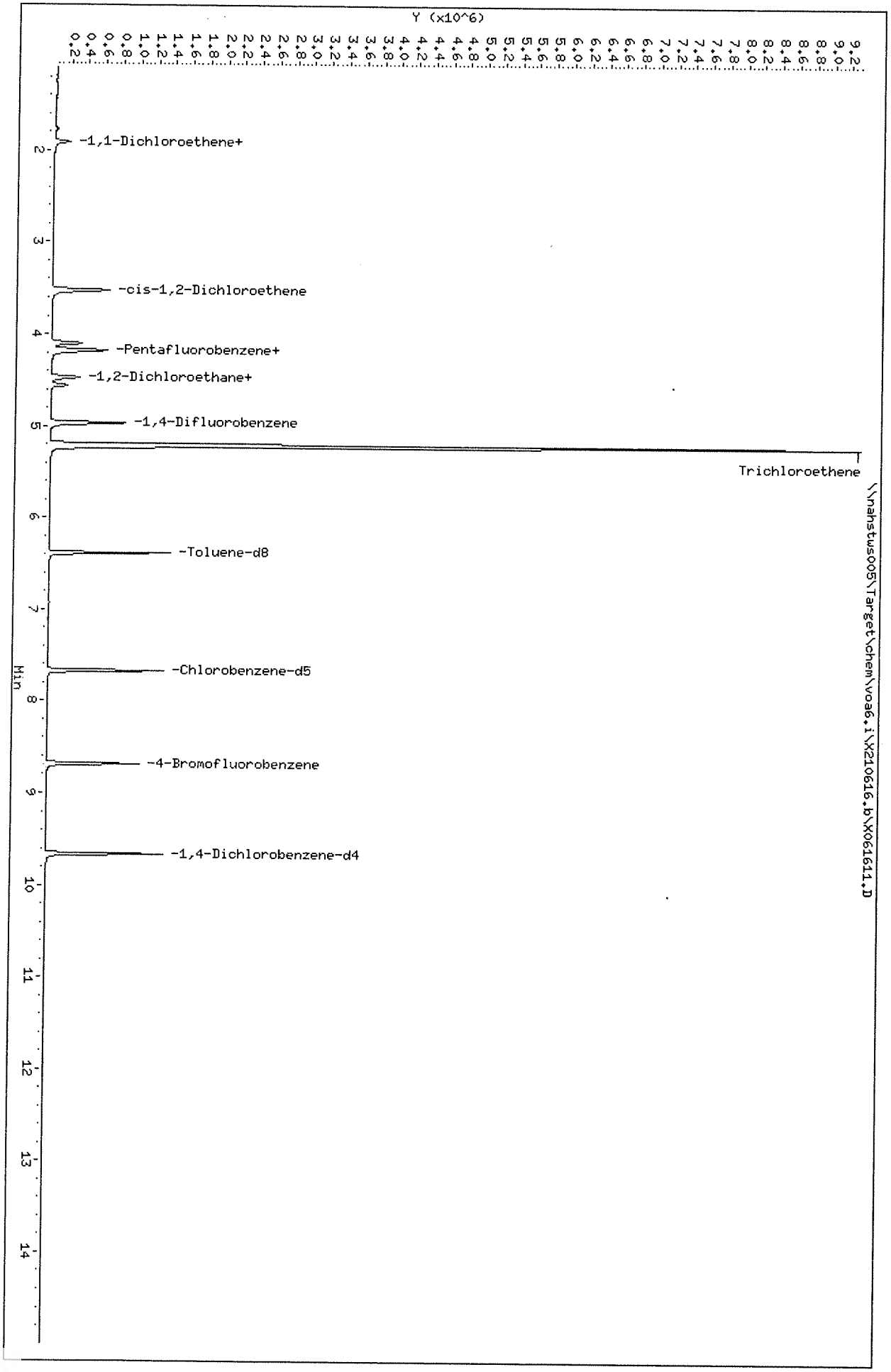
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	575887	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	785469	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	677257	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	343791	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	251014	44.2629	44.26
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	265794	48.2928	48.29
$ 48 Toluene-d8	98	6.388	6.381	(0.833)	879061	52.1080	52.10
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	289239	48.6506	48.65
11 1,1-Dichloroethene	96	1.919	1.911	(0.459)	9140	1.54080	1.54(a)
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	158164	25.2722	25.27
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	362969	60.1333	60.13
38 Trichloroethene	130	5.206	5.206	(1.049)	3177564	589.422	589.42(A)
5 Vinyl Chloride	62	1.138	1.145	(0.272)	6323	0.92755	0.92(a)

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061611.D
Date : 16-JUN-2021 13:54
Client ID: HS21060700-16
Sample Info: HS21060700-16;HS21060700-16;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061611.D

Date : 16-JUN-2021 13:54

Client ID: HS21060700-16

Instrument: voa6.i

Sample Info: HS21060700-16;HS21060700-16;;;

Purge Volume: 5.0

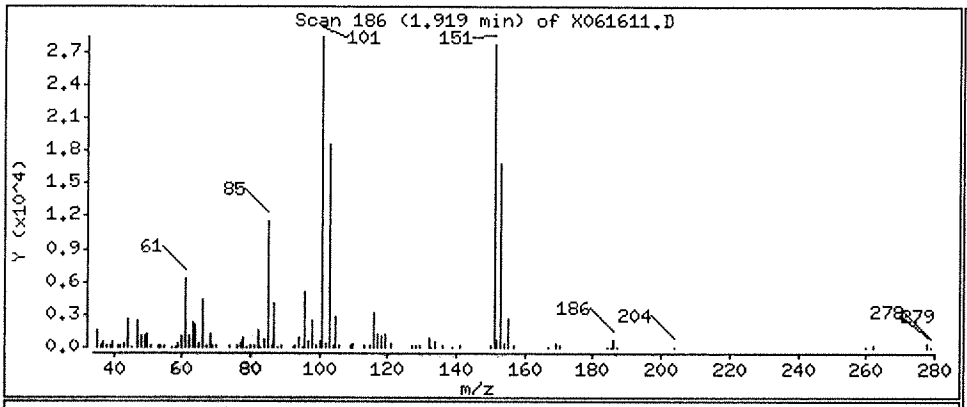
Operator: PC

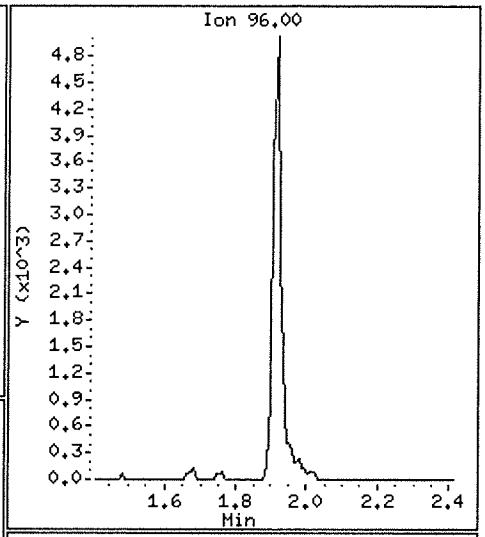
Column phase: DB624

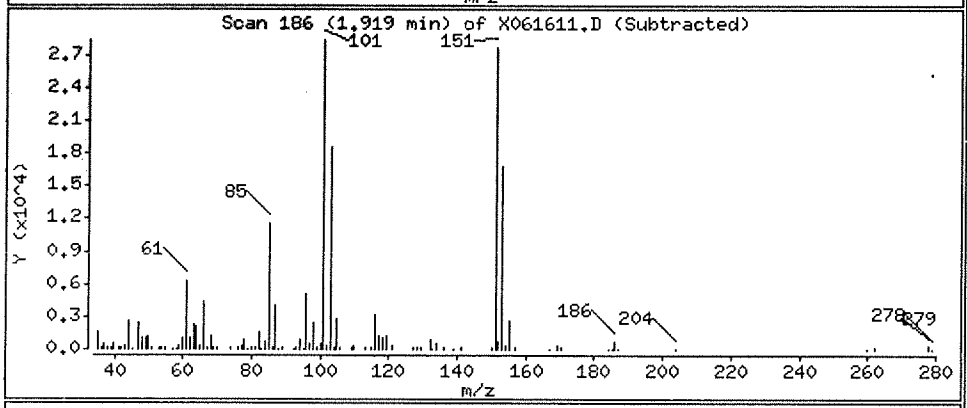
Column diameter: 0.18

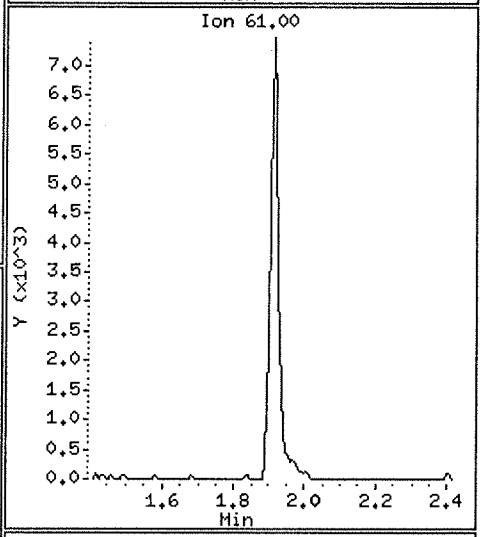
11 1,1-Dichloroethene

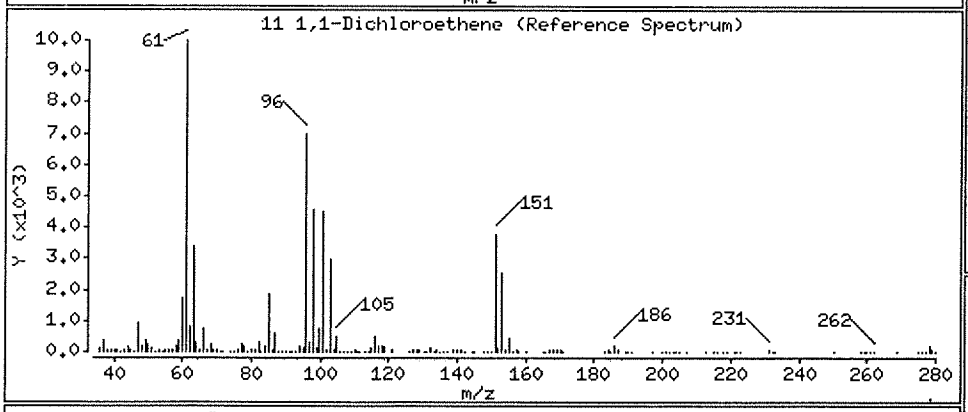
Concentration: 1.54 ug/l

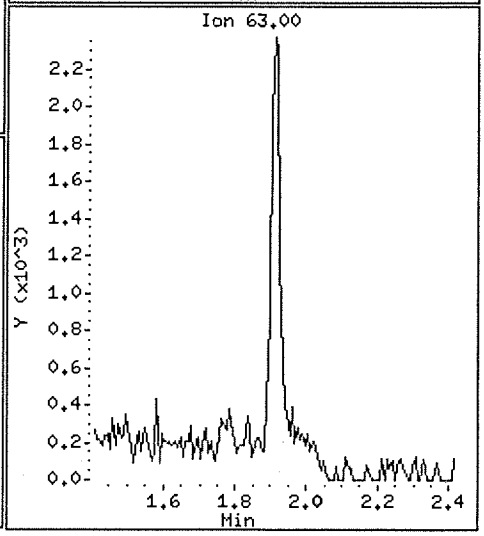


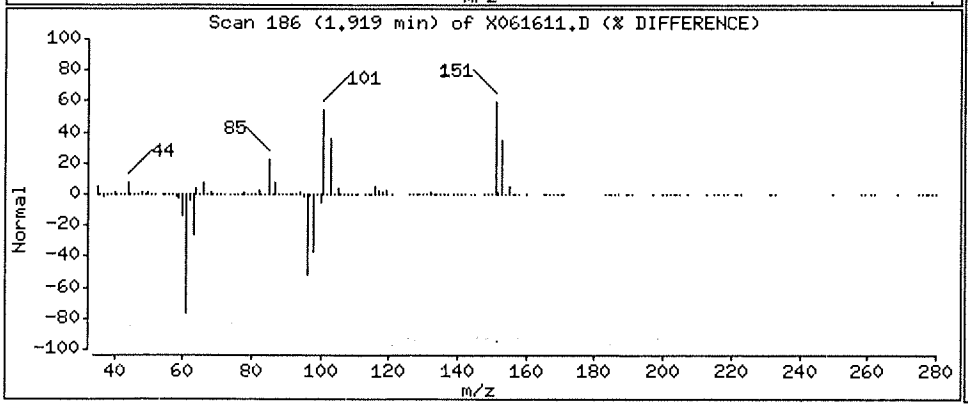












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061611.D

Date : 16-JUN-2021 13:54

Client ID: HS21060700-16

Instrument: voa6.i

Sample Info: HS21060700-16;HS21060700-16;;;

Purge Volume: 5.0

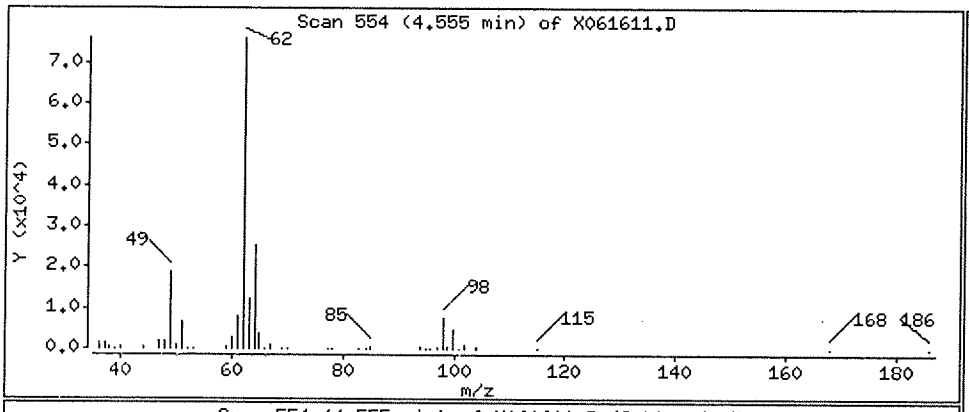
Operator: PC

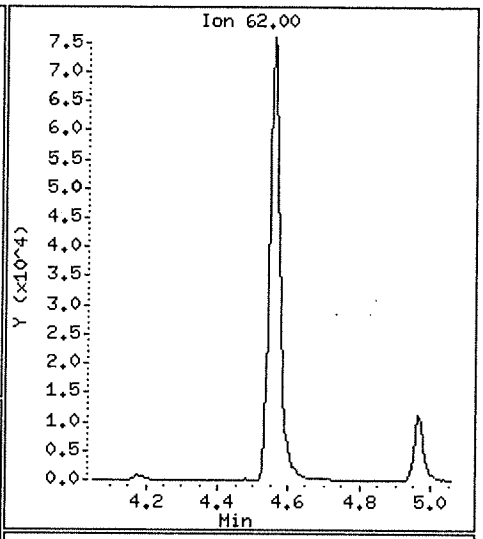
Column phase: DB624

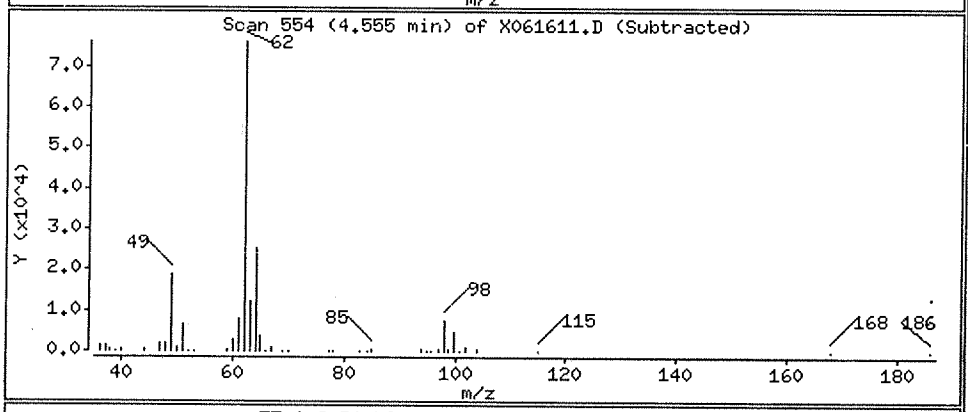
Column diameter: 0.18

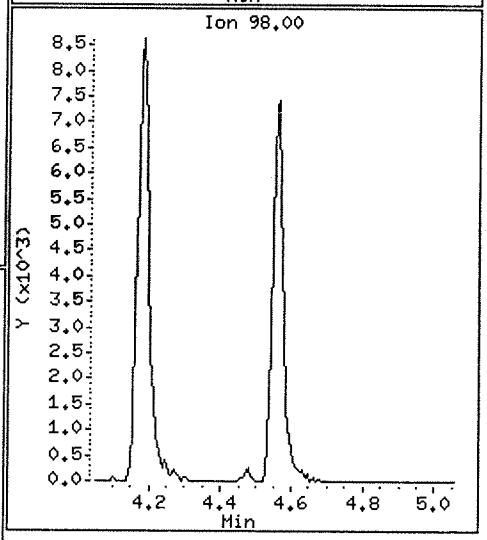
33 1,2-Dichloroethane

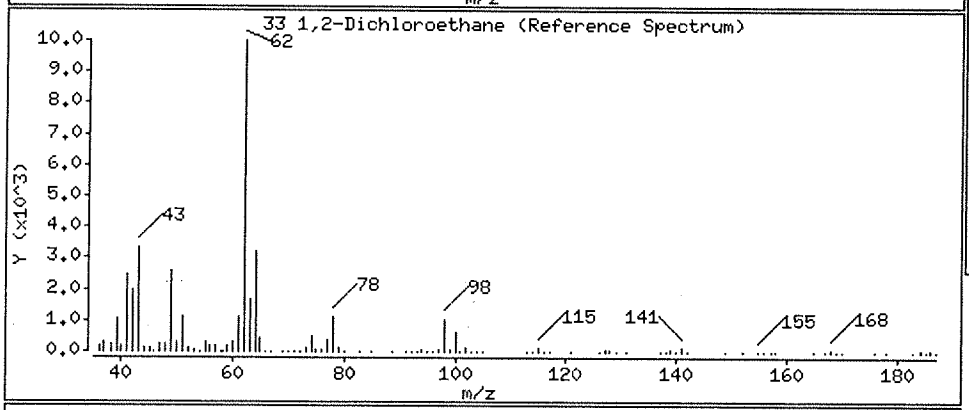
Concentration: 25.27 ug/l

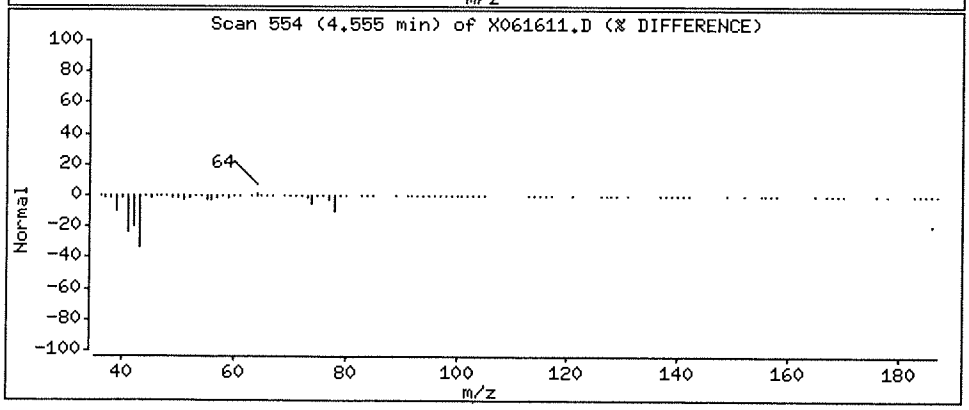












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061611.D Page 5

Date : 16-JUN-2021 13:54

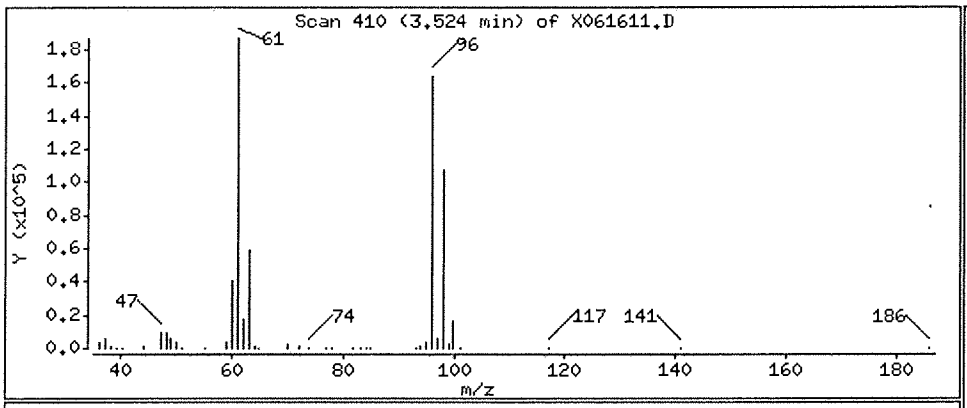
Client ID: HS21060700-16 Instrument: voa6.i

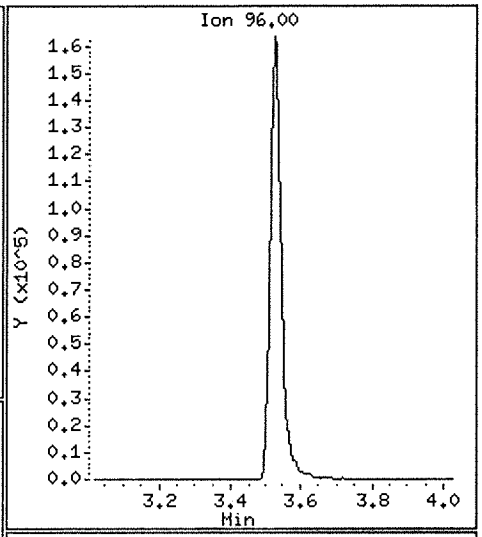
Sample Info: HS21060700-16;HS21060700-16;;;

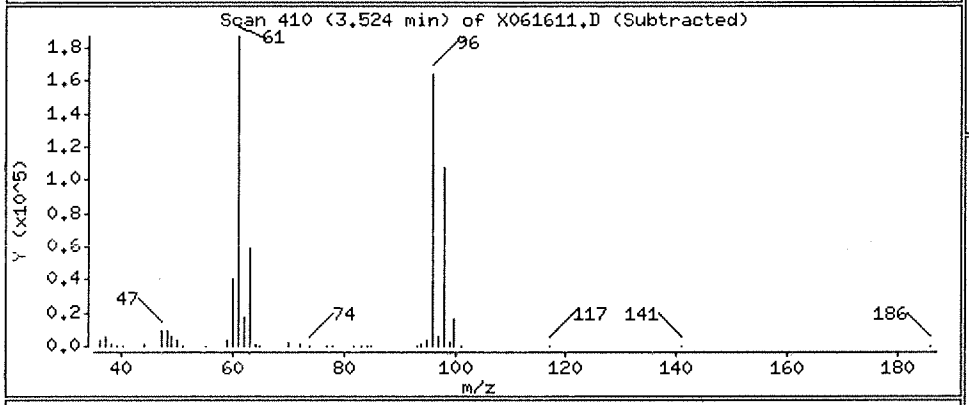
Purge Volume: 5.0 Operator: PC

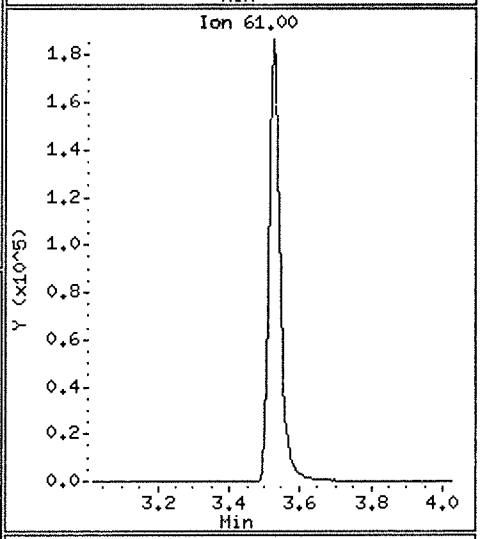
Column phase: DB624 Column diameter: 0.18

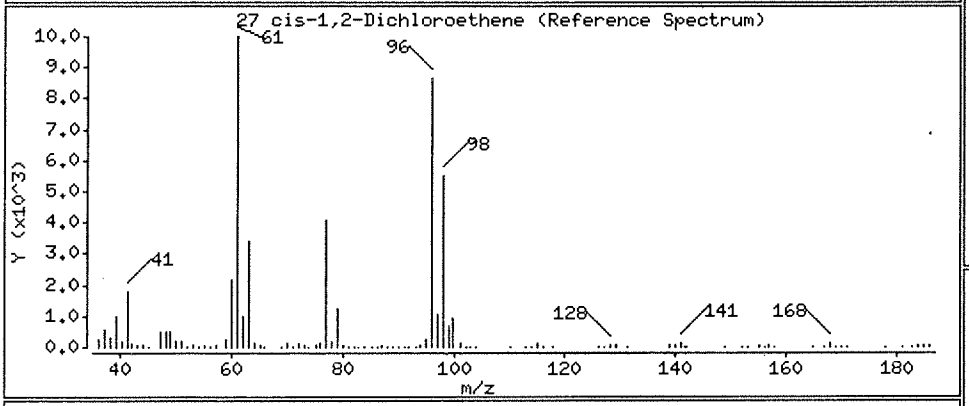
27 cis-1,2-Dichloroethene Concentration: 60.13 ug/l

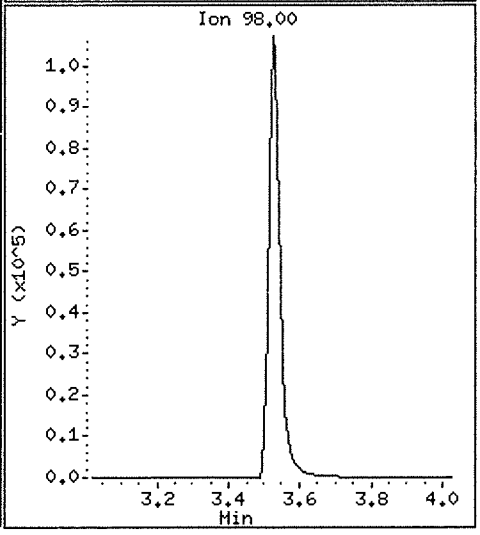


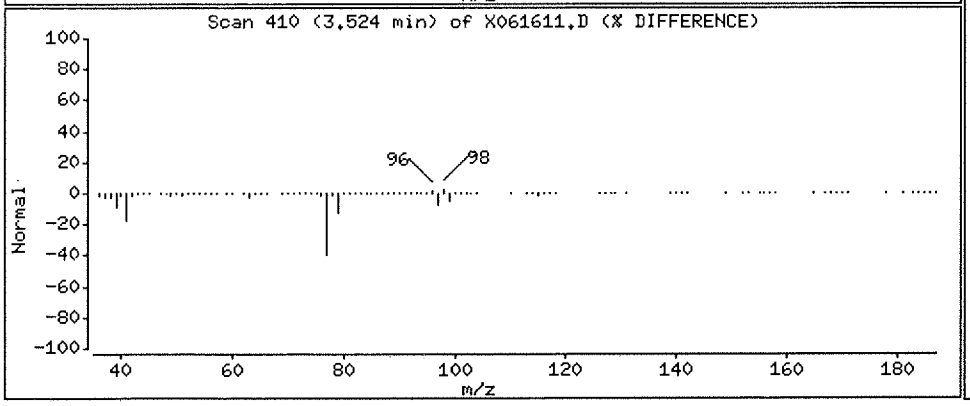












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061611.D

Date : 16-JUN-2021 13:54

Client ID: HS21060700-16

Instrument: voa6.i

Sample Info: HS21060700-16;HS21060700-16;;;

Purge Volume: 5.0

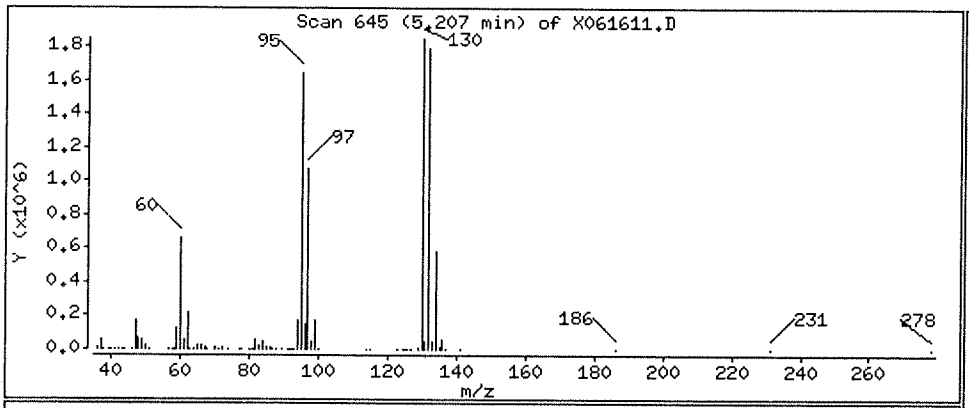
Operator: PC

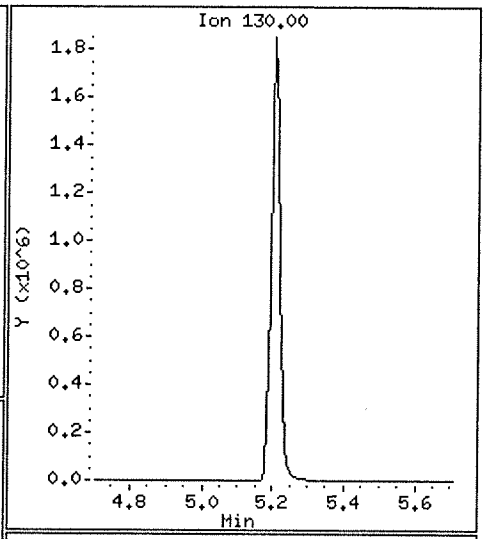
Column phase: DB624

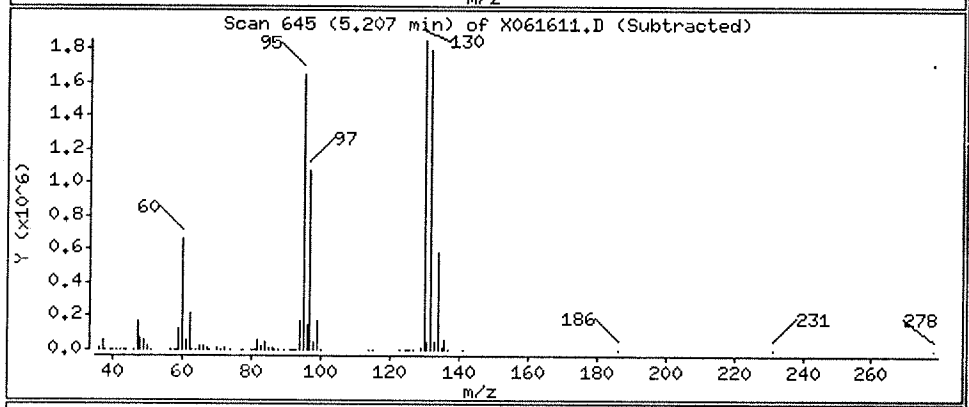
Column diameter: 0.18

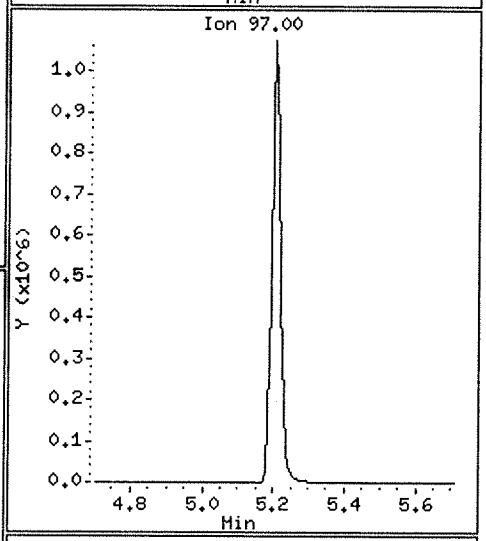
38 Trichloroethene

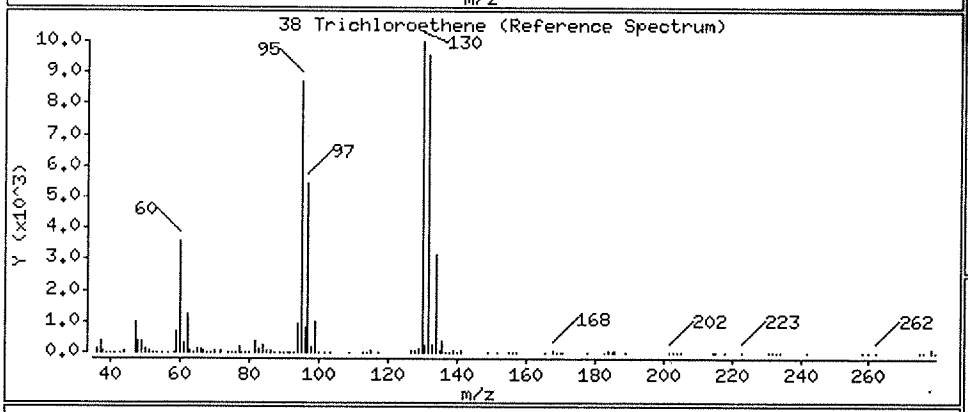
Concentration: 589.42 ug/l

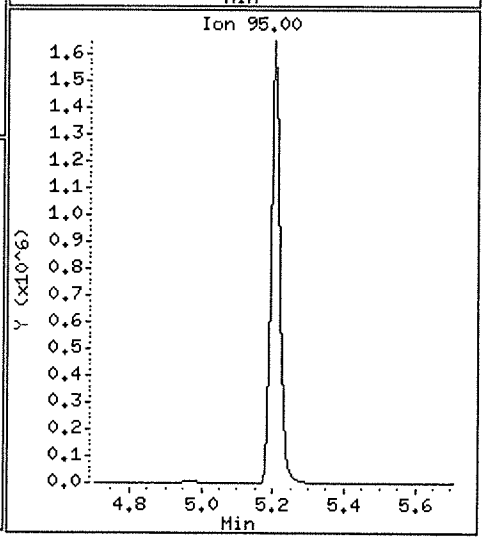


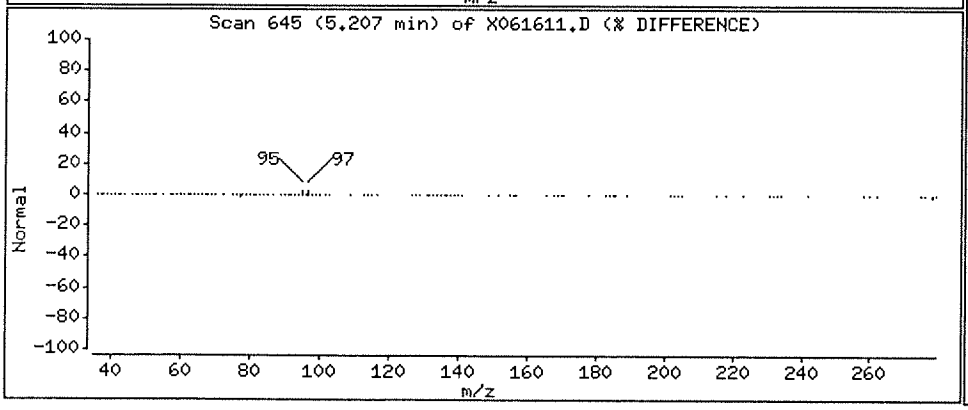












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061611.D

Date : 16-JUN-2021 13:54

Client ID: HS21060700-16

Instrument: voa6.i

Sample Info: HS21060700-16;HS21060700-16;;;

Purge Volume: 5.0

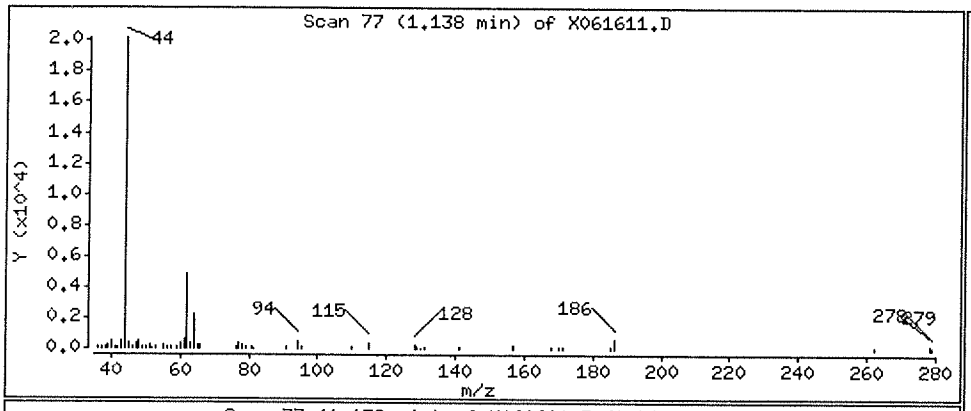
Operator: PC

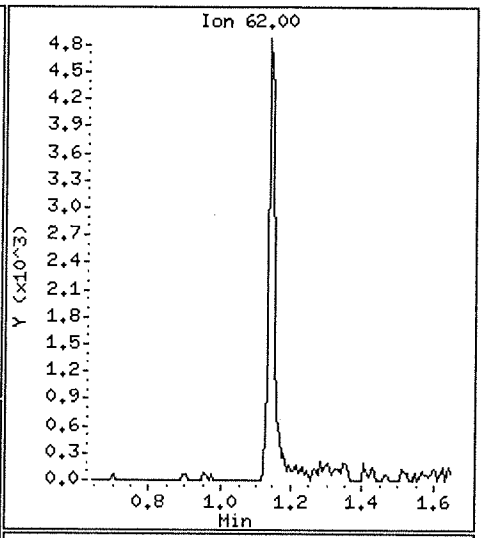
Column phase: DB624

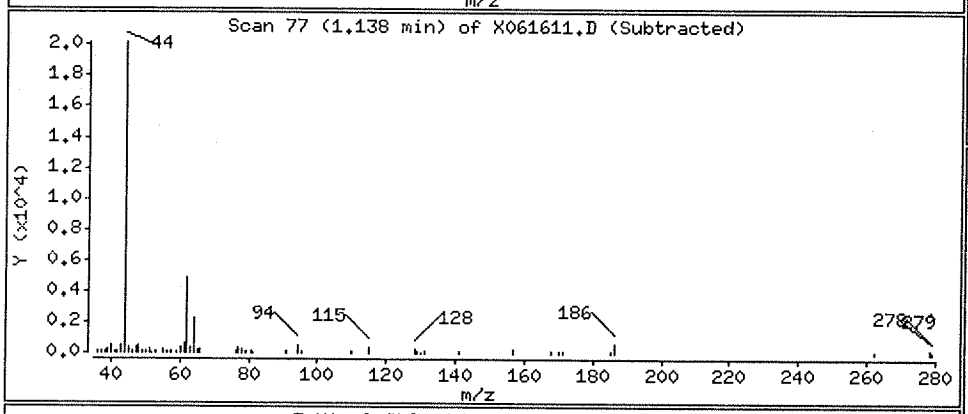
Column diameter: 0.18

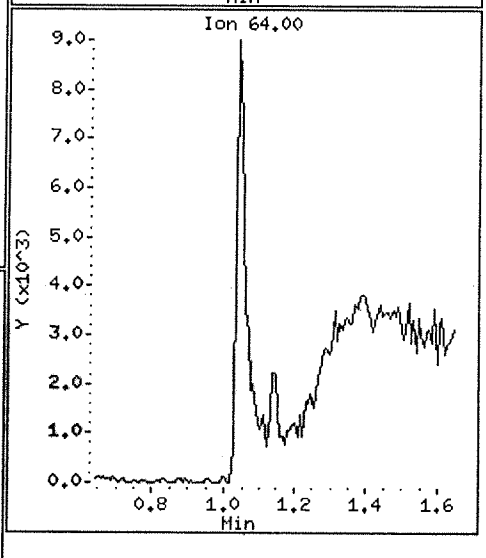
5 Vinyl Chloride

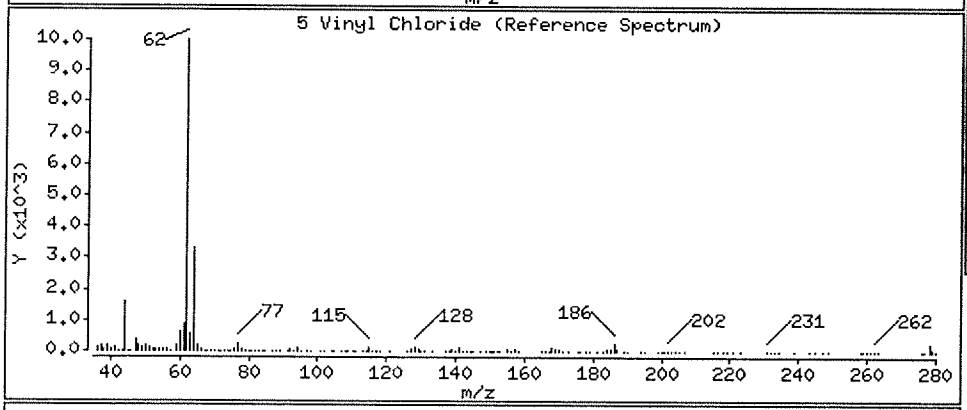
Concentration: 0.92 ug/l

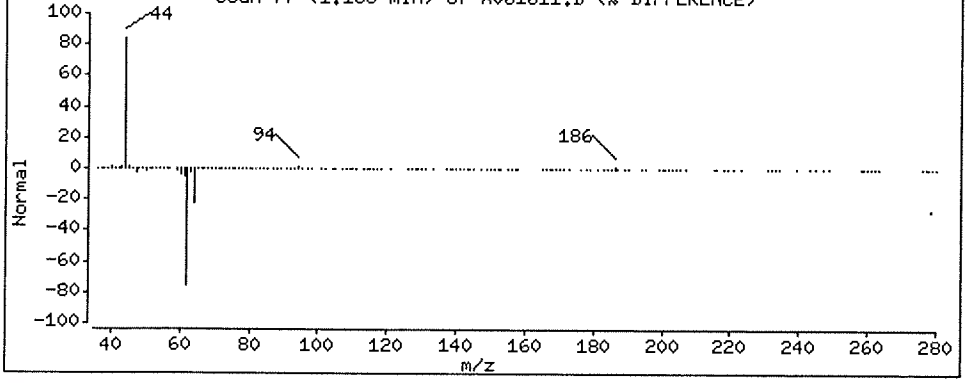












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061612.D
Lab Smp Id: HS21060700-15 Client Smp ID: HS21060700-15
Inj Date : 16-JUN-2021 14:15
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-15;HS21060700-15;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:40 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

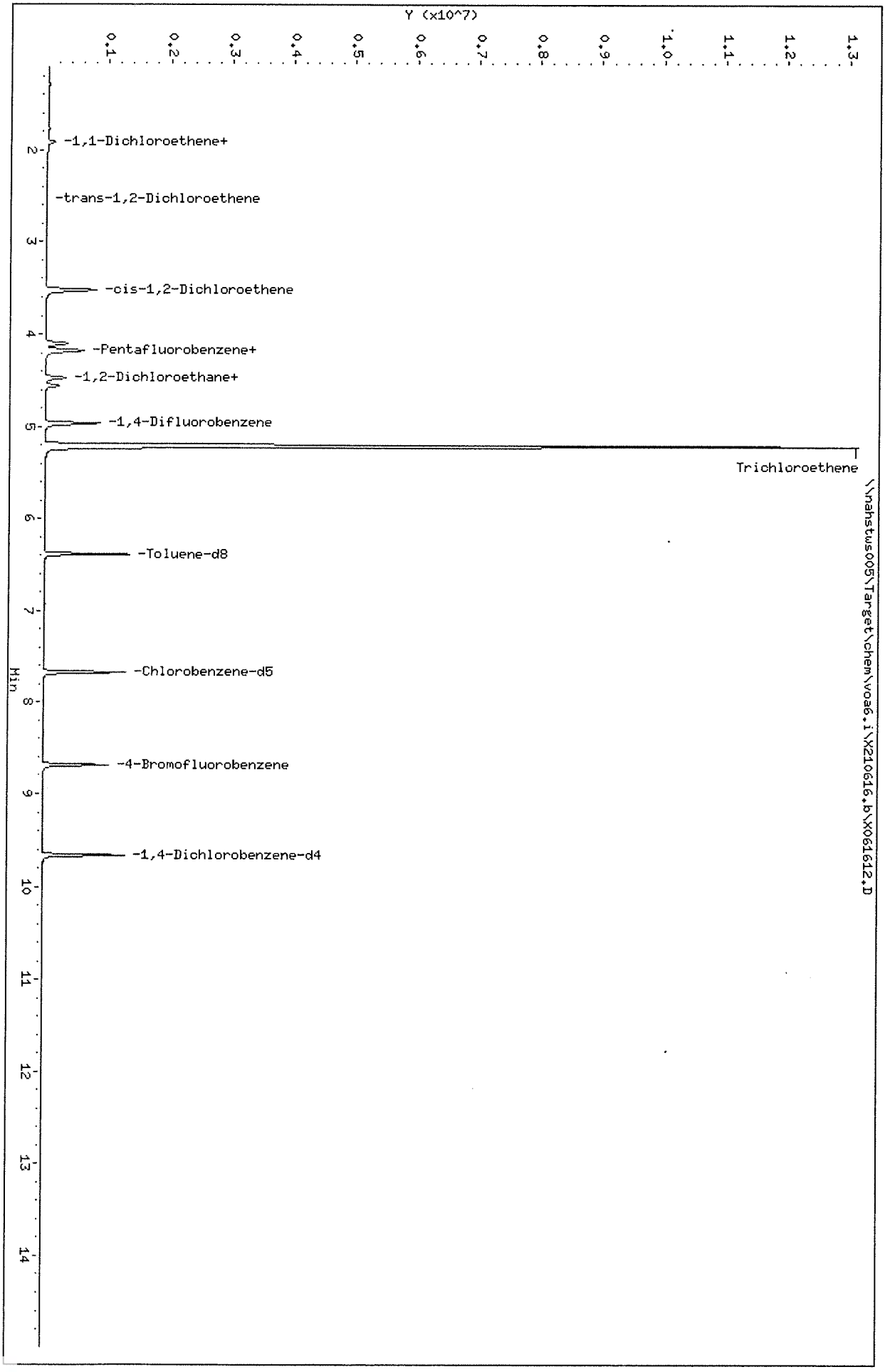
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	571281	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	777499	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	680647	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	341127	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	251107	44.6377	44.63
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	250268	45.8032	45.80
$ 48 Toluene-d8	98	6.388	6.381	(0.833)	874223	51.5631	51.56
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	281827	47.1906	47.19
11 1,1-Dichloroethene	96	1.912	1.911	(0.457)	10385	1.76479	1.76(a)
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	194116	31.3347	31.33
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	449225	75.0234	75.02
20 trans-1,2-Dichloroethene	96	2.535	2.527	(0.606)	3299	0.61846	0.61(a)
38 Trichloroethene	130	5.207	5.206	(1.049)	4455819	835.004	835.00(A)

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061612.D
Date : 16-JUN-2021 14:15
Client ID: HS21060700-15
Sample Info: HS21060700-15;HS21060700-15;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061612.D

Date : 16-JUN-2021 14:15

Client ID: HS21060700-15

Instrument: voa6.i

Sample Info: HS21060700-15;HS21060700-15;;;

Purge Volume: 5.0

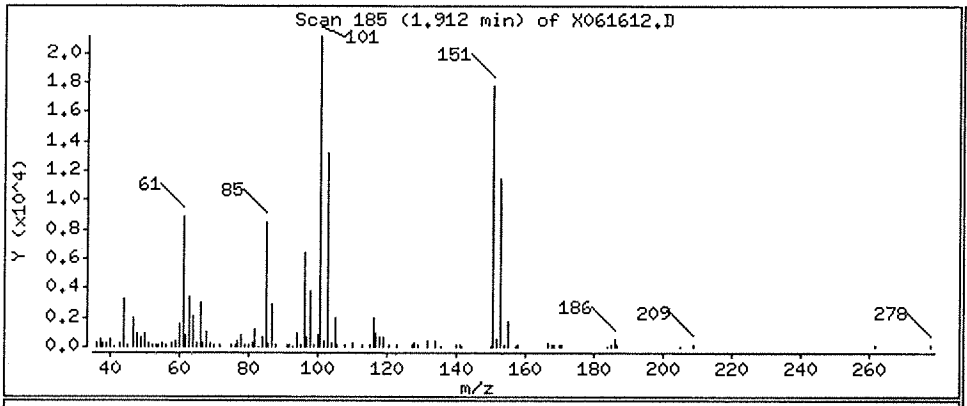
Operator: PC

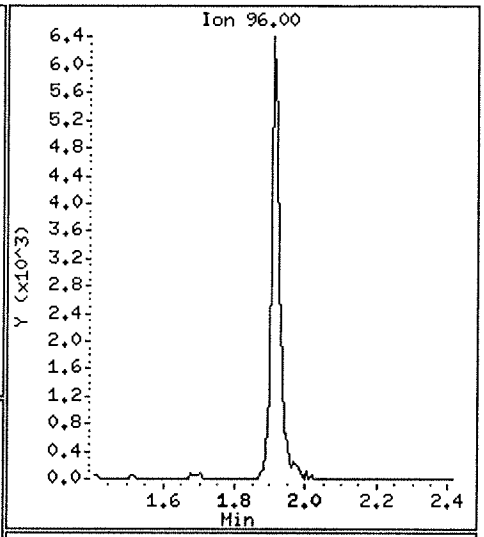
Column phase: DB624

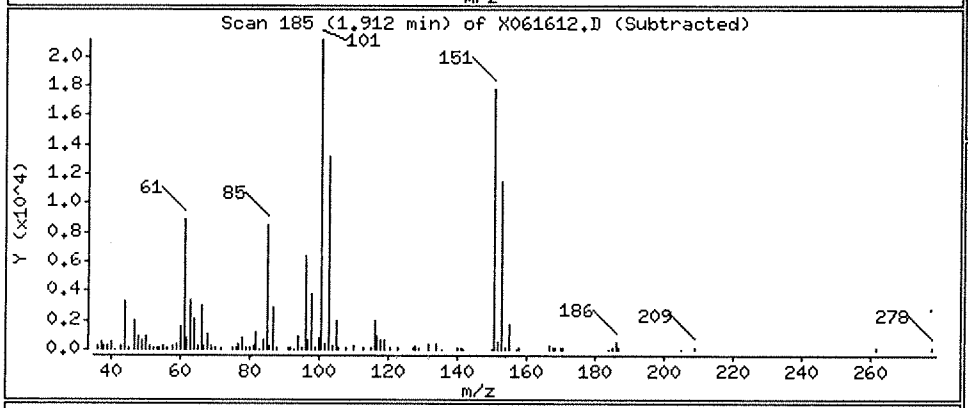
Column diameter: 0.18

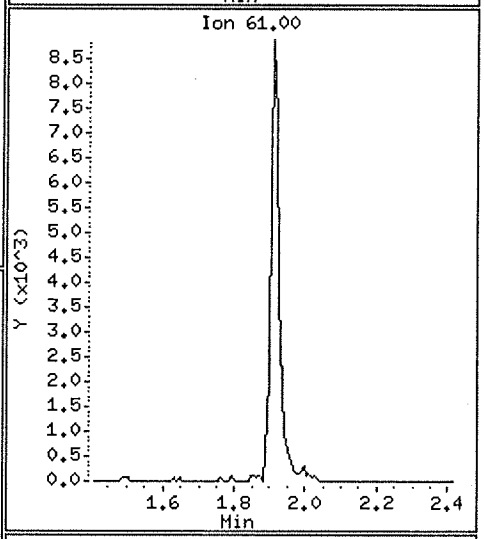
11 1,1-Dichloroethene

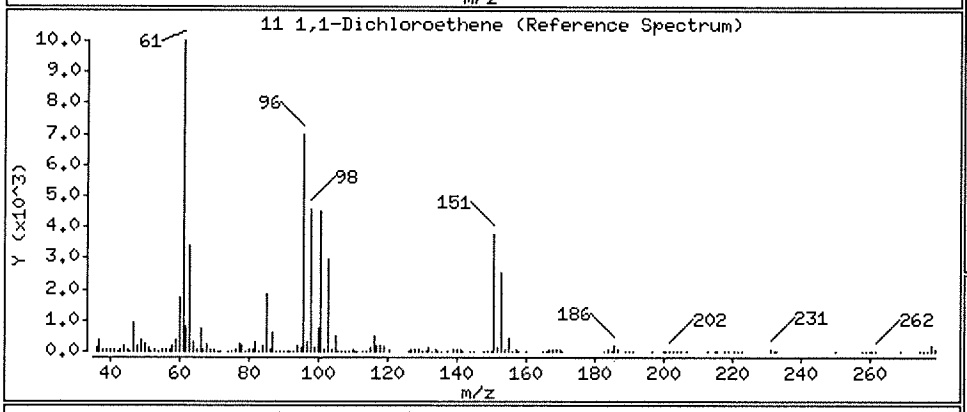
Concentration: 1.76 ug/l

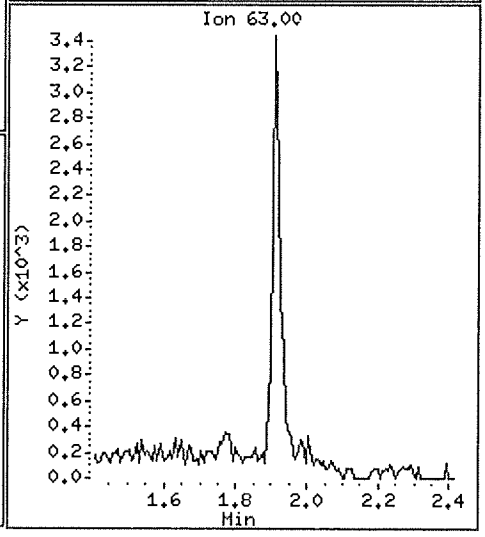


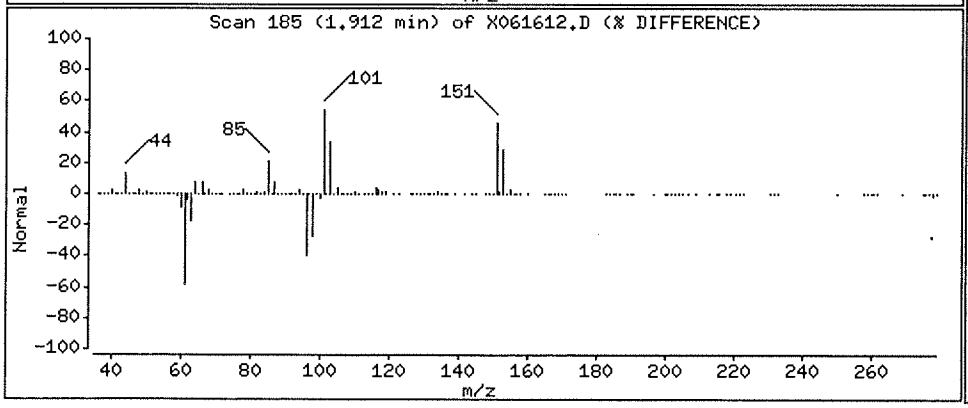












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061612.D

Date : 16-JUN-2021 14:15

Client ID: HS21060700-15

Instrument: voa6.i

Sample Info: HS21060700-15;HS21060700-15;;;

Purge Volume: 5.0

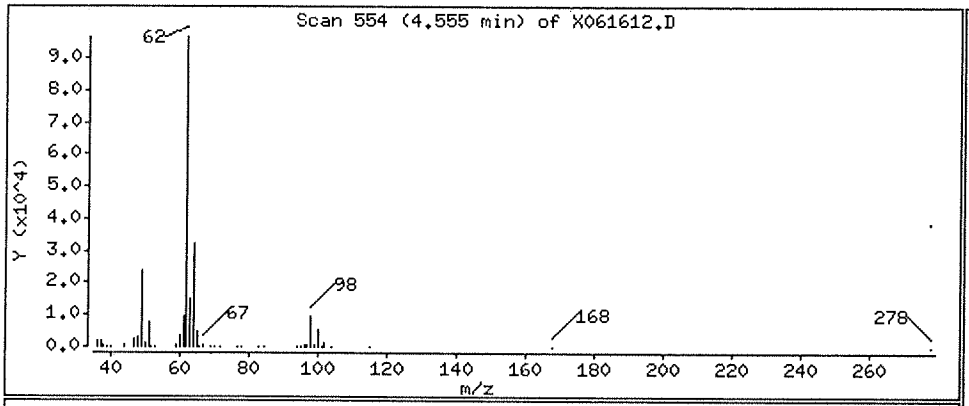
Operator: PC

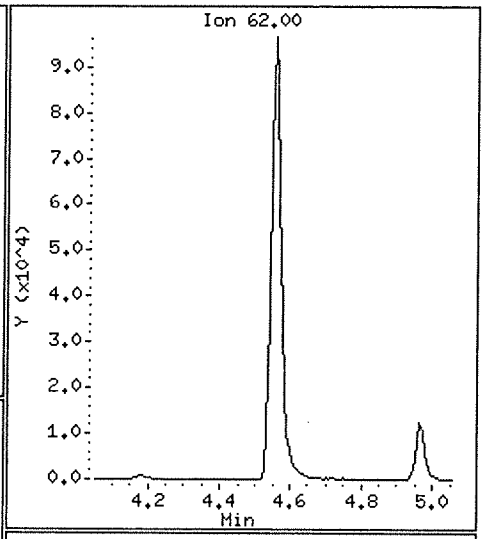
Column phase: DB624

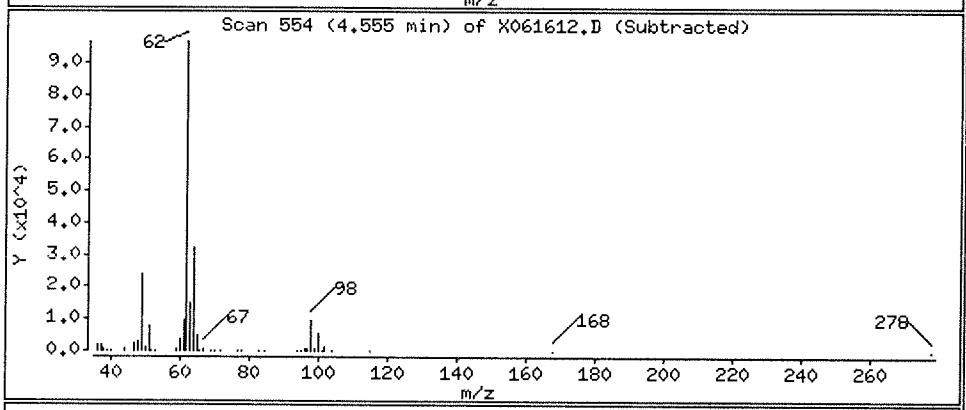
Column diameter: 0.18

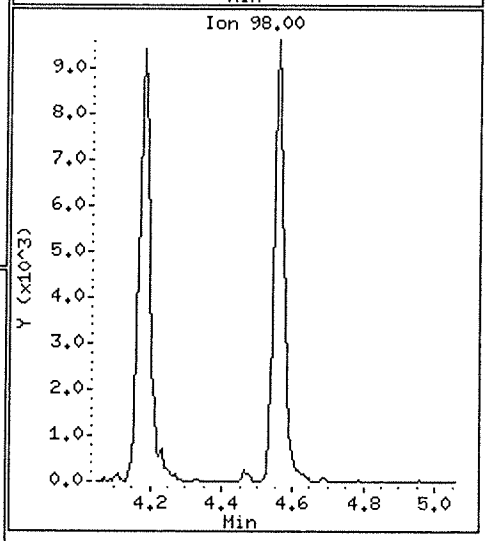
33 1,2-Dichloroethane

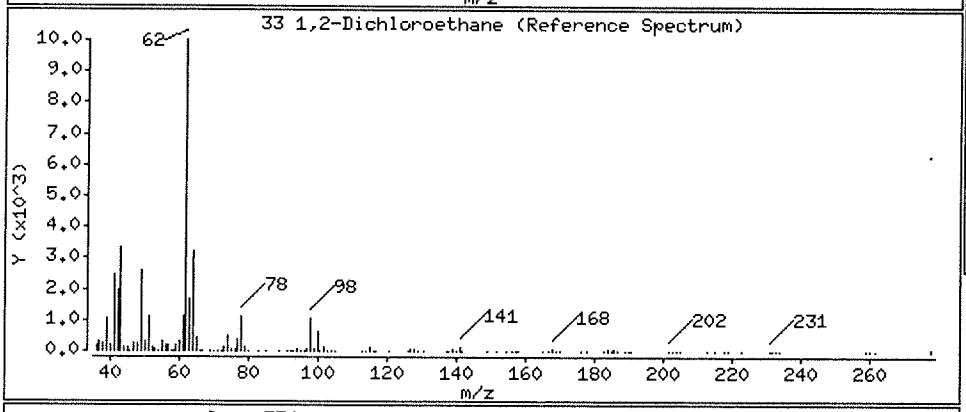
Concentration: 31.33 ug/l

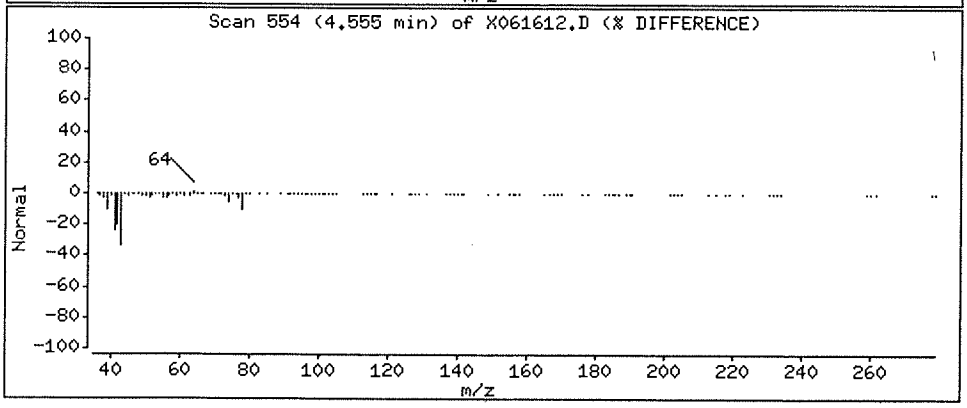












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061612.D

Date : 16-JUN-2021 14:15

Client ID: HS21060700-15

Instrument: voa6.i

Sample Info: HS21060700-15;HS21060700-15;;;

Purge Volume: 5.0

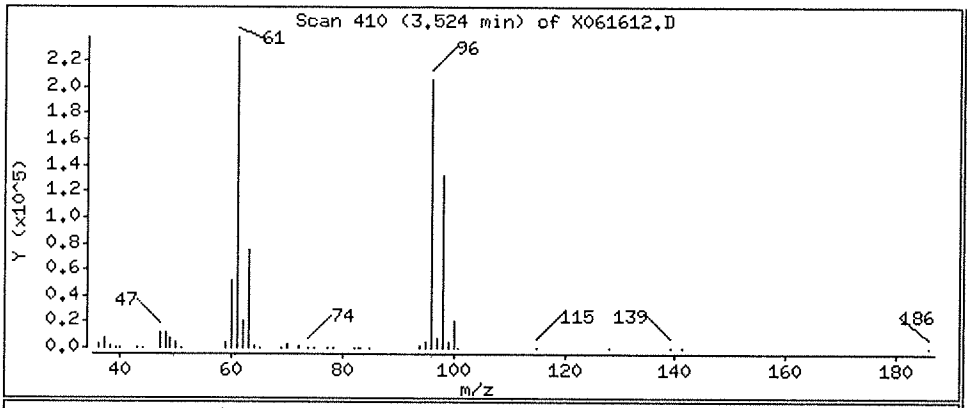
Operator: PC

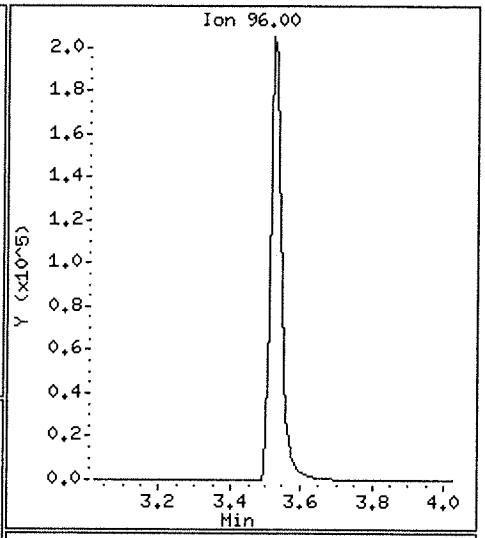
Column phase: DB624

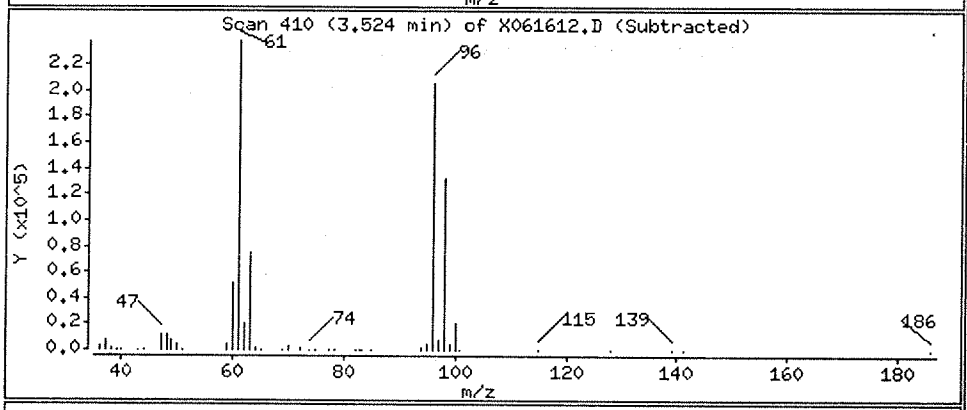
Column diameter: 0.18

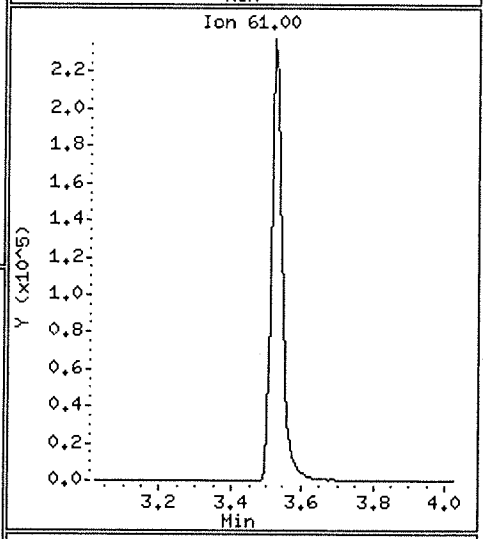
27 cis-1,2-Dichloroethene

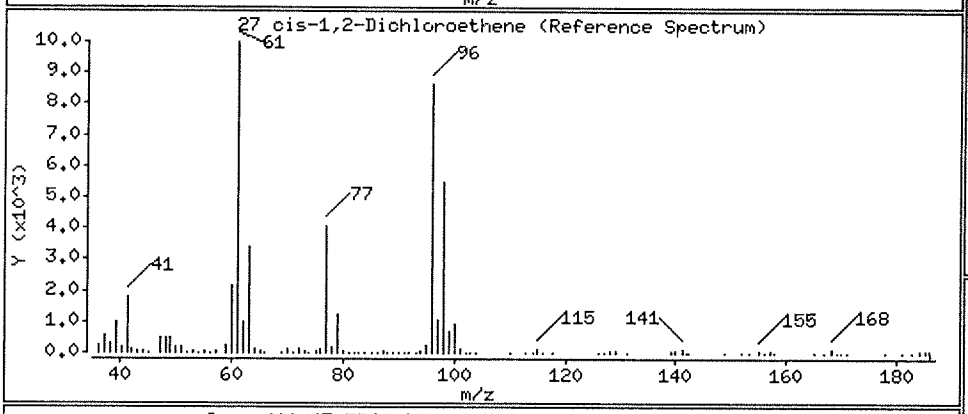
Concentration: 75.02 ug/l

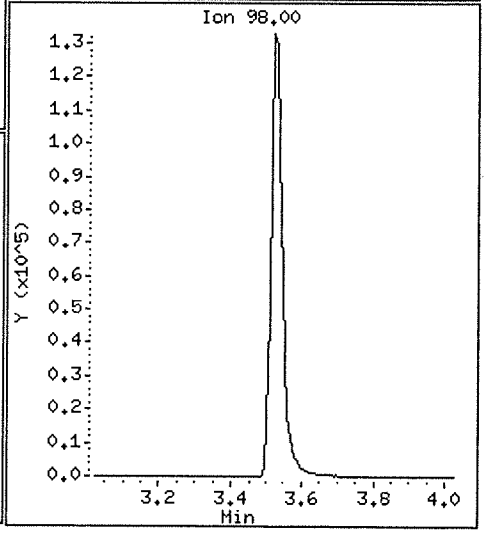


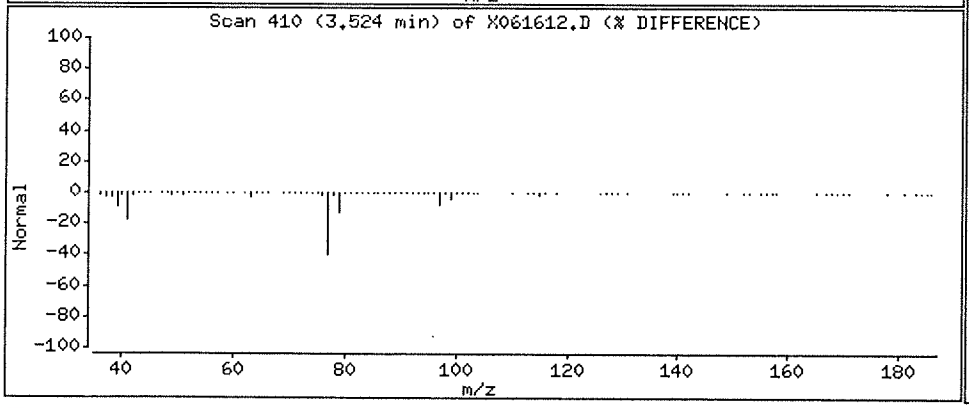












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061612.D

Date : 16-JUN-2021 14:15

Client ID: HS21060700-15

Instrument: voa6.i

Sample Info: HS21060700-15;HS21060700-15;;;

Purge Volume: 5.0

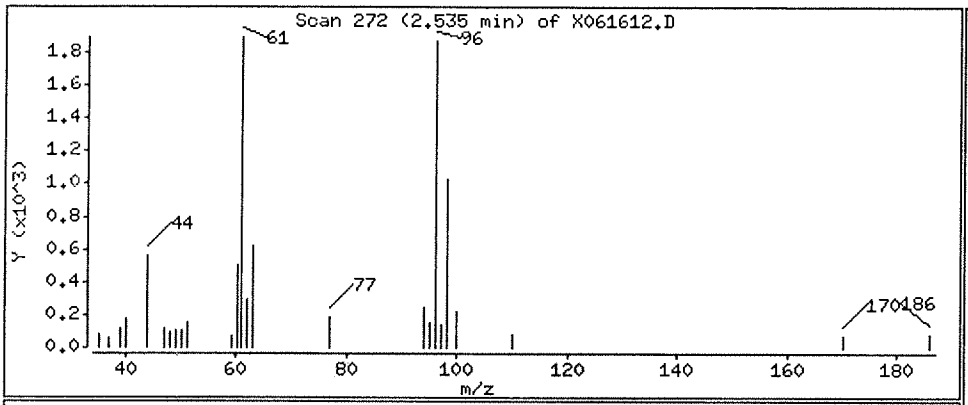
Operator: PC

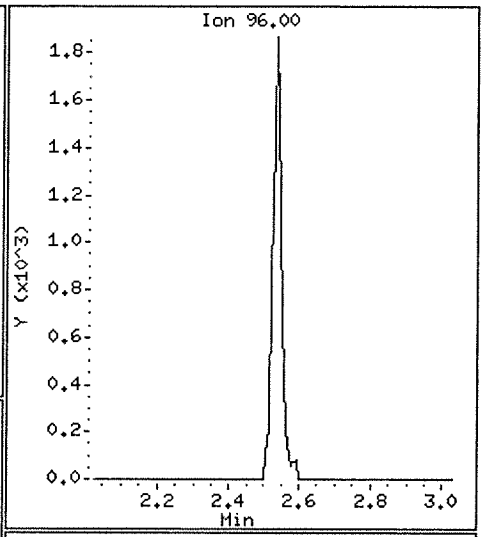
Column phase: DB624

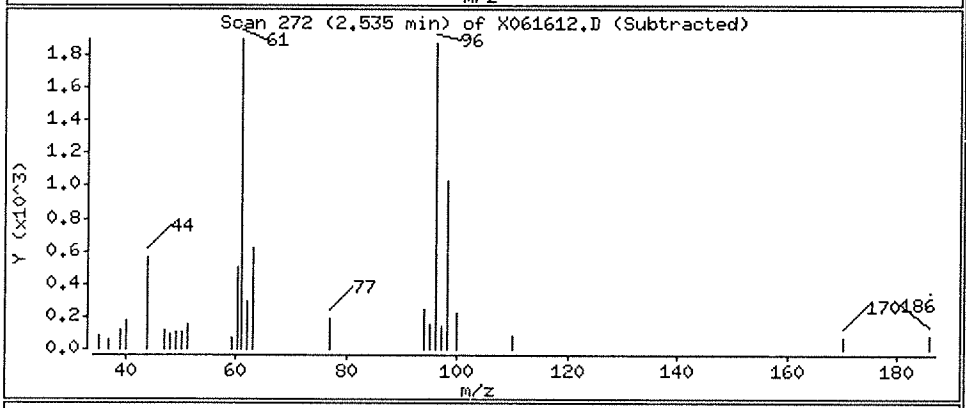
Column diameter: 0.18

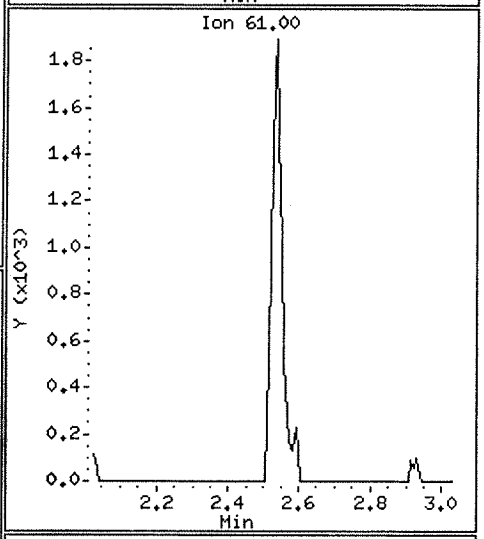
20 trans-1,2-Dichloroethene

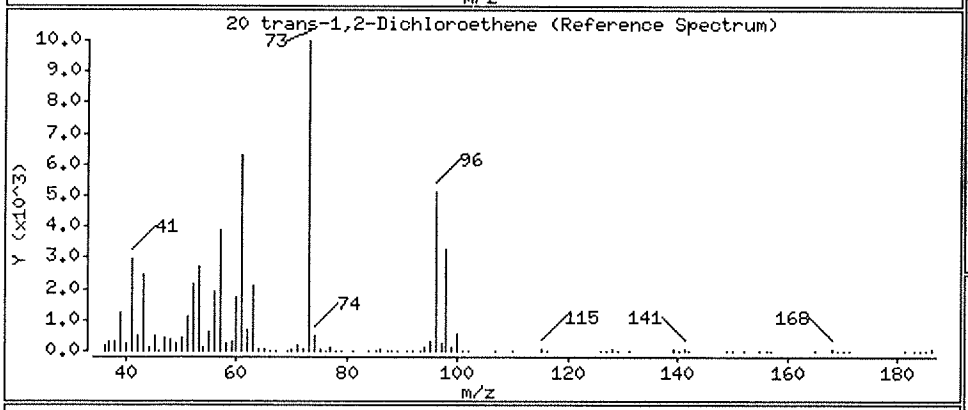
Concentration: 0.61 ug/l

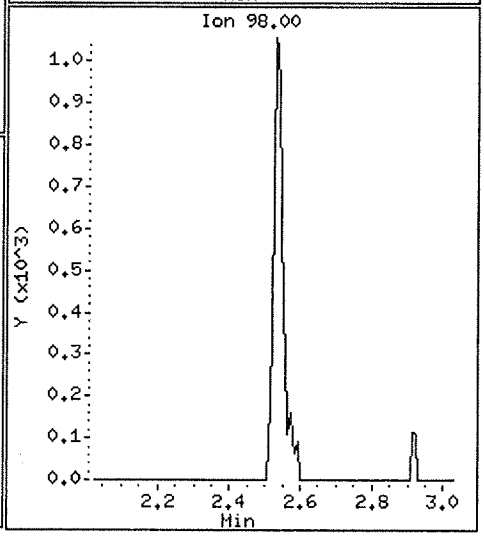


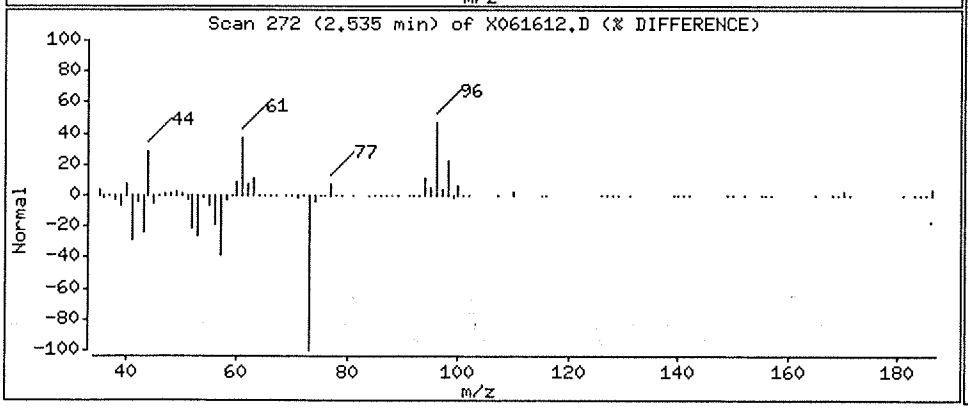












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061612.D

Date : 16-JUN-2021 14:15

Client ID: HS21060700-15

Instrument: voa6.i

Sample Info: HS21060700-15;HS21060700-15;;;

Purge Volume: 5.0

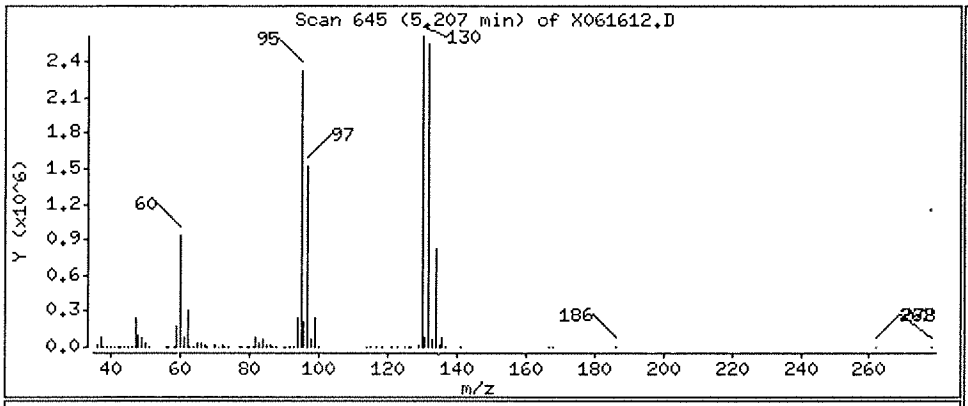
Operator: PC

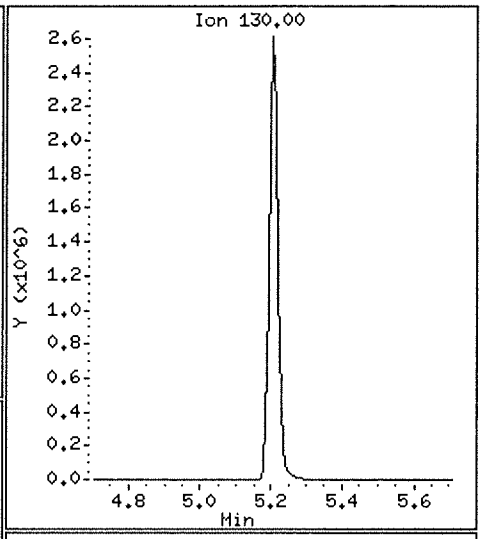
Column phase: DB624

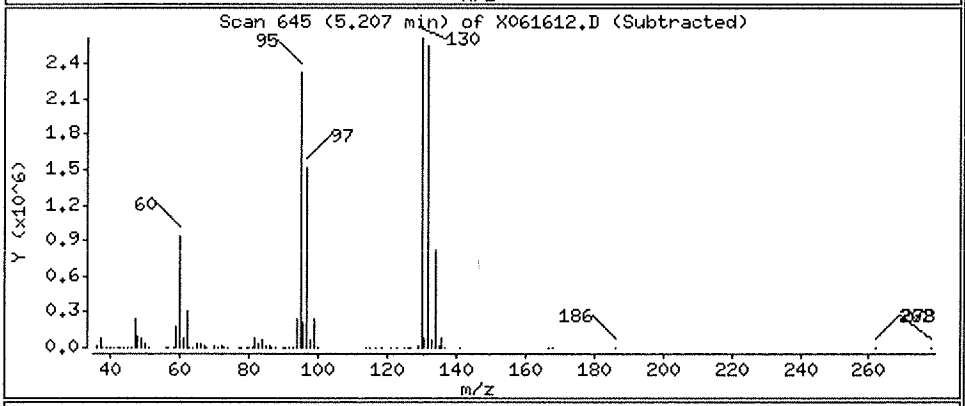
Column diameter: 0.18

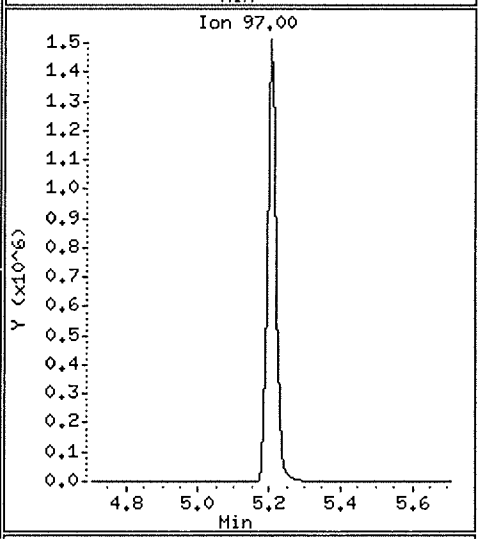
38 Trichloroethene

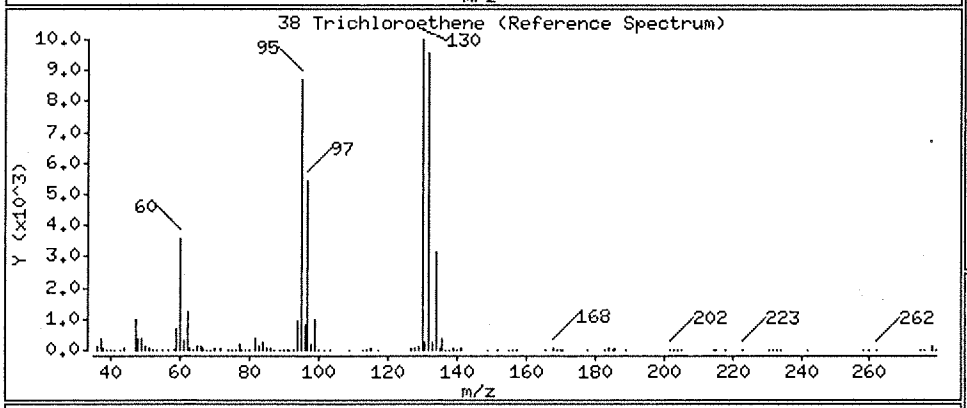
Concentration: 835.00 ug/l

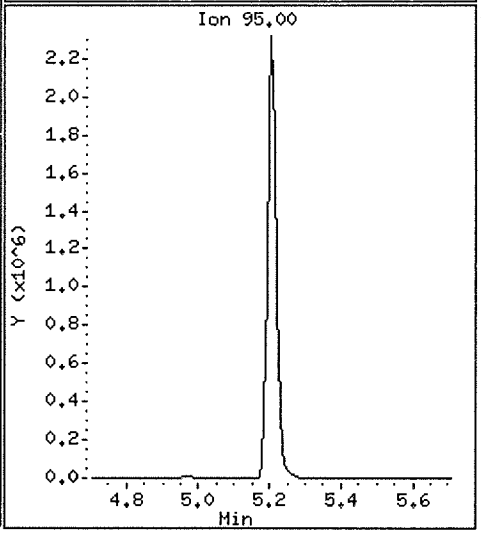


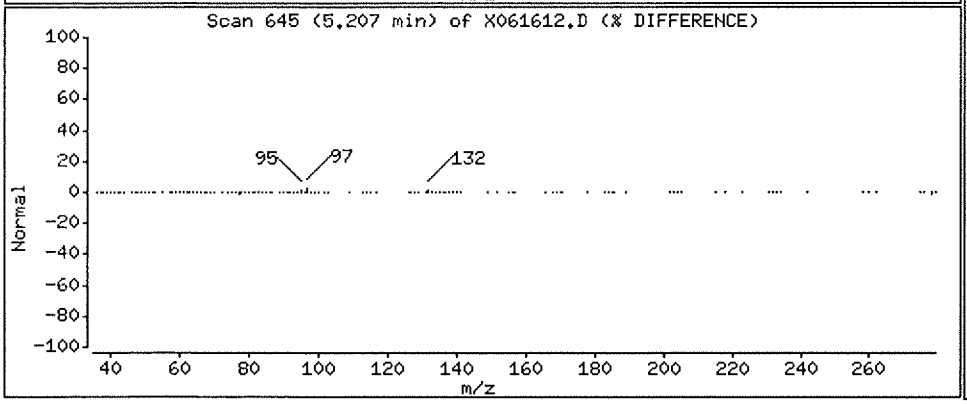












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061613.D
Lab Smp Id: HS21060700-24 Client Smp ID: HS21060700-24
Inj Date : 16-JUN-2021 14:36
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-24;HS21060700-24;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:40 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

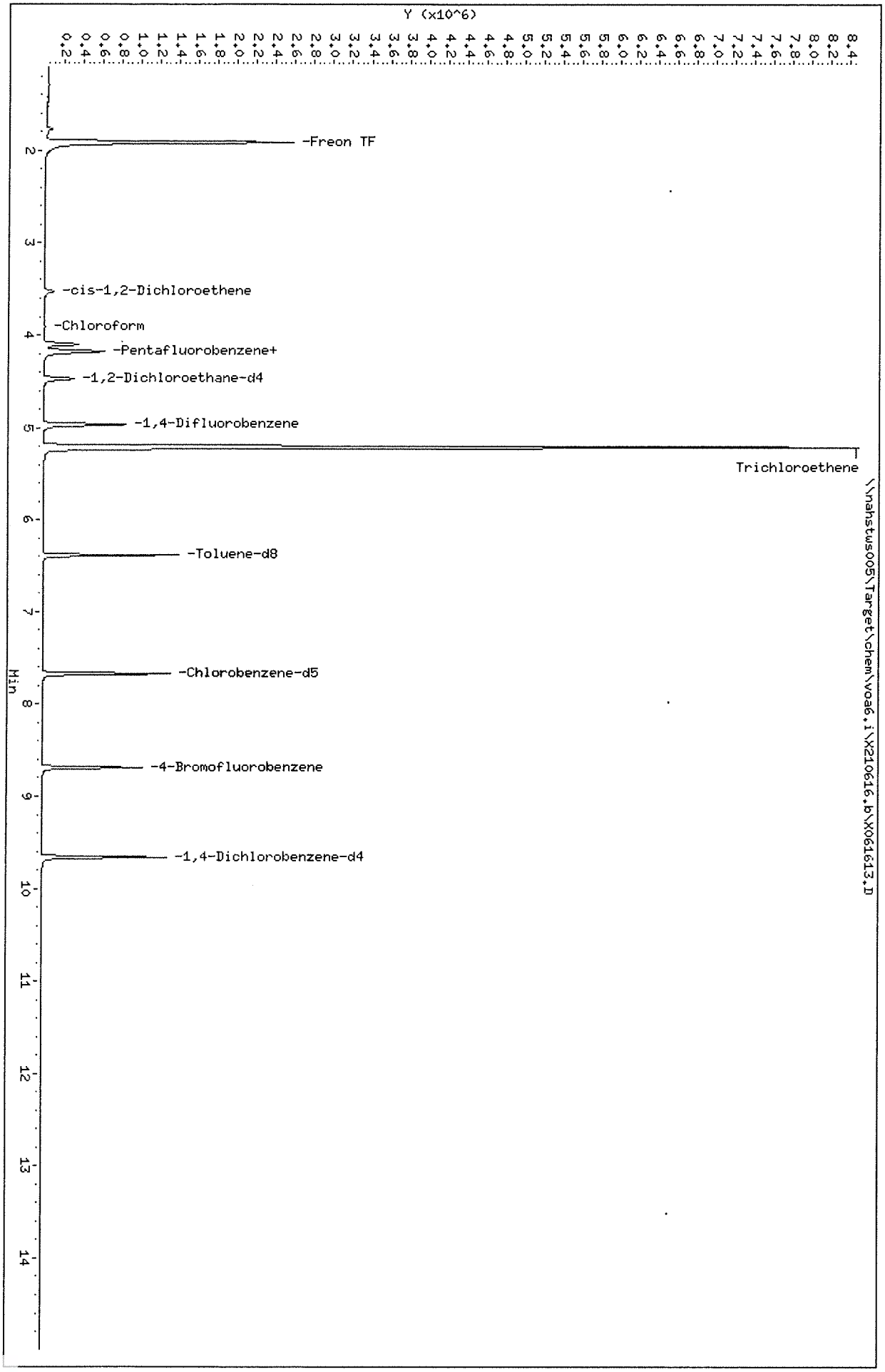
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	567583	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	778533	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	673753	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	333075	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	247038	44.1989	44.19
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	247246	45.5410	45.54
$ 48 Toluene-d8	98	6.388	6.381	(0.833)	878804	52.3636	52.36
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	284920	48.1807	48.18
28 Chloroform	83	3.910	3.903	(0.935)	6902	0.69149	0.69(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	57388	9.64660	9.64
38 Trichloroethene	130	5.206	5.206	(1.049)	2931264	548.578	548.57(A)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061613.D
Date : 16-JUN-2021 14:36
Client ID: HS21060700-24
Sample Info: HS21060700-24;HS21060700-24;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061613.D

Date : 16-JUN-2021 14:36

Client ID: HS21060700-24

Instrument: voa6.i

Sample Info: HS21060700-24;HS21060700-24;;;

Purge Volume: 5.0

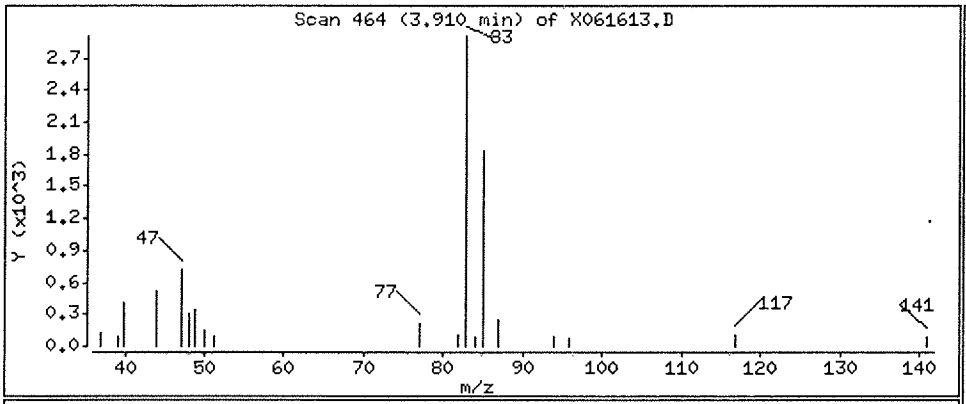
Operator: PC

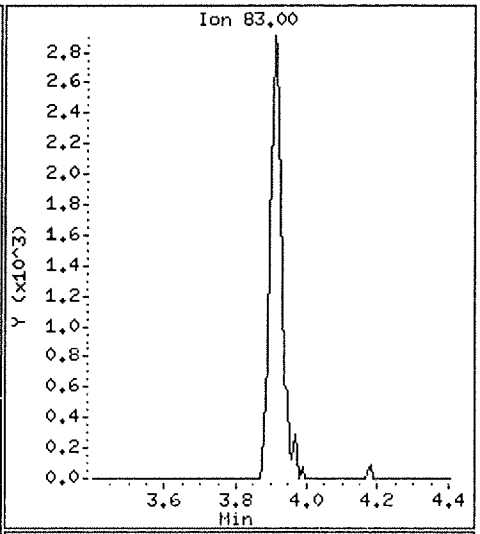
Column phase: DB624

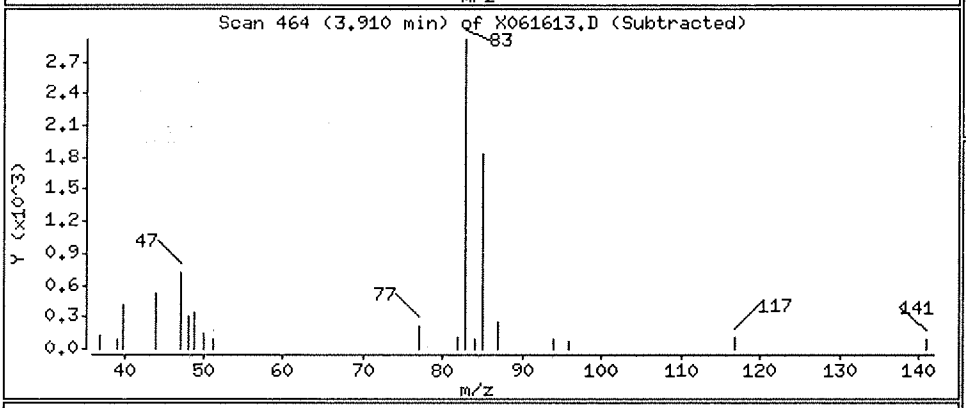
Column diameter: 0.18

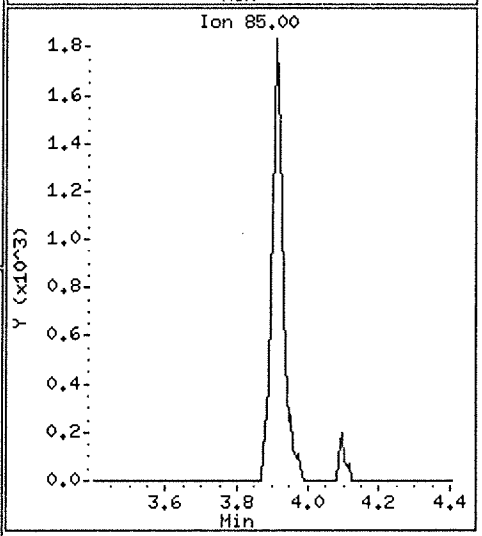
28 Chloroform

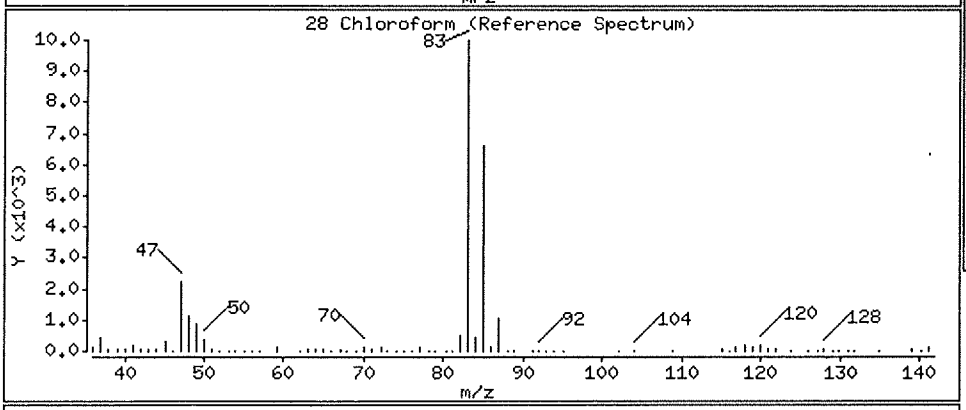
Concentration: 0.69 ug/l

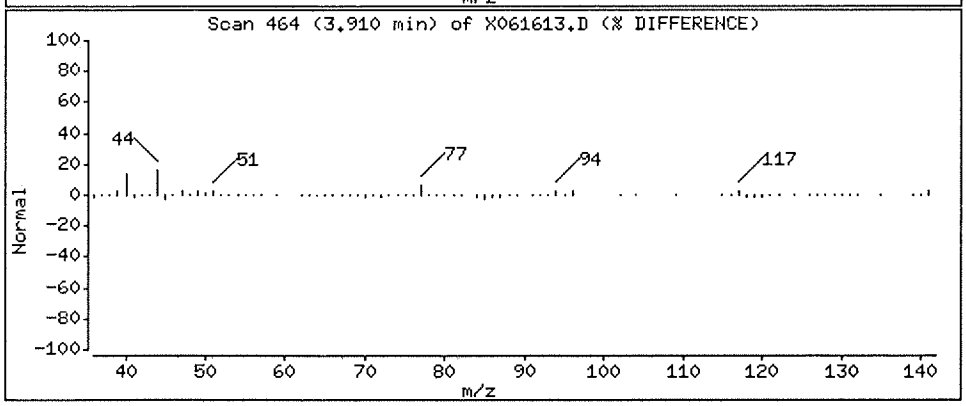












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Date : 16-JUN-2021 14:36

Client ID: HS21060700-24

Instrument: voa6.i

Sample Info: HS21060700-24;HS21060700-24;;;

Purge Volume: 5.0

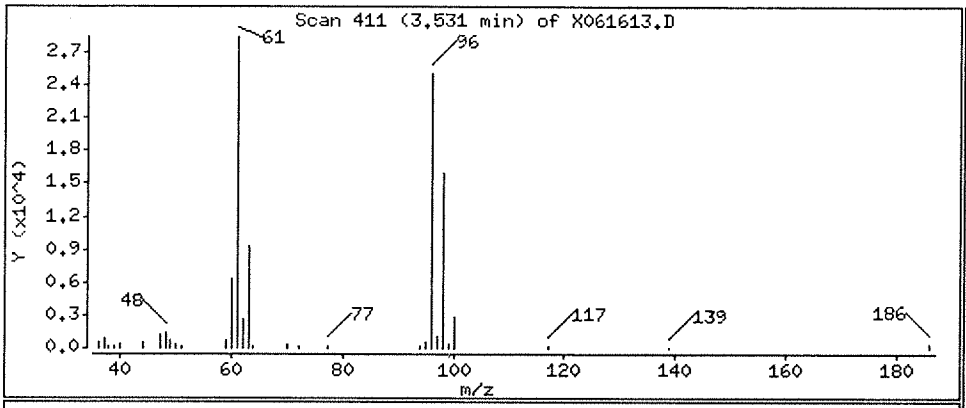
Operator: PC

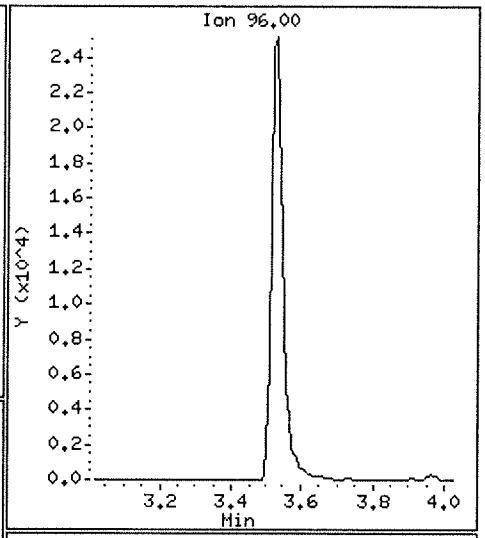
Column phase: DB624

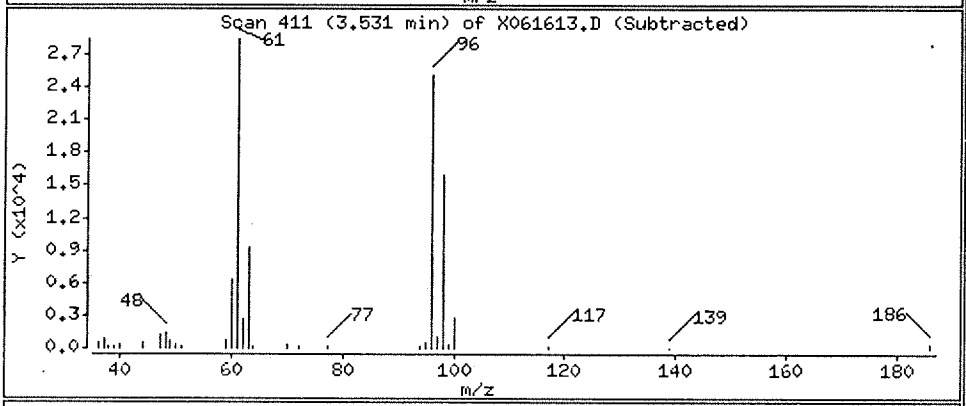
Column diameter: 0.18

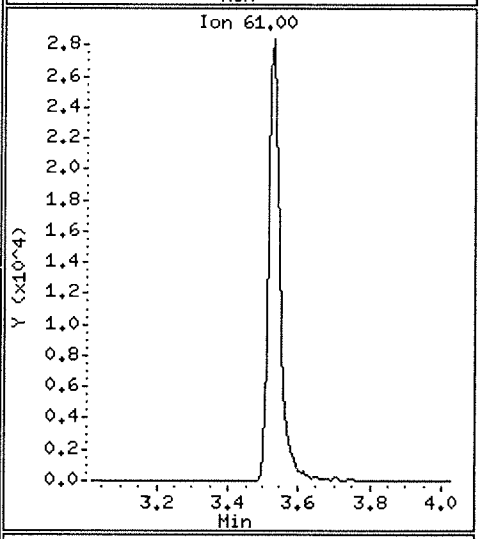
27 cis-1,2-Dichloroethene

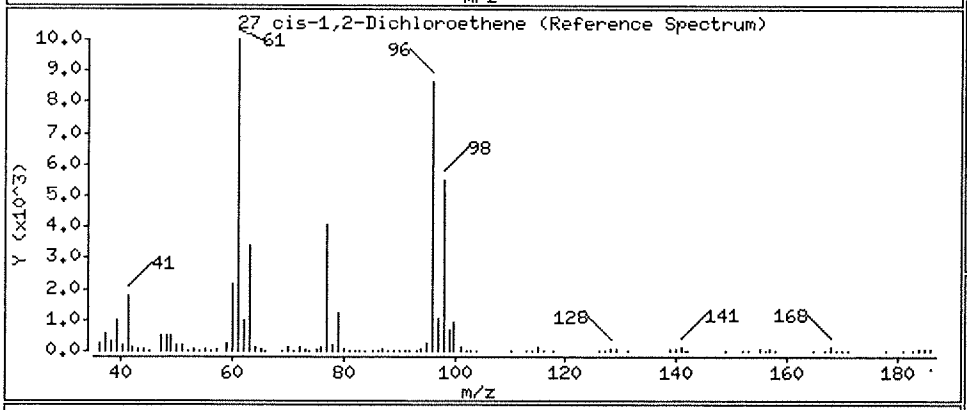
Concentration: 9.64 ug/l

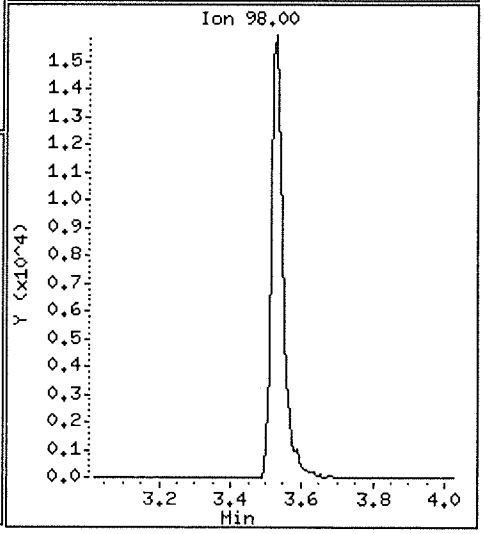


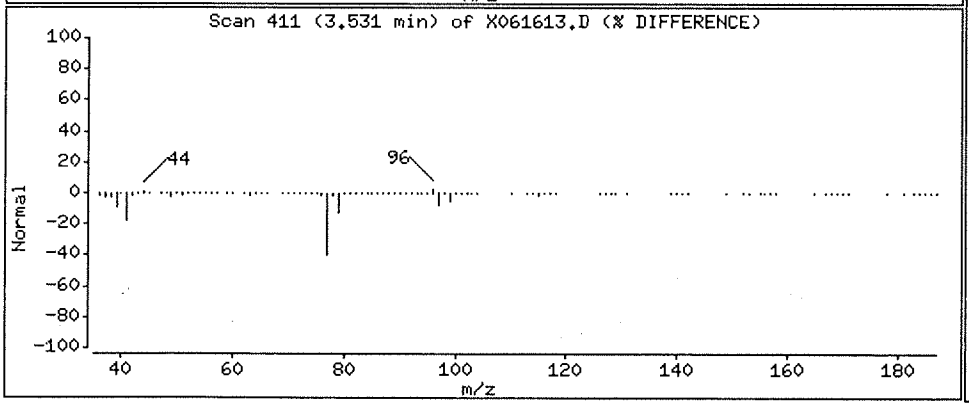












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061613.D

Date : 16-JUN-2021 14:36

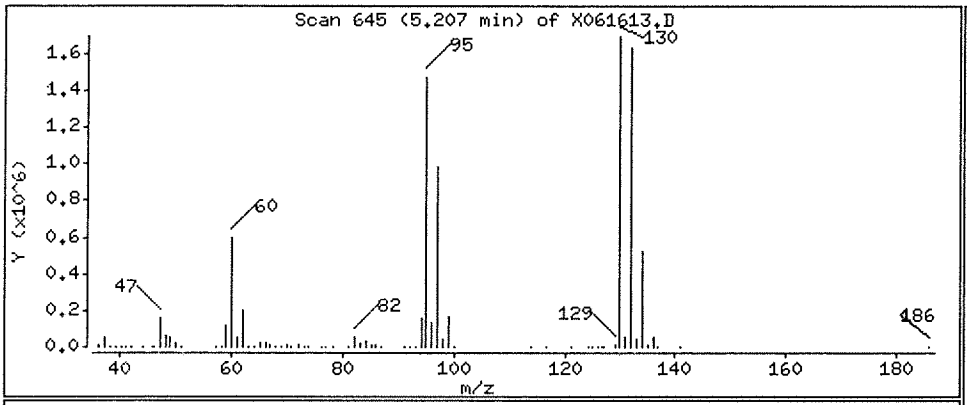
Client ID: HS21060700-24 Instrument: voa6.i

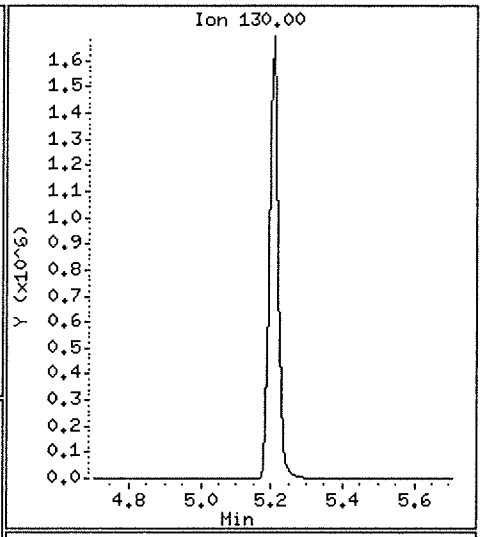
Sample Info: HS21060700-24;HS21060700-24;;;

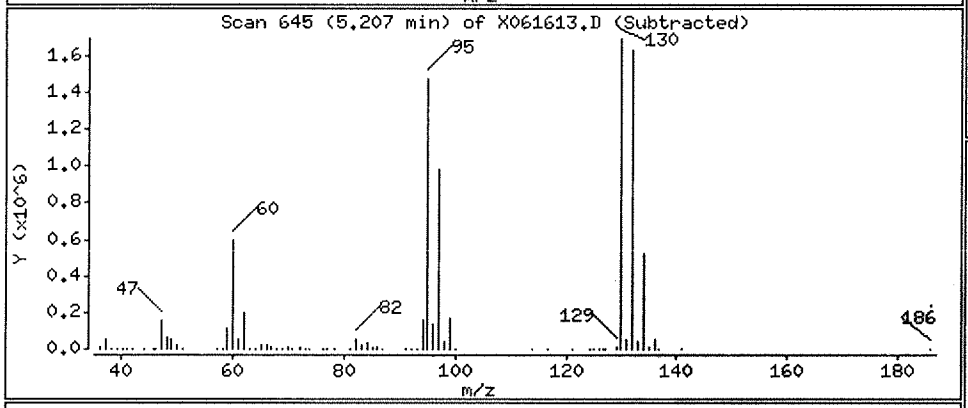
Purge Volume: 5.0 Operator: PC

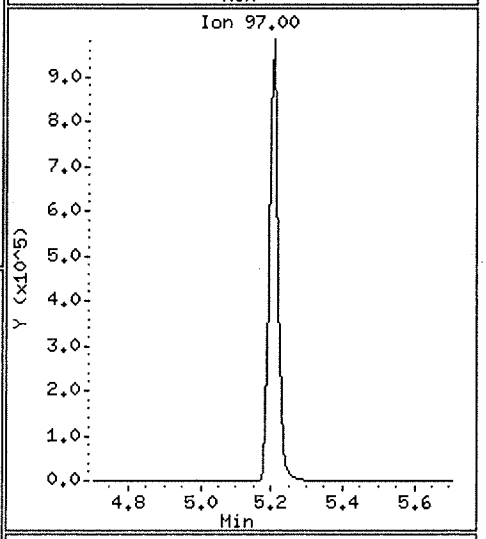
Column phase: DB624 Column diameter: 0.18

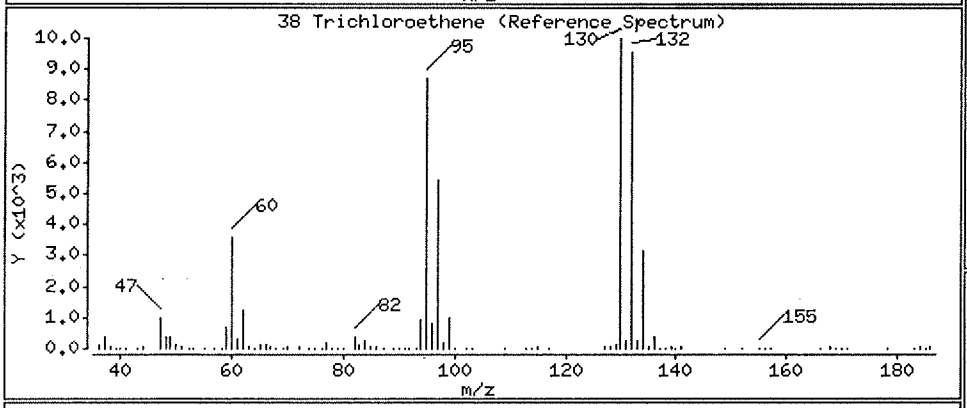
38 Trichloroethene Concentration: 548.57 ug/l

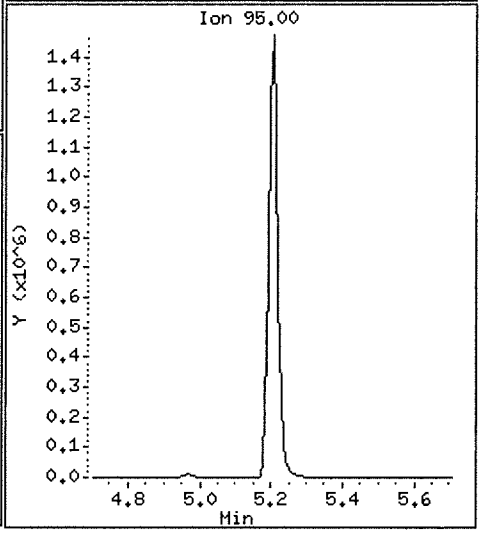


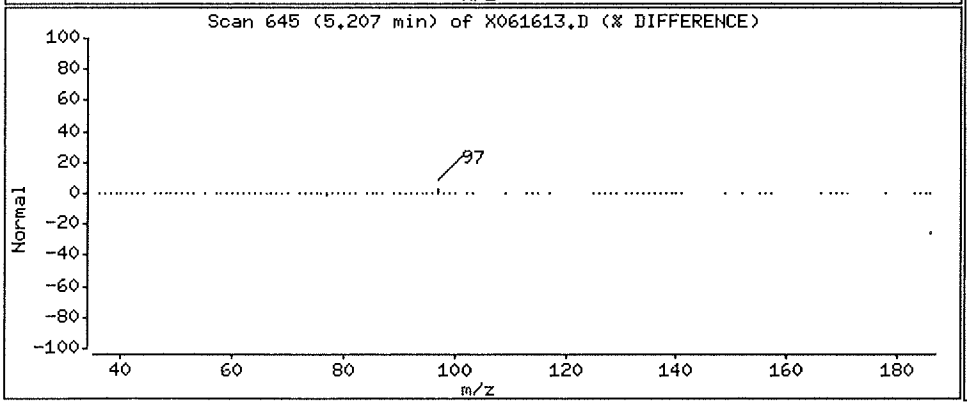












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Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061614.D
Lab Smp Id: HS21060700-09MS Client Smp ID: HS21060700-09MS
Inj Date : 16-JUN-2021 14:57
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-09MS;HS21060700-09MS;3;;MS
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:46 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

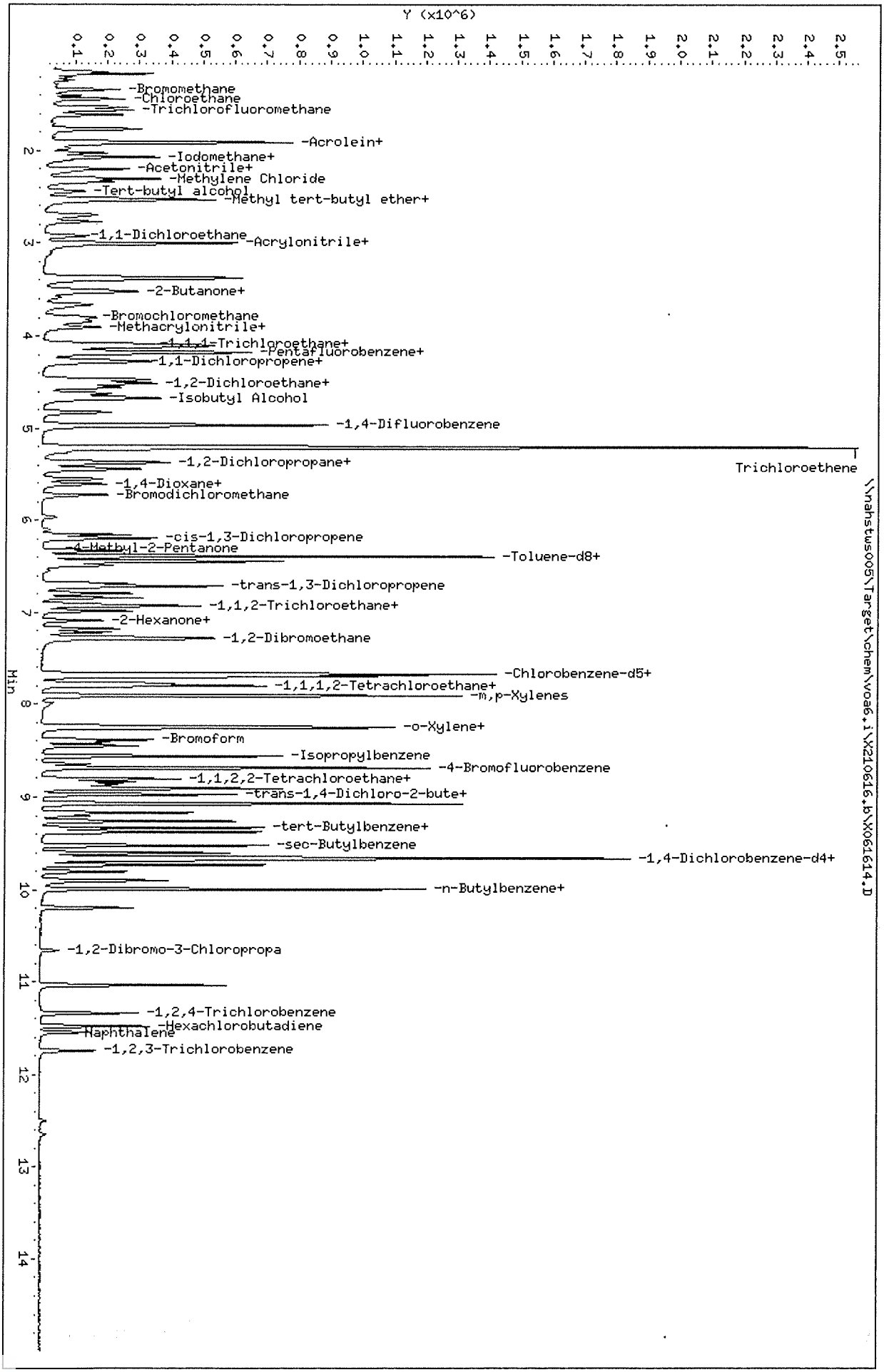
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	576412	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	790501	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	710546	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	376601	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	257638	45.3938	45.39
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	259822	47.1485	47.14
$ 48 Toluene-d8	98	6.388	6.389	(0.833)	892917	50.4496	50.44
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	312381	50.0594	50.05
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	101024	19.2254	19.22
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	144352	16.9461	16.94
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	113585	21.1576	21.15
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	69655	18.0966	18.09
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	142693	15.6589	15.65
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	99401	16.7415	16.74
32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	119950	19.8122	19.81
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	59146	25.9428	25.94
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	93110	19.8305	19.83 (M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	91702	24.6286	24.62
79 1,2,4-Trimethylbenzene	105	9.375	9.376	(0.970)	337341	19.6392	19.63
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	13695	23.2005	23.20
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	95220	18.2018	18.20
88 1,2-Dichlorobenzene	146	9.991	9.992	(1.034)	196340	19.2211	19.22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	116187	18.4467	18.44
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	83774	18.0037	18.00
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	337392	19.7369	19.73
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	212927	20.0451	20.04
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	140748	18.3895	18.38
84	1,4-Dichlorobenzene	146	9.683	9.684	(1.002)	213386	19.2508	19.25
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	130749	16.5799	16.57
24	2-Butanone	43	3.581	3.581	(0.856)	56515	32.2260	32.22
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	274935	19.5045	19.50
52	2-Hexanone	43	7.090	7.083	(0.924)	103107	39.0636	39.06
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	315003	18.7650	18.76
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	366172	21.0282	21.02
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	151053	36.9167	36.91
10	Acetone	43	1.976	1.976	(0.473)	46918	27.8046	27.80
37	Benzene	78	4.512	4.512	(0.909)	331310	18.2438	18.24
74	Bromobenzene	156	8.802	8.802	(0.911)	124452	19.9177	19.91
29	Bromochloromethane	128	3.795	3.796	(0.908)	54769	15.7141	15.71
39	Bromodichloromethane	83	5.729	5.722	(1.154)	121152	17.8274	17.82
66	Bromoform	173	8.408	8.408	(1.096)	76514	19.3112	19.31
6	Bromomethane	94	1.339	1.339	(0.320)	110613	18.6748	18.67
19	Carbon Disulfide	76	2.069	2.069	(0.495)	445917	31.6698	31.66
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	137405	20.9682	20.96
59	Chlorobenzene	112	7.692	7.692	(1.003)	264917	17.9099	17.90
7	Chloroethane	64	1.403	1.403	(0.336)	71484	16.7690	16.76
28	Chloroform	83	3.910	3.910	(0.935)	161666	15.9488	15.94
3	Chloromethane	50	1.073	1.074	(0.257)	91369	15.7610	15.76
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	105749	17.5035	17.50
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	146919	18.3467	18.34
55	Dibromochloromethane	129	7.176	7.176	(0.936)	107541	18.3887	18.38
44	Dibromomethane	93	5.550	5.550	(1.118)	61440	17.5700	17.57
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	98531	18.4766	18.47
61	Ethylbenzene	106	7.800	7.800	(1.017)	138933	20.3595	20.35
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	60561	27.0276	27.02
67	Isopropylbenzene	105	8.559	8.559	(1.116)	421930	20.2363	20.23
62	m,p-Xylenes	106	7.900	7.900	(1.030)	339041	38.1124	38.11
17	Methylene Chloride	84	2.298	2.306	(0.550)	86319	15.6237	15.62
87	n-Butylbenzene	91	9.991	9.992	(1.034)	308043	21.0257	21.02
73	n-Propylbenzene	91	8.910	8.910	(0.922)	475561	20.2438	20.24
92	Naphthalene	128	11.546	11.539	(1.195)	122896	22.8356	22.83
63	o-Xylene	106	8.244	8.244	(1.075)	163496	18.8483	18.84
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	418501	21.1627	21.16
64	Styrene	104	8.258	8.258	(1.077)	272448	18.7961	18.79
78	tert-Butylbenzene	119	9.332	9.333	(0.966)	303342	20.6983	20.69
56	Tetrachloroethene	164	6.926	6.926	(0.903)	94316	21.5621	21.56
50	Toluene	91	6.446	6.446	(0.840)	384015	18.5124	18.51
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	84519	15.7037	15.70
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	126396	18.2966	18.29
38	Trichloroethene	130	5.207	5.207	(1.049)	893013	164.595	164.59
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	178604	17.1657	17.16
5	Vinyl Chloride	62	1.138	1.138	(0.272)	120142	17.6082	17.60

QC Flag Legend

M - Compound response manually integrated.



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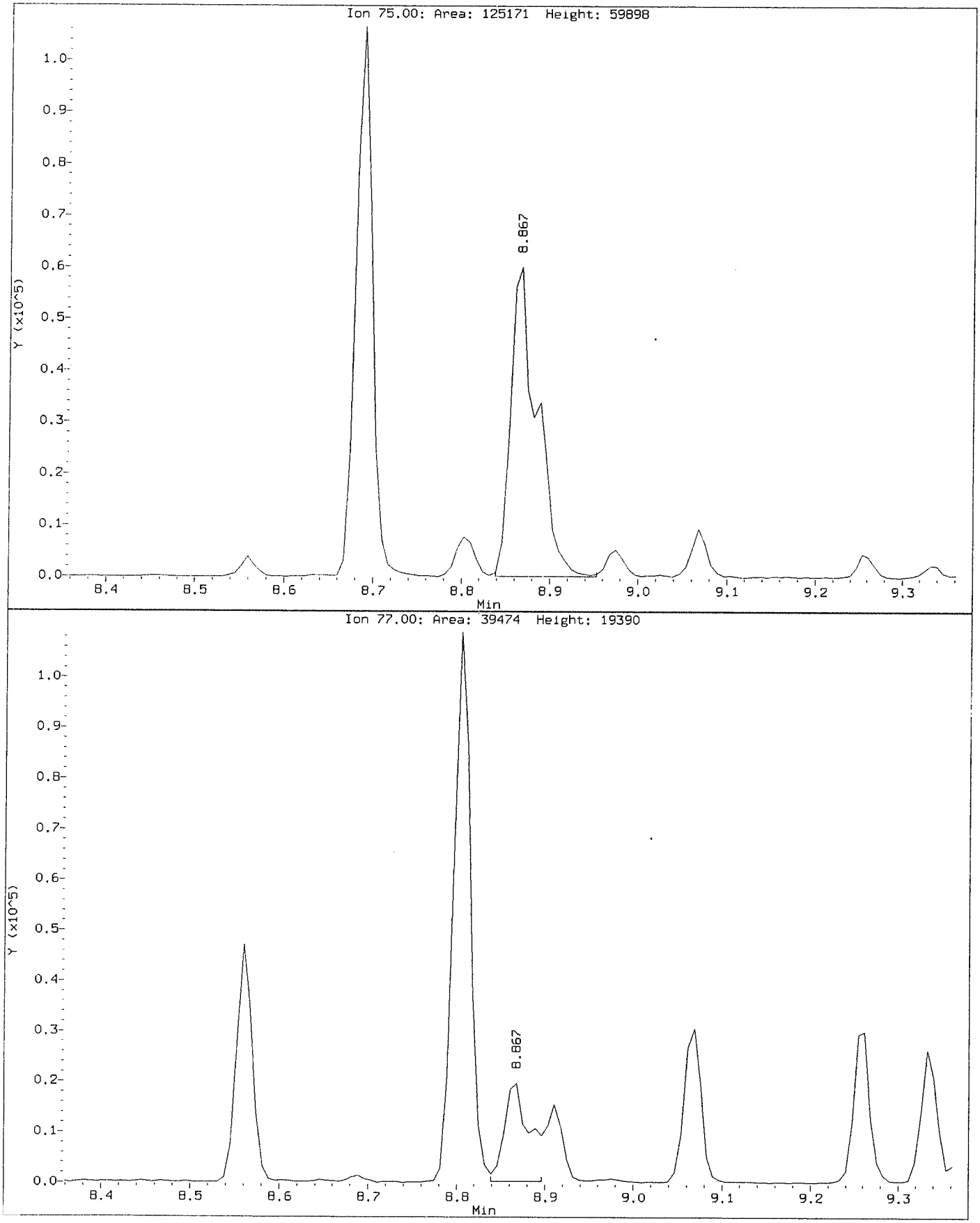
Date : 16-JUN-2021 14:57
Client ID: HS21060700-09MS
Sample Info: HS21060700-09MS;HS21060700-09MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\Before\X061614.D
Injection Date: 16-JUN-2021 14:57
Instrument: voa6.i
Client Sample ID: HS21060700-09MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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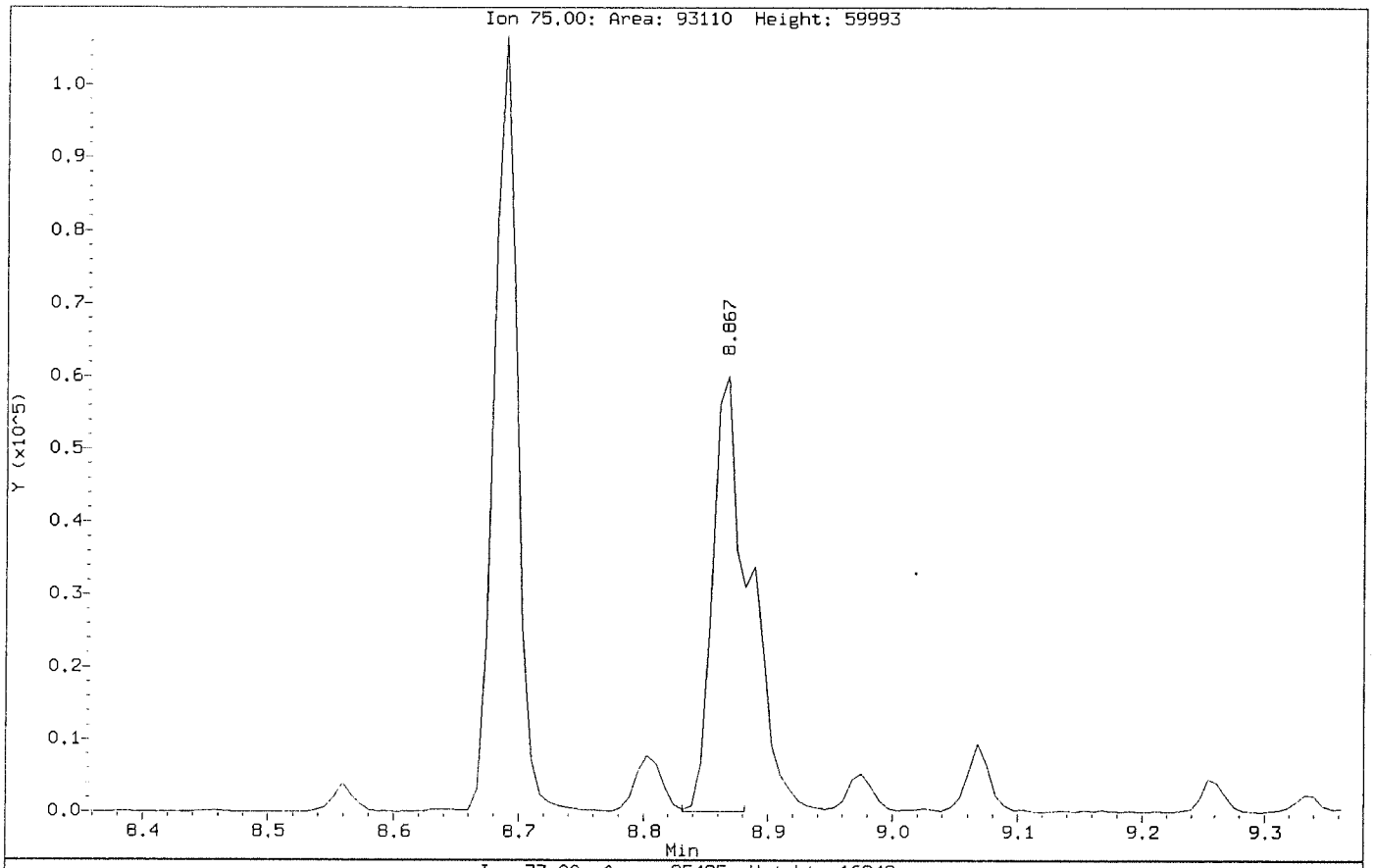
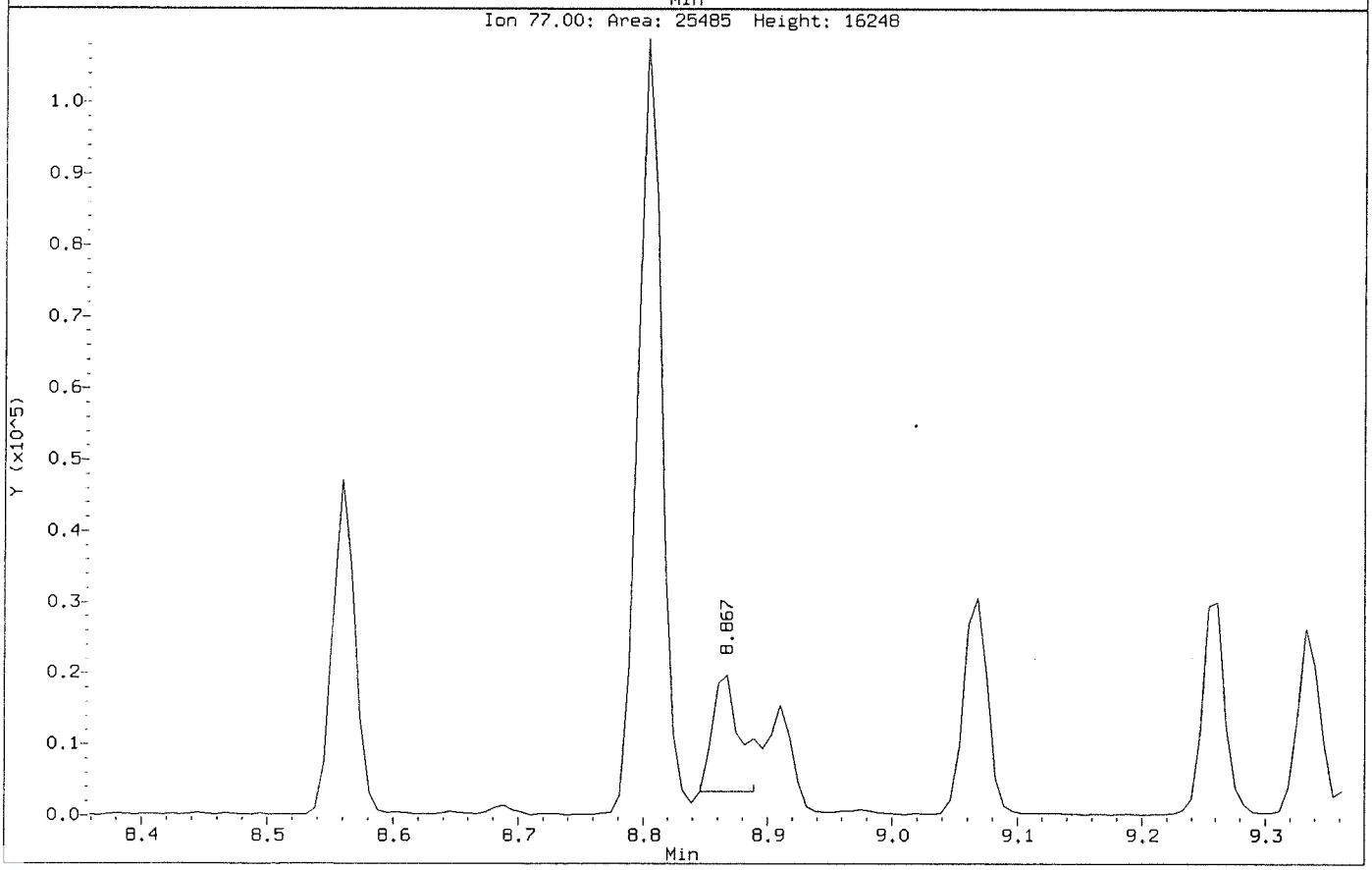
Injection Date: 16-JUN-2021 14:57
Instrument: voa6.i
Client Sample ID: HS21060700-09MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061615.D
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Inj Date : 16-JUN-2021 15:18
Operator : PC Inst ID: voa6.i
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Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:46 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

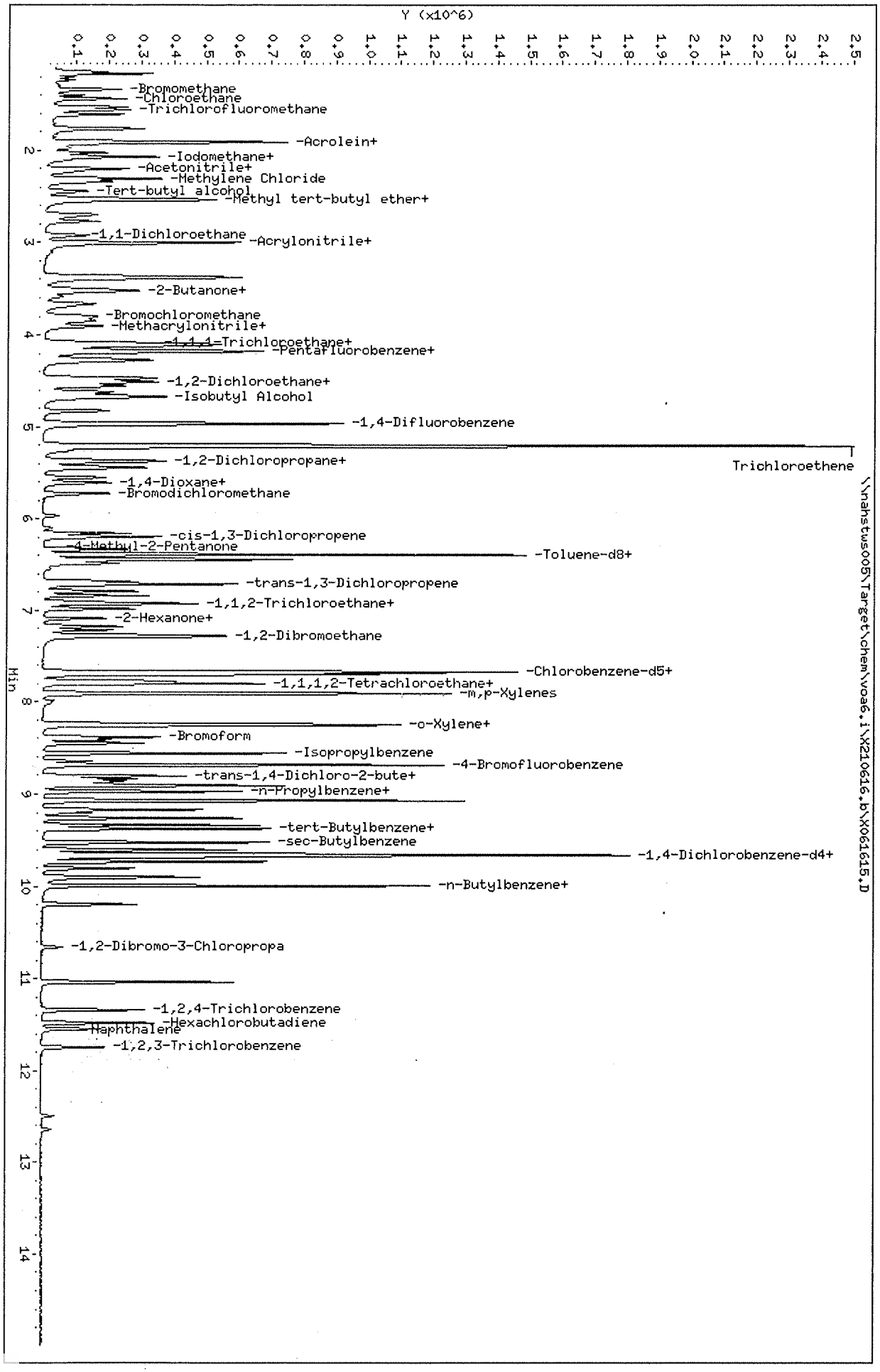
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	599926	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	821721	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	733893	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	384401	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	266459	45.1068	45.10
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	268903	46.8799	46.87
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	927631	50.7436	50.74
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	316954	49.1896	49.18
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	99119	18.2628	18.26
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	142234	16.0430	16.04
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	115293	21.0333	21.03
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	71088	17.8814	17.88
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	144338	15.2186	15.21
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	95998	15.5346	15.53
32 1,1-Dichloropropene	75	4.275	4.283	(0.861)	116681	18.5400	18.54
93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	63564	27.3149	27.31
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	95901	20.0105	20.01(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	101913	26.8156	26.81
79 1,2,4-Trimethylbenzene	105	9.376	9.376	(0.970)	336217	19.1766	19.17
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	14993	24.8469	24.84
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	96895	17.9327	17.93
88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	201726	19.3477	19.34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	119187	18.2041	18.20
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	84326	17.4338	17.43
75	1,3,5-Trimethylbenzene	105	9.068	9.067	(0.938)	335743	19.2419	19.24
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	207777	19.1634	19.16
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	143490	18.1514	18.15
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	211428	18.6871	18.68
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	129969	15.8350	15.83
24	2-Butanone	43	3.581	3.581	(0.856)	56794	31.1158	31.11
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	272423	18.9341	18.93
52	2-Hexanone	43	7.091	7.083	(0.924)	106269	38.9808	38.98
77	4-Chlorotoluene	91	9.068	9.067	(0.938)	316948	18.4978	18.49
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	361212	20.3225	20.32
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	154642	36.5916	36.59
10	Acetone	43	1.976	1.976	(0.473)	49056	27.9595	27.95
37	Benzene	78	4.512	4.512	(0.909)	329866	17.4742	17.47
74	Bromobenzene	156	8.802	8.802	(0.911)	123777	19.4077	19.40
29	Bromochloromethane	128	3.796	3.796	(0.908)	54229	14.9493	14.94
39	Bromodichloromethane	83	5.730	5.722	(1.154)	119144	16.8658	16.86
66	Bromoform	173	8.409	8.408	(1.096)	77731	18.9942	18.99
6	Bromomethane	94	1.331	1.339	(0.318)	105641	17.1490	17.14
19	Carbon Disulfide	76	2.069	2.069	(0.495)	441210	30.1073	30.10
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	129764	19.0499	19.04
59	Chlorobenzene	112	7.692	7.692	(1.003)	262618	17.1897	17.18
7	Chloroethane	64	1.396	1.403	(0.334)	81096	18.4057	18.40
28	Chloroform	83	3.910	3.910	(0.935)	164941	15.6341	15.63
3	Chloromethane	50	1.074	1.074	(0.257)	92269	15.2109	15.21
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	106508	16.9382	16.93
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	145050	17.4252	17.42
55	Dibromochloromethane	129	7.176	7.176	(0.936)	111040	18.3830	18.38
44	Dibromomethane	93	5.550	5.550	(1.118)	63546	17.4818	17.48
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	96601	17.3925	17.39
61	Ethylbenzene	106	7.800	7.800	(1.017)	135876	19.2781	19.27
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	63353	27.6617	27.66
67	Isopropylbenzene	105	8.559	8.559	(1.116)	409502	19.0154	19.01
62	m,p-Xylenes	106	7.900	7.900	(1.030)	337502	36.7325	36.73
17	Methylene Chloride	84	2.298	2.306	(0.550)	88685	15.4057	15.40
87	n-Butylbenzene	91	9.992	9.992	(1.034)	308848	20.6529	20.65
73	n-Propylbenzene	91	8.910	8.910	(0.922)	467422	19.4936	19.49
92	Naphthalene	128	11.546	11.539	(1.195)	136495	24.8479	24.84
63	o-Xylene	106	8.244	8.244	(1.075)	161332	18.0071	18.00
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	413336	20.4774	20.47
64	Styrene	104	8.258	8.258	(1.077)	269204	17.9815	17.98
78	tert-Butylbenzene	119	9.333	9.333	(0.966)	296906	19.8480	19.84
56	Tetrachloroethene	164	6.926	6.926	(0.903)	93644	20.7274	20.72
50	Toluene	91	6.446	6.446	(0.840)	375655	17.5333	17.53
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	83247	14.8611	14.86
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	127114	17.7014	17.70
38	Trichloroethene	130	5.207	5.207	(1.049)	874154	154.997	154.99
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	169127	15.6178	15.61
5	Vinyl Chloride	62	1.138	1.138	(0.272)	114248	16.0881	16.08

QC Flag Legend

M - Compound response manually integrated.



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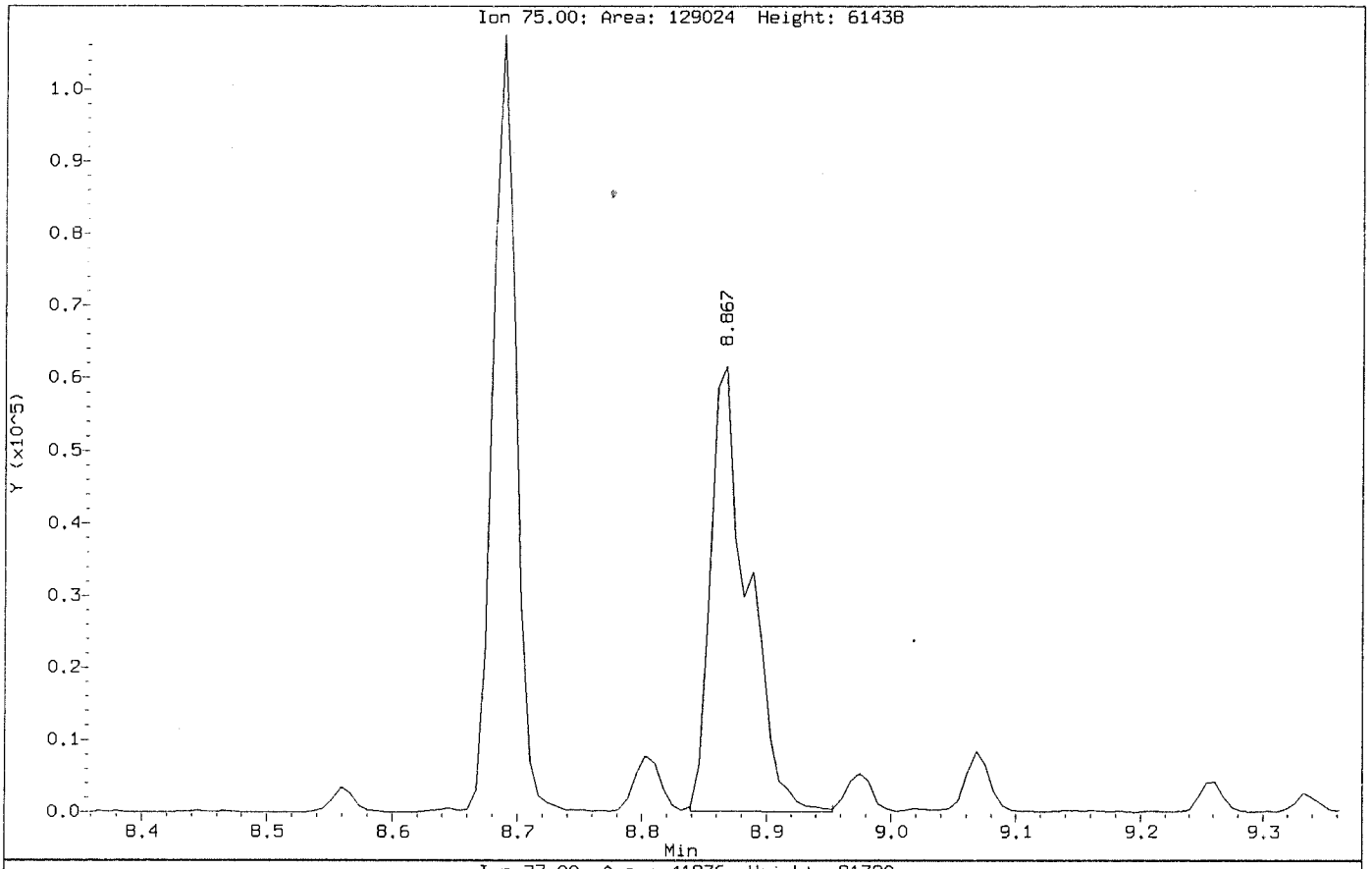
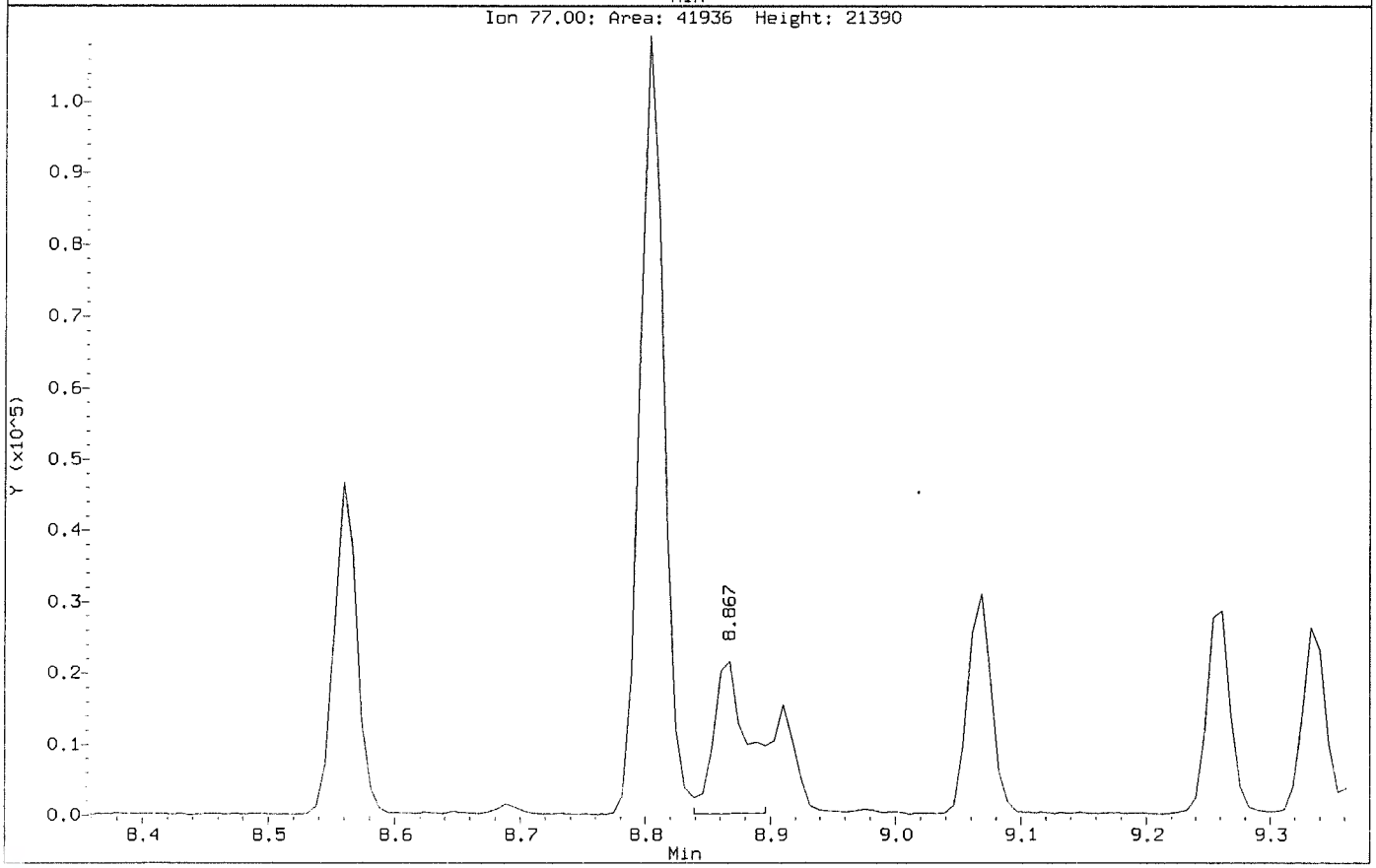
Sample Info: HS21060700-09HSD;HS21060700-09HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\Before\X061615.D
Injection Date: 16-JUN-2021 15:18
Instrument: voa6.i
Client Sample ID: HS21060700-09MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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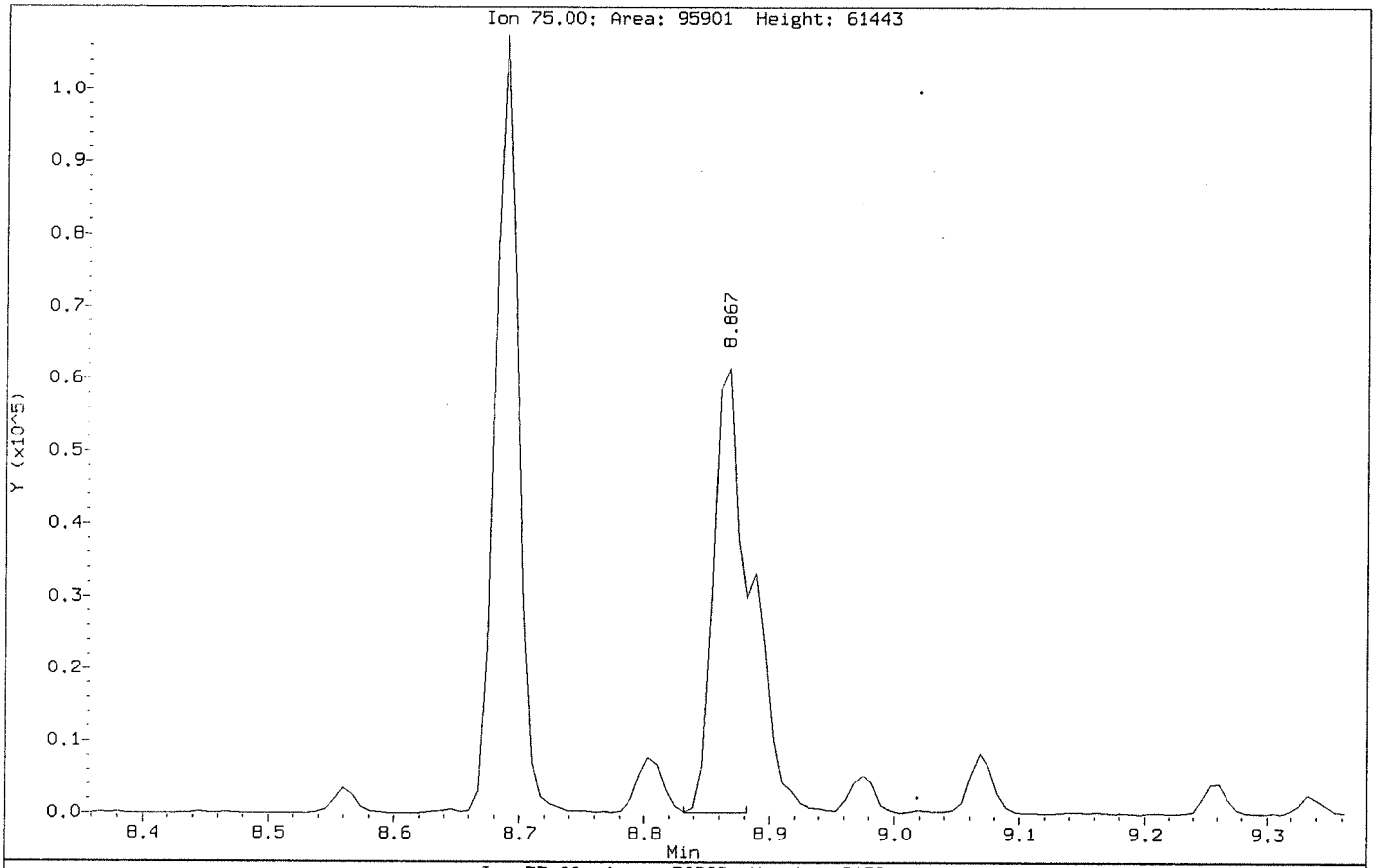
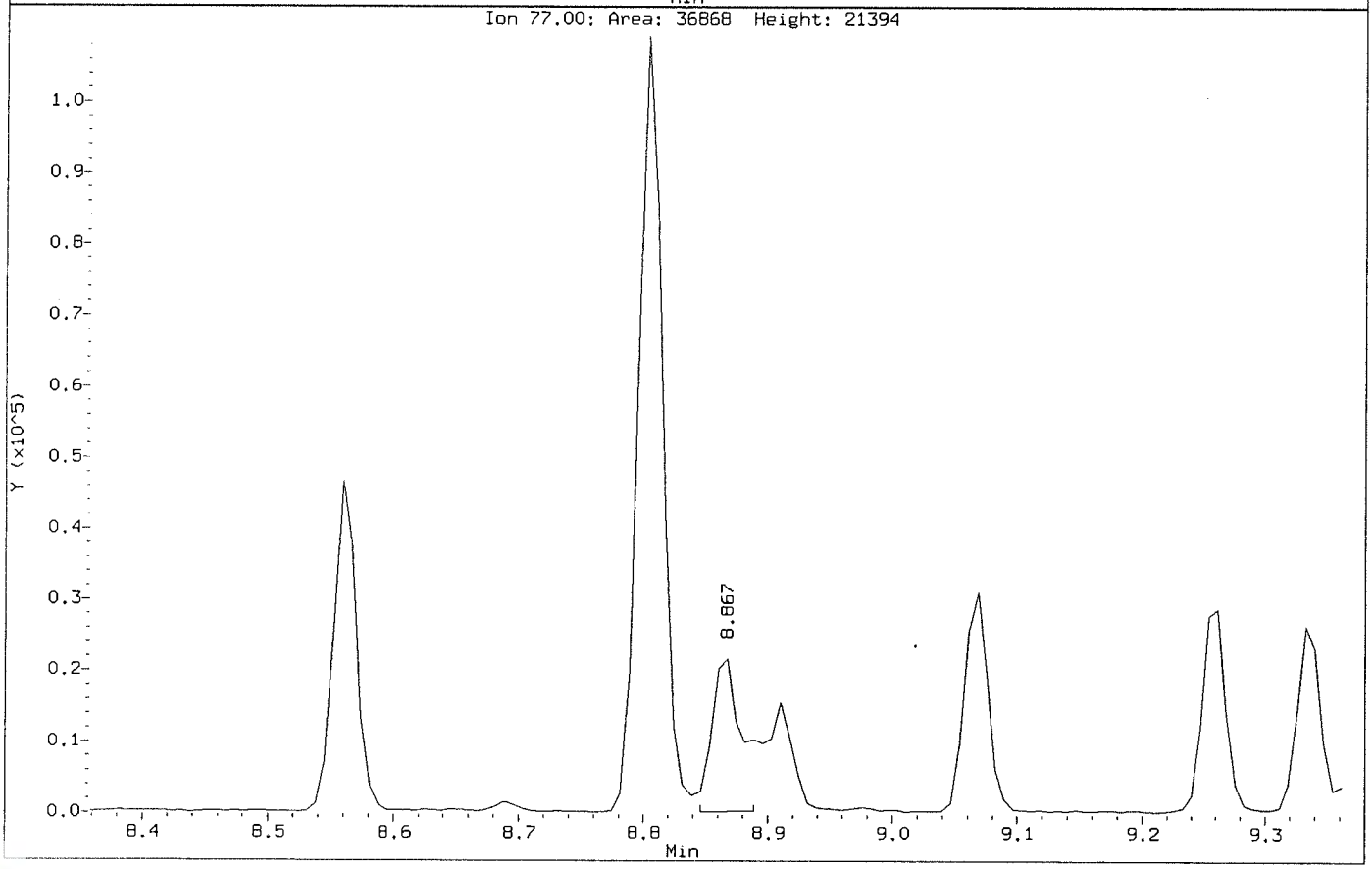
Injection Date: 16-JUN-2021 15:18
Instrument: voa6.i
Client Sample ID: HS21060700-09MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061616.D
Lab Smp Id: HS21060700-24 Client Smp ID: HS21060700-24
Inj Date : 16-JUN-2021 15:39
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-24;HS21060700-24;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:40 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 15
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

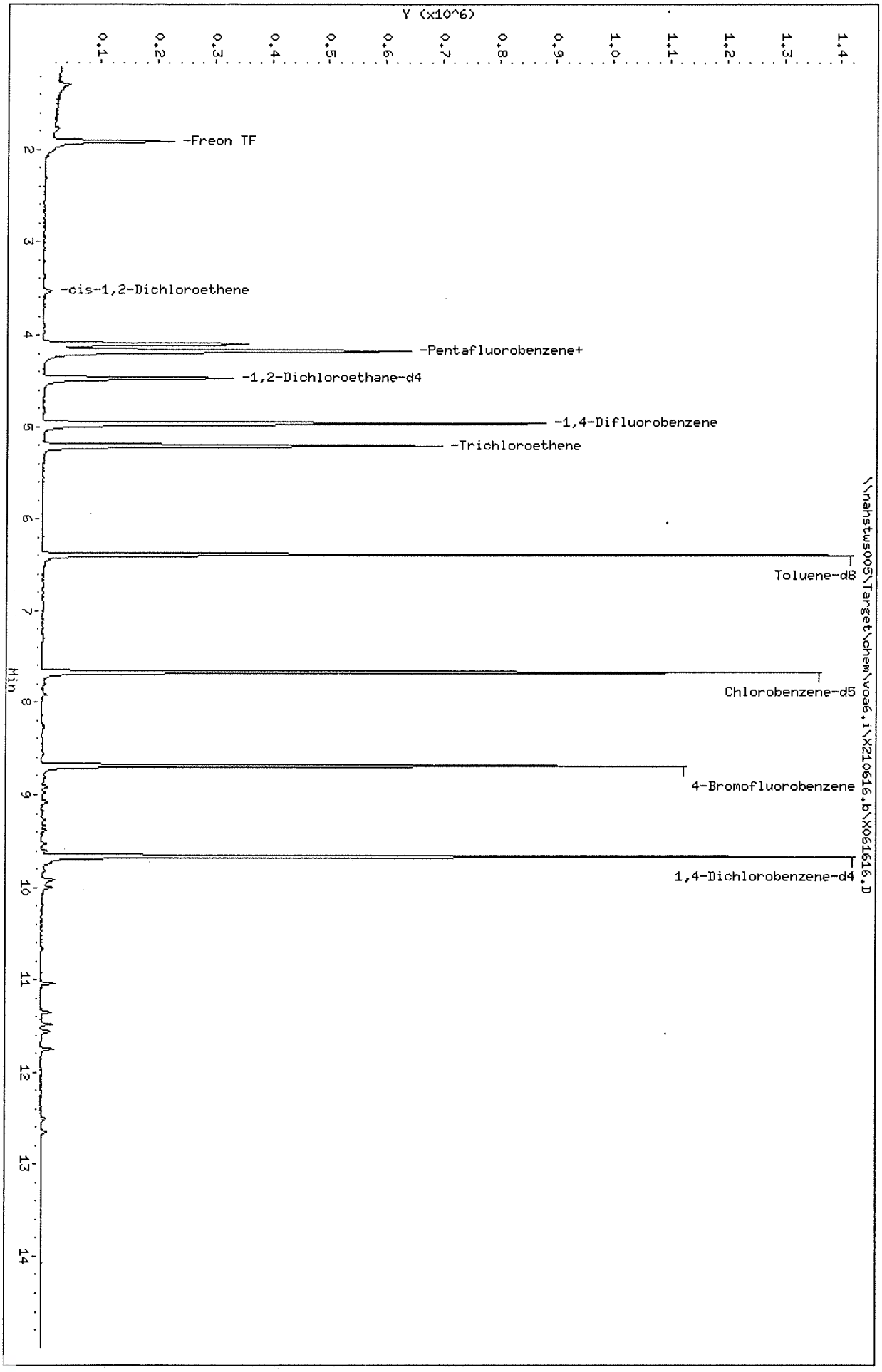
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	582785	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	798337	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	697984	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	358632	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	257597	44.8884	44.88
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	258489	46.3826	46.38
$ 48 Toluene-d8	98	6.388	6.381	(0.833)	897379	51.6142	51.61
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	305400	49.8250	49.82
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	7671	1.25582	12.55(a)
38 Trichloroethene	130	5.207	5.206	(1.049)	246718	45.0272	450.27

QC Flag Legend

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



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Client ID: HS21060700-24
Sample Info: HS21060700-24;HS21060700-24;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061616.D

Date : 16-JUN-2021 15:39

Client ID: HS21060700-24

Instrument: voa6.i

Sample Info: HS21060700-24;HS21060700-24;;;

Purge Volume: 5.0

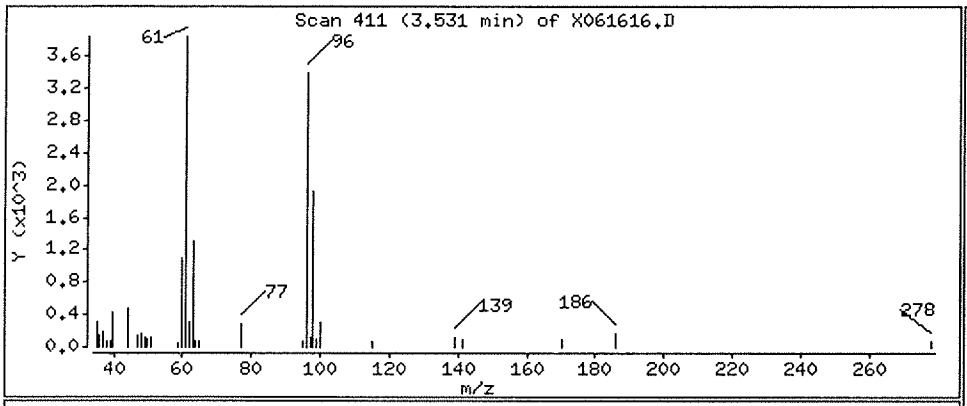
Operator: PC

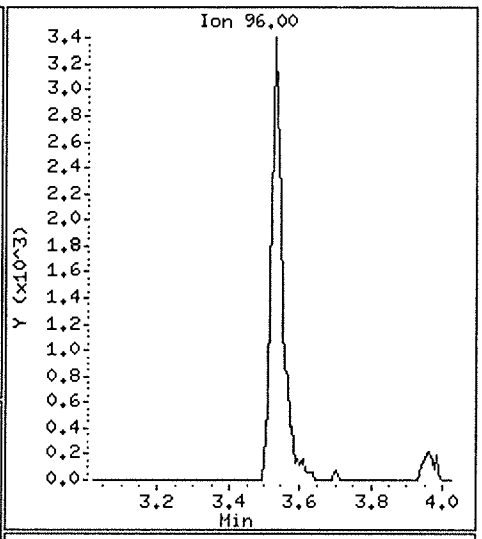
Column phase: DB624

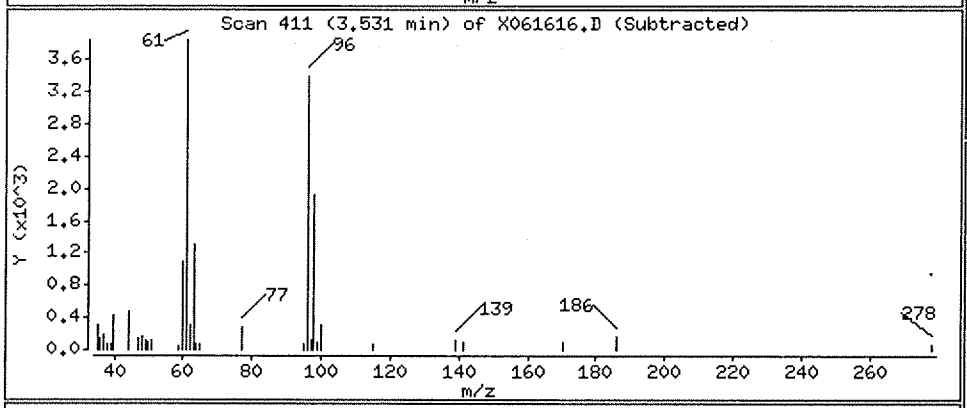
Column diameter: 0.18

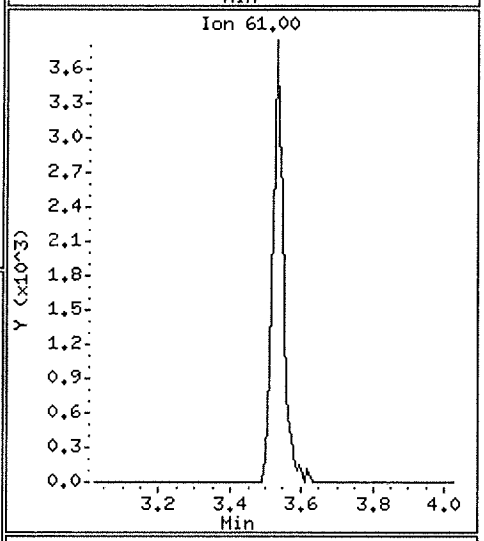
27 cis-1,2-Dichloroethene

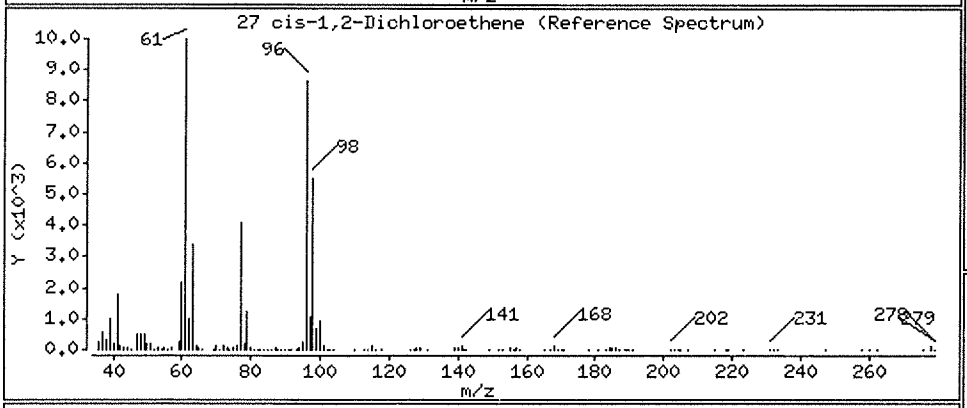
Concentration: 12.55 ug/l

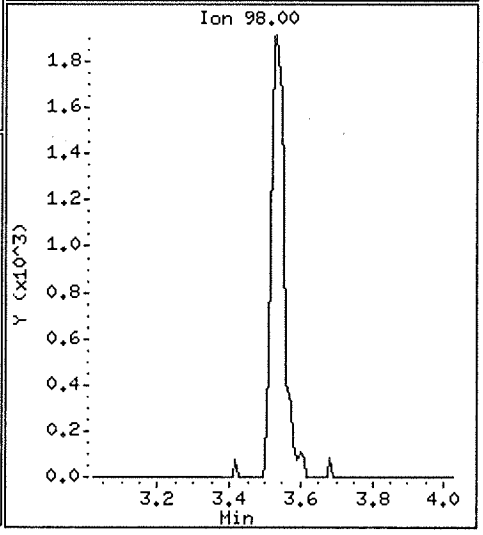


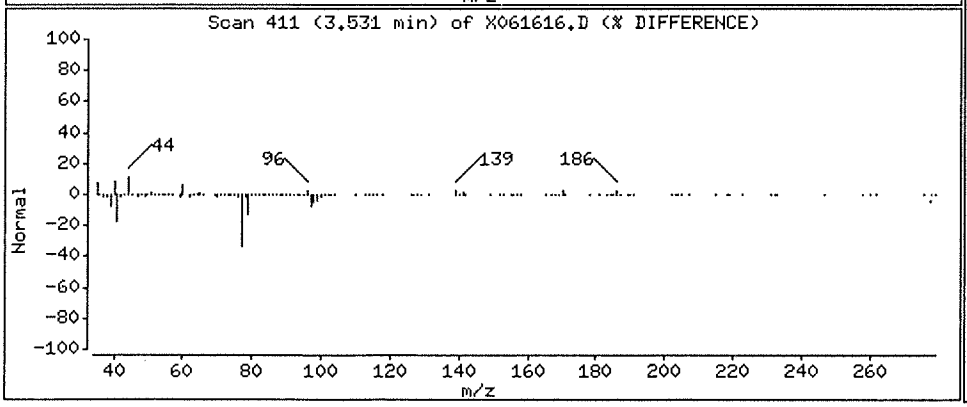












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Date : 16-JUN-2021 15:39

Client ID: HS21060700-24

Instrument: voa6.i

Sample Info: HS21060700-24;HS21060700-24;;;

Purge Volume: 5.0

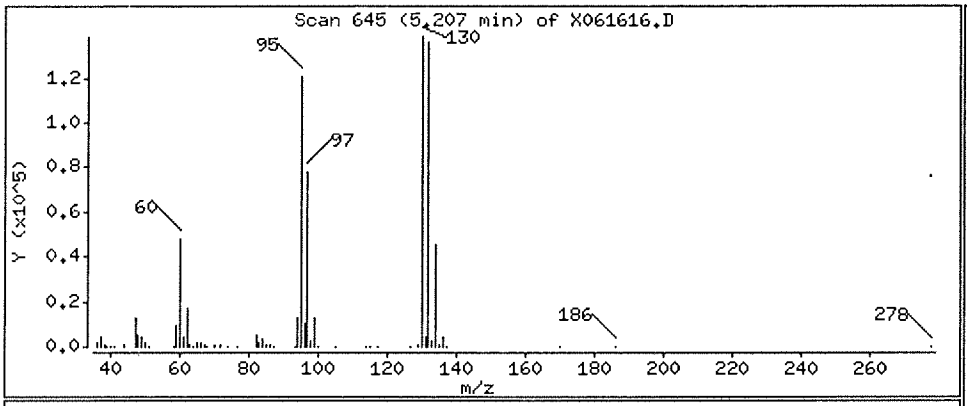
Operator: PC

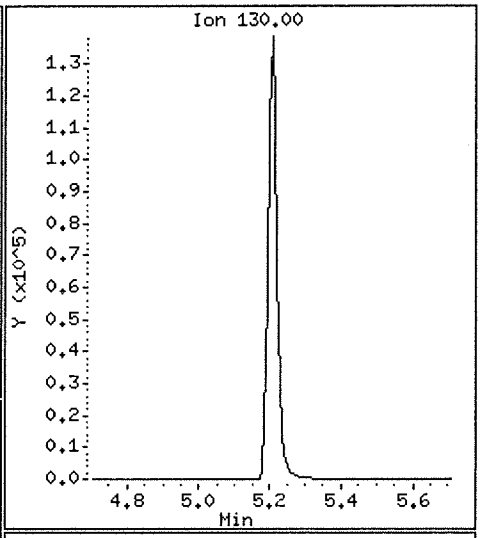
Column phase: DB624

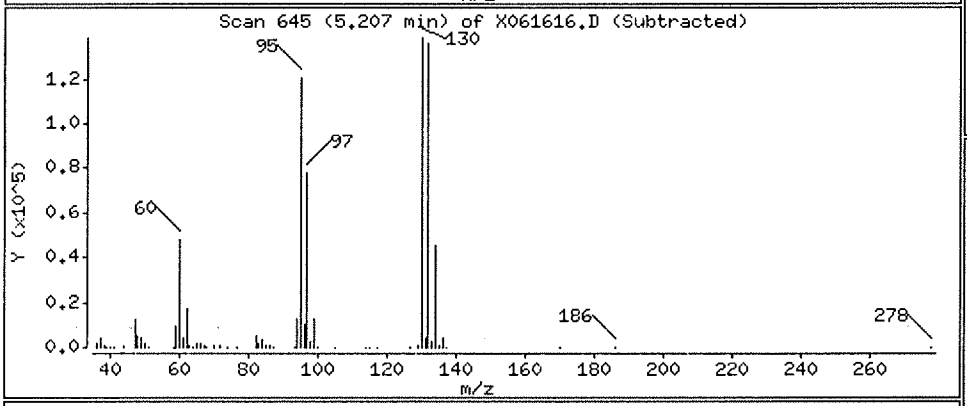
Column diameter: 0.18

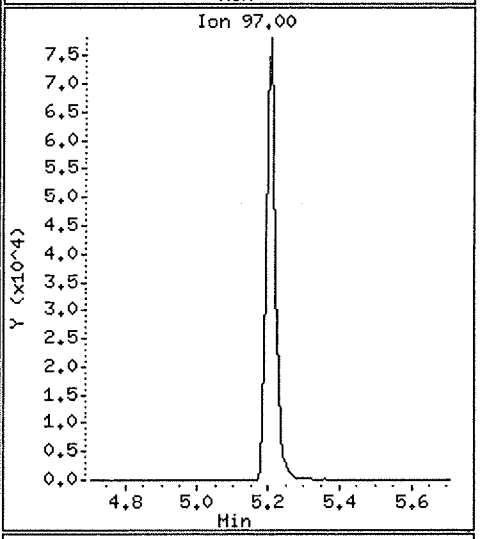
38 Trichloroethene

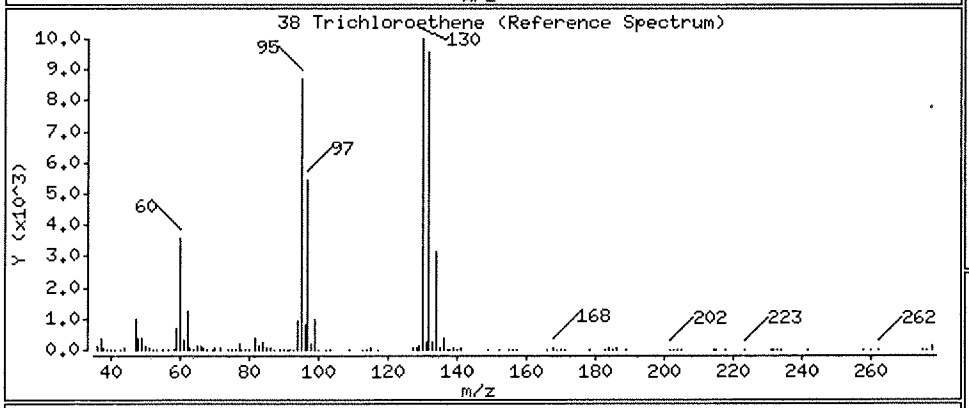
Concentration: 450.27 ug/l

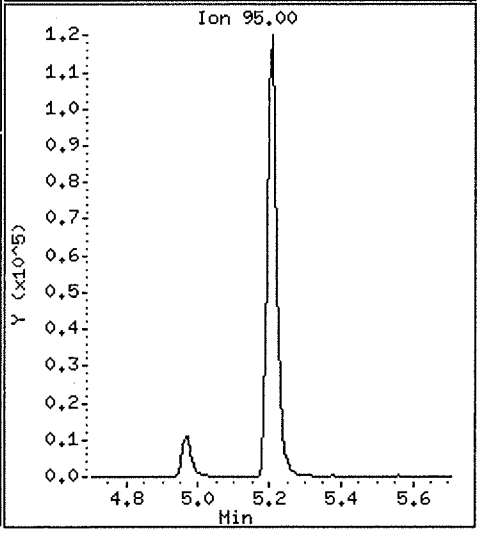


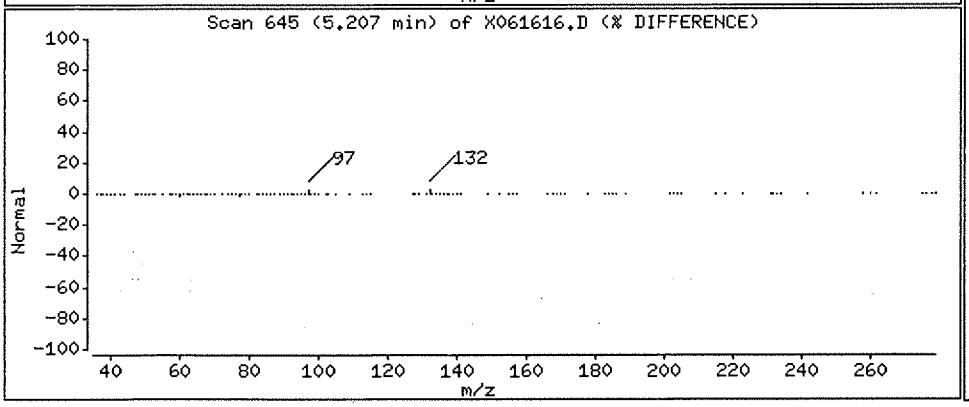












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061617.D
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Inj Date : 16-JUN-2021 16:01
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-15;HS21060700-15;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:40 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 16
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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

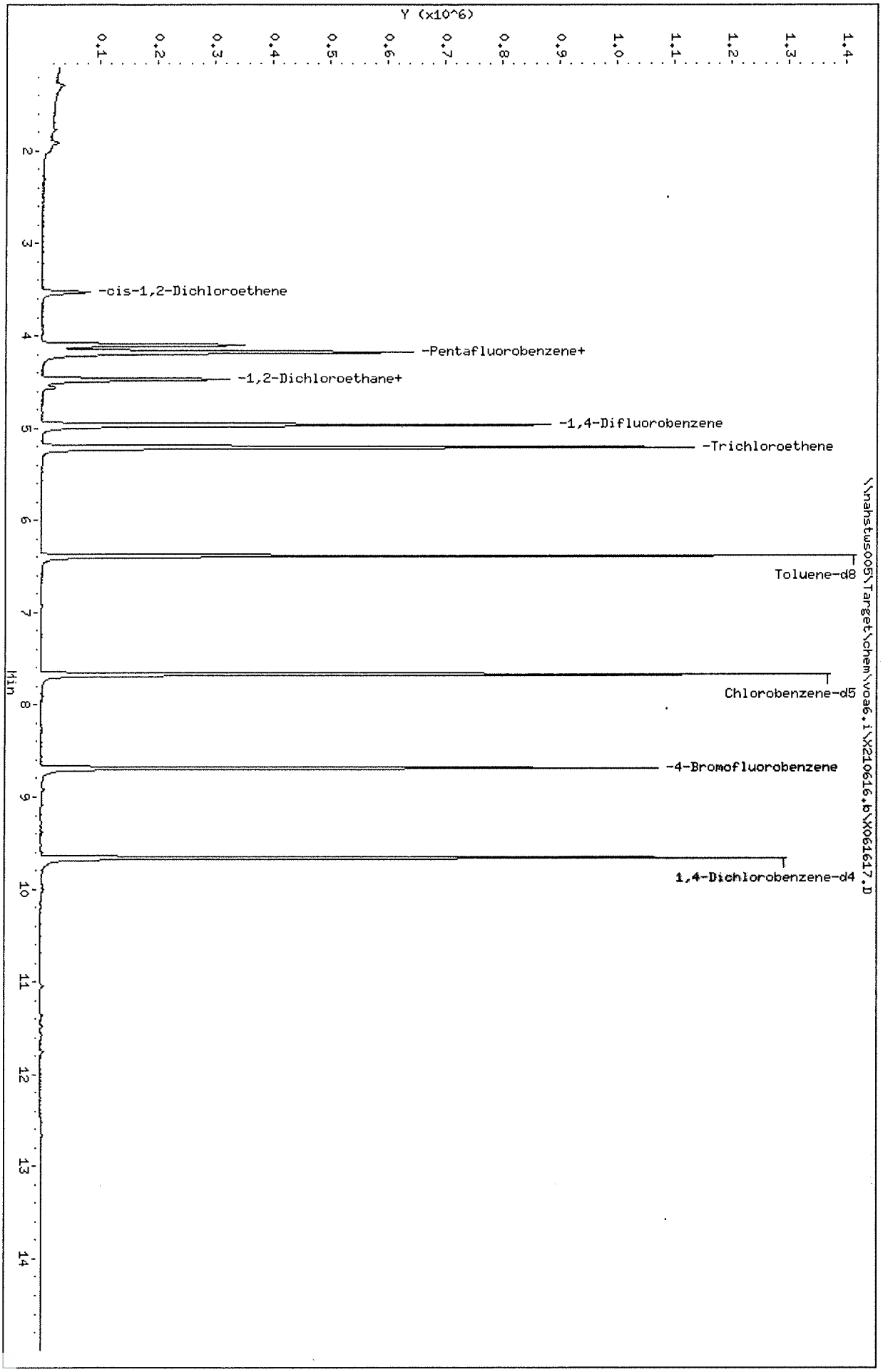
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	577498	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	794471	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	685592	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	342763	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	253510	44.5795	44.57
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	257583	46.6471	46.64
$ 48 Toluene-d8	98	6.388	6.381	(0.833)	889045	52.0591	52.05
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	281416	46.7884	46.78
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	20538	3.24447	32.44(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	45445	7.50789	75.07
38 Trichloroethene	130	5.206	5.206	(1.049)	398942	73.1632	731.63

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061617.D
Date : 16-JUN-2021 16:01
Client ID: HS21060700-15
Sample Info: HS21060700-15;HS21060700-15;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061617.D

Date : 16-JUN-2021 16:01

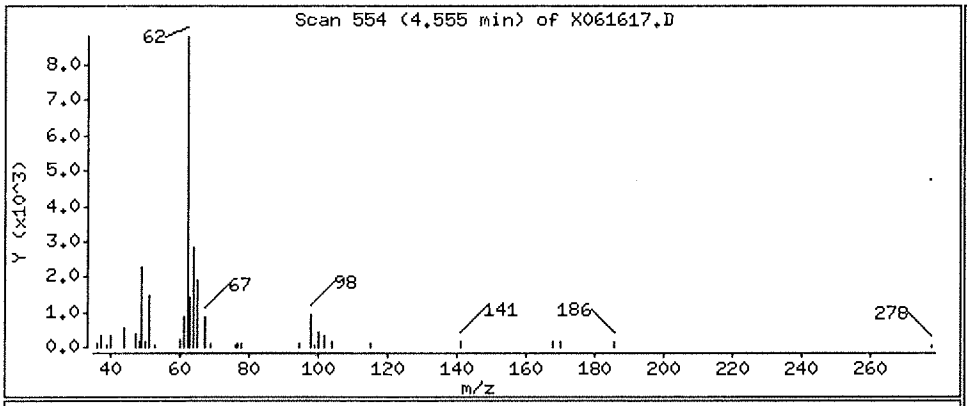
Client ID: HS21060700-15 Instrument: voa6.i

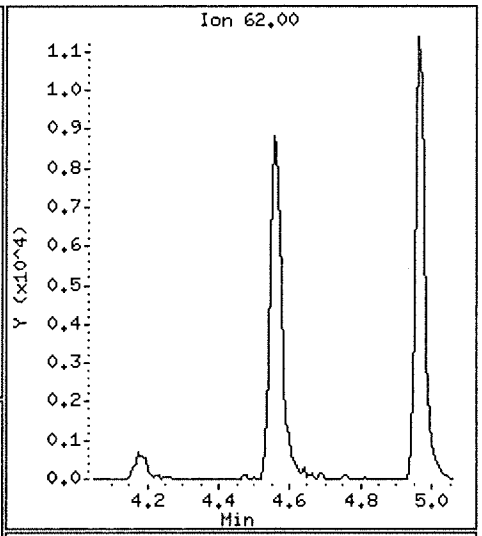
Sample Info: HS21060700-15;HS21060700-15;;;

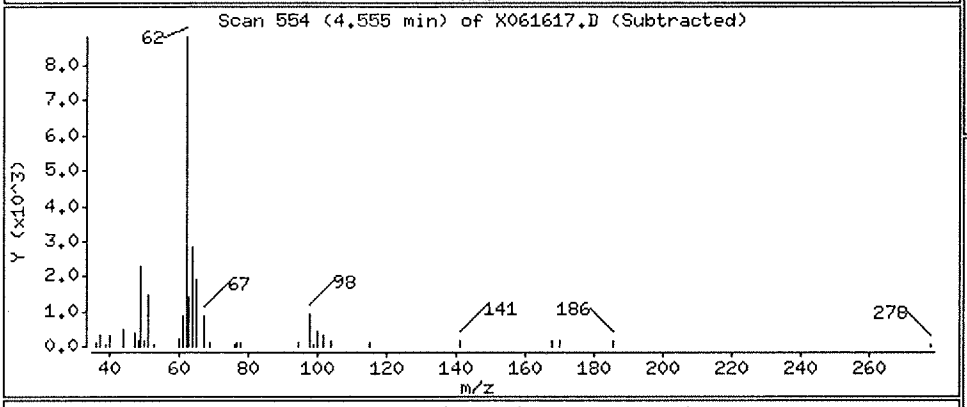
Purge Volume: 5.0 Operator: PC

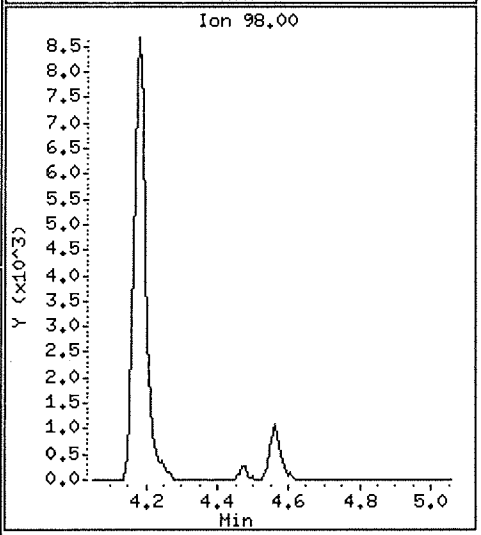
Column phase: DB624 Column diameter: 0.18

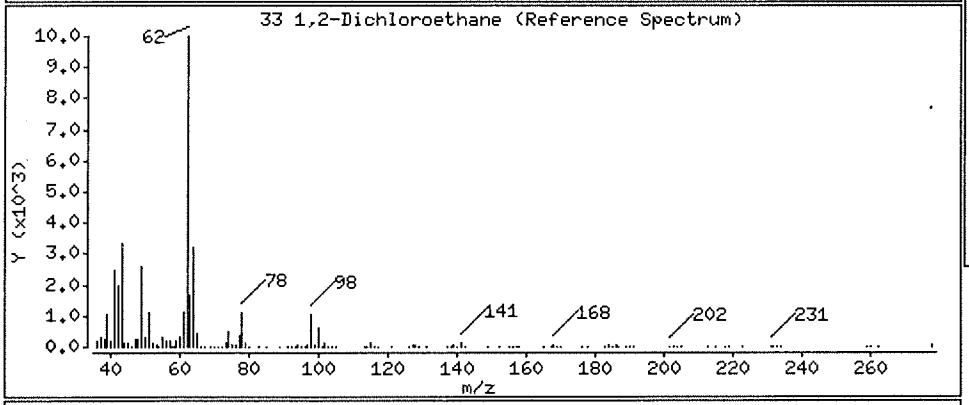
33 1,2-Dichlorcethane Concentration: 32.44 ug/l

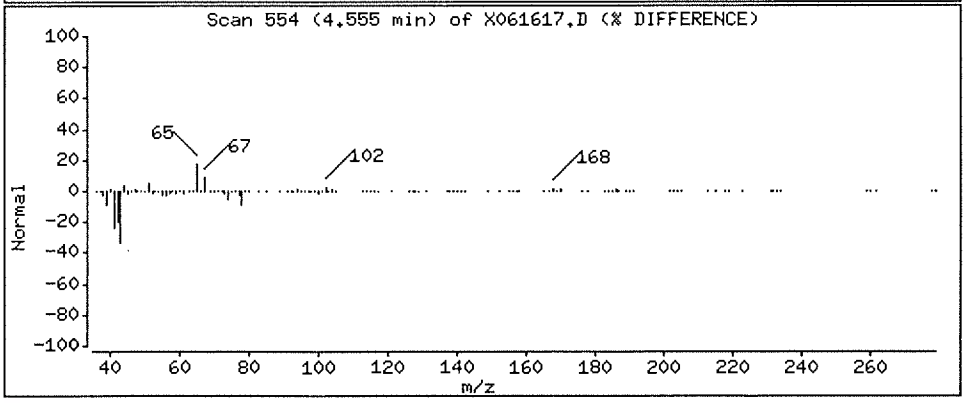












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061617.D

Date : 16-JUN-2021 16:01

Client ID: HS21060700-15

Instrument: voa6.i

Sample Info: HS21060700-15;HS21060700-15;;;

Purge Volume: 5.0

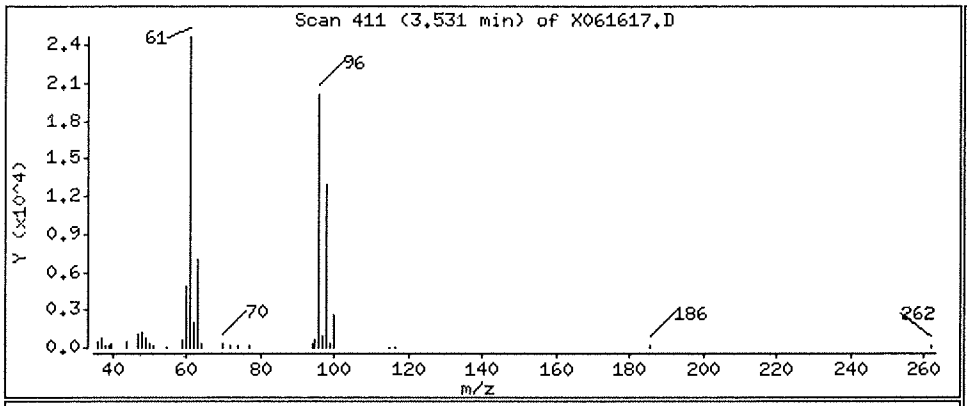
Operator: PC

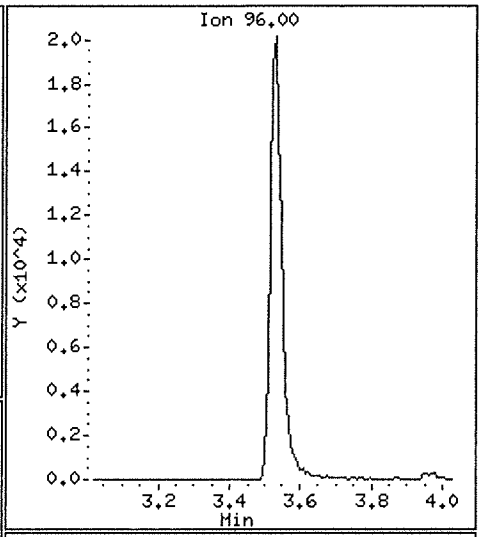
Column phase: DB624

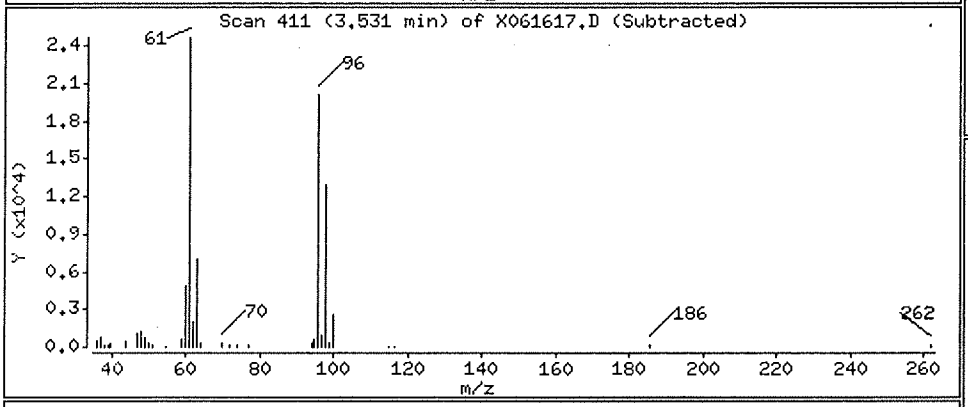
Column diameter: 0.18

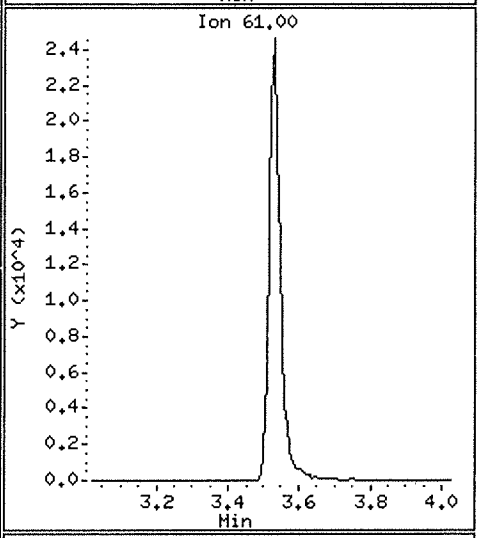
27 cis-1,2-Dichloroethene

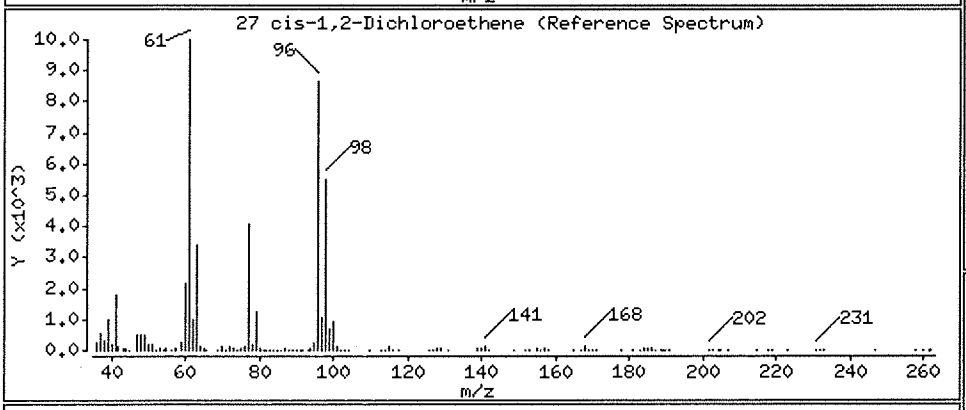
Concentration: 75.07 ug/l

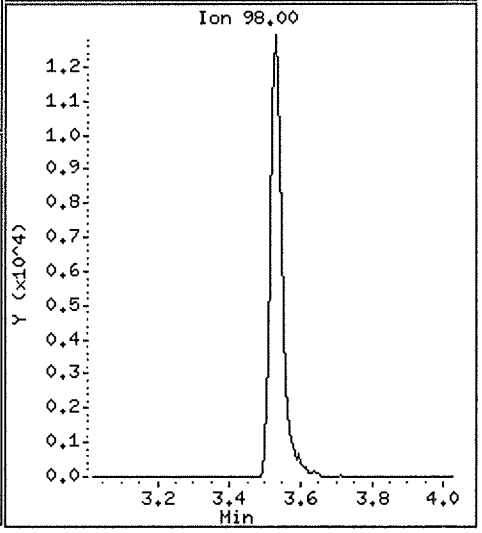


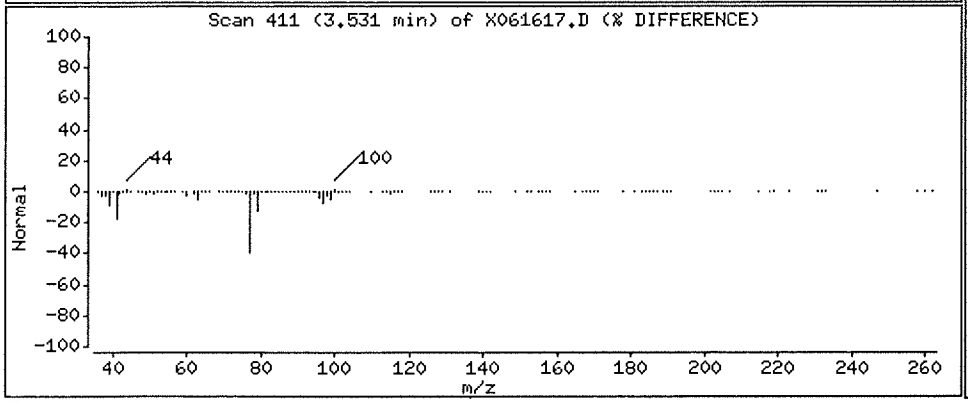












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061617.D Page 5

Date : 16-JUN-2021 16:01

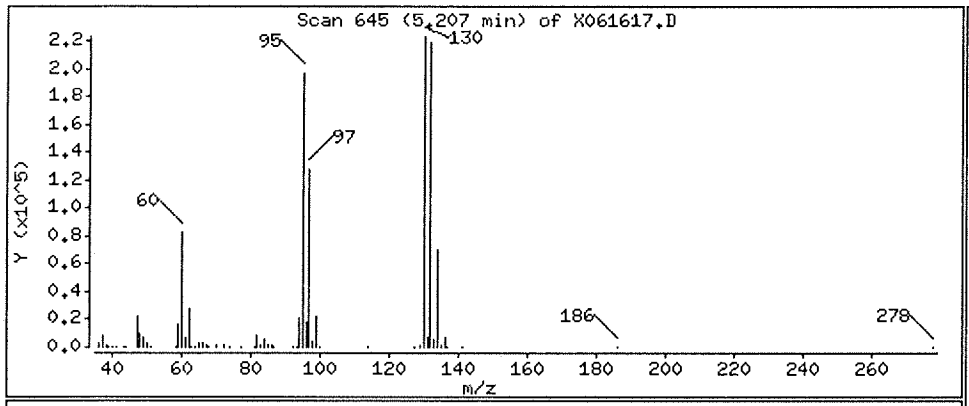
Client ID: HS21060700-15 Instrument: voa6.i

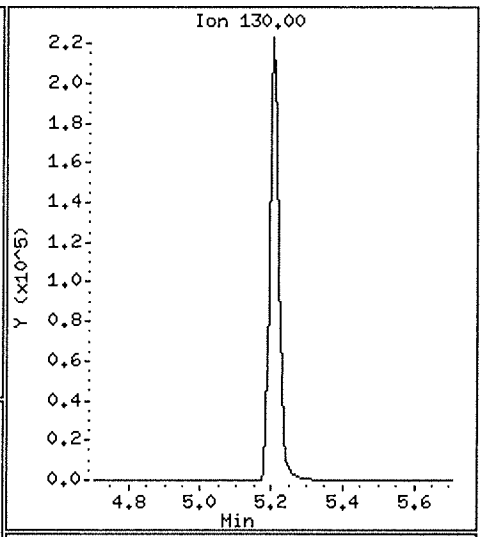
Sample Info: HS21060700-15;HS21060700-15;;;

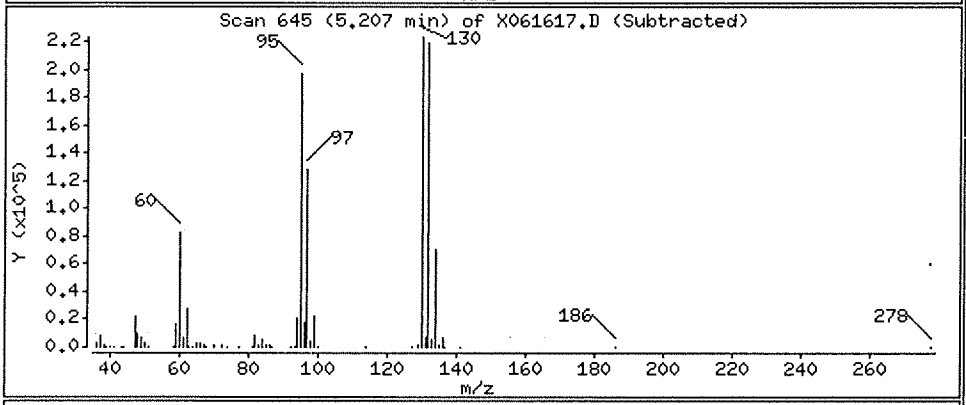
Purge Volume: 5.0 Operator: PC

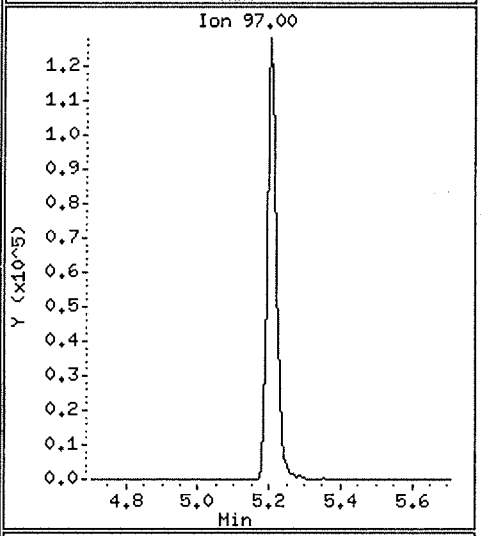
Column phase: DB624 Column diameter: 0.18

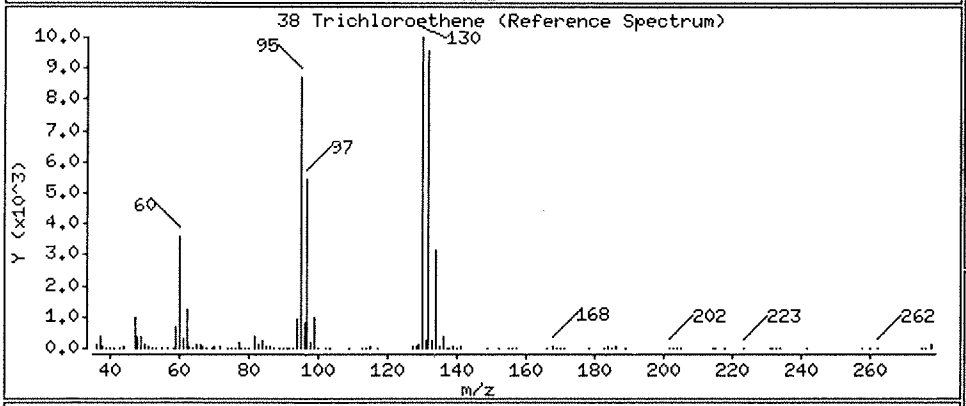
38 Trichloroethene Concentration: 731.63 ug/l

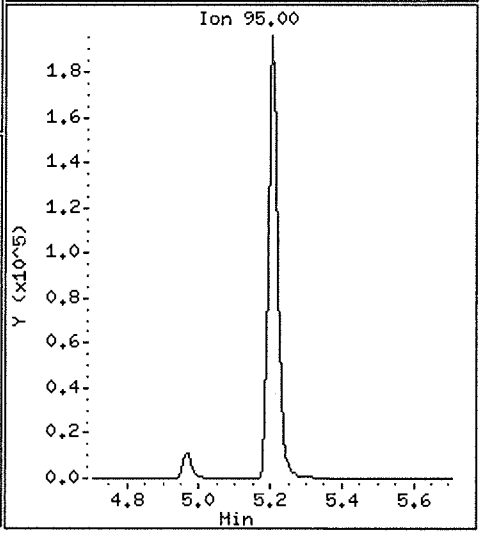


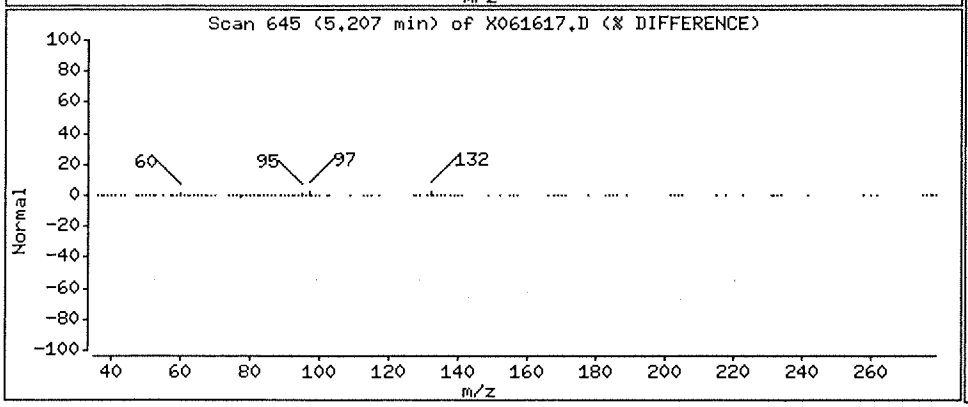












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061618.D
Lab Smp Id: HS21060700-16 Client Smp ID: HS21060700-16
Inj Date : 16-JUN-2021 16:22
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-16;HS21060700-16;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:40 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 17
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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

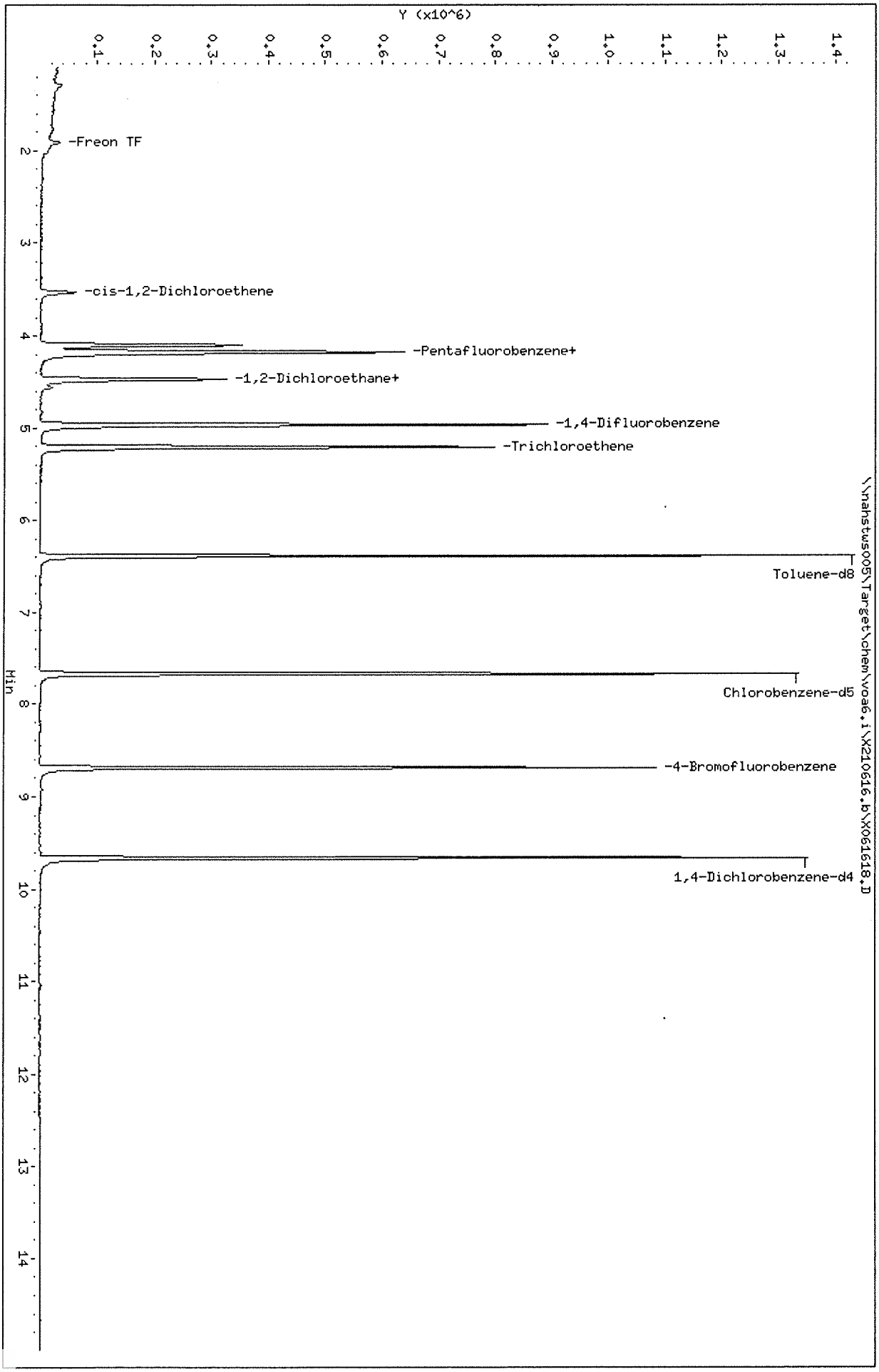
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	574063	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	793787	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	682799	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	345717	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	252266	44.6264	44.62
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	257147	46.8497	46.84
$ 48 Toluene-d8	98	6.388	6.381	(0.833)	889347	52.2898	52.28
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	283936	47.3907	47.39
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	16134	2.55095	25.50(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	36106	6.00071	60.00
38 Trichloroethene	130	5.206	5.206	(1.049)	284747	52.2656	522.65

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061618.D
Date : 16-JUN-2021 16:22
Client ID: HS21060700-16
Sample Info: HS21060700-16;HS21060700-16;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061618.D Page 3

Date : 16-JUN-2021 16:22

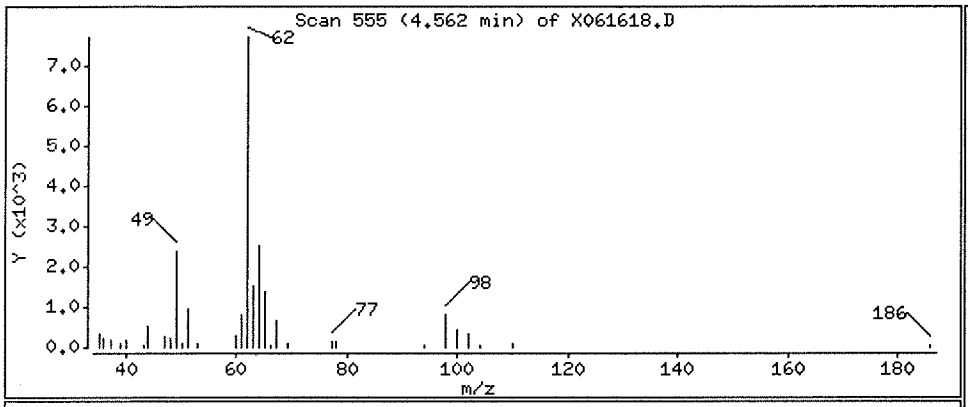
Client ID: HS21060700-16 Instrument: voa6.i

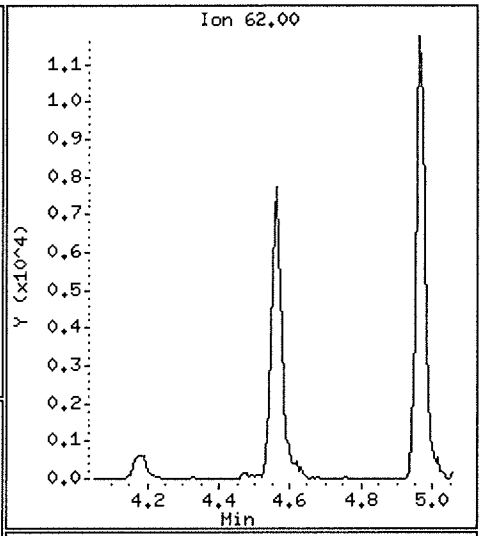
Sample Info: HS21060700-16;HS21060700-16;;;

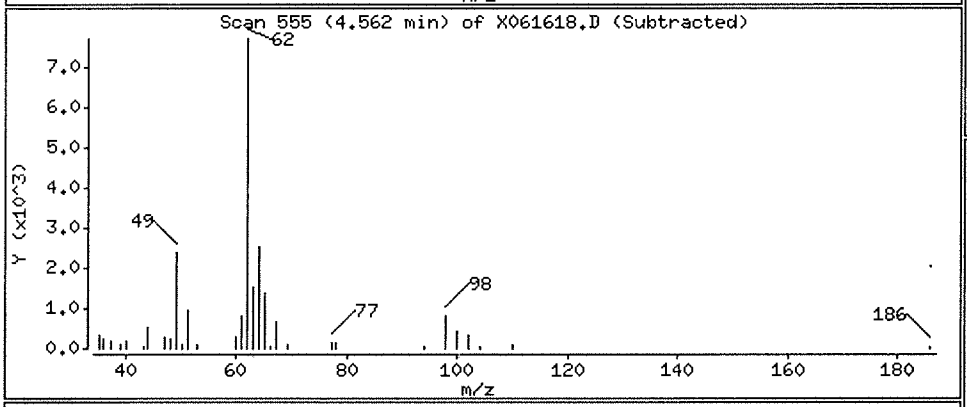
Purge Volume: 5.0 Operator: PC

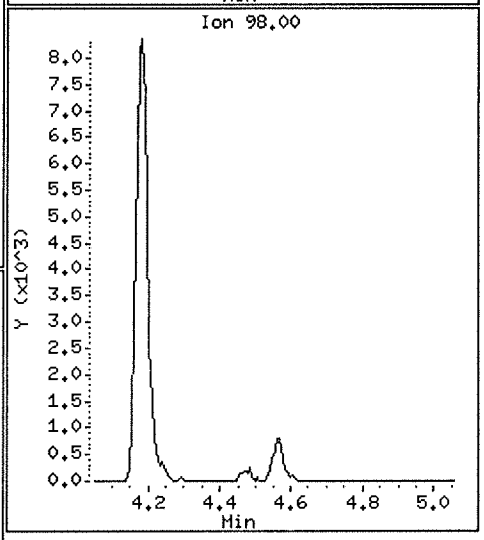
Column phase: DB624 Column diameter: 0.18

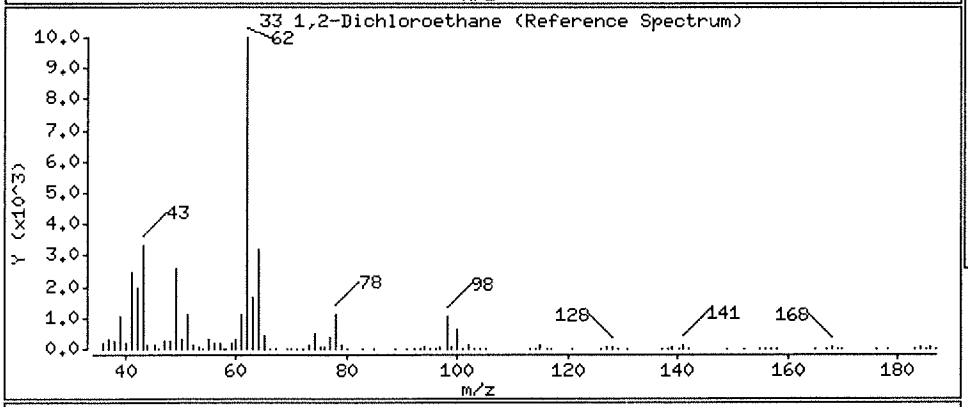
33 1,2-Dichloroethane Concentration: 25.50 ug/l

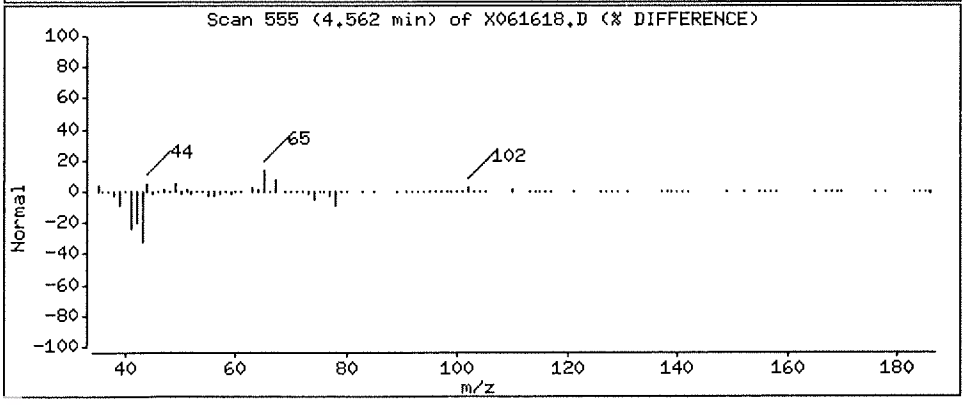












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061618.D

Date : 16-JUN-2021 16:22

Client ID: HS21060700-16

Instrument: voa6.i

Sample Info: HS21060700-16;HS21060700-16;;;

Purge Volume: 5.0

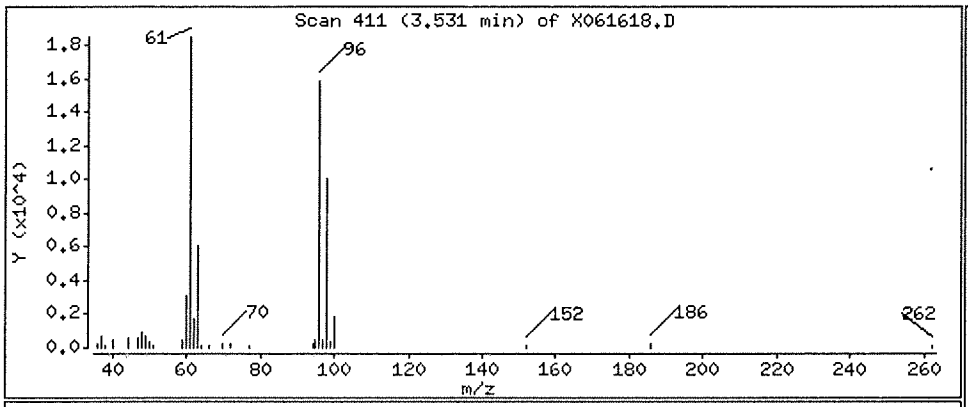
Operator: PC

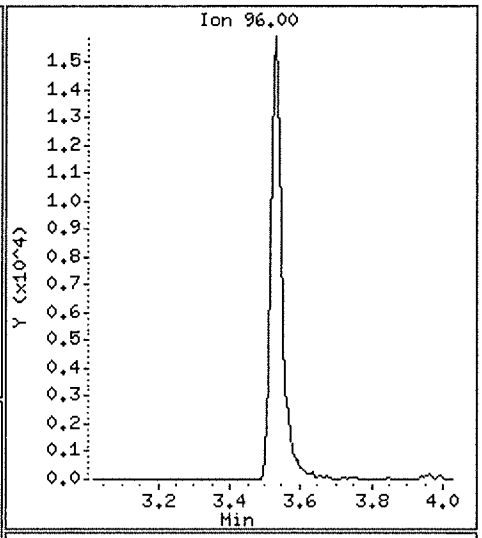
Column phase: DB624

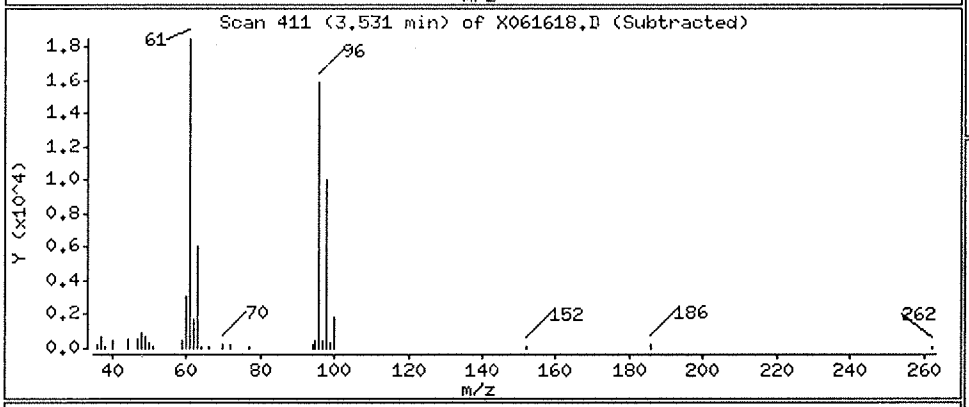
Column diameter: 0.18

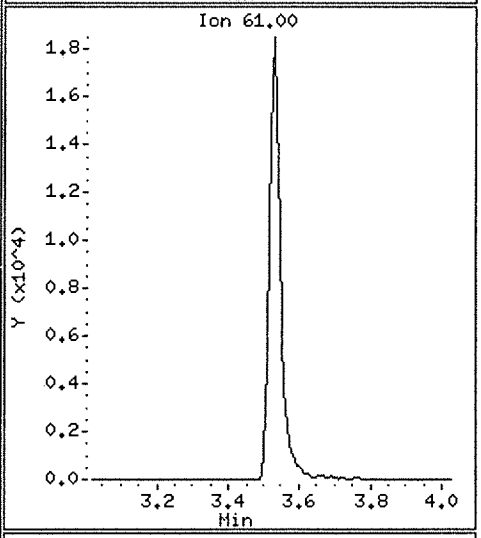
27 cis-1,2-Dichloroethene

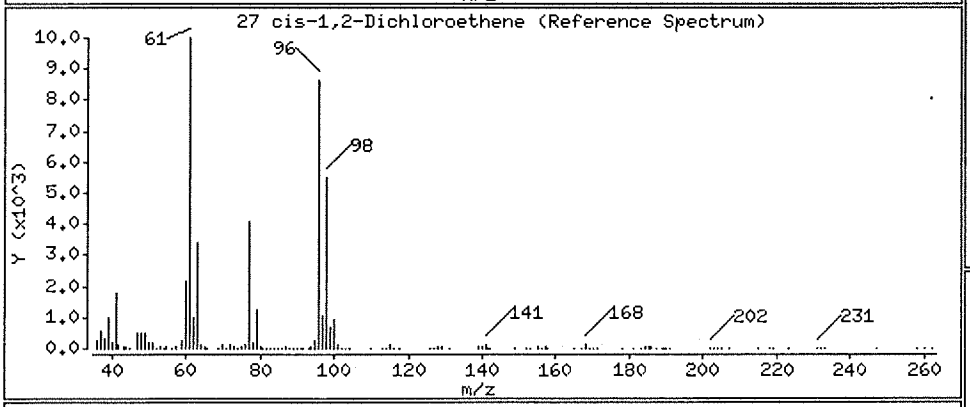
Concentration: 60.00 ug/l

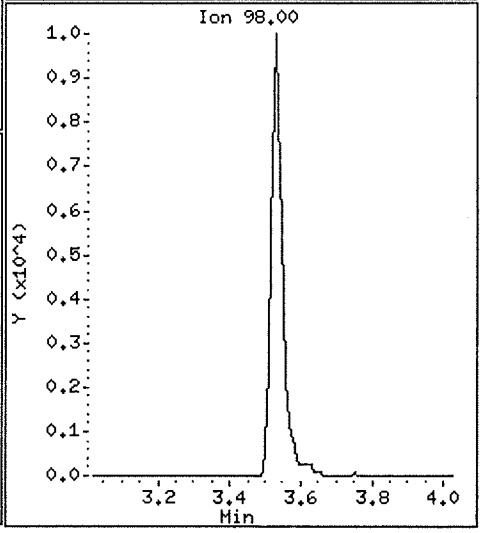


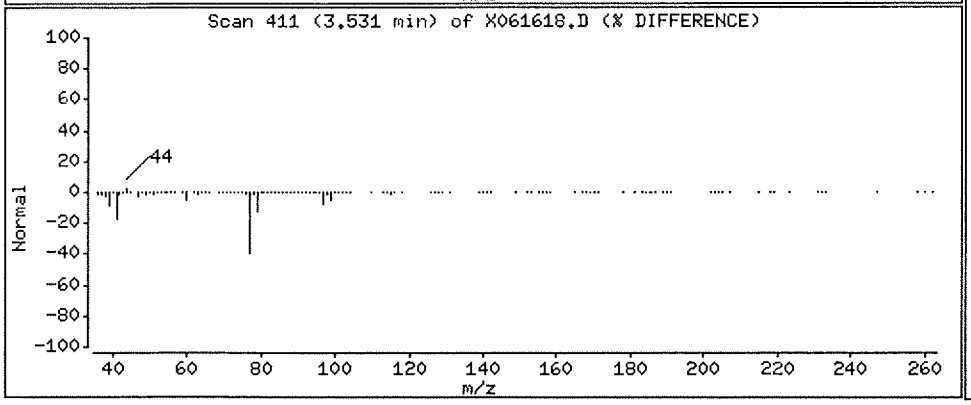












Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061618.D Page 5

Date : 16-JUN-2021 16:22

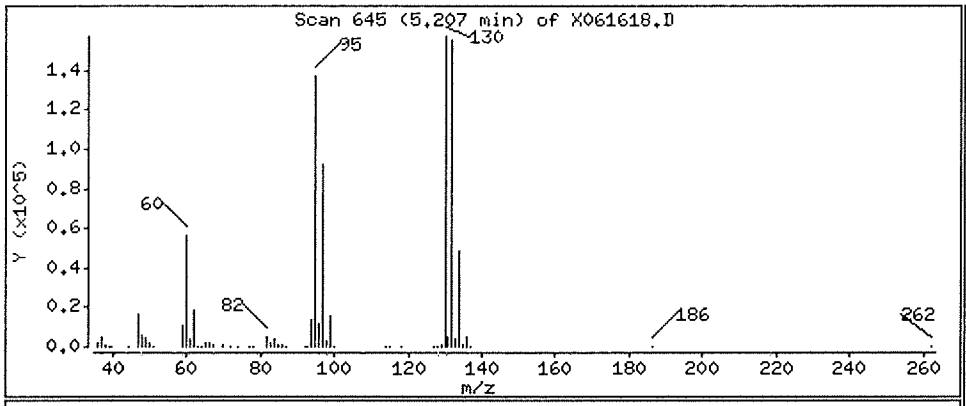
Client ID: HS21060700-16 Instrument: voa6.i

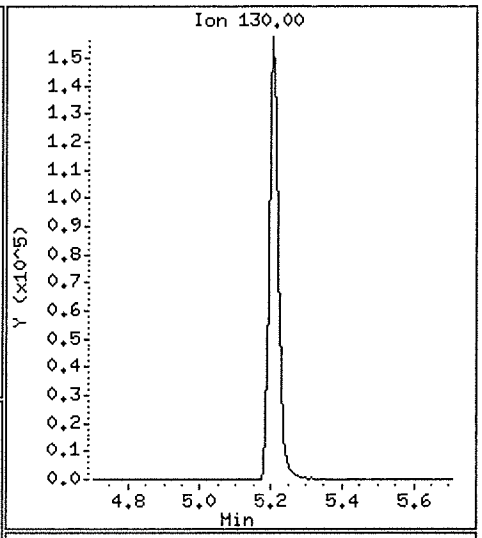
Sample Info: HS21060700-16;HS21060700-16;;;

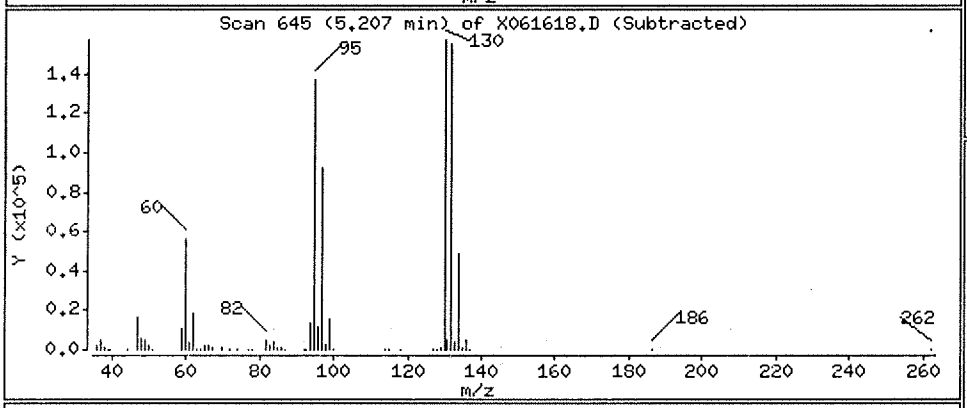
Purge Volume: 5.0 Operator: PC

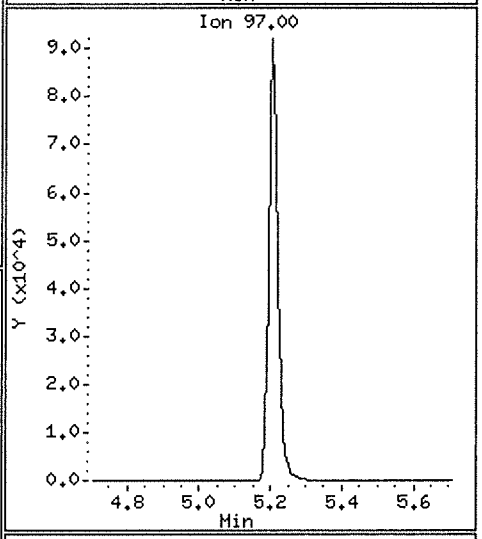
Column phase: DB624 Column diameter: 0.18

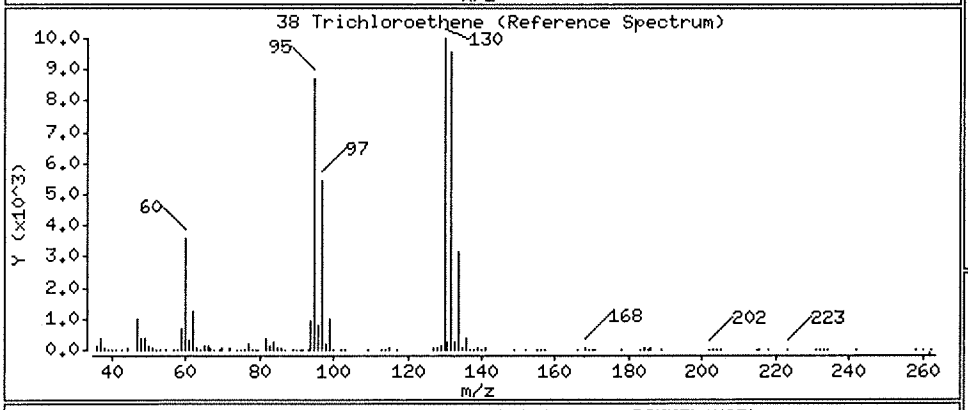
38 Trichloroethene Concentration: 522.65 ug/l

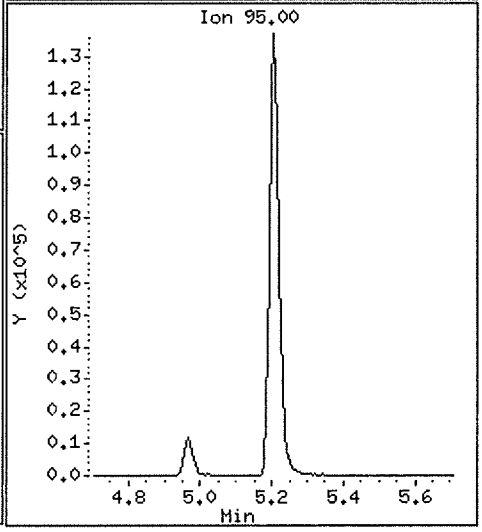


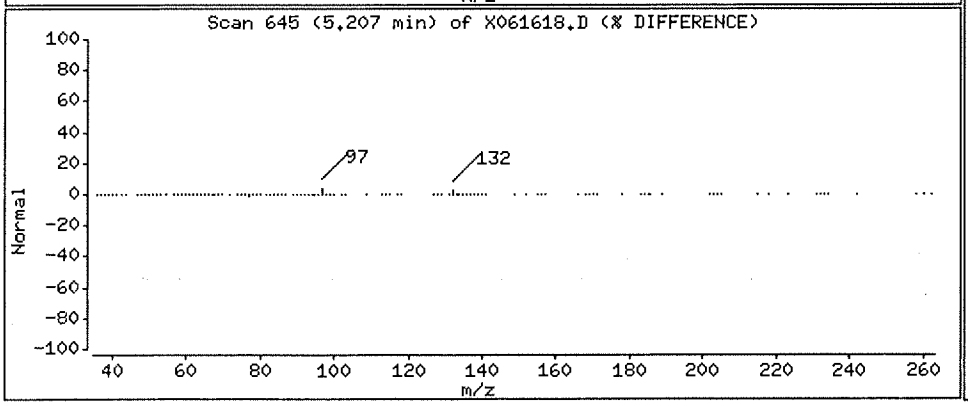












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210616.b\X061626.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 17-JUN-2021 10:12
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210616.b\8260W.m
Meth Date : 26-Jul-2021 14:46 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

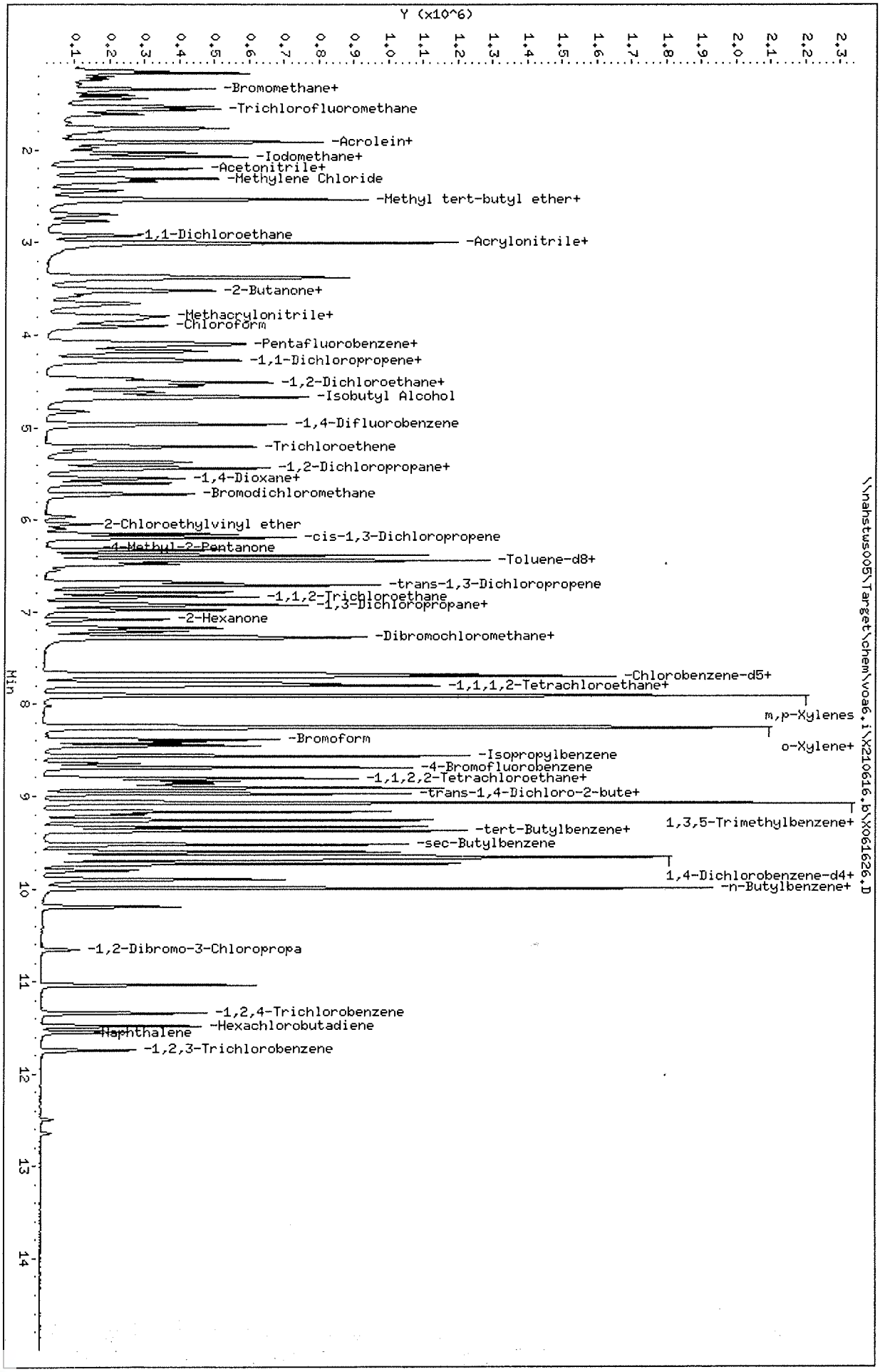
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	401384	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	608465	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	582403	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	326414	50.0000	
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	208896	50.0000	52.88
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	203494	50.0000	53.11
$	48 Toluene-d8	98	6.381	6.381	(0.832)	667868	50.0000	46.03
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	262877	50.0000	51.37
	60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	200456	50.0000	46.54
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	253709	50.0000	42.77
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	217816	50.0000	48.26
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	140256	50.0000	44.45
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	270984	50.0000	42.70
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	171265	50.0000	41.42
	32 1,1-Dichloropropene	75	4.275	4.275	(0.861)	194447	50.0000	41.72
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	83790	50.0000	42.40
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	179881	50.0000	44.20(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	136769	50.0000	42.38
	79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	554864	50.0000	37.26
	89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	25302	50.0000	48.87
	57 1,2-Dibromoethane	107	7.255	7.255	(0.946)	192451	50.0000	44.88
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	363439	50.0000	41.05

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	235244	50.0000	48.52
42 1,2-Dichloropropane	63	5.436	5.436	(1.095)	161409	50.0000	45.06
75 1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	556332	50.0000	37.54
83 1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	370605	50.0000	40.25
54 1,3-Dichloropropane	76	6.983	6.983	(0.910)	277404	50.0000	44.21
84 1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	377718	50.0000	39.31
26 2,2-Dichloropropane	77	3.509	3.509	(0.839)	151662	50.0000	27.61
24 2-Butanone	43	3.580	3.580	(0.856)	106312	100.000	87.05
76 2-Chlorotoluene	91	8.974	8.974	(0.929)	471891	50.0000	38.62
52 2-Hexanone	43	7.083	7.083	(0.923)	186424	100.000	86.16
77 4-Chlorotoluene	91	9.067	9.067	(0.938)	557563	50.0000	38.32
82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	536103	50.0000	35.52
45 4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	276997	100.000	82.59
10 Acetone	43	1.976	1.976	(0.473)	95237	100.000	92.46
37 Benzene	78	4.512	4.512	(0.909)	629498	50.0000	45.03
74 Bromobenzene	156	8.802	8.802	(0.911)	241785	50.0000	44.64
29 Bromochloromethane	128	3.795	3.795	(0.908)	115791	50.0000	47.70
39 Bromodichloromethane	83	5.722	5.722	(1.153)	244805	50.0000	46.79
66 Bromoform	173	8.408	8.408	(1.096)	164996	50.0000	50.80
6 Bromomethane	94	1.338	1.338	(0.320)	188542	50.0000	45.49
19 Carbon Disulfide	76	2.069	2.069	(0.495)	695064	100.000	70.89
34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	224026	50.0000	44.41
59 Chlorobenzene	112	7.692	7.692	(1.003)	489601	50.0000	40.38
7 Chloroethane	64	1.403	1.403	(0.336)	141354	50.0000	50.22
28 Chloroform	83	3.903	3.903	(0.933)	313985	50.0000	44.48
3 Chloromethane	50	1.081	1.081	(0.258)	187321	50.0000	51.73
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	198105	50.0000	47.08
46 cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	269144	50.0000	43.66
55 Dibromochloromethane	129	7.176	7.176	(0.936)	232511	50.0000	48.50
44 Dibromomethane	93	5.550	5.550	(1.118)	121934	50.0000	45.30
2 Dichlorodifluoromethane	85	0.973	0.973	(0.233)	175823	50.0000	47.67
61 Ethylbenzene	106	7.799	7.799	(1.017)	229744	50.0000	41.07
91 Hexachlorobutadiene	225	11.481	11.481	(1.188)	81064	50.0000	40.74
67 Isopropylbenzene	105	8.559	8.559	(1.116)	665194	50.0000	38.92
62 m,p-Xylenes	106	7.900	7.900	(1.030)	577605	100.000	79.21
17 Methylene Chloride	84	2.298	2.298	(0.550)	169109	50.0000	46.36
87 n-Butylbenzene	91	9.991	9.991	(1.034)	425810	50.0000	33.53
73 n-Propylbenzene	91	8.910	8.910	(0.922)	731136	50.0000	35.90
92 Naphthalene	128	11.546	11.546	(1.195)	195948	50.0000	42.00
63 o-Xylene	106	8.236	8.236	(1.074)	288874	50.0000	40.62
81 sec-Butylbenzene	105	9.519	9.519	(0.985)	605965	50.0000	35.35
64 Styrene	104	8.258	8.258	(1.077)	519449	50.0000	43.72
78 tert-Butylbenzene	119	9.332	9.332	(0.966)	471348	50.0000	37.10
56 Tetrachloroethene	164	6.926	6.926	(0.903)	144870	50.0000	40.40
50 Toluene	91	6.446	6.446	(0.840)	670958	50.0000	39.46
20 trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	156741	50.0000	41.82
51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	241068	50.0000	45.33
38 Trichloroethene	130	5.206	5.206	(1.049)	218400	50.0000	52.29
8 Trichlorofluoromethane	101	1.560	1.560	(0.373)	300655	50.0000	41.49
5 Vinyl Chloride	62	1.145	1.145	(0.274)	209145	50.0000	44.01

QC Flag Legend

M - Compound response manually integrated.

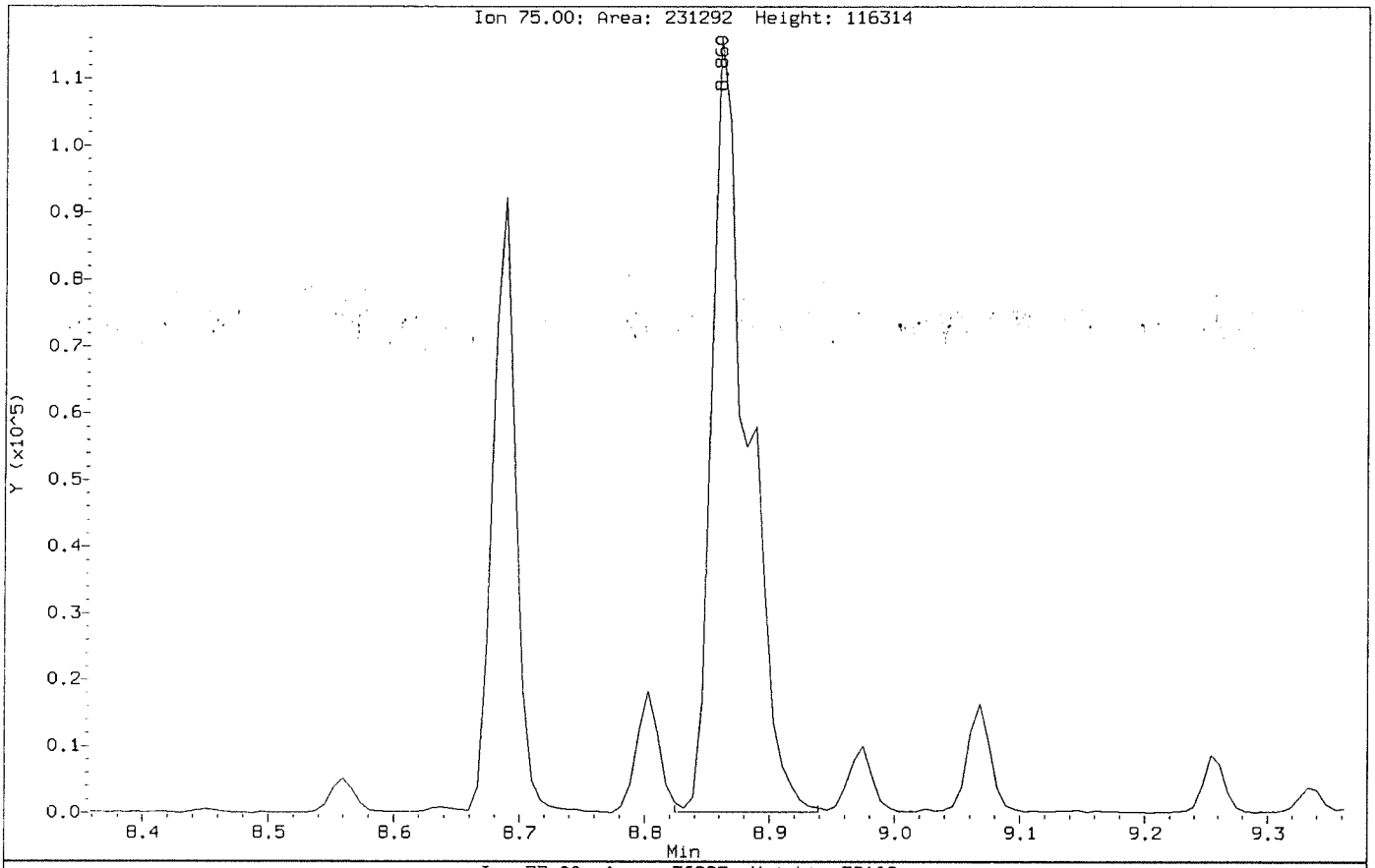


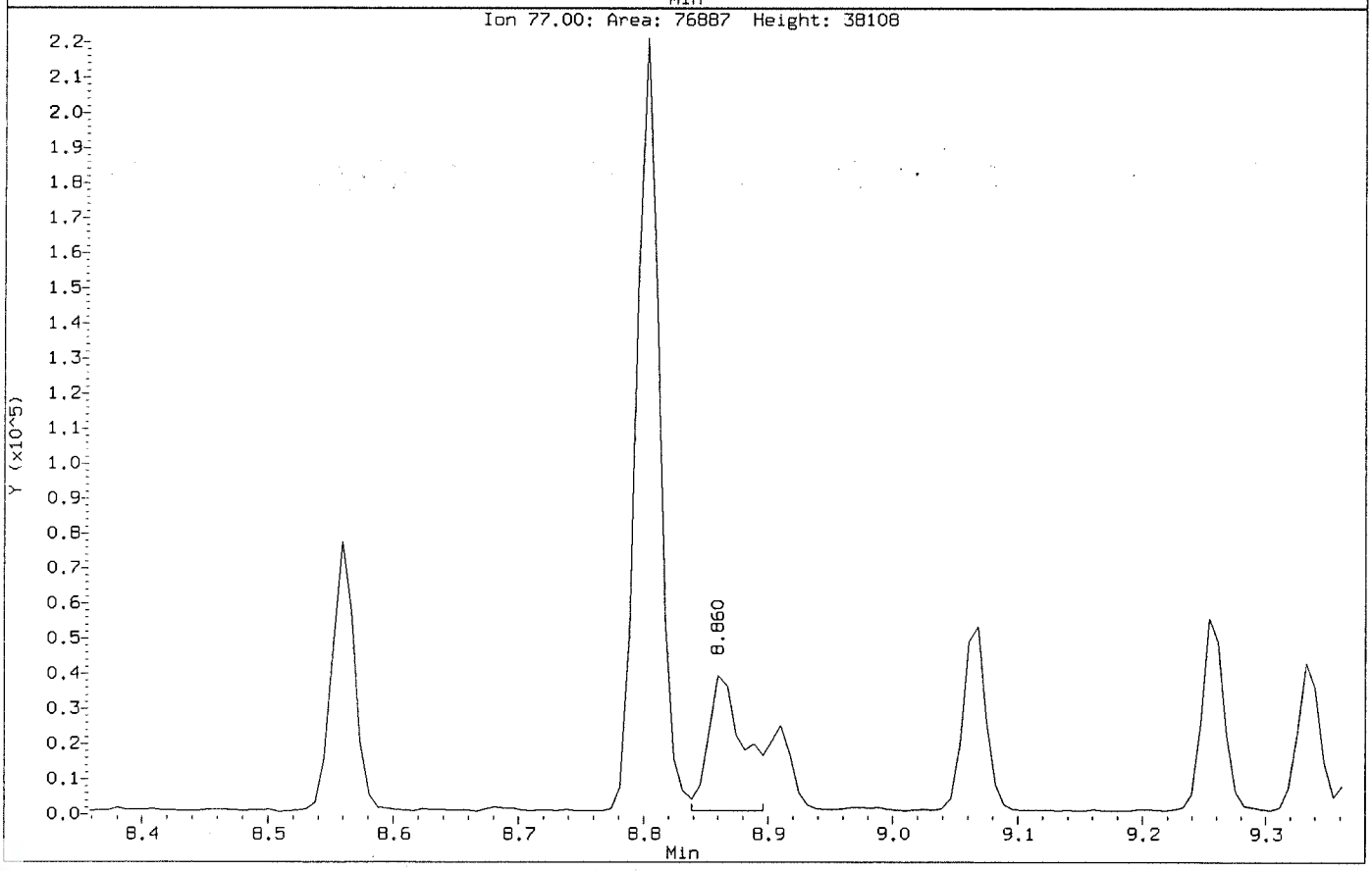
Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\X061626.D
Date : 17-JUN-2021 10:12
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210616.b\Before\X061626.D
Injection Date: 17-JUN-2021 10:12
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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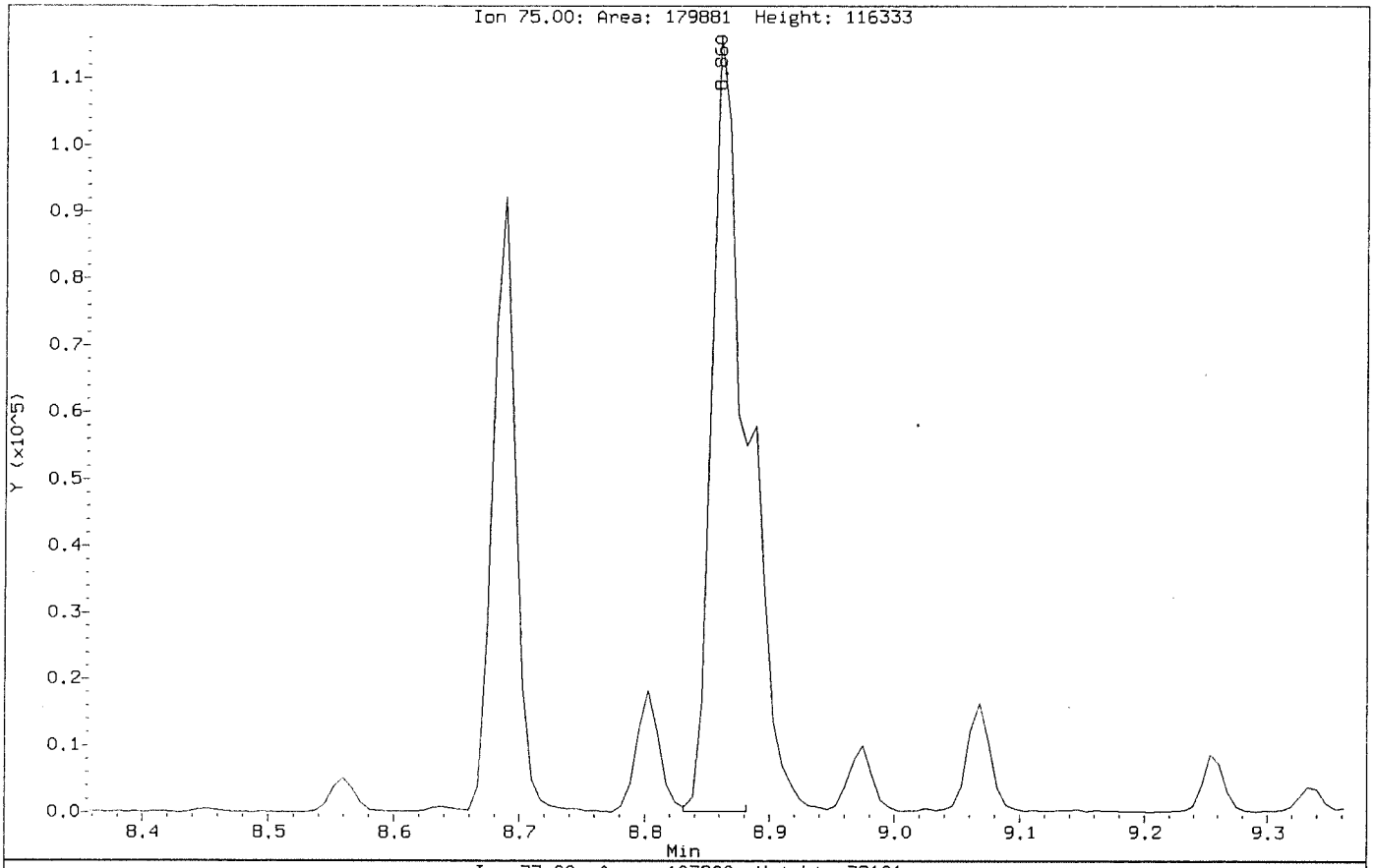
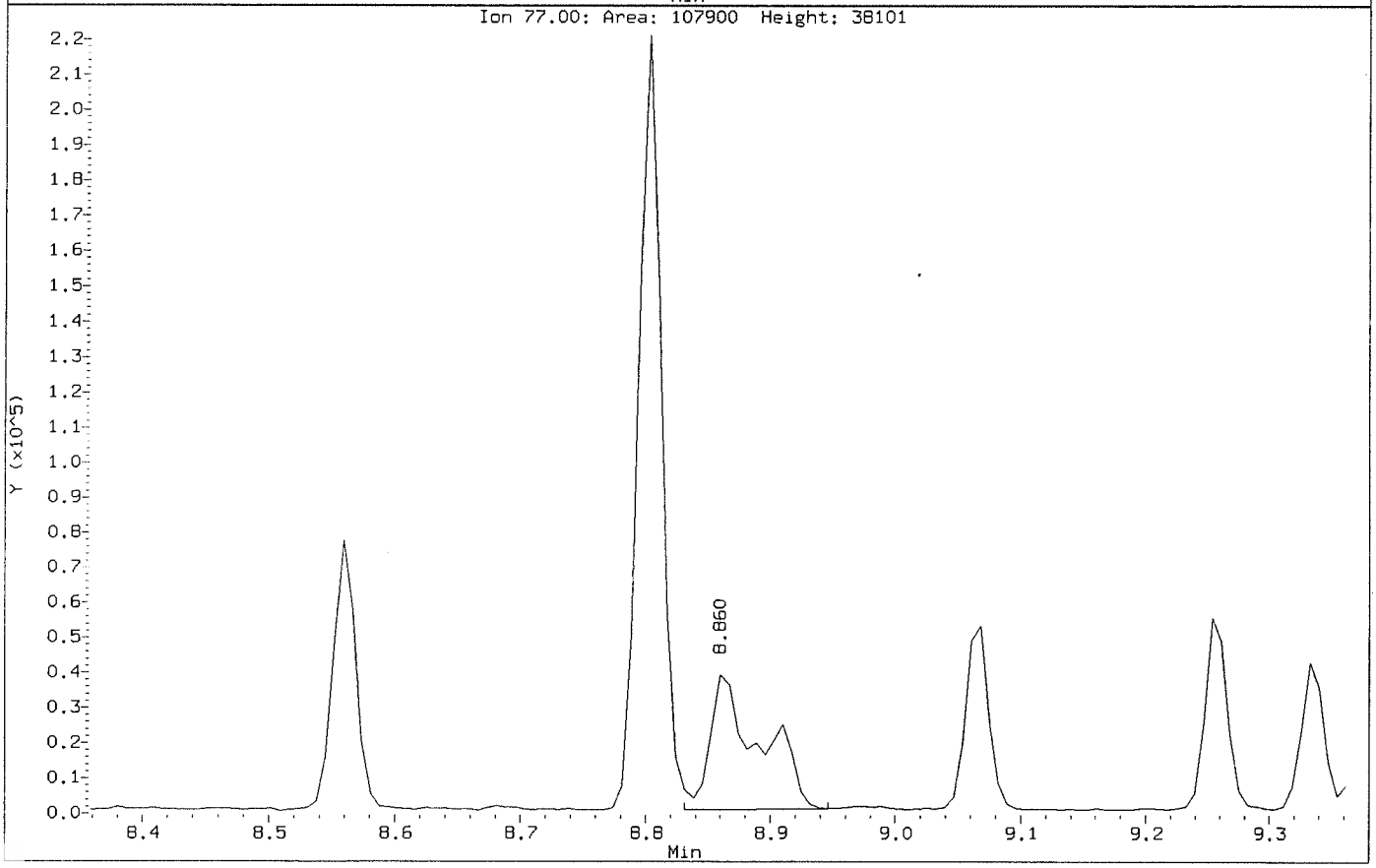
Injection Date: 17-JUN-2021 10:12
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





MSVOA06 -Logbook

Batch: 45170 **Analyst:** Presenta Cabascango

Date: 06-17-2021 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	06-17-2021 10:47 am	1.00	50 mL	50 mL	X061701.D	Liquid	Y	NA
2	CCV	CCV	06-17-2021 11:08 am	1.00	50 mL	50 mL	X061702a.D	Liquid	Y	NA
3	CCV	CCV	06-17-2021 11:29 am	1.00	50 mL	50 mL	X061703.D	Liquid	Y	NA
4	CCB	SAMP	06-17-2021 11:50 am	1.00	50 mL	50 mL	X061704.D	Liquid	Y	NA
5	CCB	SAMP	06-17-2021 12:11 pm	1.00	50 mL	50 mL	X061705.D	Liquid	Y	NA
6	VLCSW-210617	LCS	06-17-2021 12:32 pm	1.00	50 mL	50 mL	X061706.D	Liquid	Y	NA
7	BLANK	SAMP	06-17-2021 12:53 pm	1.00	50 mL	50 mL	X061707.D	Liquid	Y	NA
8	VBLKW-210617	MBLK	06-17-2021 01:14 pm	1.00	50 mL	50 mL	X061708.D	Liquid	Y	NA
9	HS21060705-04	SAMP	06-17-2021 01:35 pm	1.00	50 mL	50 mL	X061709.D	Liquid	Y	NA
10	HS21060705-01	SAMP	06-17-2021 01:56 pm	1.00	50 mL	50 mL	X061710.D	Liquid	Y	NA
11	HS21060700-14	SAMP	06-17-2021 02:17 pm	1.00	50 mL	50 mL	X061711.D	Liquid	Y	NA
12	HS21060700-07	SAMP	06-17-2021 02:38 pm	5.00	10 mL	50 mL	X061712.D	Liquid	Y	NA
13	HS21060700-08	SAMP	06-17-2021 02:59 pm	5.00	10 mL	50 mL	X061713.D	Liquid	Y	NA
14	HS21060705-01MS	MS	06-17-2021 03:20 pm	1.00	50 mL	50 mL	X061714.D	Liquid	Y	NA
15	HS21060705-01MSD	MSD	06-17-2021 03:41 pm	1.00	50 mL	50 mL	X061715.D	Liquid	Y	NA
16	HS21060700-07	SAMP	06-17-2021 04:02 pm	50.00	1 mL	50 mL	X061716.D	Liquid	Y	NA
17	HS21060700-08	SAMP	06-17-2021 04:23 pm	50.00	1 mL	50 mL	X061717.D	Liquid	Y	NA
18	HS21060847-01	SAMP	06-17-2021 04:44 pm	1.00	50 mL	50 mL	X061718.D	Liquid	Y	NA
19	HS21060705-02	SAMP	06-17-2021 05:05 pm	1.00	50 mL	50 mL	X061719.D	Liquid	Y	NA
20	HS21060705-03	SAMP	06-17-2021 05:26 pm	1.00	50 mL	50 mL	X061720.D	Liquid	Y	NA
21	HS21060700-10	SAMP	06-17-2021 05:48 pm	5.00	10 mL	50 mL	X061721.D	Liquid	Y	NA
22	HS21060700-10	SAMP	06-17-2021 06:09 pm	50.00	1 mL	50 mL	X061722.D	Liquid	Y	NA
23	HS21060700-11	SAMP	06-17-2021 06:30 pm	10.00	5 mL	50 mL	X061723.D	Liquid	Y	NA
24	HS21060700-11	SAMP	06-17-2021 06:51 pm	100.0(	500 µL	50 mL	X061724.D	Liquid	Y	NA
25	HS21060700-22	SAMP	06-17-2021 07:12 pm	10.00	5 mL	50 mL	X061725.D	Liquid	Y	NA
26	HS21060700-22	SAMP	06-17-2021 07:33 pm	100.0(	500 µL	50 mL	X061726.D	Liquid	Y	NA
27	HS21060700-23	SAMP	06-17-2021 07:54 pm	10.00	5 mL	50 mL	X061727.D	Liquid	Y	NA
28	HS21060700-23	SAMP	06-17-2021 08:15 pm	100.0(	500 µL	50 mL	X061728.D	Liquid	Y	NA
29	HS21060700-13	SAMP	06-17-2021 08:36 pm	25.00	2 mL	50 mL	X061729.D	Liquid	Y	NA
30	HS21060700-13	SAMP	06-17-2021 08:57 pm	250.0(	200 µL	50 mL	X061730.D	Liquid	Y	NA
31	CCV-END	CCV	06-17-2021 09:18 pm	1.00	50 mL	50 mL	X061731.D	Liquid	Y	NA
32	BFB	TUNE	06-17-2021 09:39 pm	1.00	50 mL	50 mL	Y061701.D	Liquid	Y	NA
33	CCV	CCV	06-17-2021 10:00 pm	1.00	50 mL	50 mL	Y061702a.D	Liquid	Y	NA
34	CCV	CCV	06-17-2021 10:21 pm	1.00	50 mL	50 mL	Y061703.D	Liquid	Y	NA
35	CCB	SAMP	06-17-2021 10:42 pm	1.00	50 mL	50 mL	Y061704.D	Liquid	Y	NA
36	VLCSW-210617	LCS	06-17-2021 11:03 pm	1.00	50 mL	50 mL	Y061705.D	Liquid	Y	NA
37	BLANK	SAMP	06-17-2021 11:24 pm	1.00	50 mL	50 mL	Y061706.D	Liquid	Y	NA
38	VBLKW-210617	MBLK	06-17-2021 11:45 pm	1.00	50 mL	50 mL	Y061707.D	Liquid	Y	NA
39	HS21060801-01	SAMP	06-18-2021 12:06 am	1.00	50 mL	50 mL	Y061708.D	Liquid	Y	NA
40	HS21060794-07	SAMP	06-18-2021 12:27 am	1.00	50 mL	50 mL	Y061709.D	Liquid	Y	NA
41	HS21060801-02	SAMP	06-18-2021 12:48 am	1.00	50 mL	50 mL	Y061710.D	Liquid	Y	NA

MSVOA06 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS21060801-02MS	MS	06-18-2021 01:09 am	1.00	50 mL	50 mL	Y061711.D	Liquid	Y	NA
43	HS21060801-02MSD	MSD	06-18-2021 01:30 am	1.00	50 mL	50 mL	Y061712.D	Liquid	Y	NA
44	HS21060801-03	SAMP	06-18-2021 01:51 am	1.00	50 mL	50 mL	Y061713.D	Liquid	Y	NA
45	HS21060801-04	SAMP	06-18-2021 02:12 am	1.00	50 mL	50 mL	Y061714.D	Liquid	Y	NA
46	HS21060801-05	SAMP	06-18-2021 02:33 am	1.00	50 mL	50 mL	Y061715.D	Liquid	Y	NA
47	HS21060801-06	SAMP	06-18-2021 02:54 am	1.00	50 mL	50 mL	Y061716.D	Liquid	Y	NA
48	HS21060801-07	SAMP	06-18-2021 03:15 am	1.00	50 mL	50 mL	Y061717.D	Liquid	Y	NA
49	HS21060801-08	SAMP	06-18-2021 03:36 am	1.00	50 mL	50 mL	Y061718.D	Liquid	Y	NA
50	HS21060801-09	SAMP	06-18-2021 03:57 am	1.00	50 mL	50 mL	Y061719.D	Liquid	Y	NA
51	HS21060801-10	SAMP	06-18-2021 04:19 am	1.00	50 mL	50 mL	Y061720.D	Liquid	Y	NA
52	HS21060801-11	SAMP	06-18-2021 04:40 am	1.00	50 mL	50 mL	Y061721.D	Liquid	Y	NA
53	HS21060801-12	SAMP	06-18-2021 05:01 am	1.00	50 mL	50 mL	Y061722.D	Liquid	Y	NA
54	HS21060794-01	SAMP	06-18-2021 05:22 am	1.00	50 mL	50 mL	Y061723.D	Liquid	Y	NA
55	HS21060794-03	SAMP	06-18-2021 05:43 am	1.00	50 mL	50 mL	Y061724.D	Liquid	Y	NA
56	HS21060794-04	SAMP	06-18-2021 06:04 am	1.00	50 mL	50 mL	Y061725.D	Liquid	Y	NA
57	HS21060794-05	SAMP	06-18-2021 06:25 am	1.00	50 mL	50 mL	Y061726.D	Liquid	Y	NA
58	HS21060794-06	SAMP	06-18-2021 06:46 am	1.00	50 mL	50 mL	Y061727.D	Liquid	Y	NA
59	HS21060794-08	SAMP	06-18-2021 07:07 am	1.00	50 mL	50 mL	Y061728.D	Liquid	Y	NA
60	HS21060794-09	SAMP	06-18-2021 07:28 am	1.00	50 mL	50 mL	Y061729.D	Liquid	Y	NA
61	BLANK	SAMP	06-18-2021 07:49 am	1.00	50 mL	50 mL	Y061740.D	Liquid	Y	NA

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

	CLIENT SAMPLE NO.	SMC1 (DCE)#	SMC2 #	SMC3 (TOL)#	OTHER #	TOT OUT
01	VLCSW-210617	100	96	95	97	0
02	VBLKW-210617	92	90	104	96	0
03	HS21060700-14	94	91	104	97	0
04	HS21060700-07	93	89	103	99	0
05	HS21060700-08	92	89	105	97	0
06	HS21060705-01MS	92	89	99	101	0
07	HS21060705-01MSD	95	91	102	100	0
08	HS21060700-07	95	91	104	95	0
09	HS21060700-08	93	89	102	99	0
10	HS21060700-10	94	90	103	98	0
11	HS21060700-10	93	90	102	98	0
12	HS21060700-11	92	89	104	99	0
13	HS21060700-11	94	90	104	96	0
14	HS21060700-22	95	89	106	97	0
15	HS21060700-22	93	89	104	96	0
16	HS21060700-23	92	88	104	97	0
17	HS21060700-23	93	90	102	94	0
18	HS21060700-13	92	88	102	96	0
19	HS21060700-13	92	88	104	98	0
20						
21						
22						
23						
24						
25						
26						
27						
28						

		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(0-130)
SMC2	= Dibromofluoromethane	(0-130)
SMC3 (TOL)	= Toluene-d8	(0-130)
OTHER	= 4-Bromofluorobenzene	(0-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKW-210617

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID: X061708 Lab Sample ID: VBLKW-210617

Date Analyzed: 06/17/21 Time Analyzed: 1314

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCSW-210617	VLCSW-210617	X061706	1232
02	HS21060700-14	HS21060700-14	X061711	1417
03	HS21060700-07	HS21060700-07	X061712	1438
04	HS21060700-08	HS21060700-08	X061713	1459
05	HS21060705-01MS	HS21060705-01MS	X061714	1520
06	HS21060705-01MSD	HS21060705-01MSD	X061715	1541
07	HS21060700-07	HS21060700-07	X061716	1602
08	HS21060700-08	HS21060700-08	X061717	1623
09	HS21060700-10	HS21060700-10	X061721	1748
10	HS21060700-10	HS21060700-10	X061722	1809
11	HS21060700-11	HS21060700-11	X061723	1830
12	HS21060700-11	HS21060700-11	X061724	1851
13	HS21060700-22	HS21060700-22	X061725	1912
14	HS21060700-22	HS21060700-22	X061726	1933
15	HS21060700-23	HS21060700-23	X061727	1954
16	HS21060700-23	HS21060700-23	X061728	2015
17	HS21060700-13	HS21060700-13	X061729	2036
18	HS21060700-13	HS21060700-13	X061730	2057
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COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID: X061701 BFB Injection Date: 06/17/21

Instrument ID: VOA6 BFB Injection Time: 1047

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.1
75	30.0 - 60.0% of mass 95	45.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.7 (0.9)1
174	Greater than 50.0% of mass 95	86.8
175	5.0 - 9.0% of mass 174	6.6 (7.6)1
176	95.0 - 101.0% of mass 174	85.5 (98.5)1
177	5.0 - 9.0% of mass 176	5.2 (6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV	CCV	X061703	06/17/21	1129
02	VLCSW-210617	VLCSW-210617	X061706	06/17/21	1232
03	VBLKW-210617	VBLKW-210617	X061708	06/17/21	1314
04	HS21060700-14	HS21060700-14	X061711	06/17/21	1417
05	HS21060700-07	HS21060700-07	X061712	06/17/21	1438
06	HS21060700-08	HS21060700-08	X061713	06/17/21	1459
07	HS21060705-01MS	HS21060705-01MS	X061714	06/17/21	1520
08	HS21060705-01MSD	HS21060705-01MSD	X061715	06/17/21	1541
09	HS21060700-07	HS21060700-07	X061716	06/17/21	1602
10	HS21060700-08	HS21060700-08	X061717	06/17/21	1623
11	HS21060700-10	HS21060700-10	X061721	06/17/21	1748
12	HS21060700-10	HS21060700-10	X061722	06/17/21	1809
13	HS21060700-11	HS21060700-11	X061723	06/17/21	1830
14	HS21060700-11	HS21060700-11	X061724	06/17/21	1851
15	HS21060700-22	HS21060700-22	X061725	06/17/21	1912
16	HS21060700-22	HS21060700-22	X061726	06/17/21	1933
17	HS21060700-23	HS21060700-23	X061727	06/17/21	1954
18	HS21060700-23	HS21060700-23	X061728	06/17/21	2015
19	HS21060700-13	HS21060700-13	X061729	06/17/21	2036
20	HS21060700-13	HS21060700-13	X061730	06/17/21	2057
21	CCV-END	CCV-END	X061731	06/17/21	2118
22					

FORM V VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Instrument ID: VOA6 Calibration Date: 06/17/21 Time: 1129

Lab File ID: X061703 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
cis-1,3-Dichloropropene	0.5060000	0.5100426	0.5100426	0.2	-0.80	20.00	AVRG
trans-1,3-Dichloropropene	0.4370000	0.4501628	0.4501628	0.1	-3.01	20.00	AVRG
1,3-Dichlorobenzene	1.4100000	1.2646475	1.2646475	0.6	10.31	20.00	AVRG
2,2-Dichloropropane	0.6840000	0.6159909	0.6159909	0.1	9.94	20.00	AVRG
1,1-Dichloropropene	0.3830000	0.3662448	0.3662448	0.1	4.37	20.00	AVRG
Dibromomethane	0.2210000	0.2140525	0.2140525	0.1	3.14	20.00	AVRG
1,2-Dibromoethane	0.3680000	0.3448607	0.3448607	0.1	6.29	20.00	AVRG
trans-1,2-Dichloroethene	0.4670000	0.4037628	0.4037628	0.1	13.54	20.00	AVRG
1,1,1,2-Tetrachloroethane	0.3700000	0.3487569	0.3487569	0.1	5.74	20.00	AVRG
1,1,1-Trichloroethane	0.7390000	0.6422397	0.6422397	0.1	13.09	20.00	AVRG
1,1,2,2-Tetrachloroethane	53.394006	50.000000	0.7365426	0.3	-6.79	20.00	LINR
1,1,2-Trichloroethane	0.2710000	0.2521478	0.2521478	0.1	6.96	20.00	AVRG
1,1-Dichloroethane	0.7900000	0.6865579	0.6865579	0.2	13.09	20.00	AVRG
1,1-Dichloroethene	0.5150000	0.4203730	0.4203730	0.1	18.37	20.00	AVRG
Trichloroethene	0.3430000	0.3435744	0.3435744	0.2	-0.17	20.00	AVRG
1,2,3-Trichlorobenzene	0.3030000	0.3613833	0.3613833	0.01	-19.27	20.00	AVRG
Trichlorofluoromethane	0.9020000	0.7297845	0.7297845	0.1	19.09	20.00	AVRG
1,2,4-Trichlorobenzene	0.4940000	0.5676514	0.5676514	0.1	-14.91	20.00	AVRG
1,2,4-Trimethylbenzene	2.2800000	2.0048973	2.0048973	0.1	12.06	20.00	AVRG
Tetrachloroethene	0.3080000	0.2851787	0.2851787	0.2	7.41	20.00	AVRG
1,2-Dichlorobenzene	1.3560000	1.2270677	1.2270677	0.4	9.51	20.00	AVRG
1,2-Dichloroethane	0.3980000	0.3827237	0.3827237	0.1	3.84	20.00	AVRG
1,2-Dichloropropane	0.2940000	0.2775032	0.2775032	0.1	5.61	20.00	AVRG
1,3,5-Trimethylbenzene	2.2700000	1.9546631	1.9546631	0.1	13.89	20.00	AVRG
1,3-Dichloropropane	0.5390000	0.5072844	0.5072844	0.1	5.88	20.00	AVRG
1,4-Dichlorobenzene	1.4720000	1.2910296	1.2910296	0.4	12.29	20.00	AVRG
Toluene	1.4600000	1.2725374	1.2725374	0.4	12.84	20.00	AVRG
2-Butanone	0.1520000	0.1455154	0.1455154	0.1	4.27	20.00	AVRG
2-Chlorotoluene	1.8720000	1.6404563	1.6404563	0.1	12.37	20.00	AVRG
2-Hexanone	0.1860000	0.1831029	0.1831029	0.1	1.56	20.00	AVRG
4-Chlorotoluene	2.2280000	1.9318767	1.9318767	0.1	13.29	20.00	AVRG
tert-Butylbenzene	1.9460000	1.6657676	1.6657676	0.1	14.40	20.00	AVRG
4-Methyl-2-Pentanone	0.2880000	0.2696181	0.2696181	0.1	6.38	20.00	AVRG
Acetone	97.172545	100.00000	0.1243053	0.1	2.83	20.00	LINR
Benzene	1.1480000	1.0927432	1.0927432	0.5	4.81	20.00	AVRG
Bromobenzene	0.8300000	0.7901617	0.7901617	0.1	4.80	20.00	AVRG
Bromochloromethane	0.3020000	0.2730533	0.2730533	0.1	9.58	20.00	AVRG
Bromodichloromethane	0.4300000	0.4102282	0.4102282	0.2	4.60	20.00	AVRG
Bromoform	0.2790000	0.2809448	0.2809448	0.1	-0.70	20.00	AVRG
Bromomethane	41.332246	50.000000	0.4266431	0.1	17.34	20.00	LINR
Carbon Disulfide	1.2210000	0.9773551	0.9773551	0.1	19.95	20.00	AVRG
Carbon Tetrachloride	0.4140000	0.4008611	0.4008611	0.1	3.17	20.00	AVRG

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS2106070

Instrument ID: VOA6 Calibration Date: 06/17/21 Time: 1129

Lab File ID: X061703 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chlorobenzene	1.0410000	0.9034486	0.9034486	0.5	13.21	20.00	AVRG	
Chloroethane	52.872339	50.000000	0.3702217	0.1	-5.74	20.00	LINR	
Chloroform	0.8790000	0.7580270	0.7580270	0.2	13.76	20.00	AVRG	
Chloromethane	46.886709	50.000000	0.4251370	0.1	6.23	20.00	LINR	
cis-1,2-Dichloroethene	0.5240000	0.4727768	0.4727768	0.1	9.78	20.00	AVRG	
Dibromochloromethane	0.4120000	0.4017229	0.4017229	0.1	2.49	20.00	AVRG	
Dichlorodifluoromethane	48.763646	50.000000	0.4479910	0.1	2.47	20.00	LINR	
Ethylbenzene	0.4800000	0.4419201	0.4419201	0.1	7.93	20.00	AVRG	
Hexachlorobutadiene	60.585195	50.000000	0.3786457	0.1	-21.17	20.00	2RDR	<-
Isopropylbenzene	1.4670000	1.2795363	1.2795363	0.1	12.78	20.00	AVRG	
m,p-Xylenes	0.6260000	0.5509095	0.5509095	0.1	12.00	20.00	AVRG	
Methylene Chloride	46.508977	50.000000	0.4225862	0.1	6.98	20.00	LINR	
n-Butylbenzene	1.9450000	1.7924277	1.7924277	0.5	7.84	20.00	AVRG	
n-Propylbenzene	3.1190000	2.7288287	2.7288287	0.1	12.51	20.00	AVRG	
Naphthalene	0.7140000	0.8224205	0.8224205	0.2	-15.18	20.00	AVRG	
o-Xylene	0.6100000	0.5392361	0.5392361	0.3	11.60	20.00	AVRG	
sec-Butylbenzene	2.6250000	2.3346613	2.3346613	0.1	11.06	20.00	AVRG	
Styrene	1.0200000	0.9392430	0.9392430	0.3	7.92	20.00	AVRG	
Vinyl Chloride	0.5920000	0.5064342	0.5064342	0.1	14.45	20.00	AVRG	
1,2,3-Trichloropropane	0.6230000	0.6217831	0.6217831	0.1	0.20	20.00	AVRG	
p-Isopropyltoluene	2.3120000	2.0830081	2.0830081	0.1	9.90	20.00	AVRG	
1,2-Dibromo-3-Chloropropane	56.475977	50.000000	8.97e-002	0.05	-12.95	20.00	LINR	
1,2-Dichloroethane-d4	48.439681	50.000000	0.4629225	0.1	3.12	20.00	LINR	
Dibromofluoromethane	47.499233	50.000000	0.4676246	0.1	5.00	20.00	LINR	
Toluene-d8	1.2450000	1.1528178	1.1528178	0.1	7.40	20.00	AVRG	
4-Bromofluorobenzene	49.312646	50.000000	0.4329773	0.1	1.37	20.00	LINR	

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Instrument ID: VOA6 Calibration Date: 06/17/21 Time: 2118

Lab File ID: X061731 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
cis-1,3-Dichloropropene	0.5060000	0.4904040	0.4904040	0.2	3.08	50.00	AVRG
trans-1,3-Dichloropropene	0.4370000	0.4282053	0.4282053	0.1	2.01	50.00	AVRG
1,3-Dichlorobenzene	1.4100000	1.2408521	1.2408521	0.6	12.00	50.00	AVRG
2,2-Dichloropropane	0.6840000	0.4805353	0.4805353	0.1	29.75	50.00	AVRG
1,1-Dichloropropene	0.3830000	0.3460303	0.3460303	0.1	9.65	50.00	AVRG
Dibromomethane	0.2210000	0.2162379	0.2162379	0.1	2.15	50.00	AVRG
1,2-Dibromoethane	0.3680000	0.3459767	0.3459767	0.1	5.98	50.00	AVRG
trans-1,2-Dichloroethene	0.4670000	0.3961220	0.3961220	0.1	15.18	50.00	AVRG
1,1,1,2-Tetrachloroethane	0.3700000	0.3504021	0.3504021	0.1	5.30	50.00	AVRG
1,1,1-Trichloroethane	0.7390000	0.6463039	0.6463039	0.1	12.54	50.00	AVRG
1,1,2,2-Tetrachloroethane	51.940806	50.000000	0.7169358	0.3	-3.88	50.00	LINR
1,1,2-Trichloroethane	0.2710000	0.2563564	0.2563564	0.1	5.40	50.00	AVRG
1,1-Dichloroethane	0.7900000	0.6930288	0.6930288	0.2	12.27	50.00	AVRG
1,1-Dichloroethene	0.5150000	0.4179608	0.4179608	0.1	18.84	50.00	AVRG
Trichloroethene	0.3430000	0.3441289	0.3441289	0.2	-0.33	50.00	AVRG
1,2,3-Trichlorobenzene	0.3030000	0.3187242	0.3187242	0.01	-5.19	50.00	AVRG
Trichlorofluoromethane	0.9020000	0.7376688	0.7376688	0.1	18.22	50.00	AVRG
1,2,4-Trichlorobenzene	0.4940000	0.5018041	0.5018041	0.1	-1.58	50.00	AVRG
1,2,4-Trimethylbenzene	2.2800000	1.9376466	1.9376466	0.1	15.02	50.00	AVRG
Tetrachloroethene	0.3080000	0.2688259	0.2688259	0.2	12.72	50.00	AVRG
1,2-Dichlorobenzene	1.3560000	1.2133042	1.2133042	0.4	10.52	50.00	AVRG
1,2-Dichloroethane	0.3980000	0.3965303	0.3965303	0.1	0.37	50.00	AVRG
1,2-Dichloropropane	0.2940000	0.2794591	0.2794591	0.1	4.94	50.00	AVRG
1,3,5-Trimethylbenzene	2.2700000	1.8625667	1.8625667	0.1	17.95	50.00	AVRG
1,3-Dichloropropane	0.5390000	0.5046308	0.5046308	0.1	6.38	50.00	AVRG
1,4-Dichlorobenzene	1.4720000	1.2661369	1.2661369	0.4	13.98	50.00	AVRG
Toluene	1.4600000	1.2489287	1.2489287	0.4	14.46	50.00	AVRG
2-Butanone	0.1520000	0.1446028	0.1446028	0.1	4.87	50.00	AVRG
2-Chlorotoluene	1.8720000	1.5923145	1.5923145	0.1	14.94	50.00	AVRG
2-Hexanone	0.1860000	0.1803804	0.1803804	0.1	3.02	50.00	AVRG
4-Chlorotoluene	2.2280000	1.8567700	1.8567700	0.1	16.66	50.00	AVRG
tert-Butylbenzene	1.9460000	1.5708198	1.5708198	0.1	19.28	50.00	AVRG
4-Methyl-2-Pentanone	0.2880000	0.2681548	0.2681548	0.1	6.89	50.00	AVRG
Acetone	96.224702	100.00000	0.1231629	0.1	3.78	50.00	LINR
Benzene	1.1480000	1.0701078	1.0701078	0.5	6.78	50.00	AVRG
Bromobenzene	0.8300000	0.7764115	0.7764115	0.1	6.46	50.00	AVRG
Bromochloromethane	0.3020000	0.2868095	0.2868095	0.1	5.03	50.00	AVRG
Bromodichloromethane	0.4300000	0.4129923	0.4129923	0.2	3.96	50.00	AVRG
Bromoform	0.2790000	0.2823605	0.2823605	0.1	-1.20	50.00	AVRG
Bromomethane	42.521074	50.000000	0.4389600	0.1	14.96	50.00	LINR
Carbon Disulfide	1.2210000	0.9316775	0.9316775	0.1	23.70	50.00	AVRG
Carbon Tetrachloride	0.4140000	0.3778163	0.3778163	0.1	8.74	50.00	AVRG

FORM VII VOA

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS2106070

Instrument ID: VOA6 Calibration Date: 06/17/21 Time: 2118

Lab File ID: X061731 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Chlorobenzene	1.0410000	0.8944163	0.8944163	0.5	14.08	50.00	AVRG
Chloroethane	47.850659	50.000000	0.3359764	0.1	4.30	50.00	LINR
Chloroform	0.8790000	0.7830169	0.7830169	0.2	10.92	50.00	AVRG
Chloromethane	46.678524	50.000000	0.4233536	0.1	6.64	50.00	LINR
cis-1,2-Dichloroethene	0.5240000	0.4756314	0.4756314	0.1	9.23	50.00	AVRG
Dibromochloromethane	0.4120000	0.4012247	0.4012247	0.1	2.62	50.00	AVRG
Dichlorodifluoromethane	46.036297	50.000000	0.4230424	0.1	7.93	50.00	LINR
Ethylbenzene	0.4800000	0.4326554	0.4326554	0.1	9.86	50.00	AVRG
Hexachlorobutadiene	45.456989	50.000000	0.2788523	0.1	9.09	50.00	2RDR
Isopropylbenzene	1.4670000	1.2347823	1.2347823	0.1	15.83	50.00	AVRG
m,p-Xylenes	0.6260000	0.5421410	0.5421410	0.1	13.40	50.00	AVRG
Methylene Chloride	46.915987	50.000000	0.4261816	0.1	6.17	50.00	LINR
n-Butylbenzene	1.9450000	1.5171354	1.5171354	0.5	22.00	50.00	AVRG
n-Propylbenzene	3.1190000	2.5556098	2.5556098	0.1	18.06	50.00	AVRG
Naphthalene	0.7140000	0.7217734	0.7217734	0.2	-1.09	50.00	AVRG
o-Xylene	0.6100000	0.5278880	0.5278880	0.3	13.46	50.00	AVRG
sec-Butylbenzene	2.6250000	2.0841237	2.0841237	0.1	20.60	50.00	AVRG
Styrene	1.0200000	0.9239448	0.9239448	0.3	9.42	50.00	AVRG
Vinyl Chloride	0.5920000	0.5063026	0.5063026	0.1	14.48	50.00	AVRG
1,2,3-Trichloropropane	0.6230000	0.6085279	0.6085279	0.1	2.32	50.00	AVRG
p-Isopropyltoluene	2.3120000	1.8383432	1.8383432	0.1	20.49	50.00	AVRG
1,2-Dibromo-3-Chloropropane	53.117704	50.000000	8.43e-002	0.05	-6.24	50.00	LINR
1,2-Dichloroethane-d4	52.145784	50.000000	0.4978407	0.1	-4.29	50.00	LINR
Dibromofluoromethane	50.687255	50.000000	0.4989017	0.1	-1.37	50.00	LINR
Toluene-d8	1.2450000	1.1827254	1.1827254	0.1	5.00	50.00	AVRG
4-Bromofluorobenzene	50.721348	50.000000	0.4455372	0.1	-1.44	50.00	LINR

FORM VII VOA

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID (Standard): X061703 Date Analyzed: 06/17/21

Instrument ID: VOA6 Time Analyzed: 1129

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(DCB) AREA #	RT #
	12 HOUR STD	728410	7.67	763948	4.96	394094	9.66
	UPPER LIMIT	1456820	8.17	1527896	5.46	788188	10.16
	LOWER LIMIT	364205	7.17	381974	4.46	197047	9.16
	CLIENT SAMPLE NO.						
01	VLCSW-210617	671388	7.67	703897	4.96	356379	9.66
02	VBLKW-210617	719847	7.67	828949	4.96	350833	9.66
03	HS21060700-14	673874	7.67	779308	4.97	326147	9.66
04	HS21060700-07	706884	7.67	802618	4.96	374405	9.66
05	HS21060700-08	669347	7.67	782078	4.96	324648	9.66
06	HS21060705-01MS	745382	7.67	823373	4.96	407546	9.66
07	HS21060705-01MSD	734641	7.67	828677	4.96	383046	9.66
08	HS21060700-07	699967	7.67	811946	4.96	349413	9.66
09	HS21060700-08	700174	7.67	792725	4.96	358392	9.66
10	HS21060700-10	683225	7.67	787216	4.96	340885	9.66
11	HS21060700-10	694108	7.67	788709	4.96	362376	9.66
12	HS21060700-11	673661	7.67	784932	4.96	335929	9.66
13	HS21060700-11	691153	7.67	790468	4.96	339632	9.66
14	HS21060700-22	647366	7.67	761696	4.96	322082	9.66
15	HS21060700-22	678290	7.67	773430	4.96	345644	9.66
16	HS21060700-23	664711	7.67	773219	4.96	338462	9.66
17	HS21060700-23	680772	7.67	776928	4.96	338700	9.66
18	HS21060700-13	684996	7.67	778058	4.96	339097	9.66
19	HS21060700-13	671562	7.67	778632	4.96	342081	9.66
20							

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ALS HOUSTON Contract:

Lab Code: ALS-HS Case No.: SAS No.: SDG No.: HS21060700

Lab File ID (Standard): X061703 Date Analyzed: 06/17/21

Instrument ID: VOA6 Time Analyzed: 1129

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	533167	4.18				
	UPPER LIMIT	1066334	4.68				
	LOWER LIMIT	266584	3.68				
	CLIENT SAMPLE NO.						
01	VLCSW-210617	491361	4.18				
02	VBLKW-210617	604918	4.18				
03	HS21060700-14	569582	4.18				
04	HS21060700-07	585974	4.18				
05	HS21060700-08	570537	4.18				
06	HS21060705-01MS	596843	4.18				
07	HS21060705-01MSD	595203	4.18				
08	HS21060700-07	589545	4.18				
09	HS21060700-08	581452	4.18				
10	HS21060700-10	573706	4.18				
11	HS21060700-10	573987	4.18				
12	HS21060700-11	576629	4.18				
13	HS21060700-11	580527	4.18				
14	HS21060700-22	554070	4.18				
15	HS21060700-22	570279	4.18				
16	HS21060700-23	569330	4.18				
17	HS21060700-23	564180	4.18				
18	HS21060700-13	564440	4.18				
19	HS21060700-13	568416	4.18				
20							

IS4 = Pentafluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061701.D

Date : 17-JUN-2021 10:47

Client ID: BFB

Instrument: voa6.i

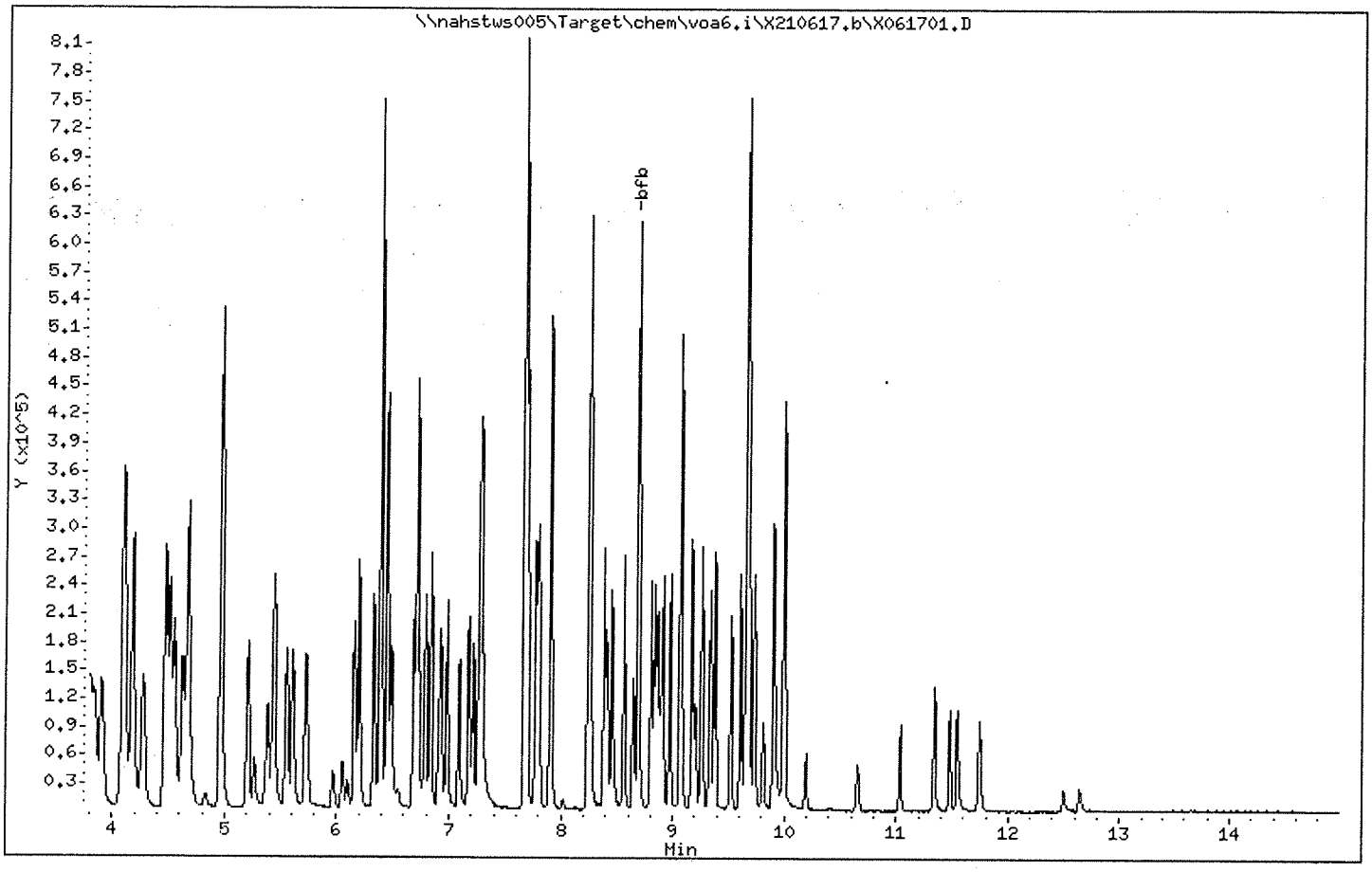
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061701.D

Date : 17-JUN-2021 10:47

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

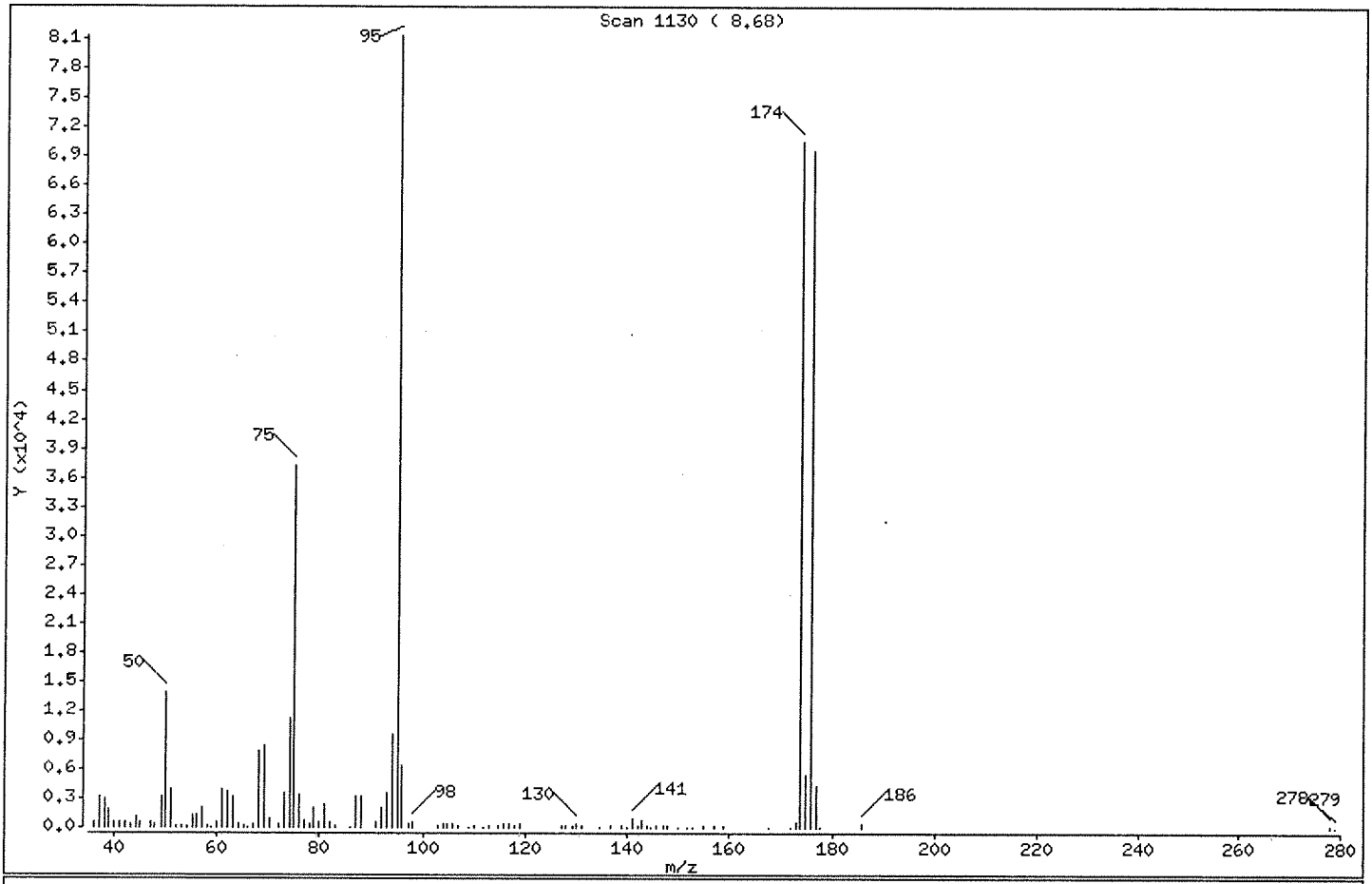
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.11
75	30.00 - 60.00% of mass 95	45.81
96	5.00 - 9.00% of mass 95	7.84
173	Less than 2.00% of mass 174	0.75 (0.86)
174	Greater than 50.00% of mass 95	86.78
175	5.00 - 9.00% of mass 174	6.59 (7.60)
176	95.00 - 101.00% of mass 174	85.49 (98.52)
177	5.00 - 9.00% of mass 176	5.18 (6.06)

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061701.D

Date : 17-JUN-2021 10:47

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: X061701.D
Spectrum: Scan 1130 (8.68)
Location of Maximum: 95.00
Number of points: 105

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	595	64.00	319	96.00	6385	142.00	144
37.10	3178	65.10	112	97.10	330	142.90	720
38.10	3006	66.10	54	98.10	523	143.80	96
39.00	1812	66.90	313	102.90	148	144.70	81
40.00	623	68.00	7777	103.90	446	145.80	162
41.10	517	69.00	8396	104.90	313	147.10	97
42.00	628	70.10	873	105.80	281	147.80	208
43.10	371	72.10	329	107.00	174	150.00	90
44.10	1137	73.00	3534	108.90	69	151.80	80
45.10	519	74.00	11201	110.00	145	152.80	77
47.00	634	75.00	37288	111.90	54	154.90	215
47.90	311	76.00	3342	112.90	120	156.90	168
49.10	3212	77.00	786	114.80	146	158.70	115
50.10	13926	78.10	370	115.90	296	167.80	83
51.10	4001	78.90	2038	116.80	413	172.00	85
52.00	253	80.00	618	117.90	258	173.00	607
53.00	109	80.90	2485	118.90	371	173.90	70640
54.10	108	82.00	551	127.10	110	174.90	5366
55.10	1257	83.00	214	127.90	199	175.90	69592
56.00	1262	85.80	91	129.10	164	176.90	4214
57.10	2076	87.00	3219	130.00	373	177.80	87
58.00	159	87.90	3089	130.90	202	186.00	309
58.80	64	90.90	508	134.70	76	278.00	208
59.90	547	92.00	2069	136.80	130	279.10	78
61.00	3928	93.00	3499	139.00	122		
62.00	3797	94.00	9509	140.00	65		
63.00	3183	95.00	81400	140.90	845		

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061703.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 17-JUN-2021 11:29
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 15:01 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

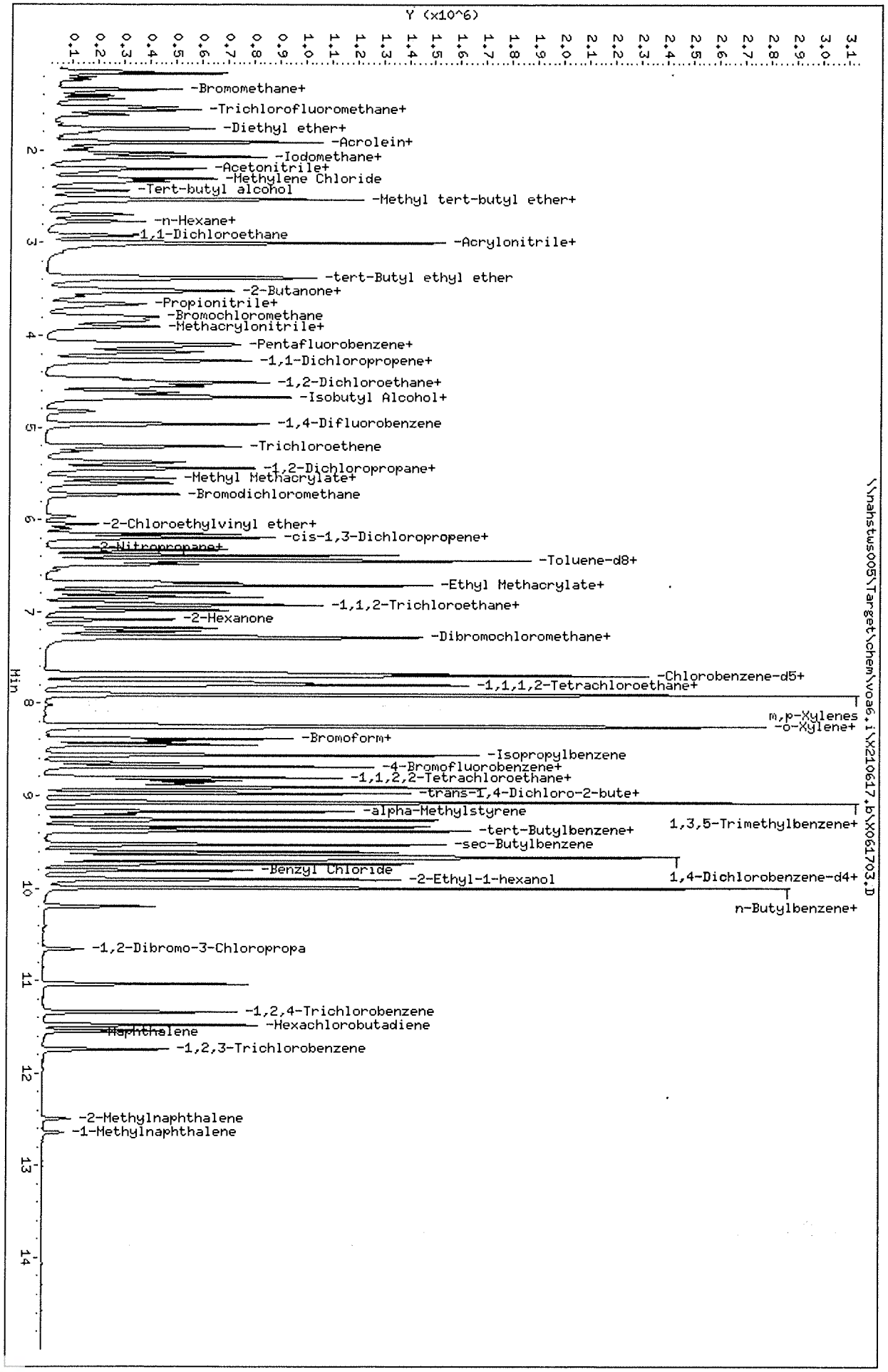
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	533167	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	763948	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	728410	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	394094	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	249322	50.0000	47.49
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	246815	50.0000	48.43
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	839724	50.0000	46.28
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	315385	50.0000	49.31
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	254038	50.0000	47.15
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	342421	50.0000	43.45
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	290267	50.0000	53.39
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	183667	50.0000	46.54
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	366050	50.0000	43.42
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	224129	50.0000	40.81
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	279792	50.0000	47.81
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	142419	50.0000	59.69
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	245041	50.0000	49.87(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	223708	50.0000	57.41
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	790118	50.0000	43.95
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	35350	50.0000	56.47
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	251200	50.0000	46.84
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	483580	50.0000	45.23

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061703.D Page 2
Report Date: 26-Jul-2021 15:01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	292381	50.0000	48.03
42 1,2-Dichloropropane	63	5.436	5.436	(1.095)	211998	50.0000	47.14
75 1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	770321	50.0000	43.06
83 1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	498390	50.0000	44.83
54 1,3-Dichloropropane	76	6.983	6.983	(0.910)	369511	50.0000	47.09
84 1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	508787	50.0000	43.86
26 2,2-Dichloropropane	77	3.509	3.509	(0.839)	328426	50.0000	45.02
24 2-Butanone	43	3.580	3.580	(0.856)	155168	100.000	95.65
76 2-Chlorotoluene	91	8.974	8.974	(0.929)	646494	50.0000	43.82
52 2-Hexanone	43	7.083	7.083	(0.923)	266748	100.000	98.58
77 4-Chlorotoluene	91	9.067	9.067	(0.938)	761341	50.0000	43.34
82 p-Isopropyltoluene	119	9.648	9.648	(0.999)	820901	50.0000	45.04
45 4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	392785	100.000	93.64
10 Acetone	43	1.976	1.976	(0.473)	132551	100.000	97.17
37 Benzene	78	4.512	4.512	(0.909)	834799	50.0000	47.56
74 Bromobenzene	156	8.802	8.802	(0.911)	311398	50.0000	47.62
29 Bromochloromethane	128	3.795	3.795	(0.908)	145583	50.0000	45.15
39 Bromodichloromethane	83	5.722	5.722	(1.153)	313393	50.0000	47.71
66 Bromoform	173	8.408	8.408	(1.096)	204643	50.0000	50.38
6 Bromomethane	94	1.338	1.338	(0.320)	227472	50.0000	41.33
19 Carbon Disulfide	76	2.069	2.069	(0.495)	1042187	100.000	80.02(M)
34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	306237	50.0000	48.35
59 Chlorobenzene	112	7.692	7.692	(1.003)	658081	50.0000	43.39
7 Chloroethane	64	1.403	1.403	(0.336)	197390	50.0000	52.87
28 Chloroform	83	3.910	3.910	(0.935)	404155	50.0000	43.10
3 Chloromethane	50	1.073	1.073	(0.257)	226669	50.0000	46.88
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	252069	50.0000	45.10
46 cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	389646	50.0000	50.34
55 Dibromochloromethane	129	7.176	7.176	(0.936)	292619	50.0000	48.80
44 Dibromomethane	93	5.550	5.550	(1.118)	163525	50.0000	48.38
2 Dichlorodifluoromethane	85	0.973	0.973	(0.233)	238854	50.0000	48.76
61 Ethylbenzene	106	7.800	7.800	(1.017)	321899	50.0000	46.01
91 Hexachlorobutadiene	225	11.481	11.481	(1.188)	149222	50.0000	60.58
67 Isopropylbenzene	105	8.559	8.559	(1.116)	932027	50.0000	43.60
62 m,p-Xylenes	106	7.900	7.900	(1.030)	802576	100.000	88.00
17 Methylene Chloride	84	2.305	2.305	(0.551)	225309	50.0000	46.50
87 n-Butylbenzene	91	9.991	9.991	(1.034)	706385	50.0000	46.07
73 n-Propylbenzene	91	8.910	8.910	(0.922)	1075415	50.0000	43.74
92 Naphthalene	128	11.539	11.539	(1.194)	324111	50.0000	57.55
63 o-Xylene	106	8.244	8.244	(1.075)	392785	50.0000	44.17
81 sec-Butylbenzene	105	9.519	9.519	(0.985)	920076	50.0000	44.46
64 Styrene	104	8.258	8.258	(1.077)	684154	50.0000	46.04
78 tert-Butylbenzene	119	9.332	9.332	(0.966)	656469	50.0000	42.80
56 Tetrachloroethene	164	6.926	6.926	(0.903)	207727	50.0000	46.32
50 Toluene	91	6.446	6.446	(0.840)	926929	50.0000	43.58
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	215273	50.0000	43.24
51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	343901	50.0000	51.51
38 Trichloroethene	130	5.206	5.206	(1.049)	262473	50.0000	50.05
8 Trichlorofluoromethane	101	1.560	1.560	(0.373)	389097	50.0000	40.42
5 Vinyl Chloride	62	1.138	1.138	(0.272)	270014	50.0000	42.78

QC Flag Legend

M - Compound response manually integrated.



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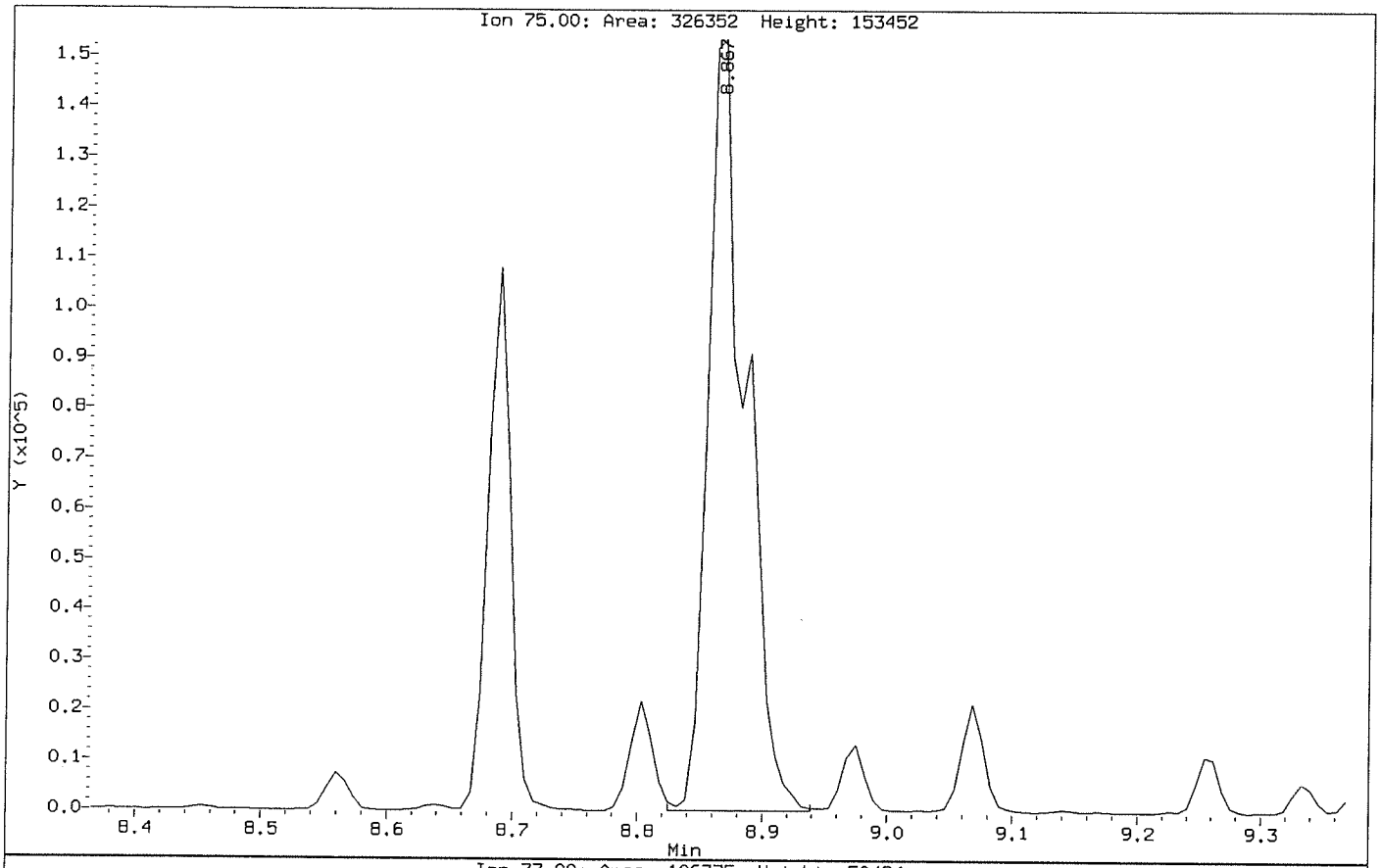
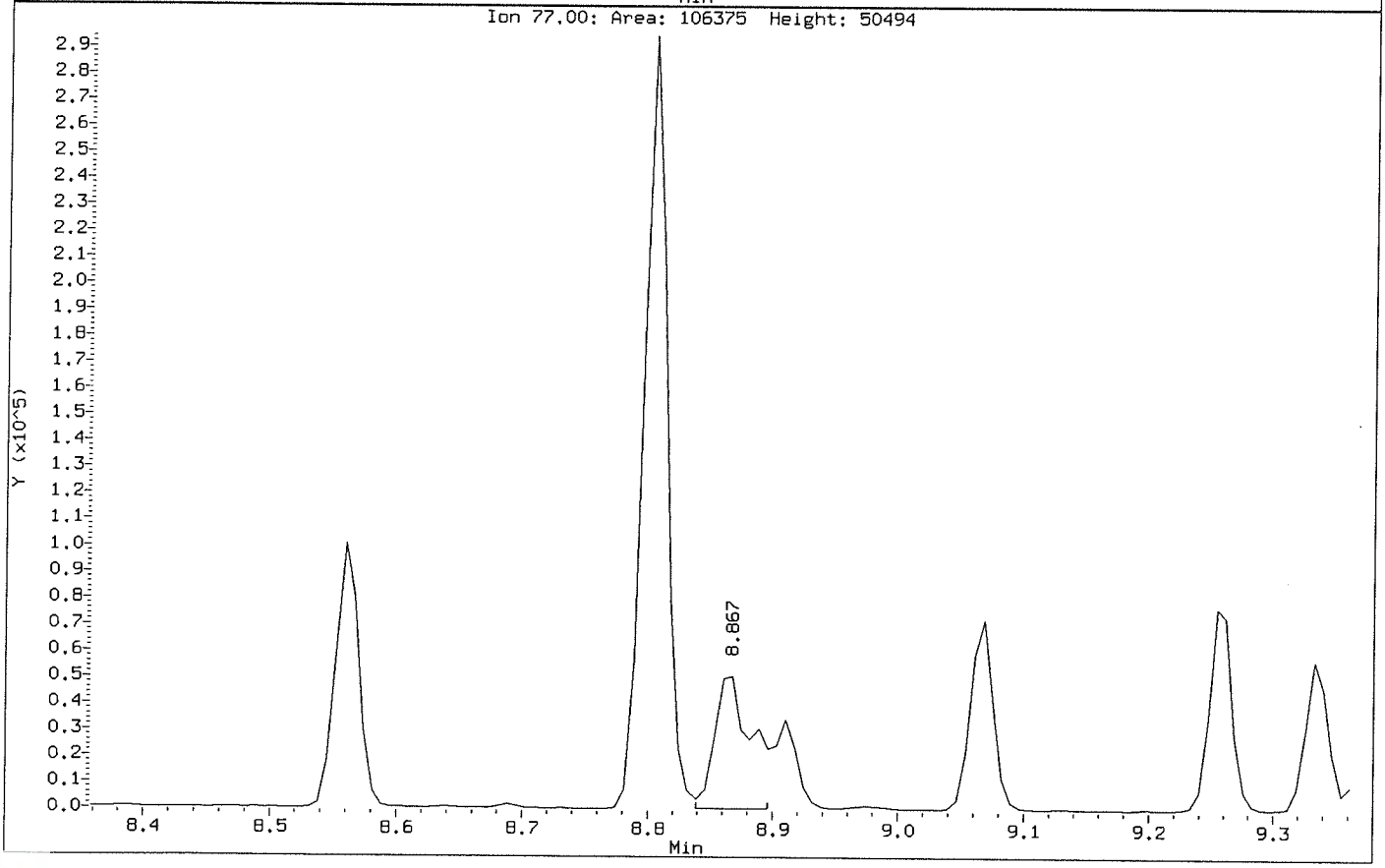
Date : 17-JUN-2021 11:29
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210617.b\Before\X061703.D
Injection Date: 17-JUN-2021 11:29
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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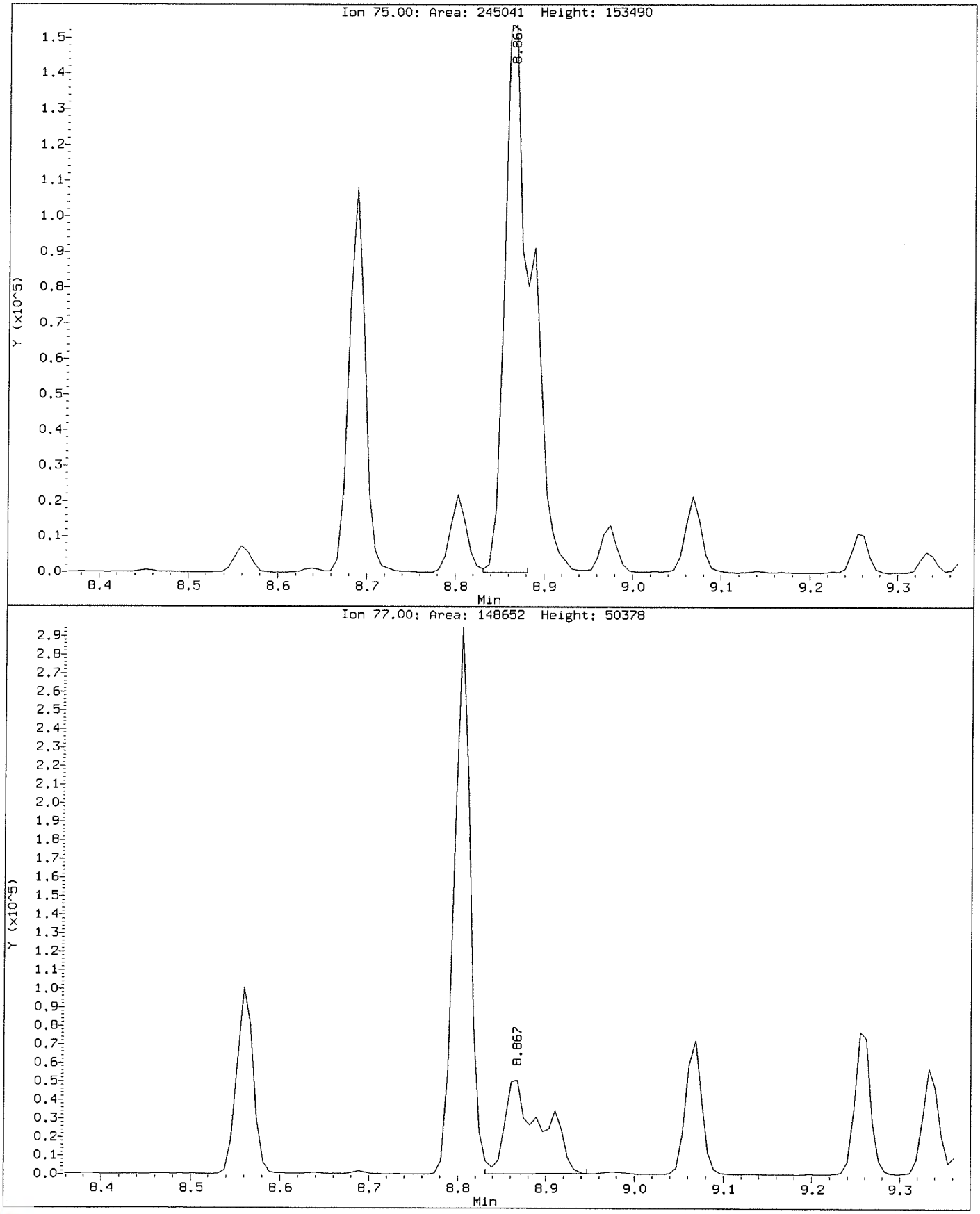
Injection Date: 17-JUN-2021 11:29
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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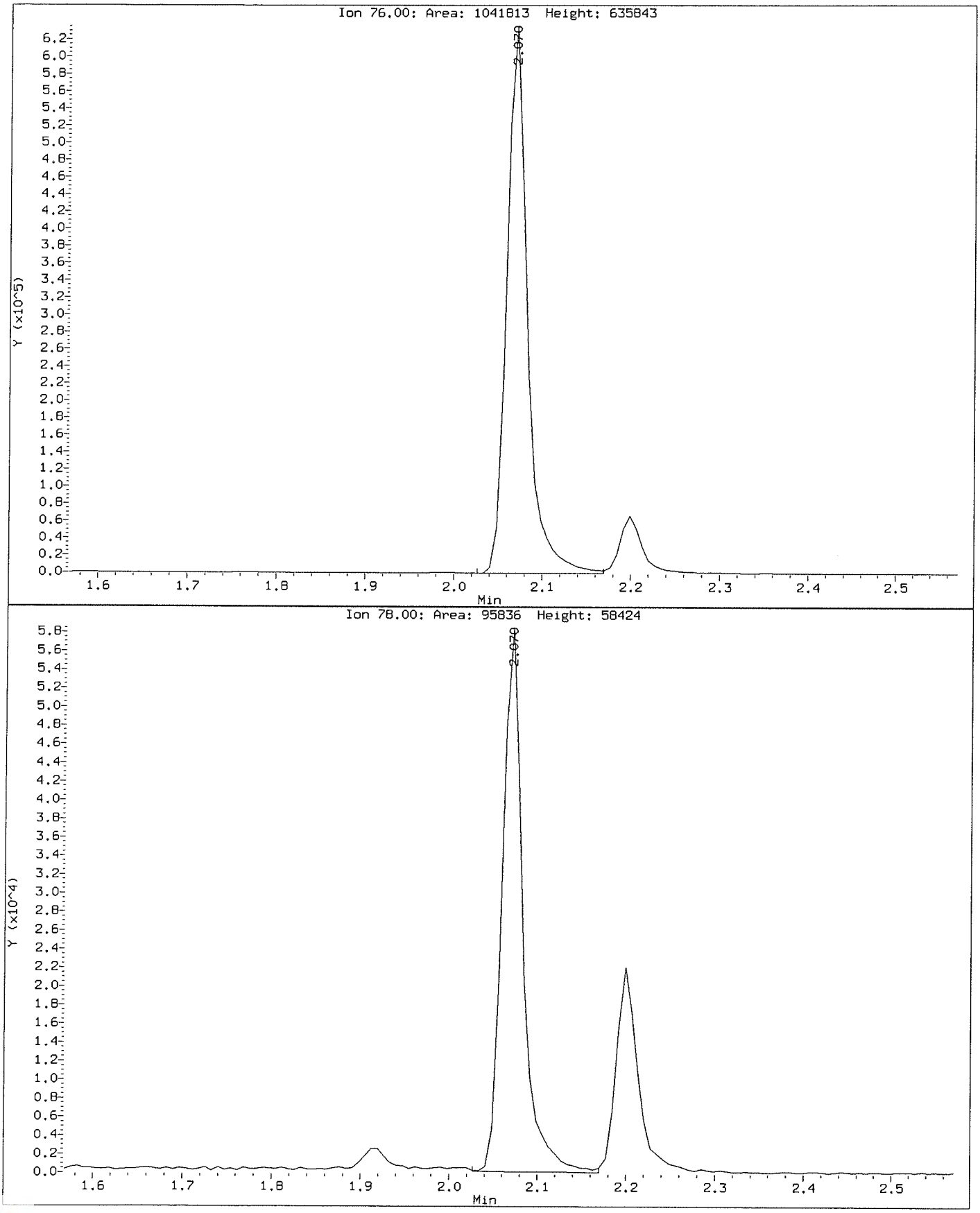
Injection Date: 17-JUN-2021 11:29
Instrument: voa6.i
Client Sample ID: CCV

Compound: Carbon Disulfide
CAS Number: 75-15-0



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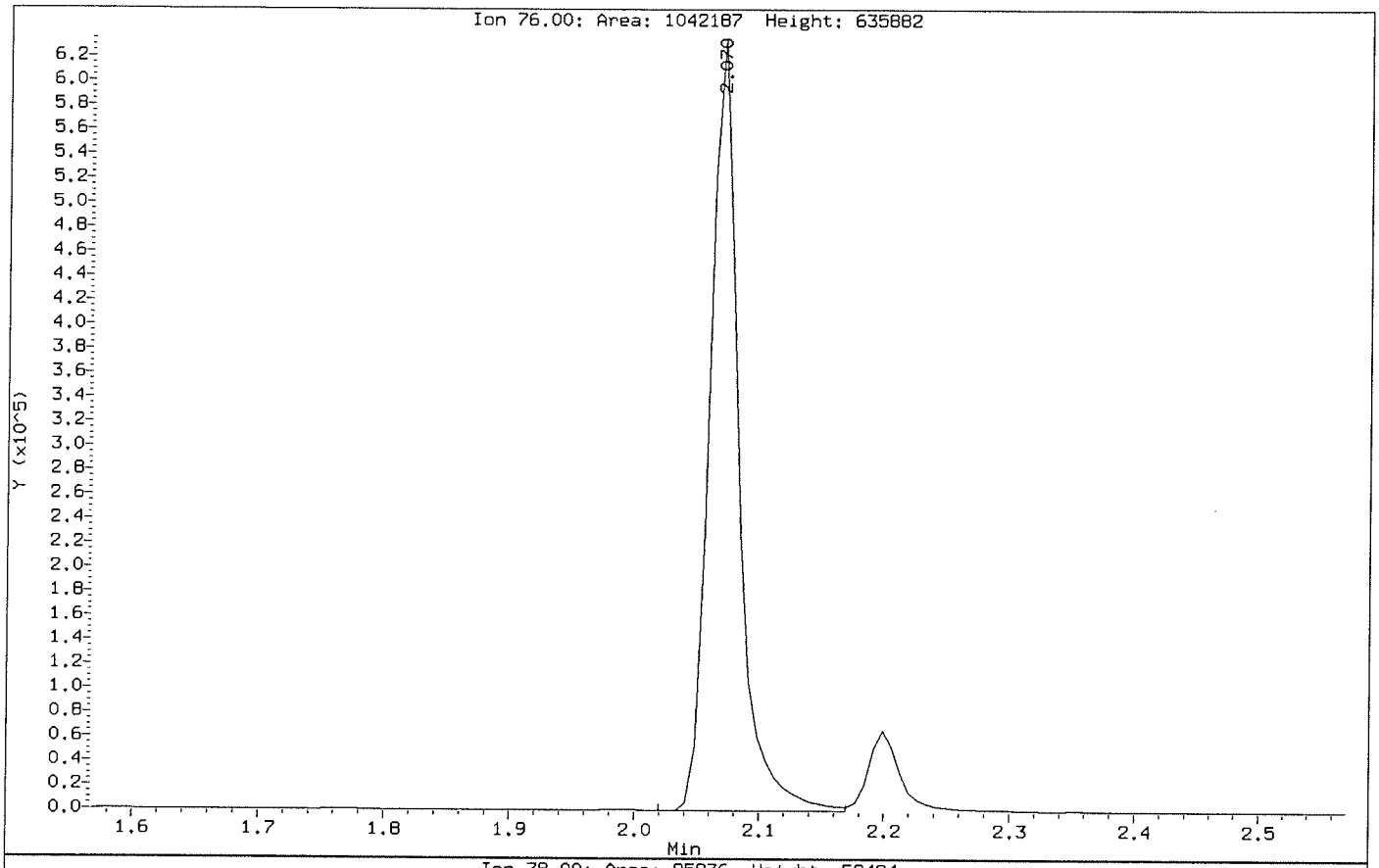
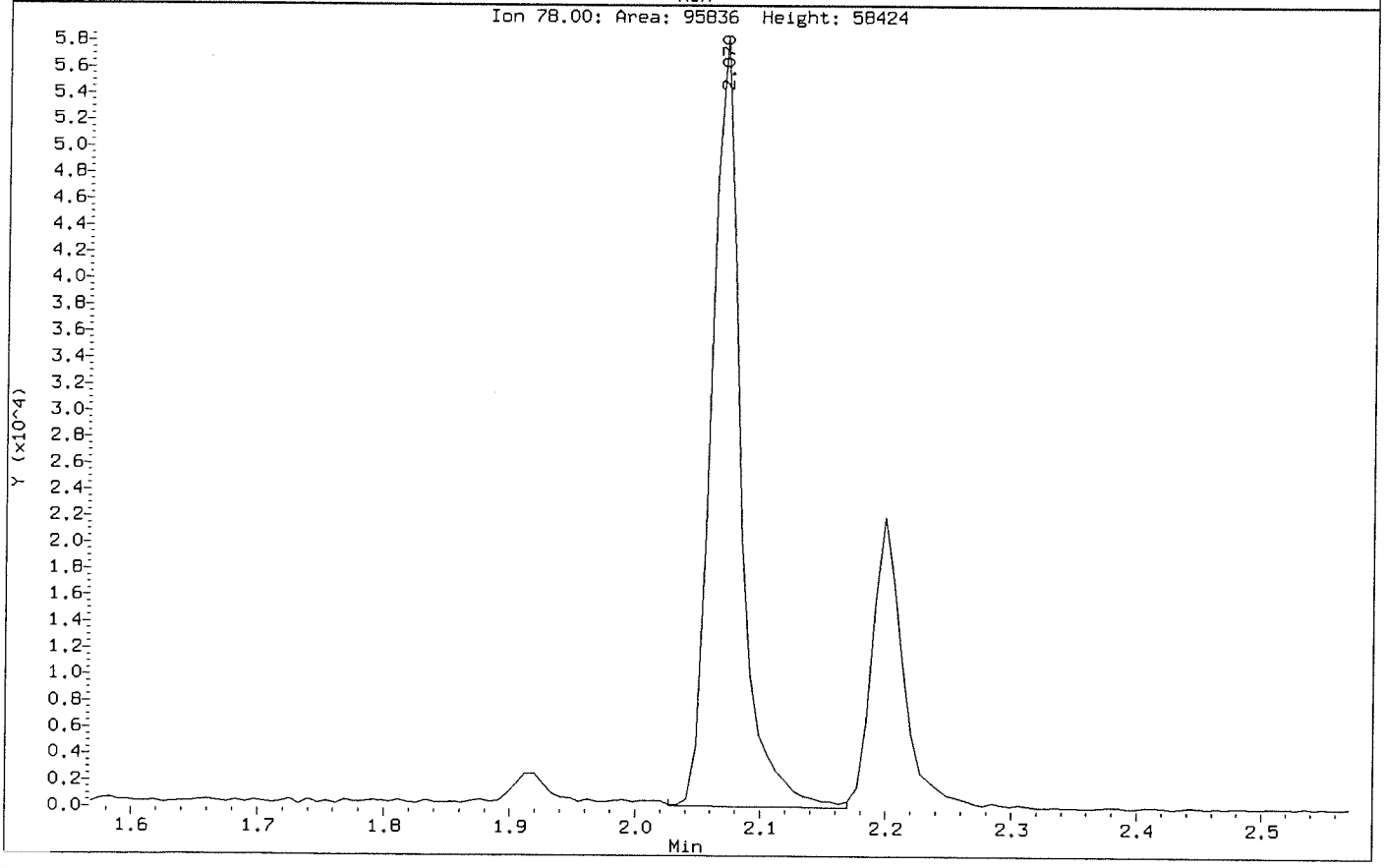
Injection Date: 17-JUN-2021 11:29
Instrument: voa6.i
Client Sample ID: CCV

Compound: Carbon Disulfide
CAS Number: 75-15-0





ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061706.D
Lab Smp Id: VLCSW-210617 Client Smp ID: VLCSW-210617
Inj Date : 17-JUN-2021 12:32
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-210617;VLCSW-210617;3;;LCS
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 15:01 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

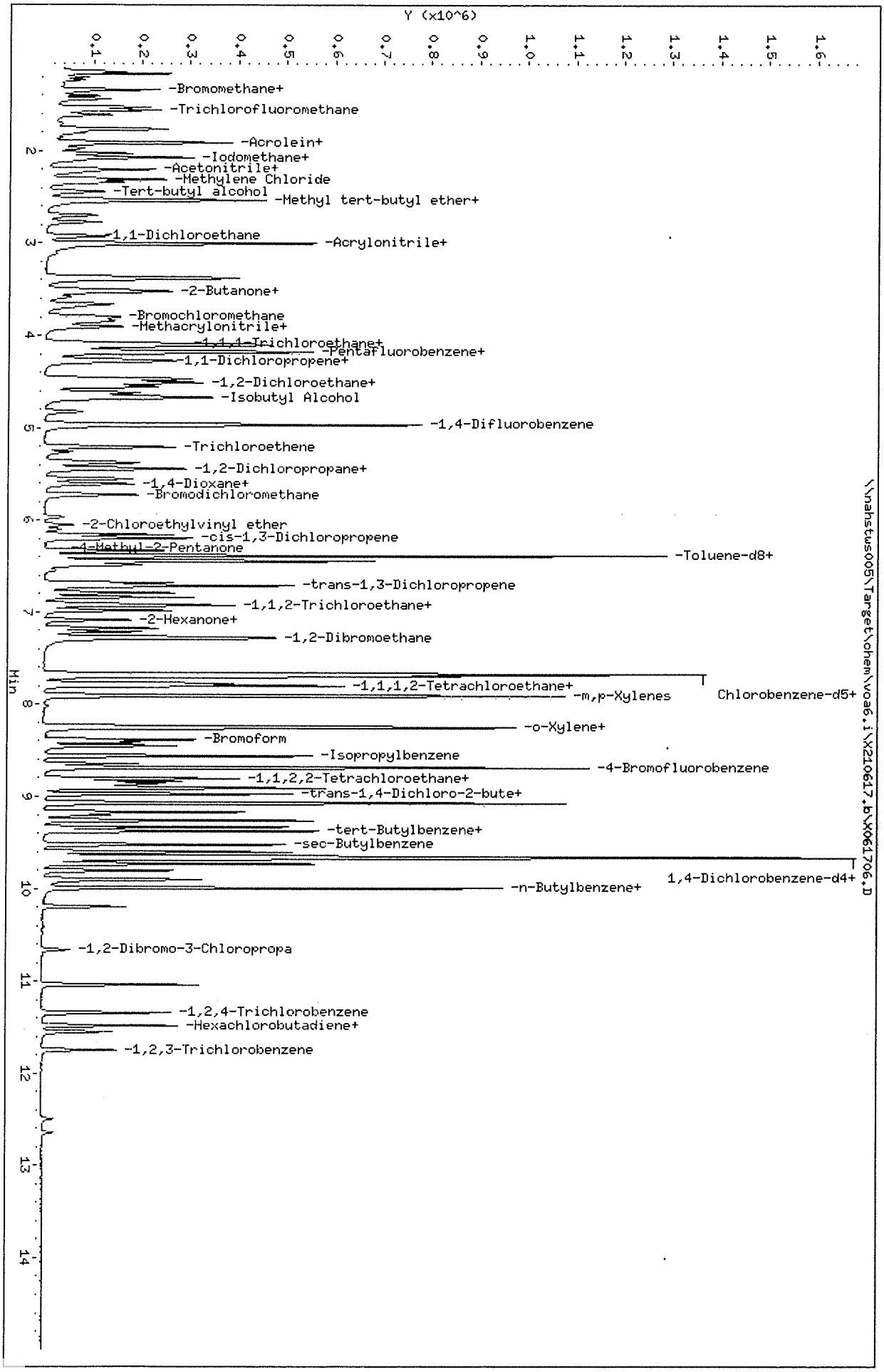
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	491361	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	703897	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	671388	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	356379	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.096	(0.981)	232770	48.1210	48.12
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	233977	49.8469	49.84
$	48 Toluene-d8	98	6.388	6.388	(0.833)	794773	47.5235	47.52
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	284732	48.3164	48.31
	60 1,1,1,2-Tetrachloroethane	131	7.778	7.771	(1.014)	94250	18.9824	18.98
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	124930	17.2047	17.20
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	108256	21.3178	21.31
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	67779	18.6362	18.63
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	132742	17.0883	17.08
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	79568	15.7208	15.72
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	100579	18.6566	18.65
	93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	53633	24.8595	24.85
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	88815	19.9891	19.98(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	83404	23.6710	23.67
	79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	276870	17.0333	17.03
	89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	12673	22.6987	22.69
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	92366	18.6860	18.68
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	180039	18.6254	18.62

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061706.D Page 2
Report Date: 26-Jul-2021 15:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	107400	19.1496	19.14
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	78064	18.8407	18.84
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	268810	16.6172	16.61
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	188088	18.7115	18.71
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	136577	18.8853	18.88
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	190501	18.1614	18.16
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	121006	18.0004	18.00
24	2-Butanone	43	3.580	3.580	(0.856)	57628	38.5486	38.54
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	241364	18.0945	18.09
52	2-Hexanone	43	7.090	7.083	(0.924)	101121	40.5457	40.54
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	272479	17.1529	17.15
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	273645	16.6064	16.60
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	146982	38.0169	38.01
10	Acetone	43	1.976	1.976	(0.473)	55219	40.6578	40.65
37	Benzene	78	4.512	4.512	(0.909)	303500	18.7687	18.76
74	Bromobenzene	156	8.802	8.802	(0.911)	113863	19.2571	19.25
29	Bromochloromethane	128	3.795	3.795	(0.908)	52172	17.5600	17.55
39	Bromodichloromethane	83	5.729	5.722	(1.154)	114802	18.9714	18.97
66	Bromoform	173	8.408	8.408	(1.096)	74166	19.8103	19.81
6	Bromomethane	94	1.338	1.338	(0.320)	93770	18.5724	18.57
19	Carbon Disulfide	76	2.069	2.069	(0.495)	370831	30.8958	30.89
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	108622	18.6153	18.61
59	Chlorobenzene	112	7.692	7.692	(1.003)	247889	17.7361	17.73
7	Chloroethane	64	1.403	1.403	(0.336)	74072	20.6891	20.68
28	Chloroform	83	3.910	3.910	(0.935)	147441	17.0632	17.06
3	Chloromethane	50	1.073	1.073	(0.257)	81261	16.5626	16.56
27	cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	90668	17.6050	17.60
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	140824	19.7493	19.74
55	Dibromochloromethane	129	7.176	7.176	(0.936)	106729	19.3142	19.31
44	Dibromomethane	93	5.550	5.550	(1.118)	60639	19.4745	19.47
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	83813	18.4367	18.43
61	Ethylbenzene	106	7.799	7.800	(1.017)	118391	18.3611	18.36
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	49502	23.5437	23.54
67	Isopropylbenzene	105	8.559	8.559	(1.116)	323228	16.4066	16.40
62	m,p-Xylenes	106	7.900	7.900	(1.030)	290870	34.6044	34.60
17	Methylene Chloride	84	2.305	2.305	(0.551)	83165	17.8314	17.83
87	n-Butylbenzene	91	9.991	9.991	(1.034)	226836	16.3614	16.36
73	n-Propylbenzene	91	8.910	8.910	(0.922)	371833	16.7264	16.72
92	Naphthalene	128	11.546	11.539	(1.195)	117973	23.1647	23.16
63	o-Xylene	106	8.244	8.244	(1.075)	145653	17.7706	17.77
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	303709	16.2294	16.22
64	Styrene	104	8.258	8.258	(1.077)	249203	18.1952	18.19
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	226121	16.3047	16.30
56	Tetrachloroethene	164	6.926	6.926	(0.903)	75420	18.2478	18.24
50	Toluene	91	6.446	6.446	(0.840)	339322	17.3119	17.31
20	trans-1,2-Dichloroethene	96	2.527	2.528	(0.604)	76455	16.6642	16.66
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	125637	20.4243	20.42
38	Trichloroethene	130	5.206	5.206	(1.049)	96434	19.9610	19.96
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	139555	15.7343	15.73
5	Vinyl Chloride	62	1.138	1.138	(0.272)	93797	16.1266	16.12

QC Flag Legend

M - Compound response manually integrated.



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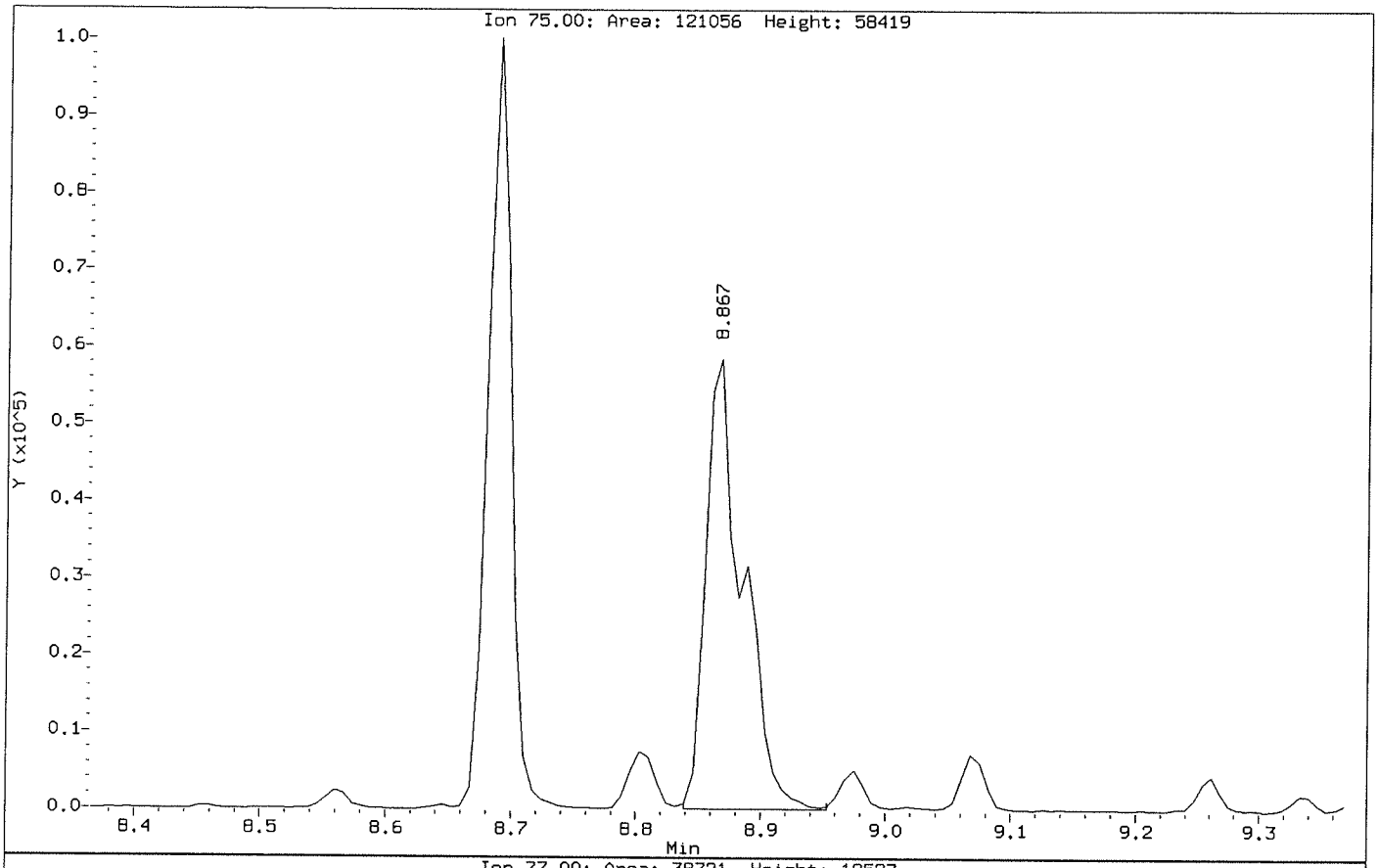
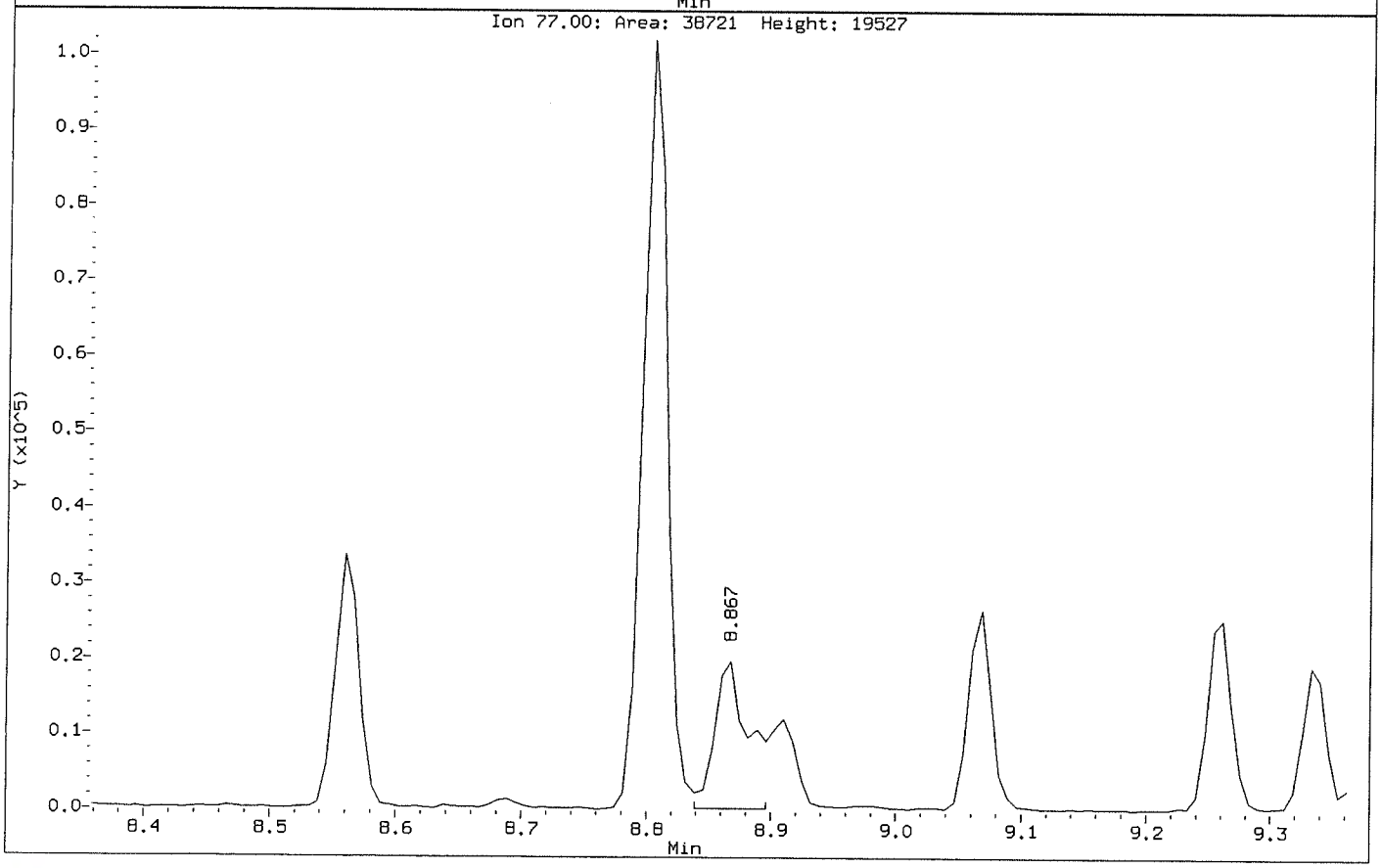
Sample Info: VLCSW-210617;VLCSW-210617;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210617.b\Before\X061706.D
Injection Date: 17-JUN-2021 12:32
Instrument: voa6.i
Client Sample ID: VLCSW-210617

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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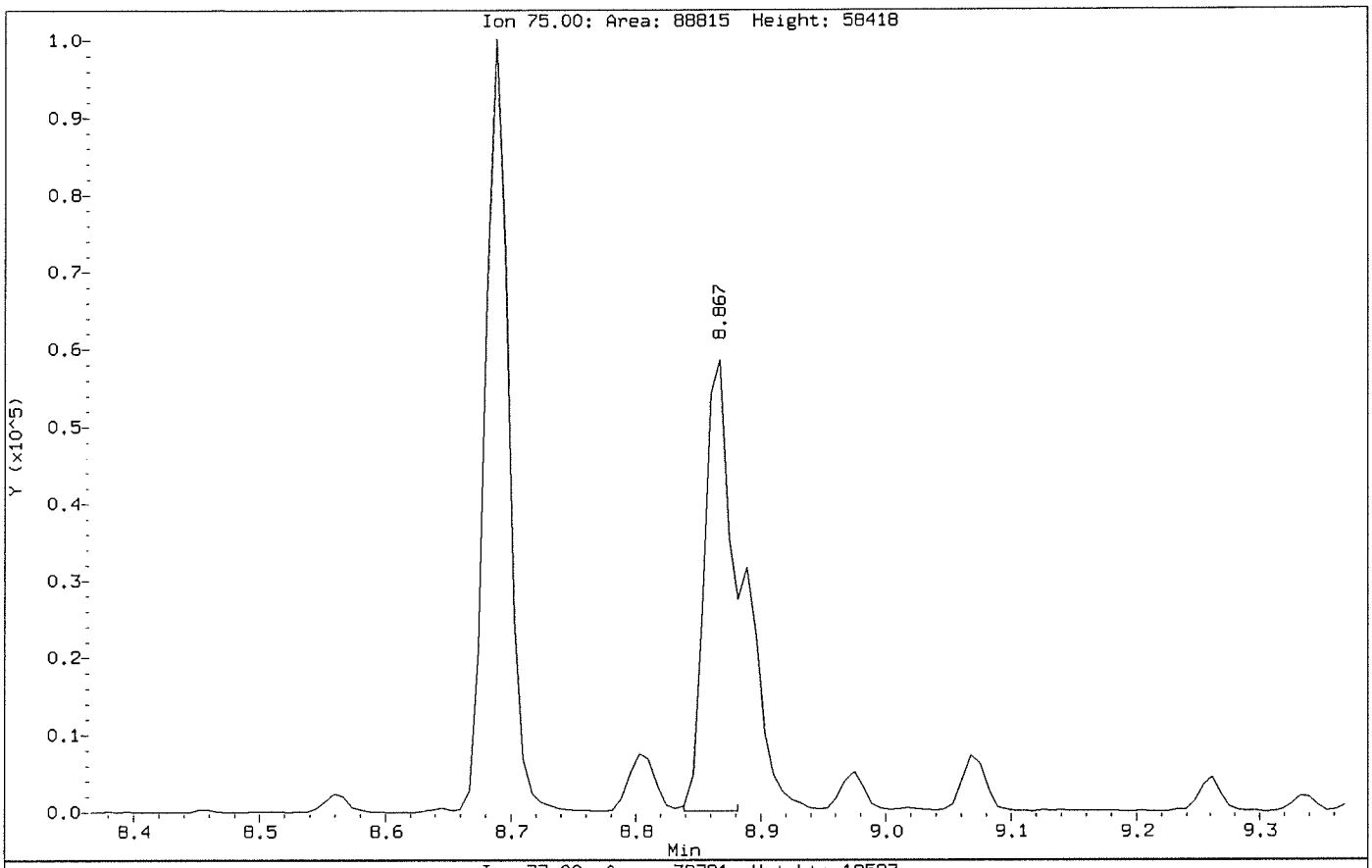
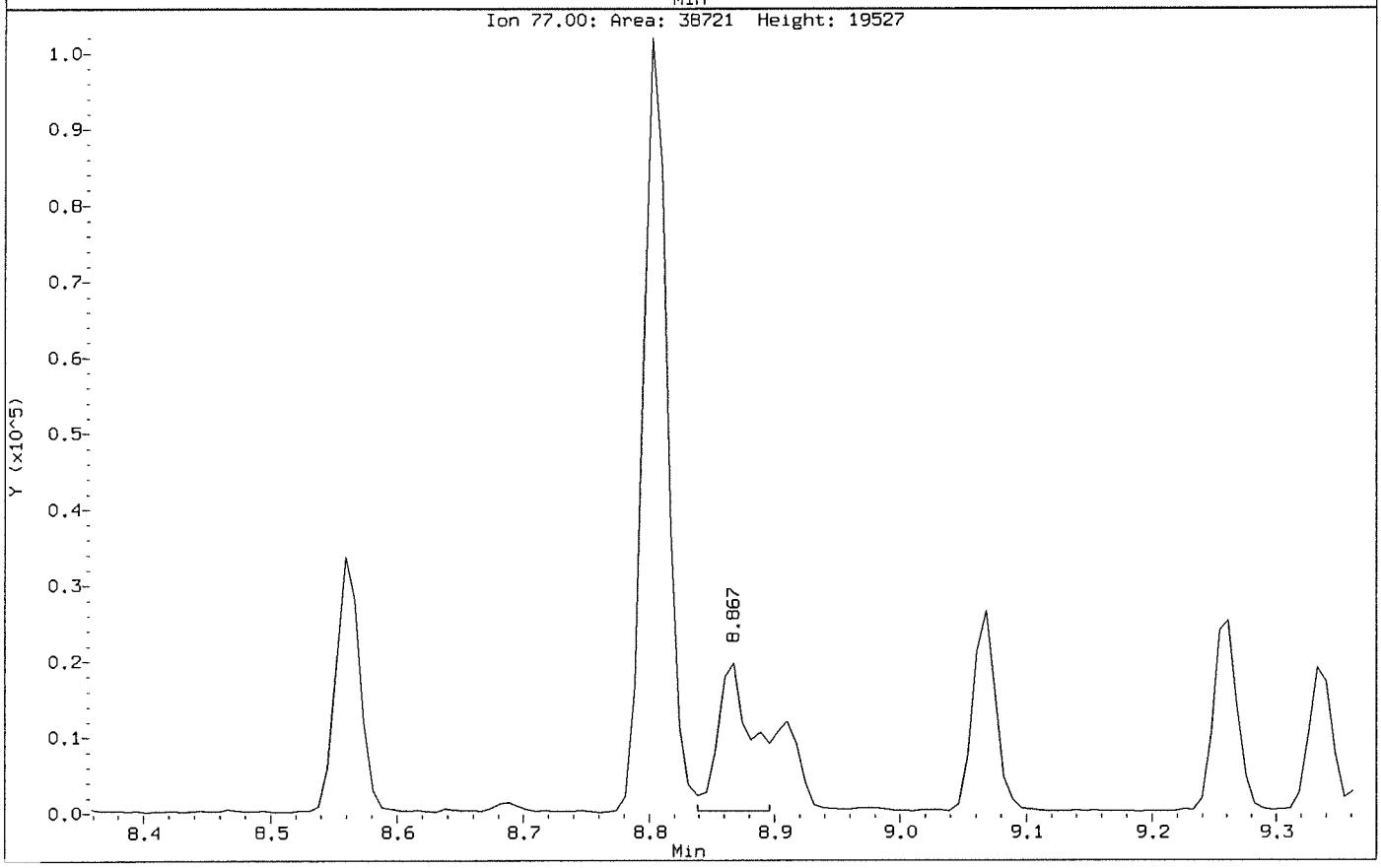
Injection Date: 17-JUN-2021 12:32
Instrument: voa6.i
Client Sample ID: VLCSW-210617

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





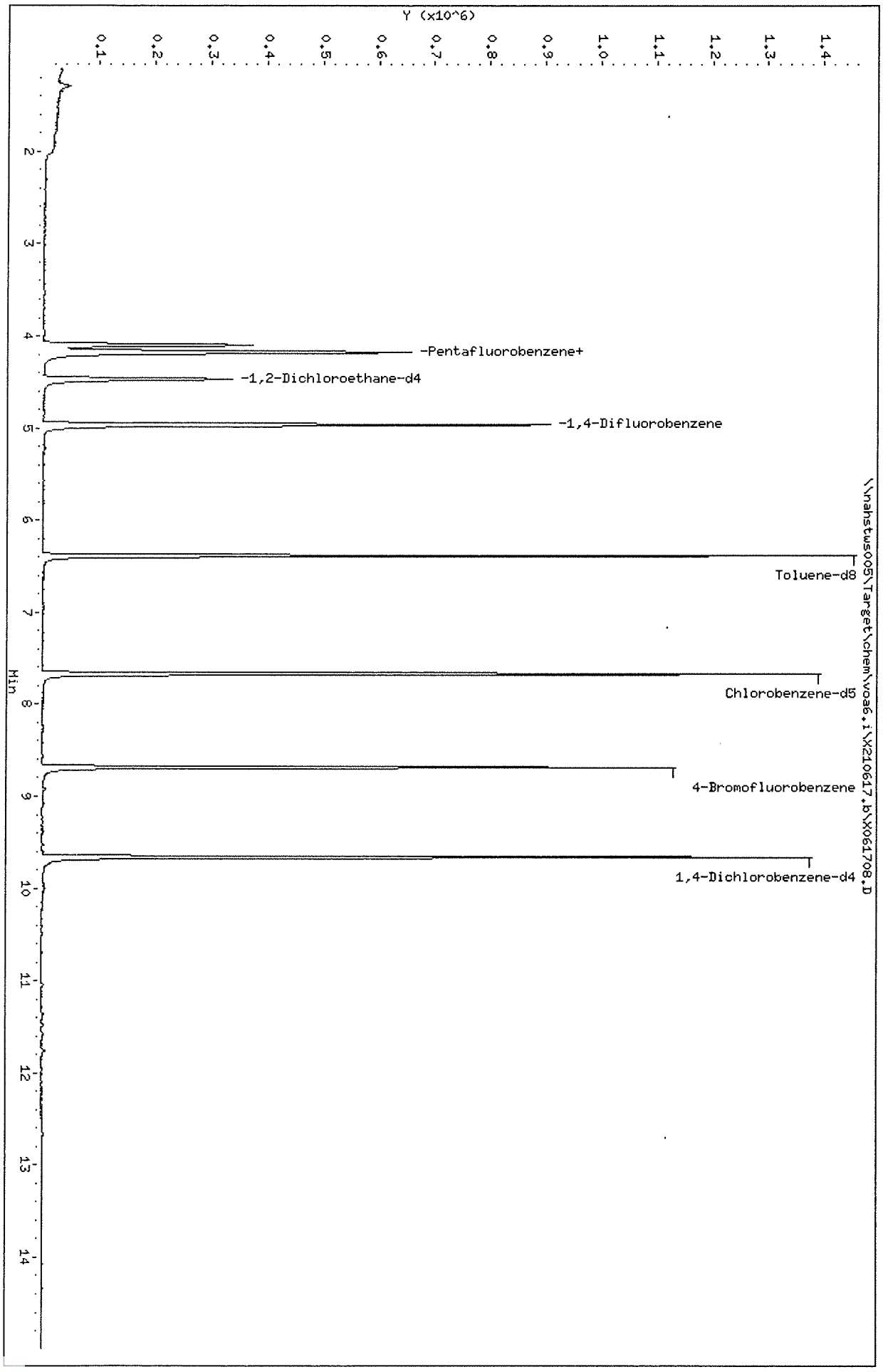
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061708.D
Lab Smp Id: VBLKW-210617 Client Smp ID: VBLKW-210617
Inj Date : 17-JUN-2021 13:14
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-210617;VBLKW-210617;3;;BLANK
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 15:01 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.182	4.182	(1.000)	604918	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	828949	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	719847	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	350833	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	268488	45.0751	45.07
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	266922	46.1398	46.13
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	929628	51.8451	51.84
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	303196	47.9912	47.99



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Sample Info: VBLKW-210617;VBLKW-210617;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061711.D Page 1
Report Date: 26-Jul-2021 14:56

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061711.D
Lab Smp Id: HS21060700-14 Client Smp ID: HS21060700-14
Inj Date : 17-JUN-2021 14:17
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-14;HS21060700-14;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

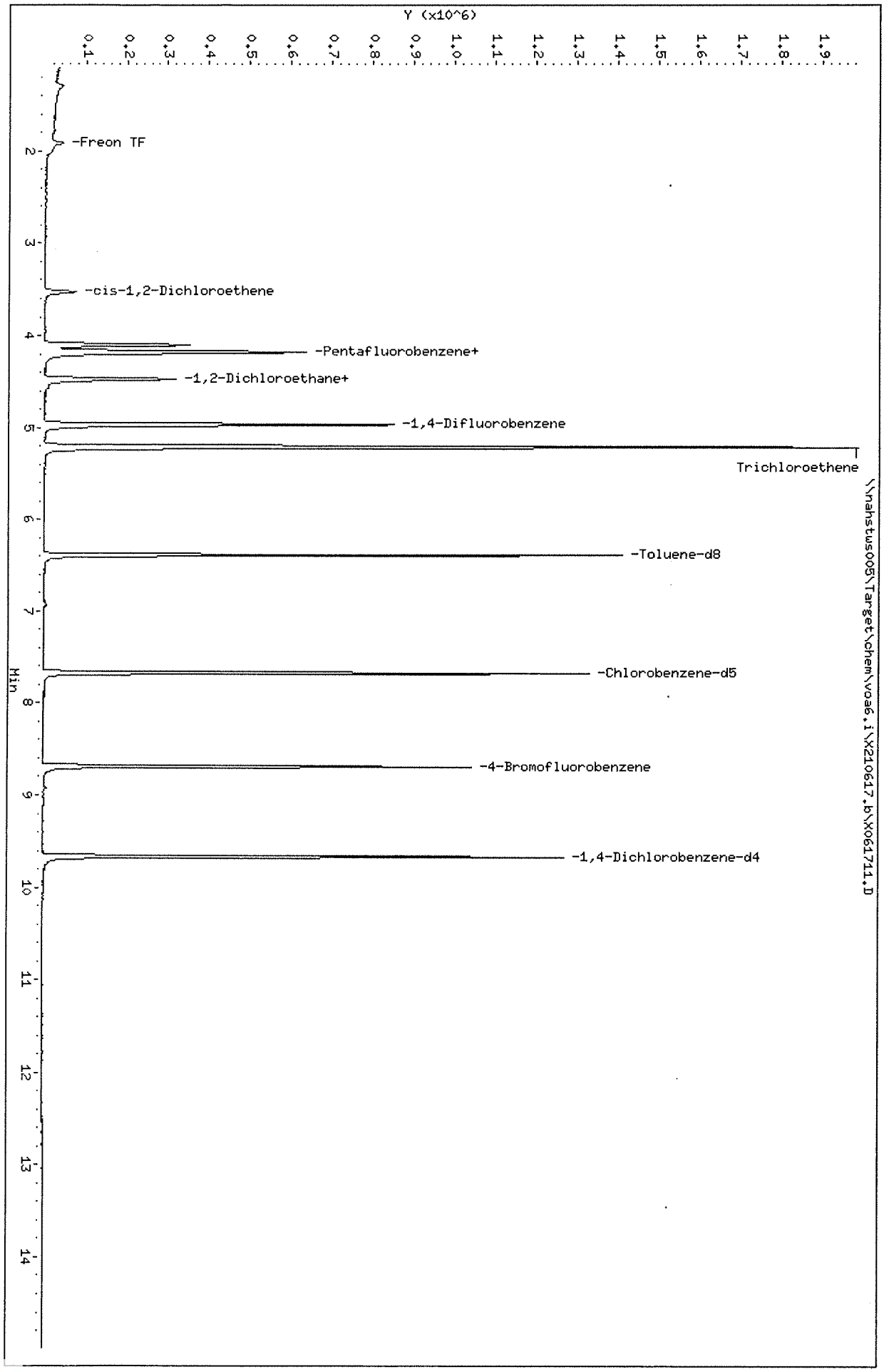
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	569582	50.0000	
* 36 1,4-Difluorobenzene	114	4.970	4.963	(1.000)	779308	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	673874	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	326147	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	254621	45.4002	45.40
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	254656	46.7596	46.75
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	872492	51.9782	51.97
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	286232	48.3906	48.39
33 1,2-Dichloroethane	62	4.562	4.555	(0.918)	7224	1.16341	1.16(a)
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	43041	7.20956	7.20
38 Trichloroethene	130	5.206	5.207	(1.048)	692778	129.523	129.52

QC Flag Legend

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



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Client ID: HS21060700-14
Sample Info: HS21060700-14;HS21060700-14;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061711.D

Date : 17-JUN-2021 14:17

Client ID: HS21060700-14

Instrument: voa6.i

Sample Info: HS21060700-14;HS21060700-14;;;

Purge Volume: 5.0

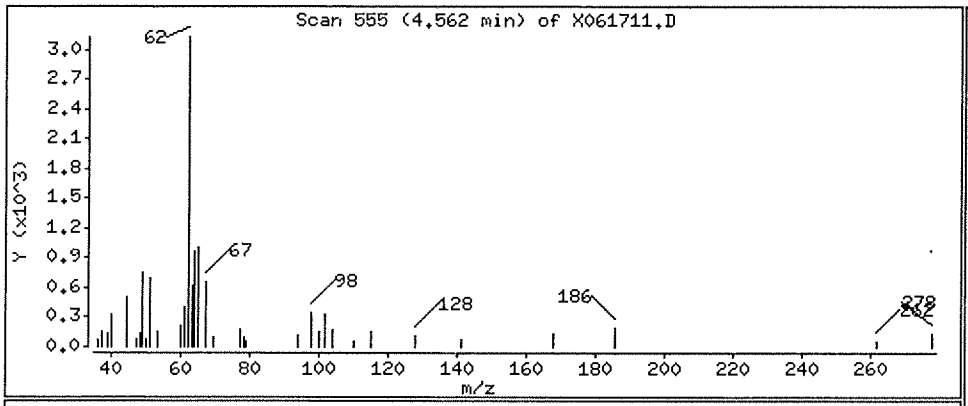
Operator: PC

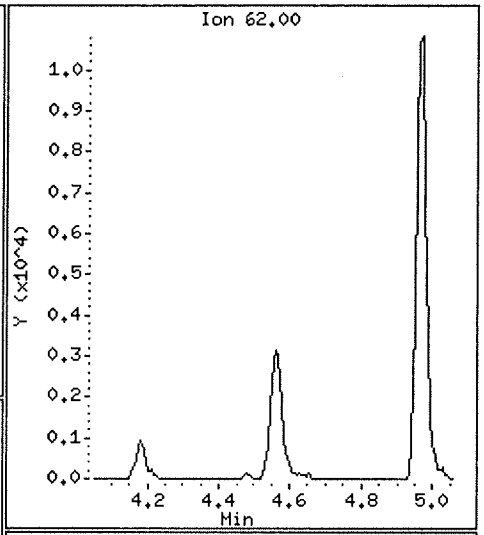
Column phase: DB624

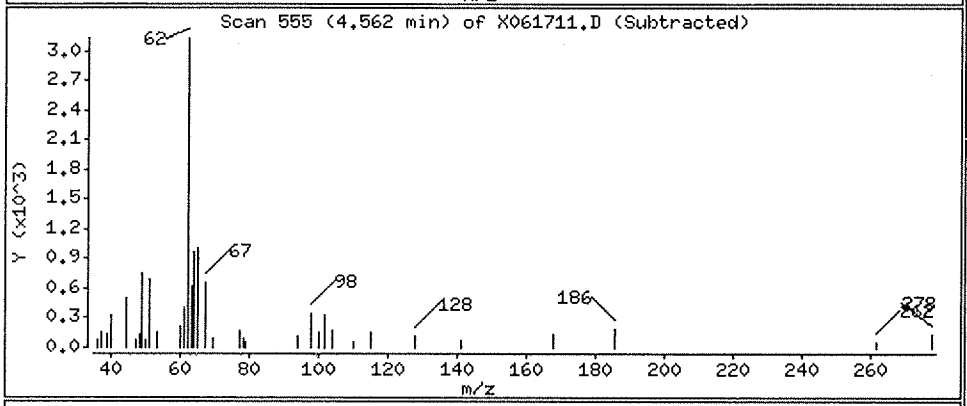
Column diameter: 0.18

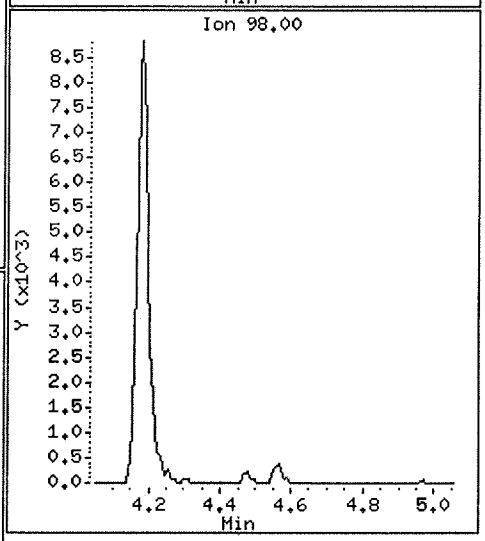
33 1,2-Dichloroethane

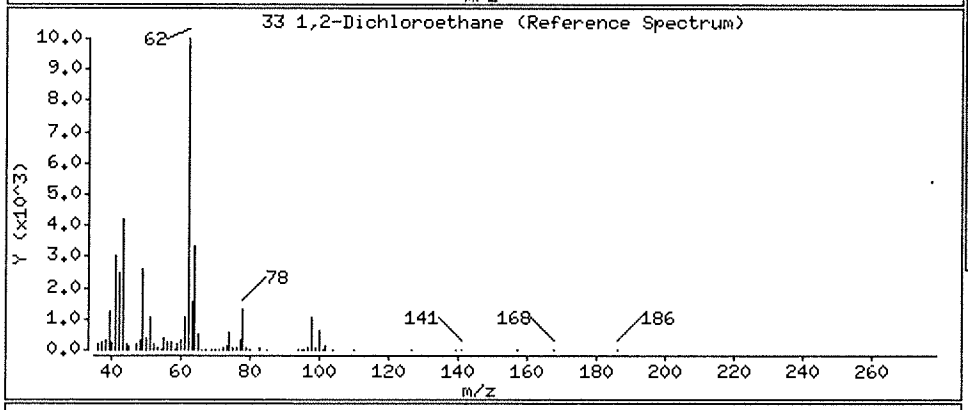
Concentration: 1.16 ug/l

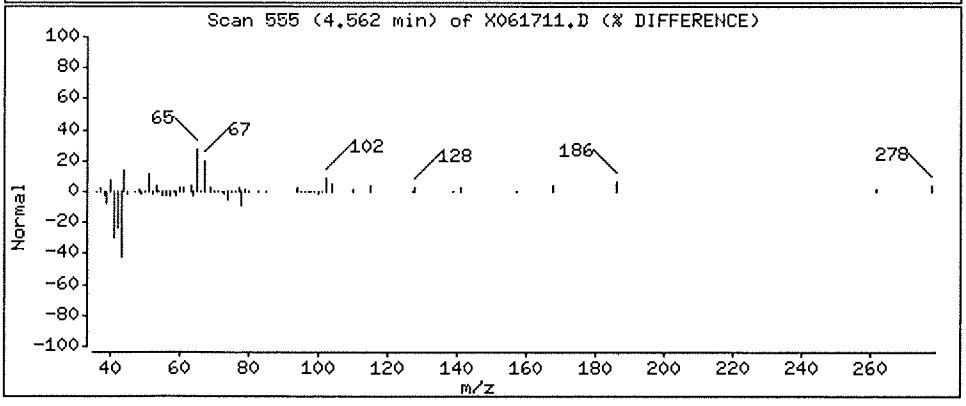












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Date : 17-JUN-2021 14:17

Client ID: HS21060700-14

Instrument: voa6.i

Sample Info: HS21060700-14;HS21060700-14;;;

Purge Volume: 5.0

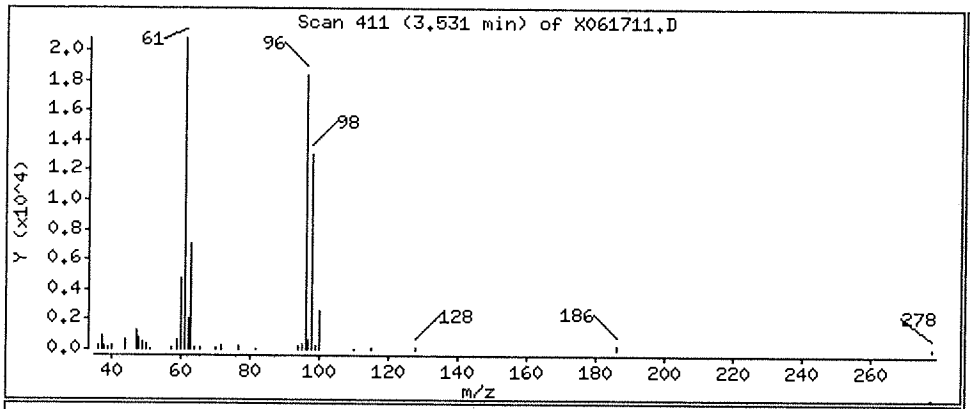
Operator: PC

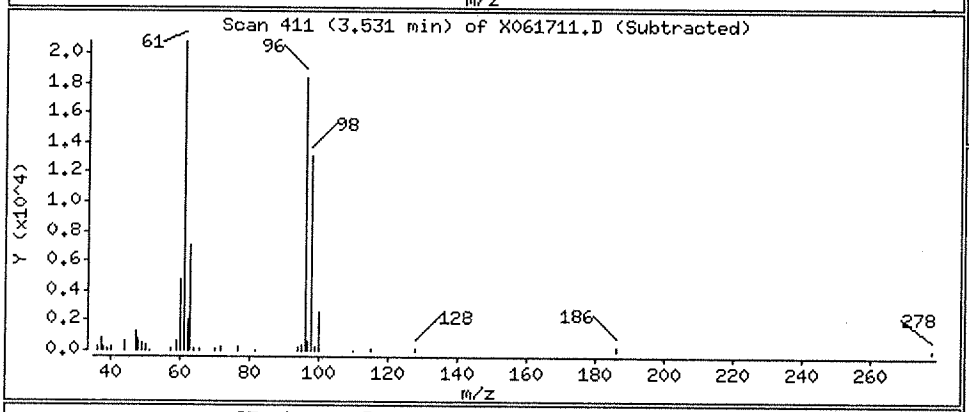
Column phase: DB624

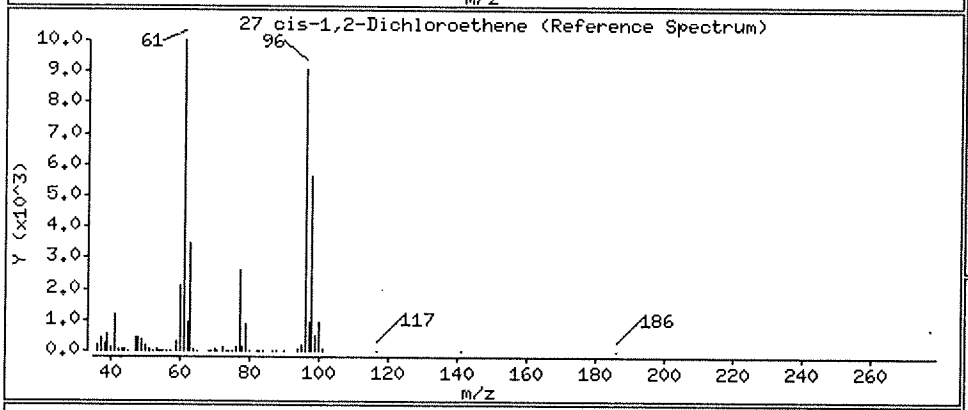
Column diameter: 0.18

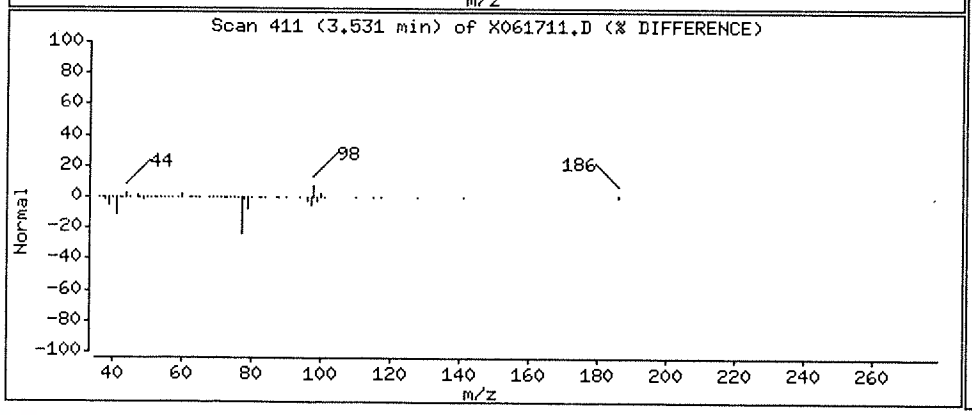
27 cis-1,2-Dichloroethene

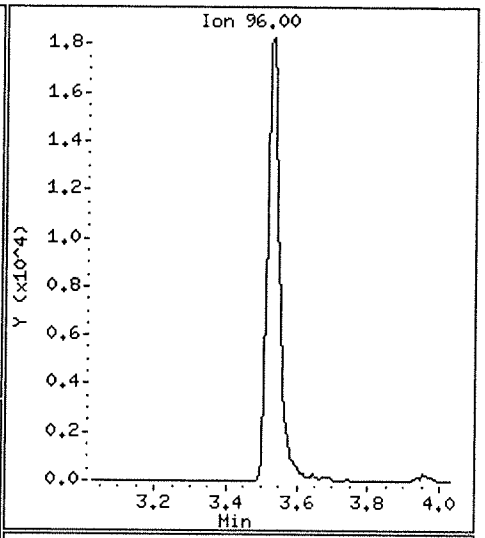
Concentration: 7.20 ug/l

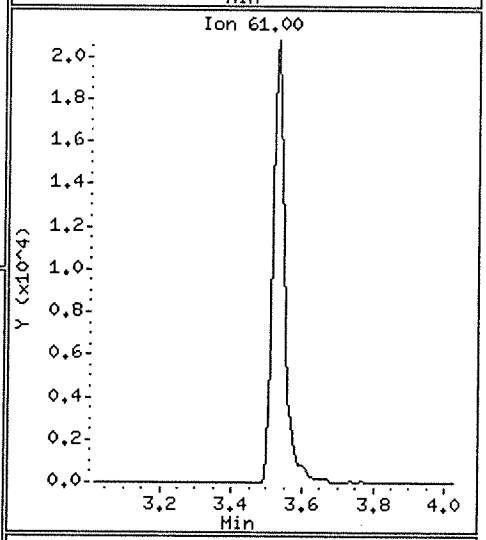


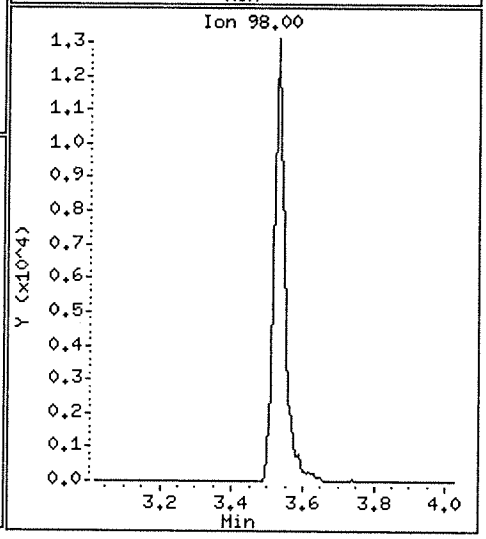












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061711.D

Date : 17-JUN-2021 14:17

Client ID: HS21060700-14

Instrument: voa6.i

Sample Info: HS21060700-14;HS21060700-14;;;

Purge Volume: 5.0

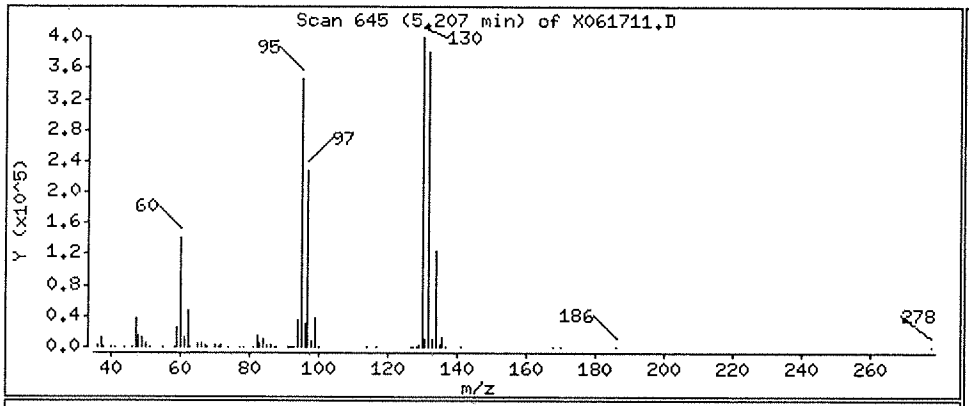
Operator: PC

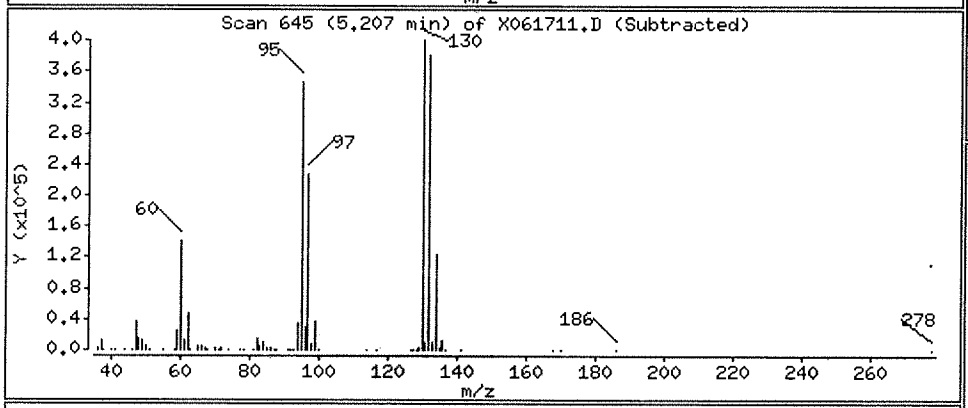
Column phase: DB624

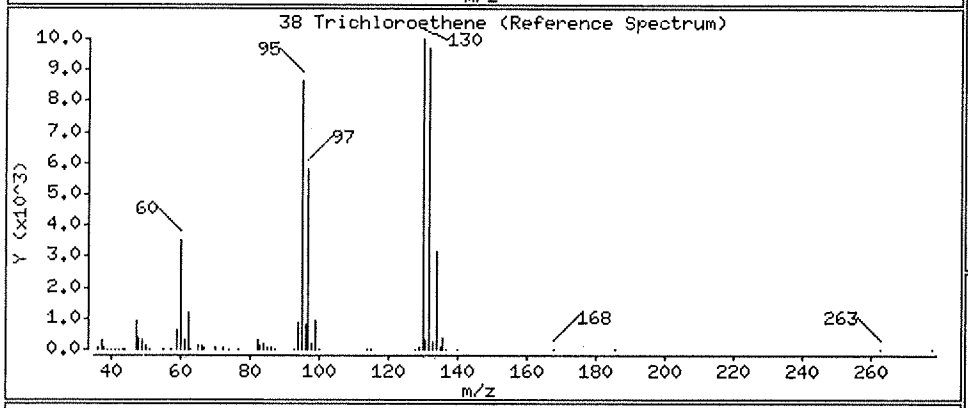
Column diameter: 0.18

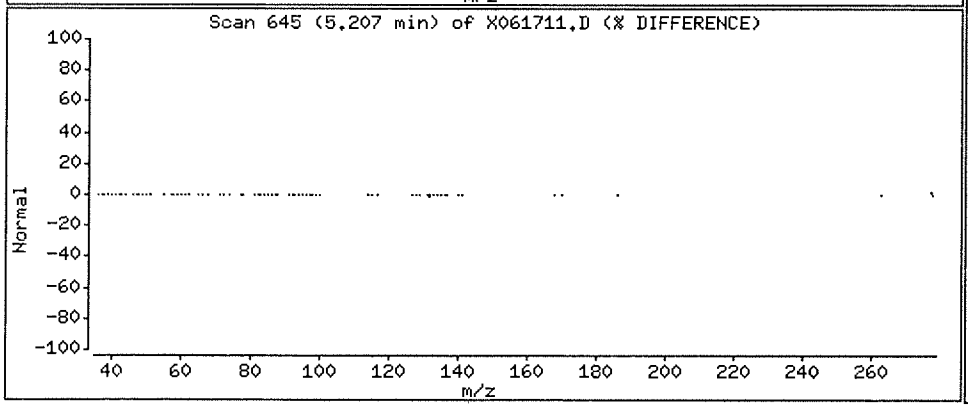
38 Trichloroethene

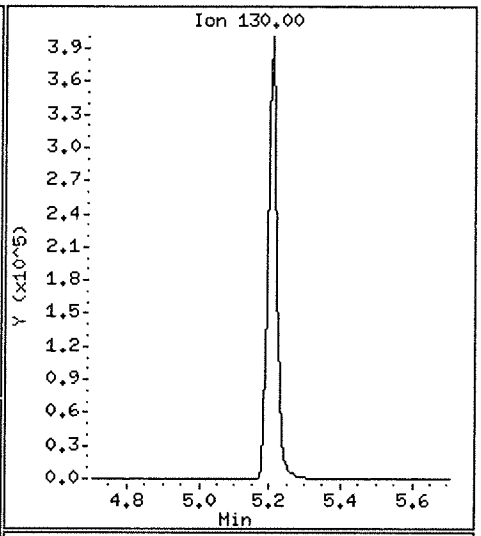
Concentration: 129.52 ug/l

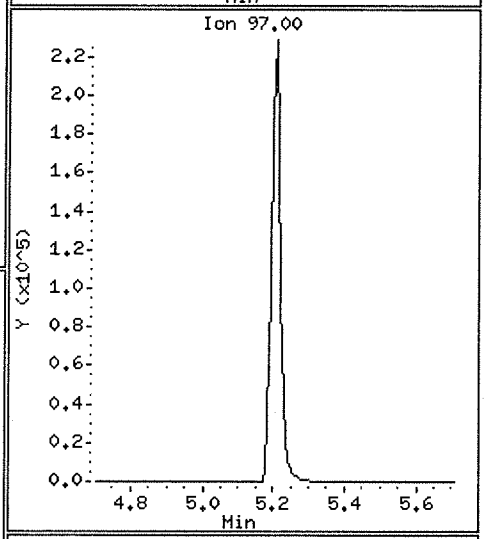


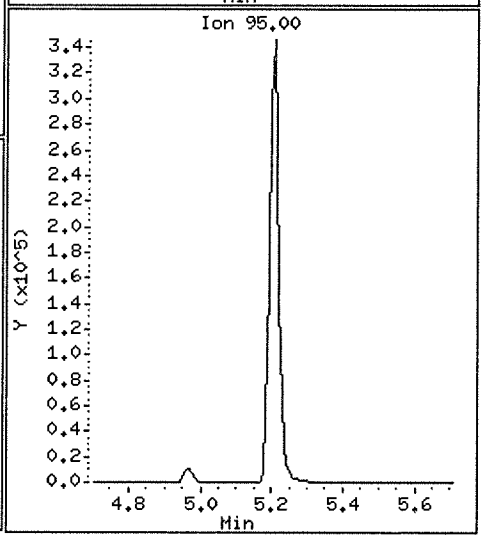












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061712.D
Lab Smp Id: HS21060700-07 Client Smp ID: HS21060700-07
Inj Date : 17-JUN-2021 14:38
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-07;HS21060700-07;;;
Misc Info : HS18090001;WATER;0;5;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 12
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.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

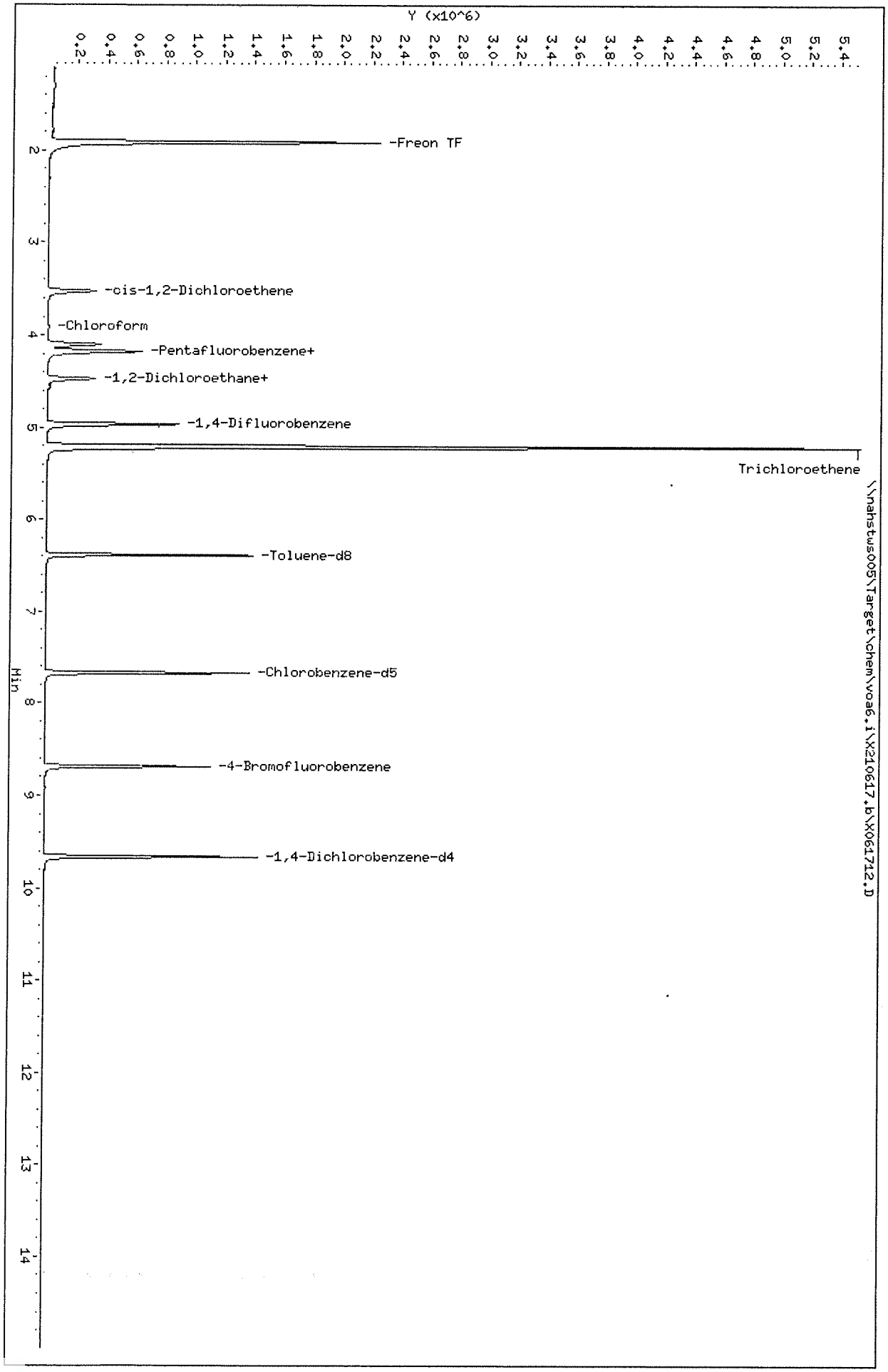
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	585974	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	802618	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	706884	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	374405	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	255698	44.3129	44.31
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	259815	46.3666	46.36
$ 48 Toluene-d8	98	6.389	6.388	(0.833)	905536	51.4276	51.42
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	307283	49.5059	49.50
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	12635	1.97574	9.87(a)
28 Chloroform	83	3.910	3.910	(0.935)	8203	0.79604	3.98(a)
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	184443	30.0308	150.15
38 Trichloroethene	130	5.207	5.207	(1.049)	1931535	350.634	1753.17(A)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061712.D
Date : 17-JUN-2021 14:38
Client ID: HS21060700-07
Sample Info: HS21060700-07;HS21060700-07;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061712.D

Date : 17-JUN-2021 14:38

Client ID: HS21060700-07

Instrument: voa6.i

Sample Info: HS21060700-07;HS21060700-07;;;

Purge Volume: 5.0

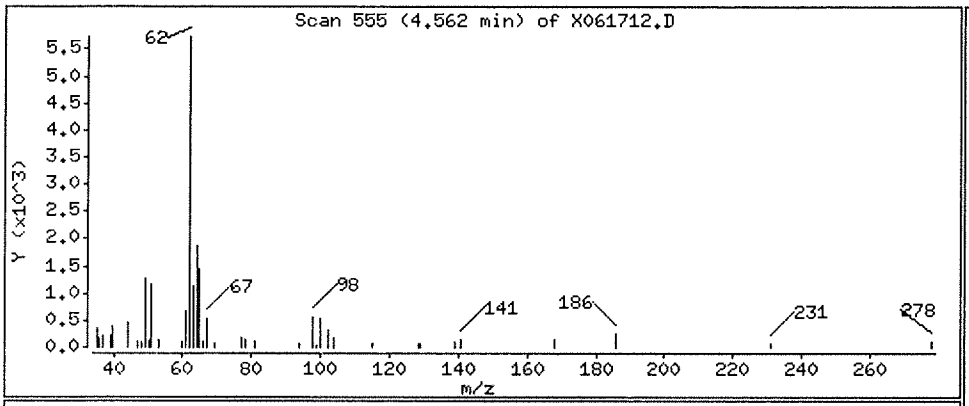
Operator: PC

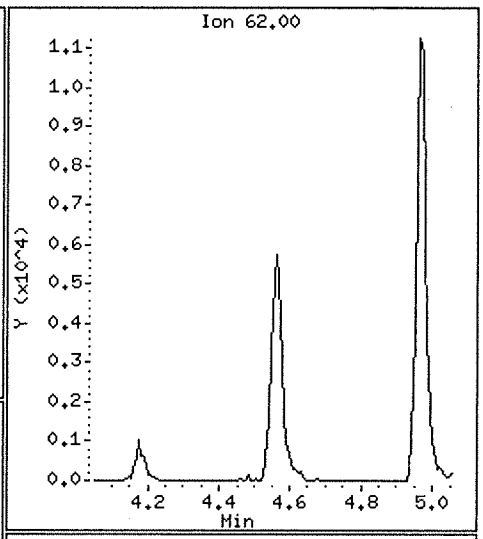
Column phase: DB624

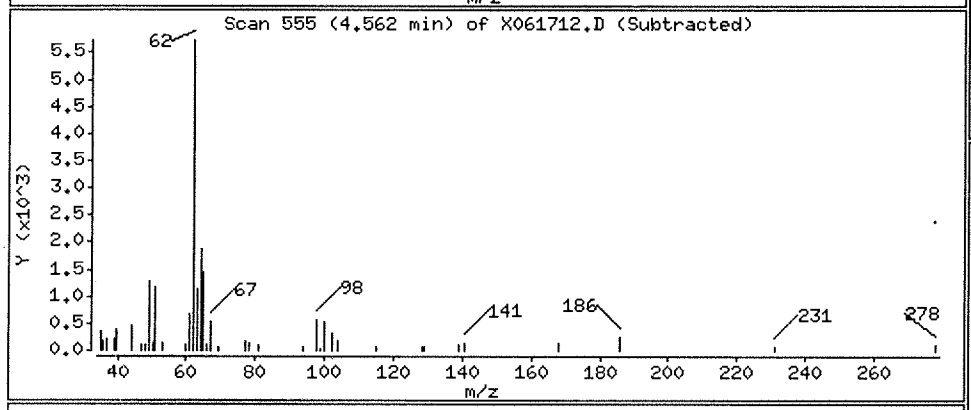
Column diameter: 0.18

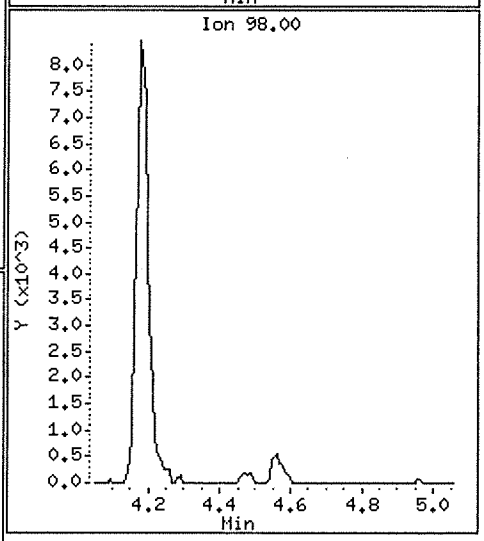
33 1,2-Dichloroethane

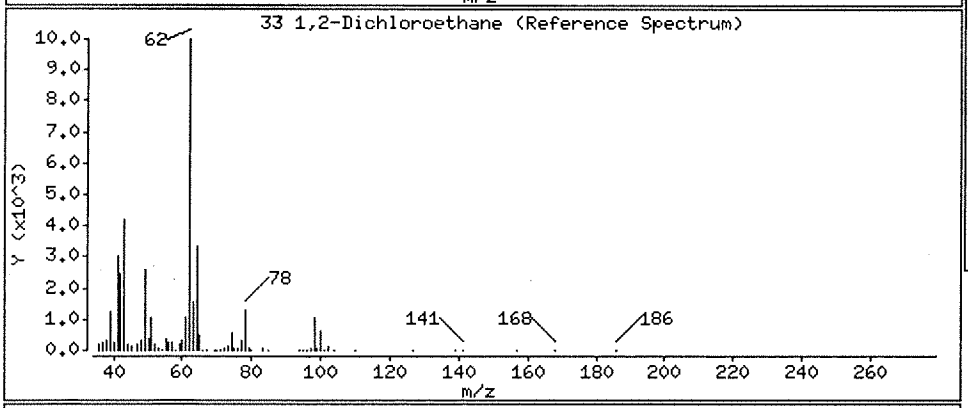
Concentration: 9.87 ug/l

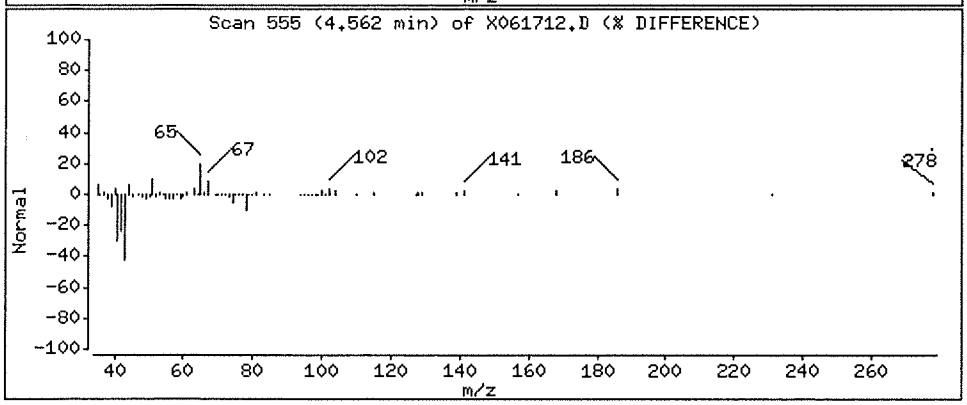












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061712.D

Date : 17-JUN-2021 14:38

Client ID: HS21060700-07

Instrument: voa6.i

Sample Info: HS21060700-07;HS21060700-07;;;

Purge Volume: 5.0

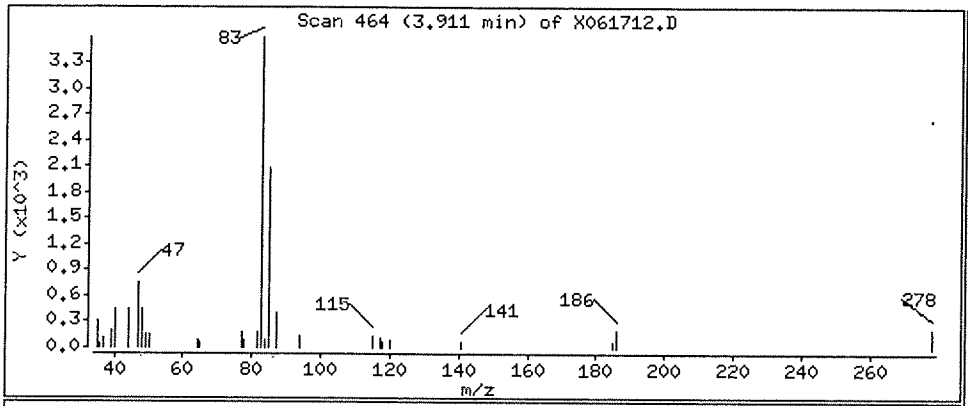
Operator: PC

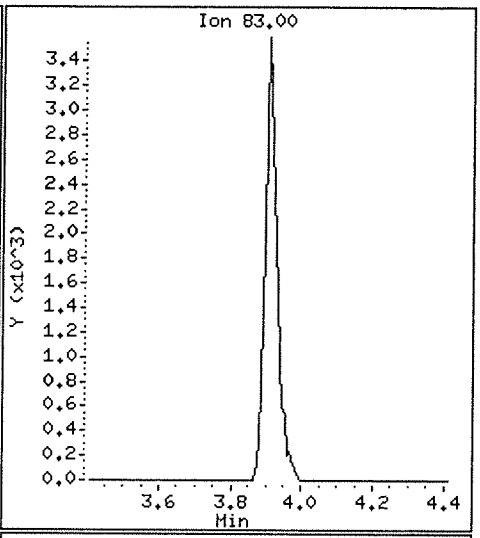
Column phase: DB624

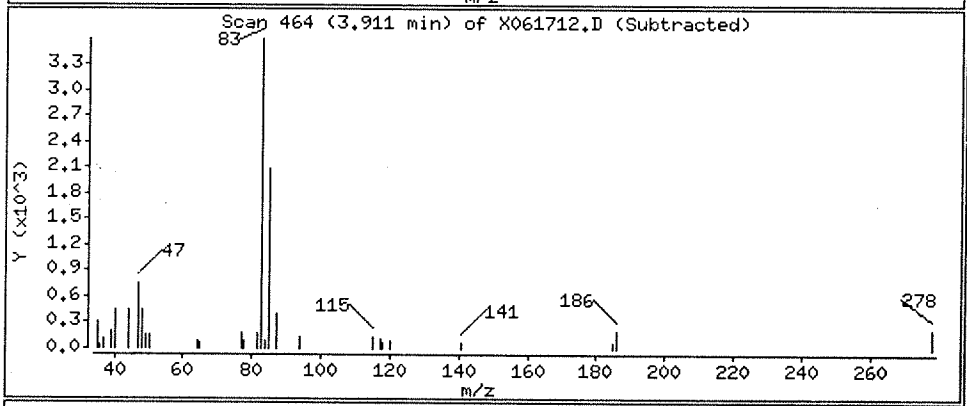
Column diameter: 0.18

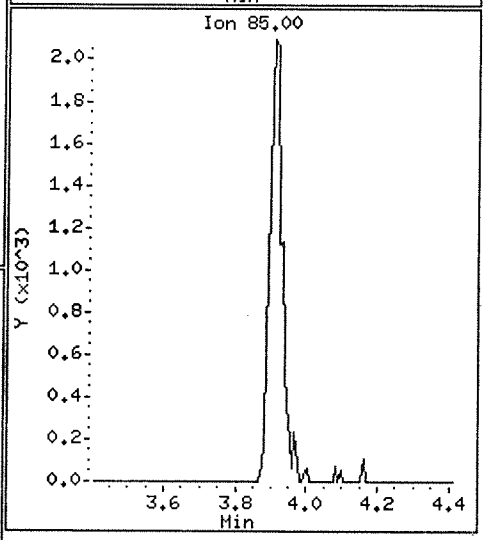
28 Chloroform

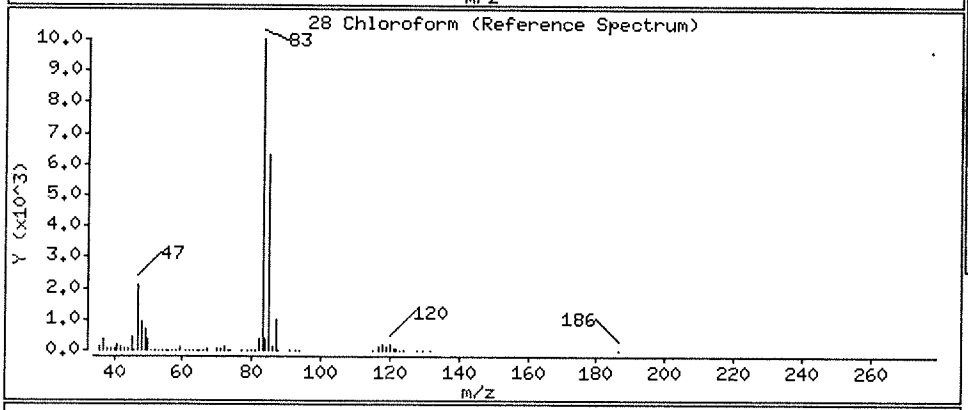
Concentration: 3.98 ug/l

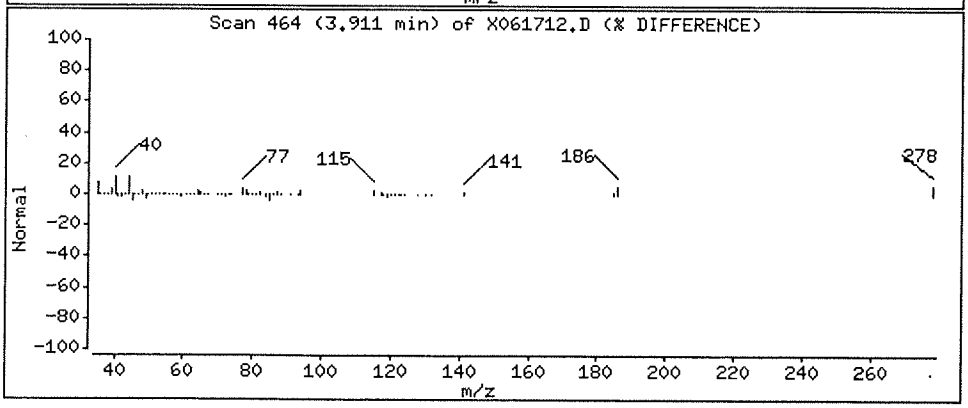












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061712.D

Date : 17-JUN-2021 14:38

Client ID: HS21060700-07

Instrument: voa6.i

Sample Info: HS21060700-07;HS21060700-07;;;

Purge Volume: 5.0

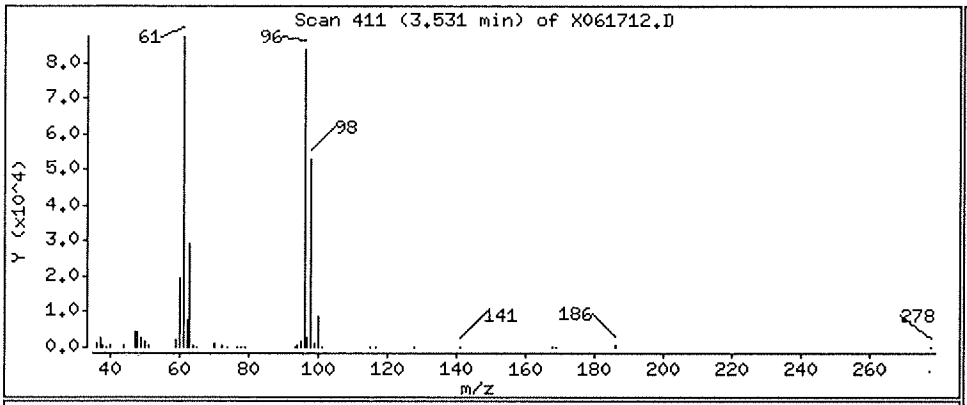
Operator: PC

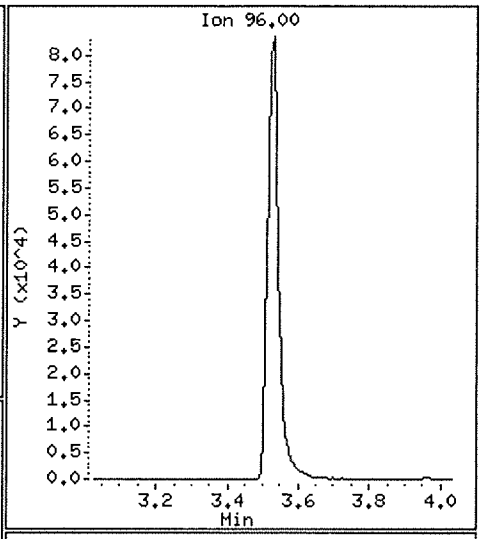
Column phase: DB624

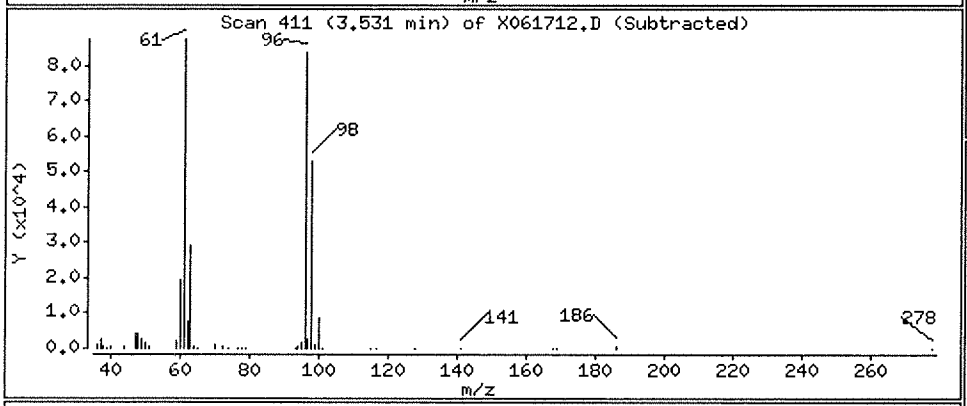
Column diameter: 0.18

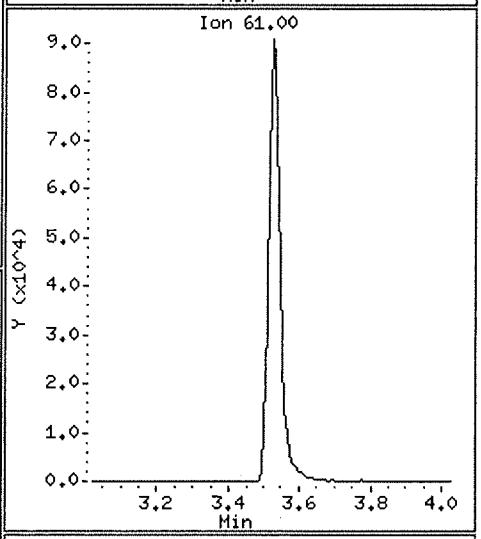
27 cis-1,2-Dichloroethene

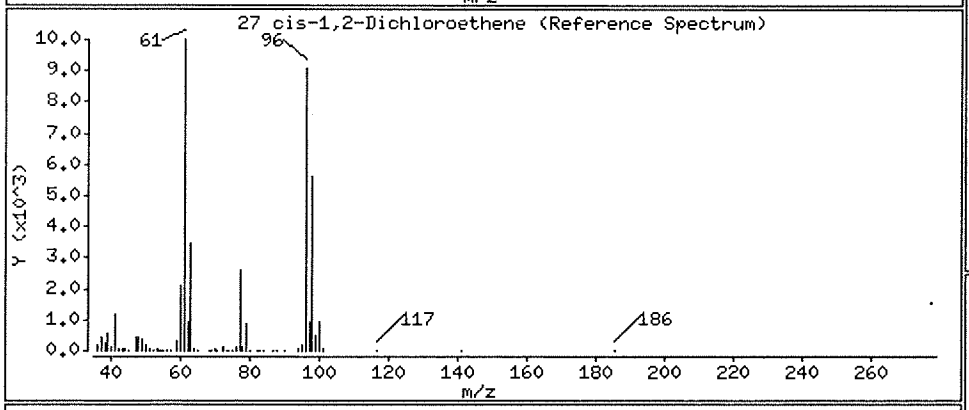
Concentration: 150.15 ug/l

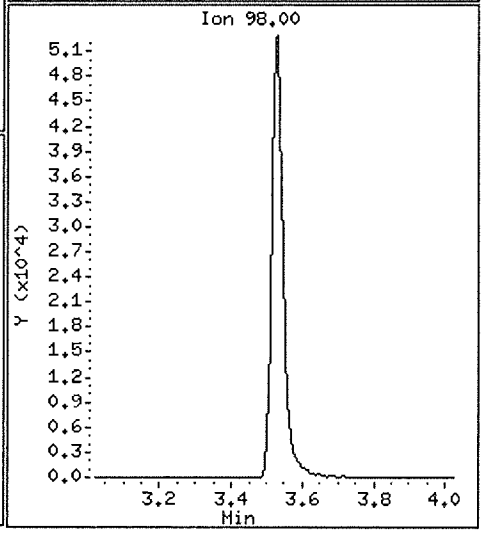


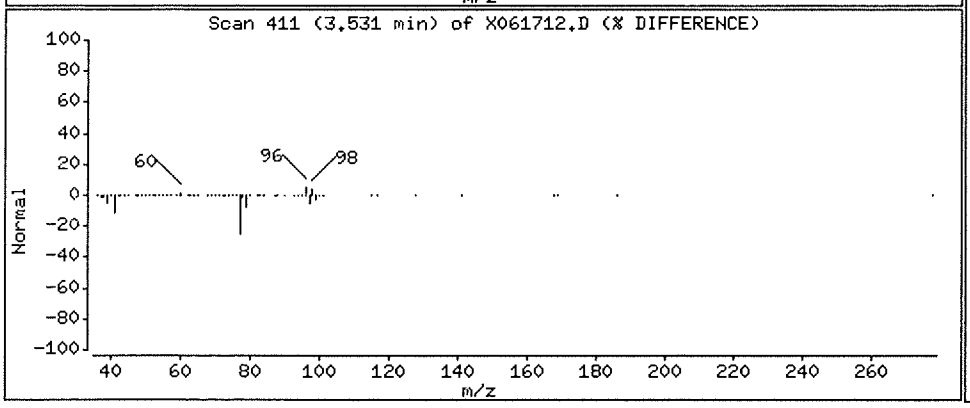












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061712.D

Date : 17-JUN-2021 14:38

Client ID: HS21060700-07

Instrument: voa6.i

Sample Info: HS21060700-07;HS21060700-07;;;

Purge Volume: 5.0

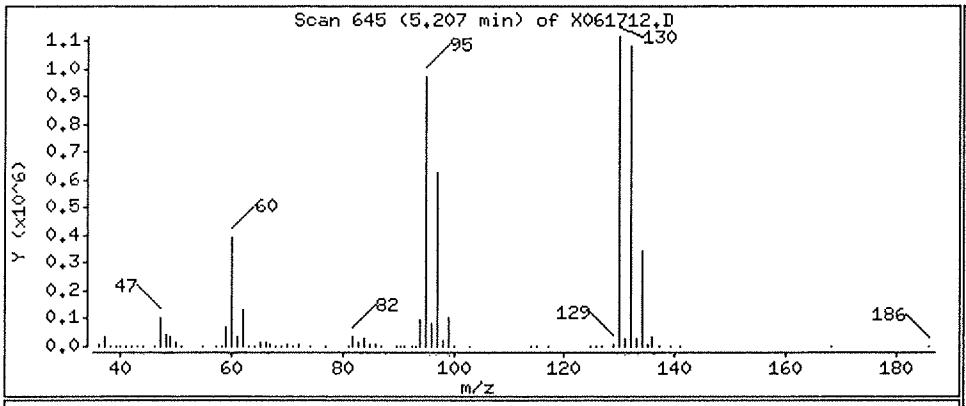
Operator: PC

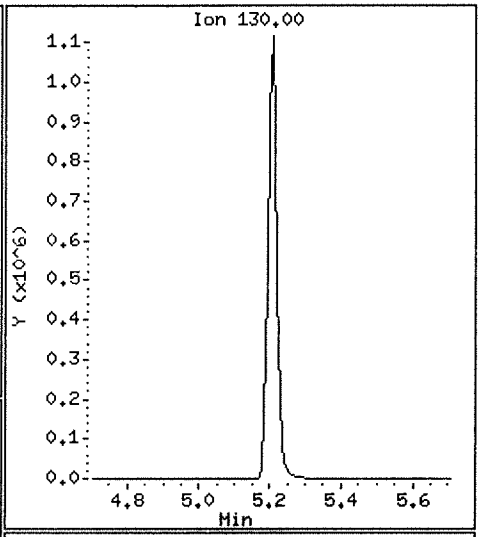
Column phase: DB624

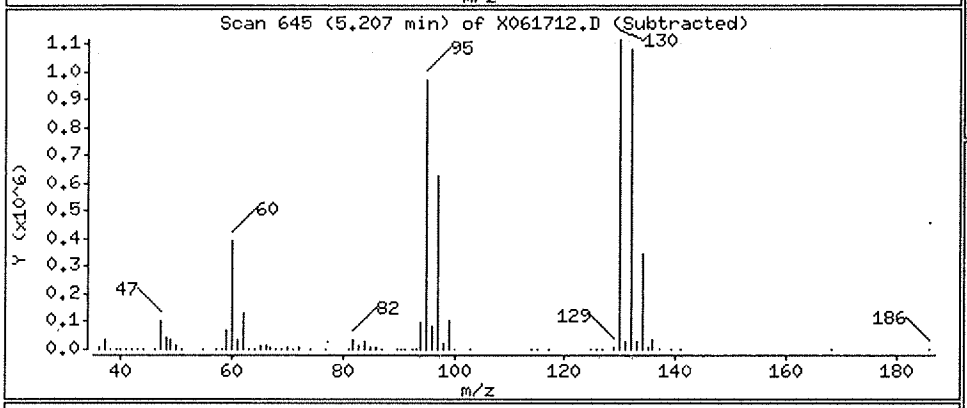
Column diameter: 0.18

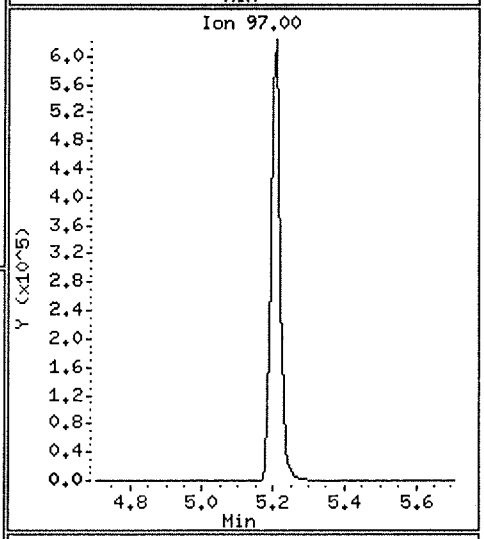
38 Trichloroethene

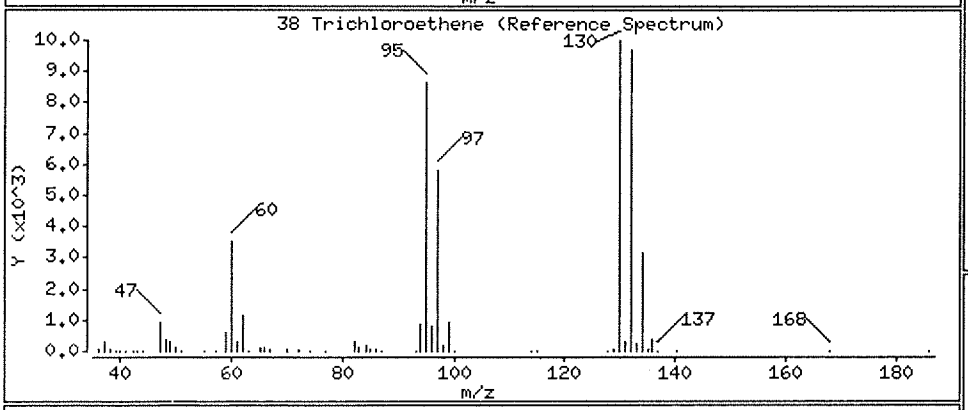
Concentration: 1753.17 ug/l

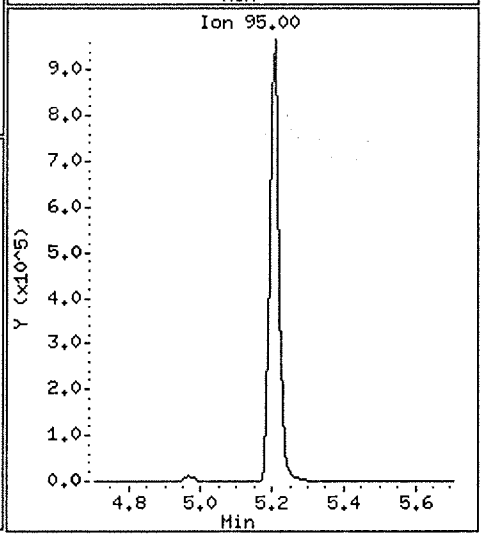


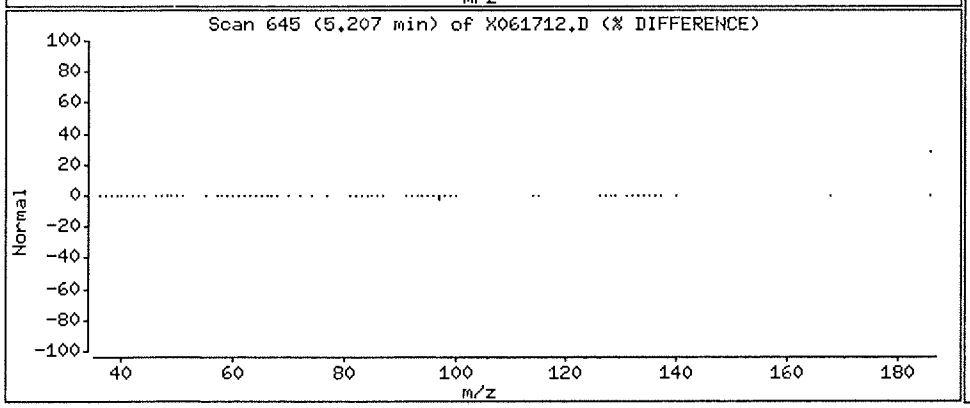












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061713.D
Lab Smp Id: HS21060700-08 Client Smp ID: HS21060700-08
Inj Date : 17-JUN-2021 14:59
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-08;HS21060700-08;;;
Misc Info : HS18090001;WATER;0;5;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 13
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.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

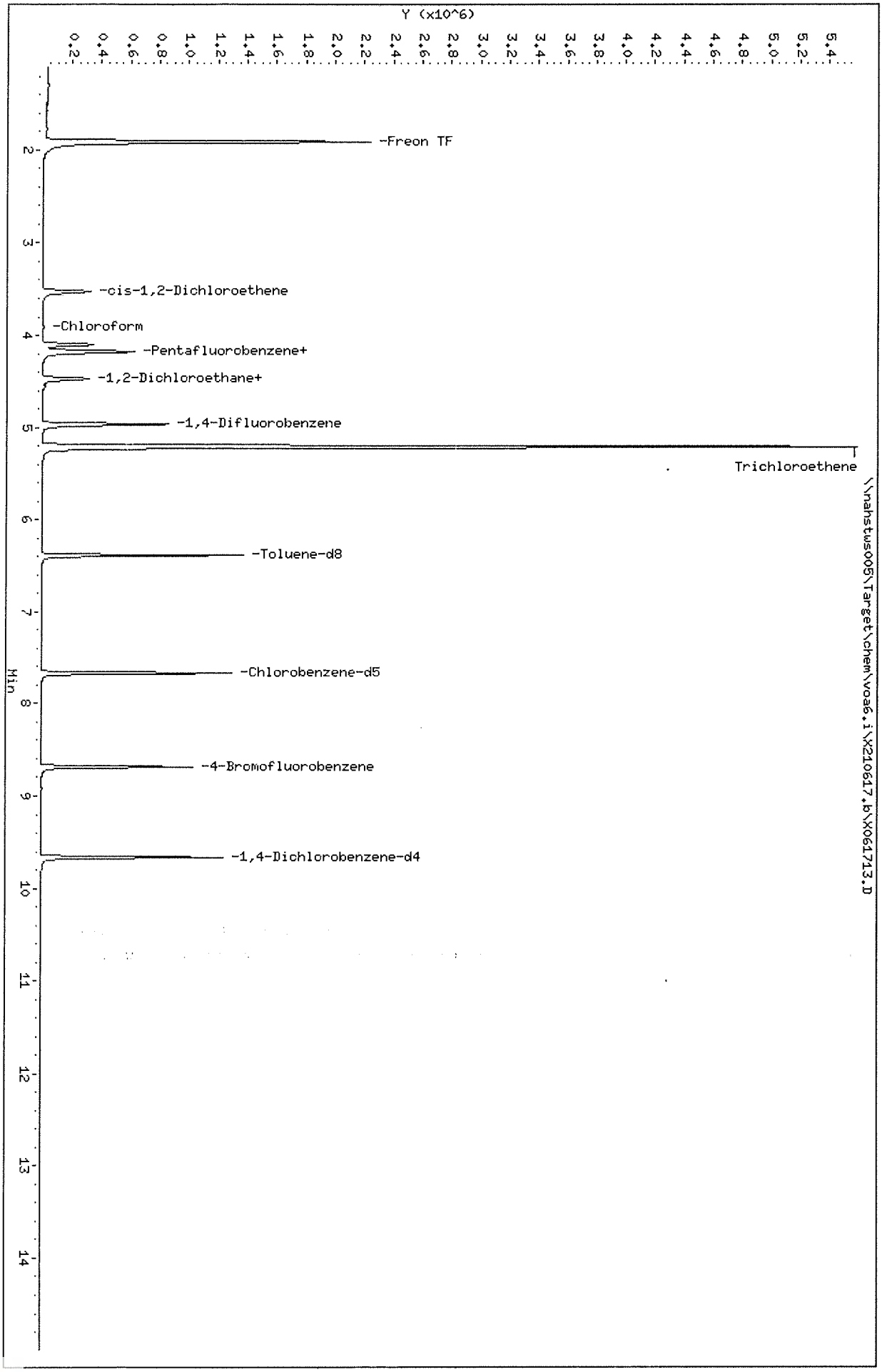
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	570537	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	782078	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	669347	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	324648	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	248926	44.3065	44.30
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	251358	46.0666	46.06
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	873170	52.3704	52.37
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	285416	48.5760	48.57
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	12602	2.02234	10.11(a)
28 Chloroform	83	3.910	3.910	(0.935)	8432	0.84041	4.20(a)
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	184816	30.9057	154.52
38 Trichloroethene	130	5.206	5.207	(1.049)	1920531	357.793	1788.96(A)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061713.D
Date : 17-JUN-2021 14:59
Client ID: HS21060700-08
Sample Info: HS21060700-08;HS21060700-08;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061713.D

Date : 17-JUN-2021 14:59

Client ID: HS21060700-08

Instrument: voa6.i

Sample Info: HS21060700-08;HS21060700-08;;;

Purge Volume: 5.0

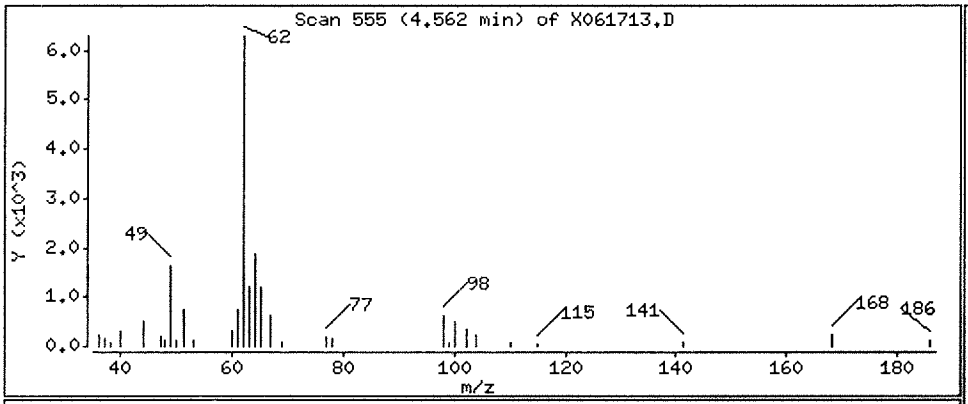
Operator: PC

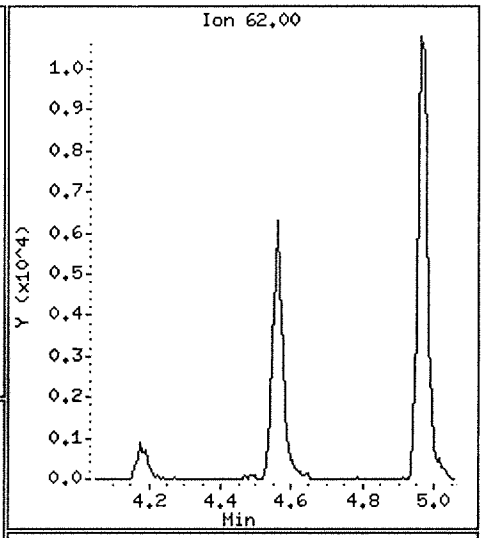
Column phase: DB624

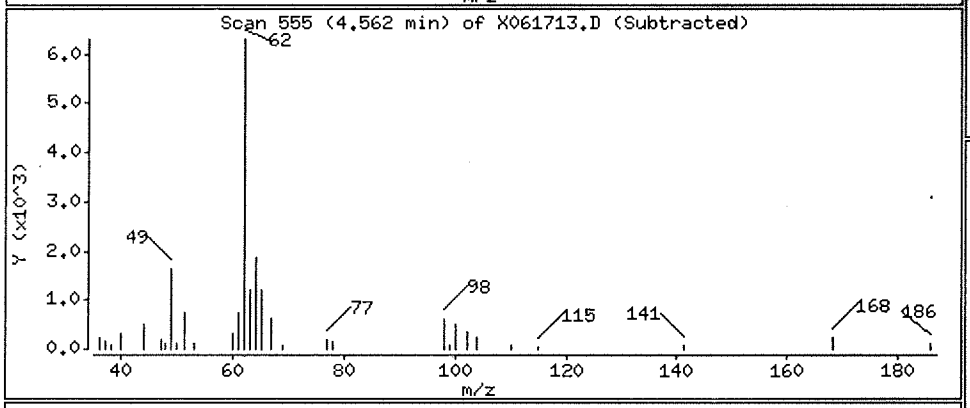
Column diameter: 0.18

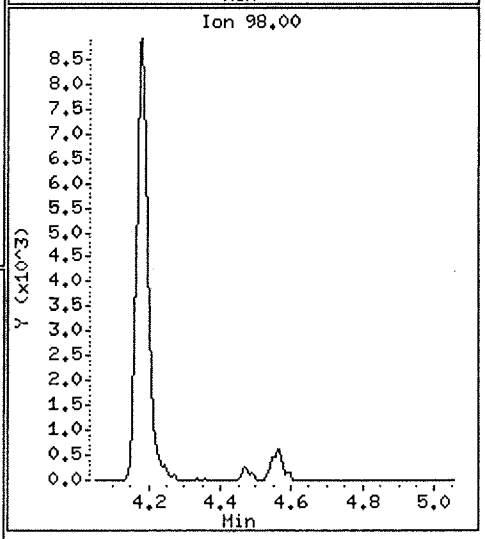
33 1,2-Dichloroethane

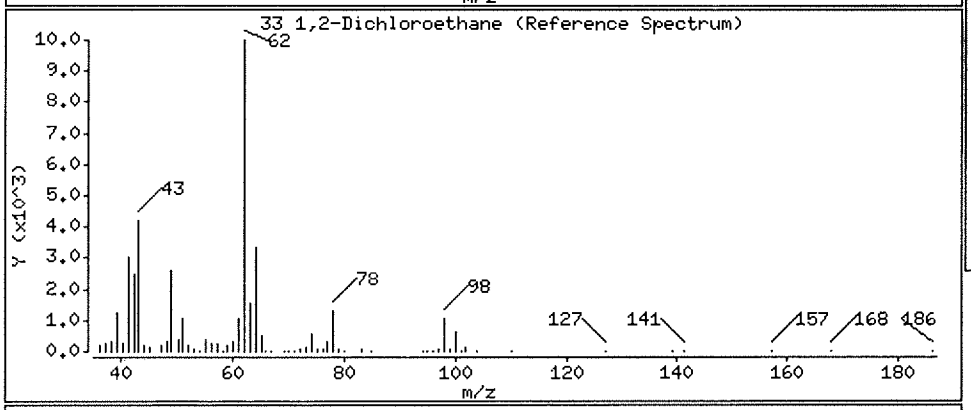
Concentration: 10.11 ug/l

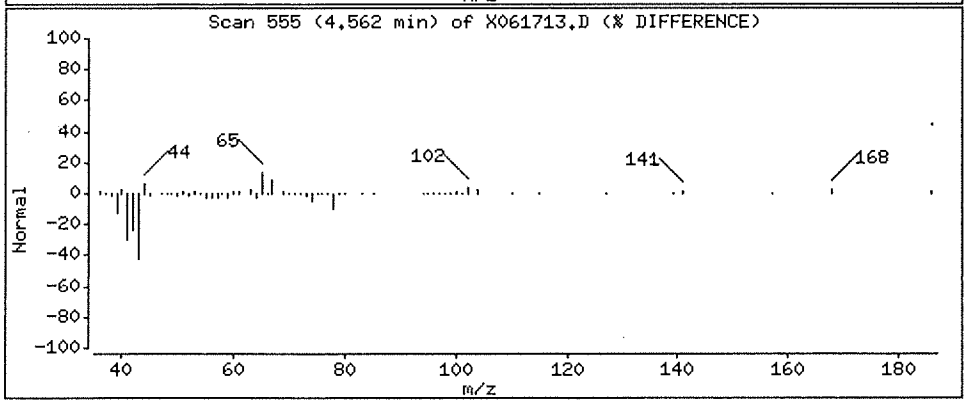












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061713.D

Date : 17-JUN-2021 14:59

Client ID: HS21060700-08

Instrument: voa6.i

Sample Info: HS21060700-08;HS21060700-08;;;

Purge Volume: 5.0

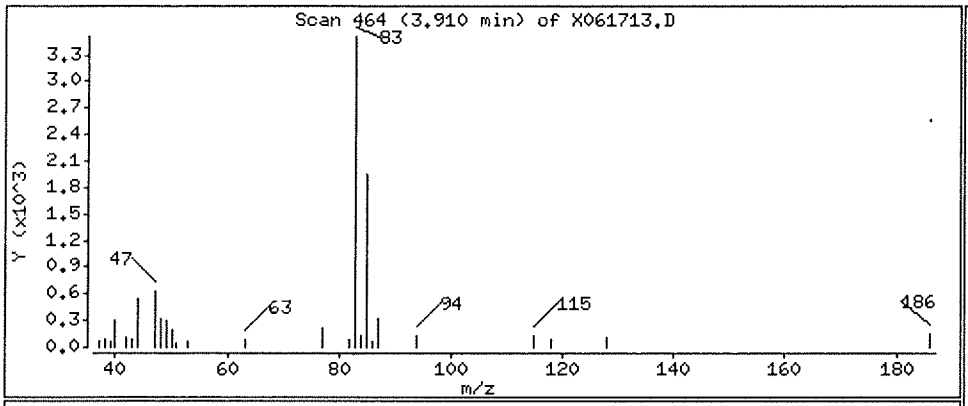
Operator: PC

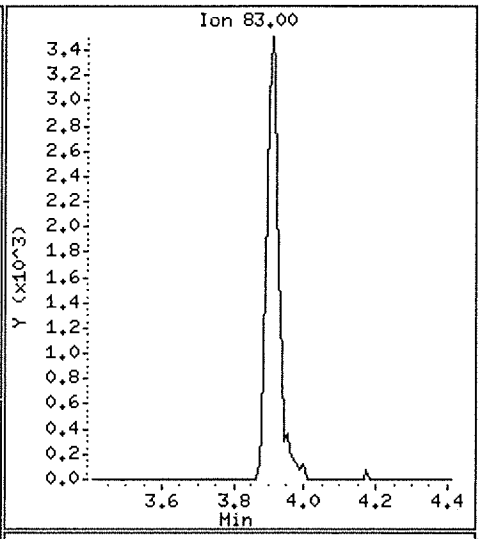
Column phase: DB624

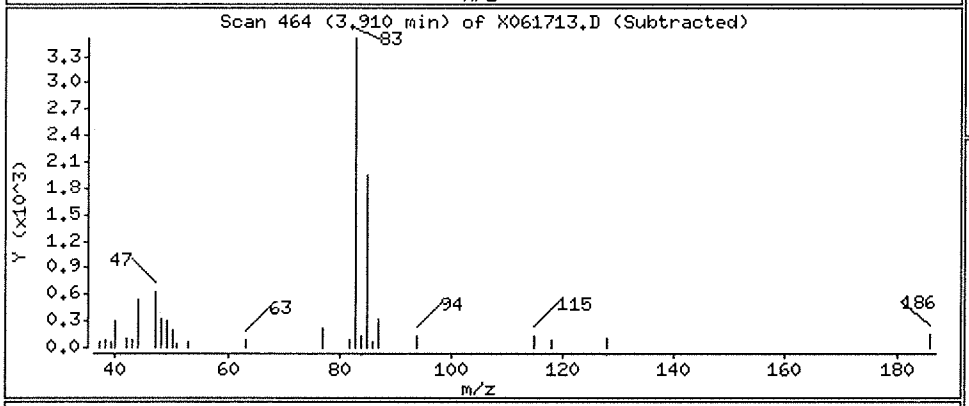
Column diameter: 0.18

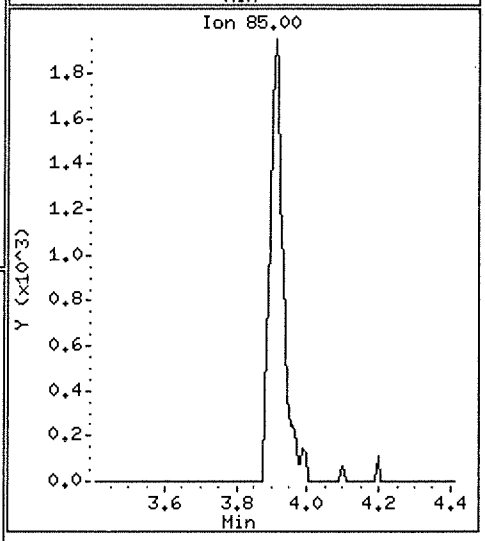
28 Chloroform

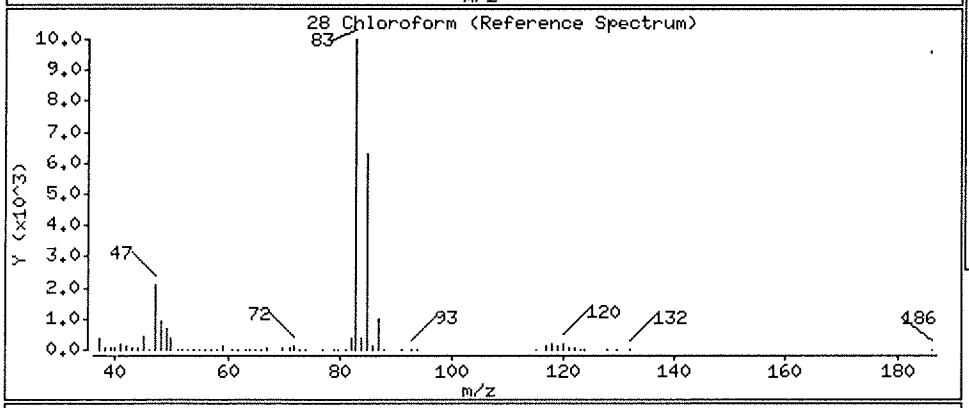
Concentration: 4.20 ug/l

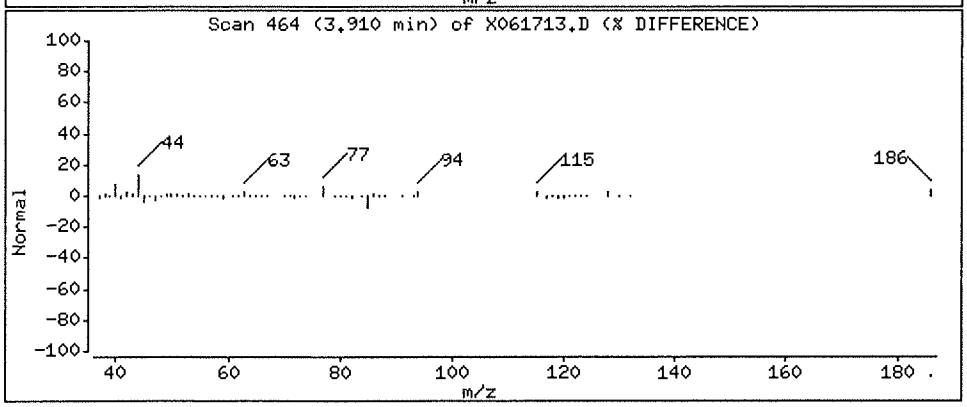












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061713.D Page 5

Date : 17-JUN-2021 14:59

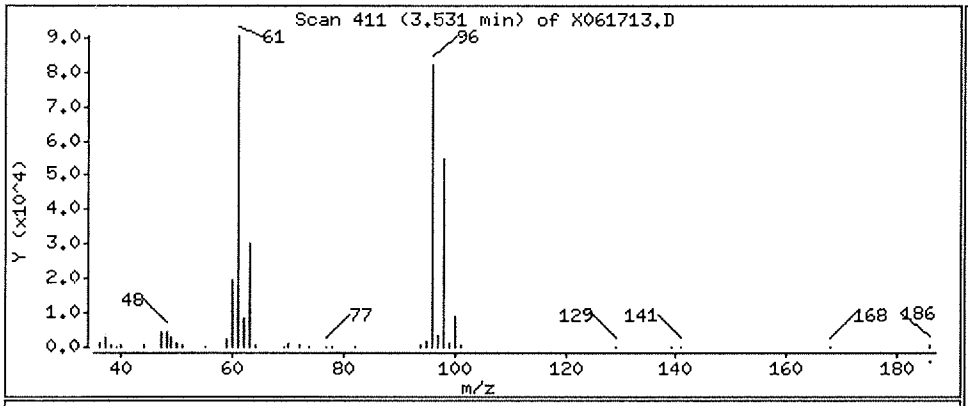
Client ID: HS21060700-08 Instrument: voa6.i

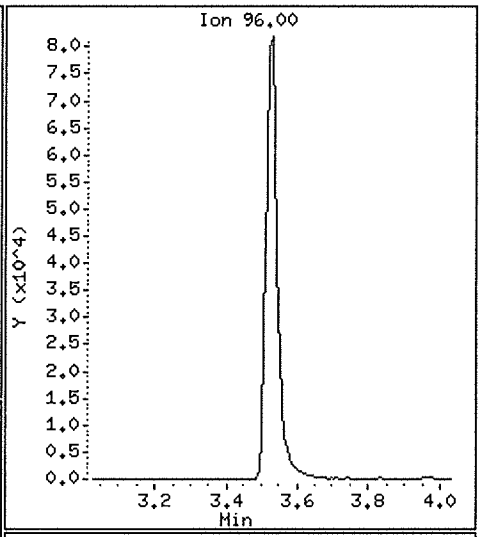
Sample Info: HS21060700-08;HS21060700-08;;;

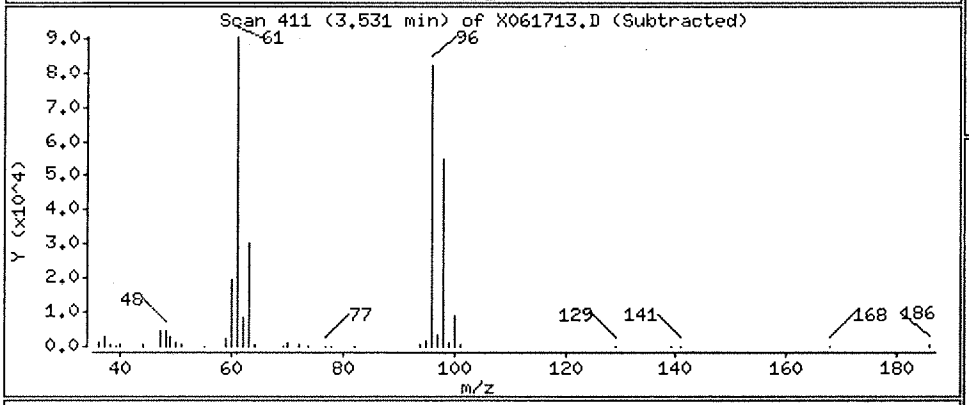
Purge Volume: 5.0 Operator: PC

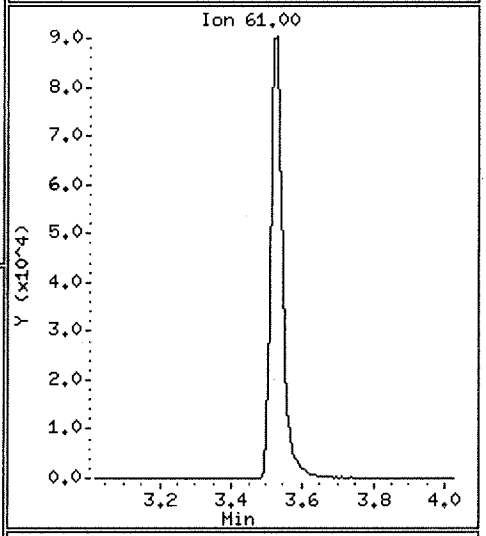
Column phase: DB624 Column diameter: 0.18

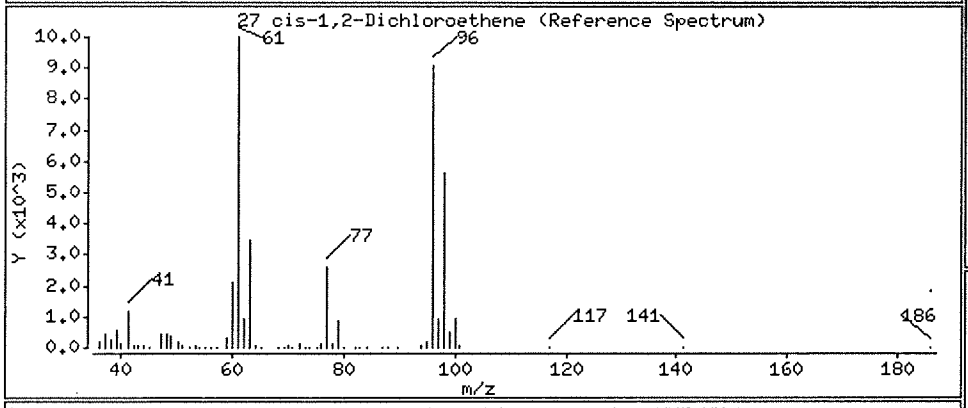
27 cis-1,2-Dichloroethene Concentration: 154.52 ug/l

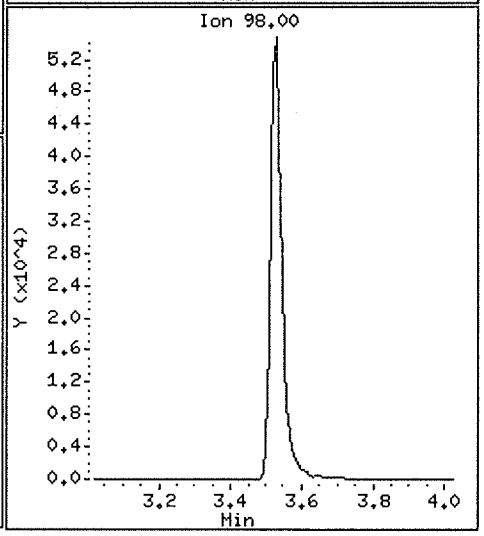


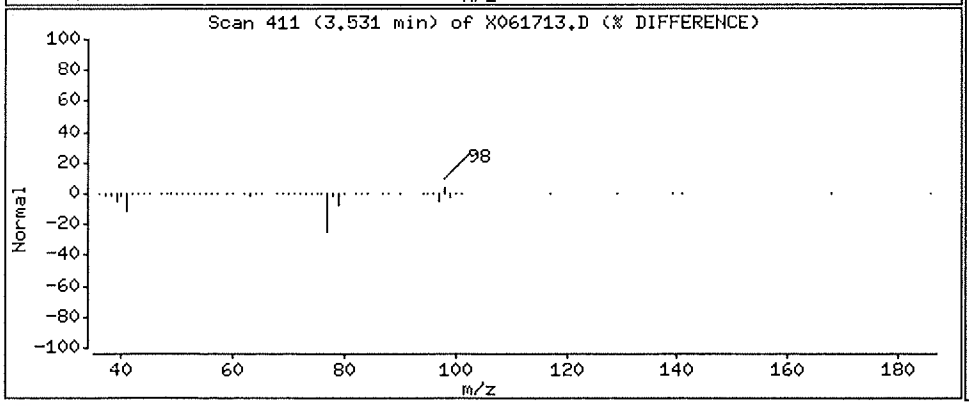












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061713.D Page 6

Date : 17-JUN-2021 14:59

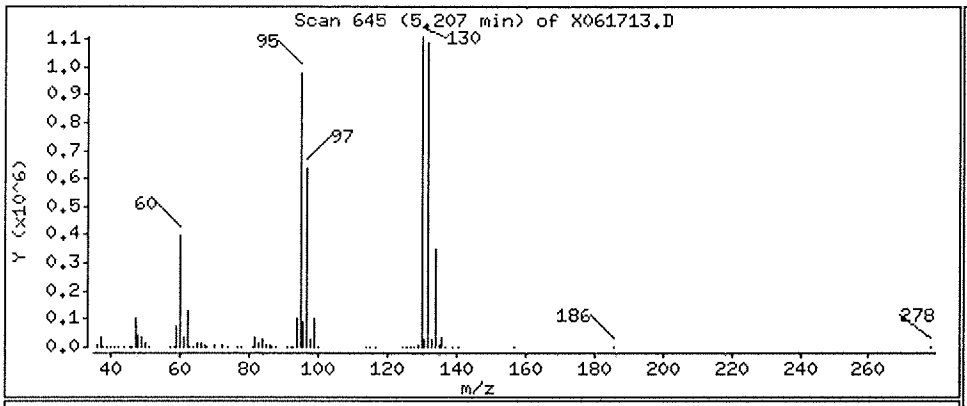
Client ID: HS21060700-08 Instrument: voa6.i

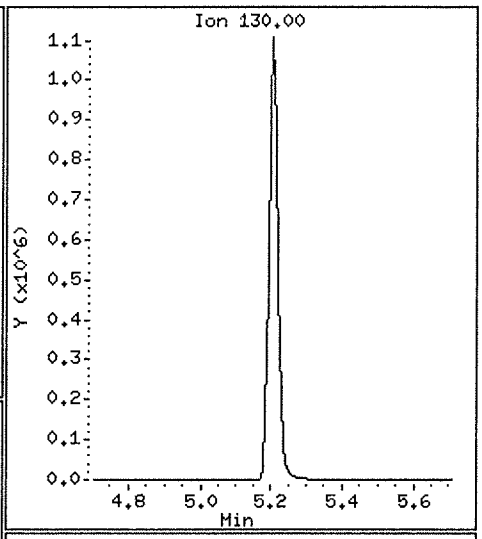
Sample Info: HS21060700-08;HS21060700-08;;;

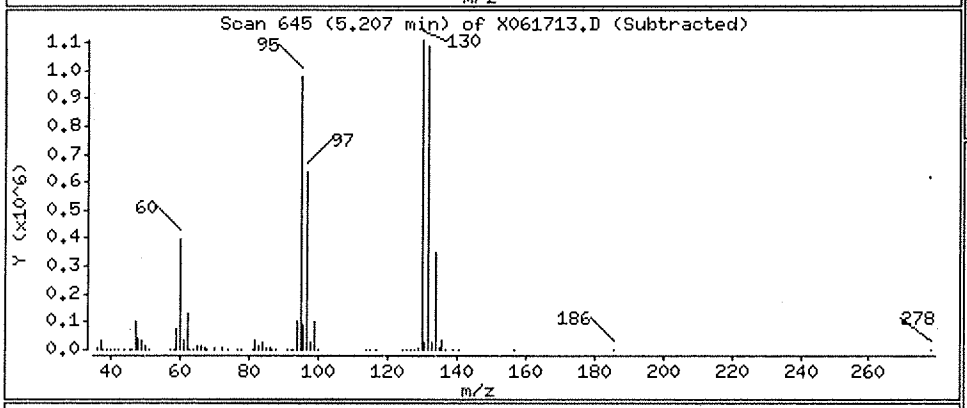
Purge Volume: 5.0 Operator: PC

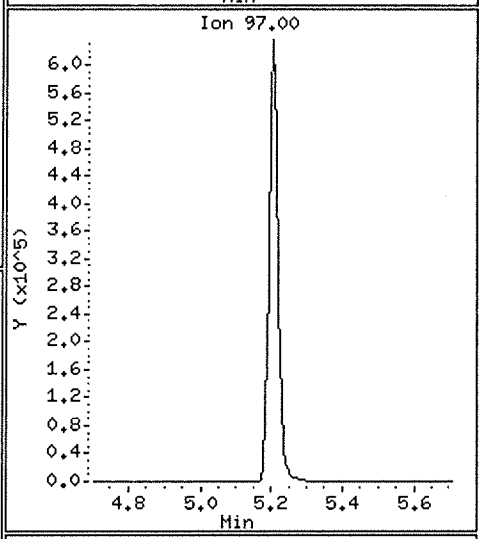
Column phase: DB624 Column diameter: 0.18

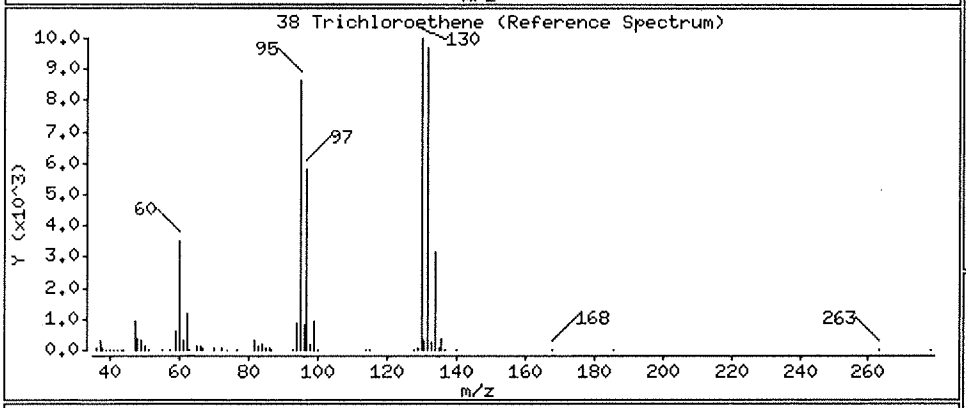
38 Trichloroethene Concentration: 1788.96 ug/l

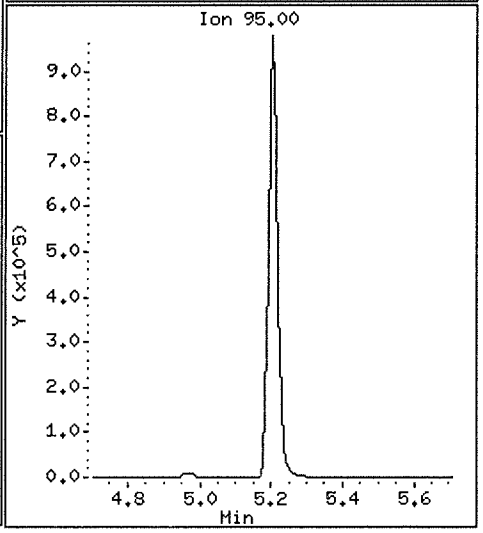


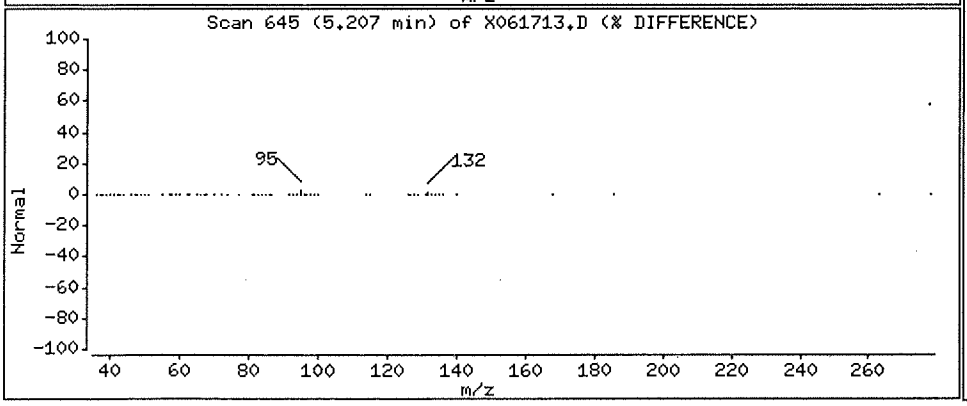












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061714.D Page 1
Report Date: 26-Jul-2021 15:01

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061714.D
Lab Smp Id: HS21060705-01MS Client Smp ID: HS21060705-01MS
Inj Date : 17-JUN-2021 15:20
Operator : PC Inst ID: voa6.i
Smp Info : HS21060705-01MS;HS21060705-01MS;3;;MS
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 15:01 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

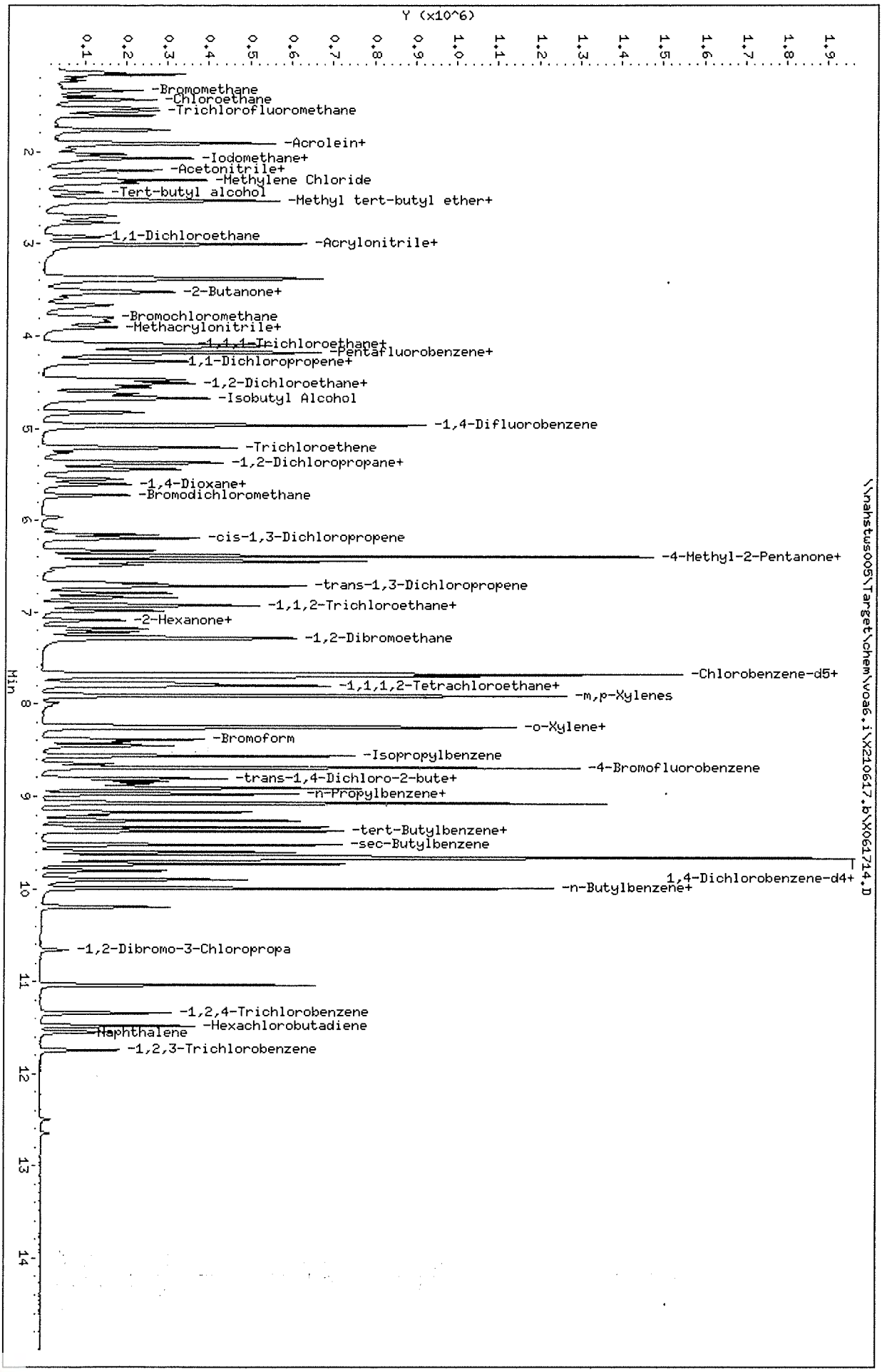
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.182	4.182	(1.000)	596843	50.0000	
* 36	1,4-Difluorobenzene	114	4.963	4.963	(1.000)	823373	50.0000	
* 47	Chlorobenzene-d5	117	7.671	7.671	(1.000)	745382	50.0000	
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	407546	50.0000	
$ 30	Dibromofluoromethane	113	4.096	4.096	(0.979)	261559	44.5039	44.50
$ 35	1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	263573	46.1778	46.17
$ 48	Toluene-d8	98	6.388	6.388	(0.833)	918327	49.4603	49.46
$ 69	4-Bromofluorobenzene	95	8.688	8.688	(1.133)	330093	50.4200	50.42
60	1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	102369	18.5709	18.57
31	1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	149347	16.9323	16.93
68	1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	119259	20.4921	20.49
53	1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	73645	18.2390	18.23
22	1,1-Dichloroethane	63	2.922	2.921	(0.699)	150647	15.9658	15.96
11	1,1-Dichloroethene	96	1.912	1.911	(0.457)	97353	15.8353	15.83
32	1,1-Dichloropropene	75	4.283	4.282	(0.863)	125217	19.8564	19.85
93	1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	62745	25.4317	25.43
71	1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	94801	18.6576	18.65(M)
90	1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	95602	23.7265	23.72
79	1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	340083	18.2955	18.29
89	1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	14646	22.9337	22.93
57	1,2-Dibromoethane	107	7.262	7.262	(0.947)	99593	18.1480	18.14
88	1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	202261	18.2973	18.29

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061714.D Page 2
Report Date: 26-Jul-2021 15:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	117024	17.8378	17.83
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	86430	17.8330	17.83
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	345815	18.6935	18.69
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	212515	18.4872	18.48
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	144282	17.9703	17.97
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	220027	18.3427	18.34
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	140741	17.2360	17.23
24	2-Butanone	43	3.581	3.580	(0.856)	59524	32.7799	32.77
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	281664	18.4646	18.46
52	2-Hexanone	43	7.090	7.083	(0.924)	106444	38.4431	38.44
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	325880	17.9389	17.93
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	372617	19.7736	19.77
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	159633	37.1903	37.19
10	Acetone	43	1.976	1.976	(0.473)	47346	26.9462	26.94
37	Benzene	78	4.512	4.512	(0.909)	341357	18.0466	18.04
74	Bromobenzene	156	8.802	8.802	(0.911)	125881	18.6167	18.61
29	Bromochloromethane	128	3.795	3.795	(0.908)	56051	15.5314	15.53
39	Bromodichloromethane	83	5.729	5.722	(1.154)	124126	17.5358	17.53
66	Bromoform	173	8.408	8.408	(1.096)	78933	18.9906	18.99
6	Bromomethane	94	1.339	1.338	(0.320)	109517	17.8636	17.86
19	Carbon Disulfide	76	2.069	2.069	(0.495)	462763	31.7411	31.74
34	Carbon Tetrachloride	117	4.261	4.268	(0.859)	134306	19.6771	19.67
59	Chlorobenzene	112	7.692	7.692	(1.003)	271106	17.4717	17.47
7	Chloroethane	64	1.396	1.403	(0.334)	73306	16.5941	16.59
28	Chloroform	83	3.903	3.910	(0.933)	164933	15.7141	15.71
3	Chloromethane	50	1.073	1.073	(0.257)	93484	15.5413	15.54
27	cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	111445	17.8149	17.81
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	151859	18.2065	18.20
55	Dibromochloromethane	129	7.176	7.176	(0.936)	111708	18.2085	18.20
44	Dibromomethane	93	5.550	5.550	(1.118)	65156	17.8888	17.88
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	100245	18.1509	18.15
61	Ethylbenzene	106	7.800	7.800	(1.017)	139776	19.5257	19.52
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	64766	26.7275	26.72
67	Isopropylbenzene	105	8.559	8.559	(1.116)	429806	19.6506	19.65
62	m,p-Xylenes	106	7.907	7.900	(1.031)	350264	37.5338	37.53
17	Methylene Chloride	84	2.298	2.305	(0.550)	89555	15.6572	15.65
87	n-Butylbenzene	91	9.991	9.991	(1.034)	321125	20.2543	20.25
73	n-Propylbenzene	91	8.910	8.910	(0.922)	486216	19.1258	19.12
92	Naphthalene	128	11.546	11.539	(1.195)	135141	23.2042	23.20
63	o-Xylene	106	8.244	8.244	(1.075)	165275	18.1629	18.16
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	428370	20.0170	20.01
64	Styrene	104	8.258	8.258	(1.077)	274012	18.0205	18.02
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	308626	19.4598	19.45
56	Tetrachloroethene	164	6.926	6.926	(0.903)	103288	22.5096	22.50
50	Toluene	91	6.446	6.446	(0.840)	384324	17.6614	17.66
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	90140	16.1747	16.17
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	131238	18.2391	18.23
38	Trichloroethene	130	5.207	5.206	(1.049)	162337	28.7264	28.72
8	Trichlorofluoromethane	101	1.561	1.560	(0.373)	180446	16.7491	16.74
5	Vinyl Chloride	62	1.138	1.138	(0.272)	117837	16.6792	16.67

QC Flag Legend

M - Compound response manually integrated.



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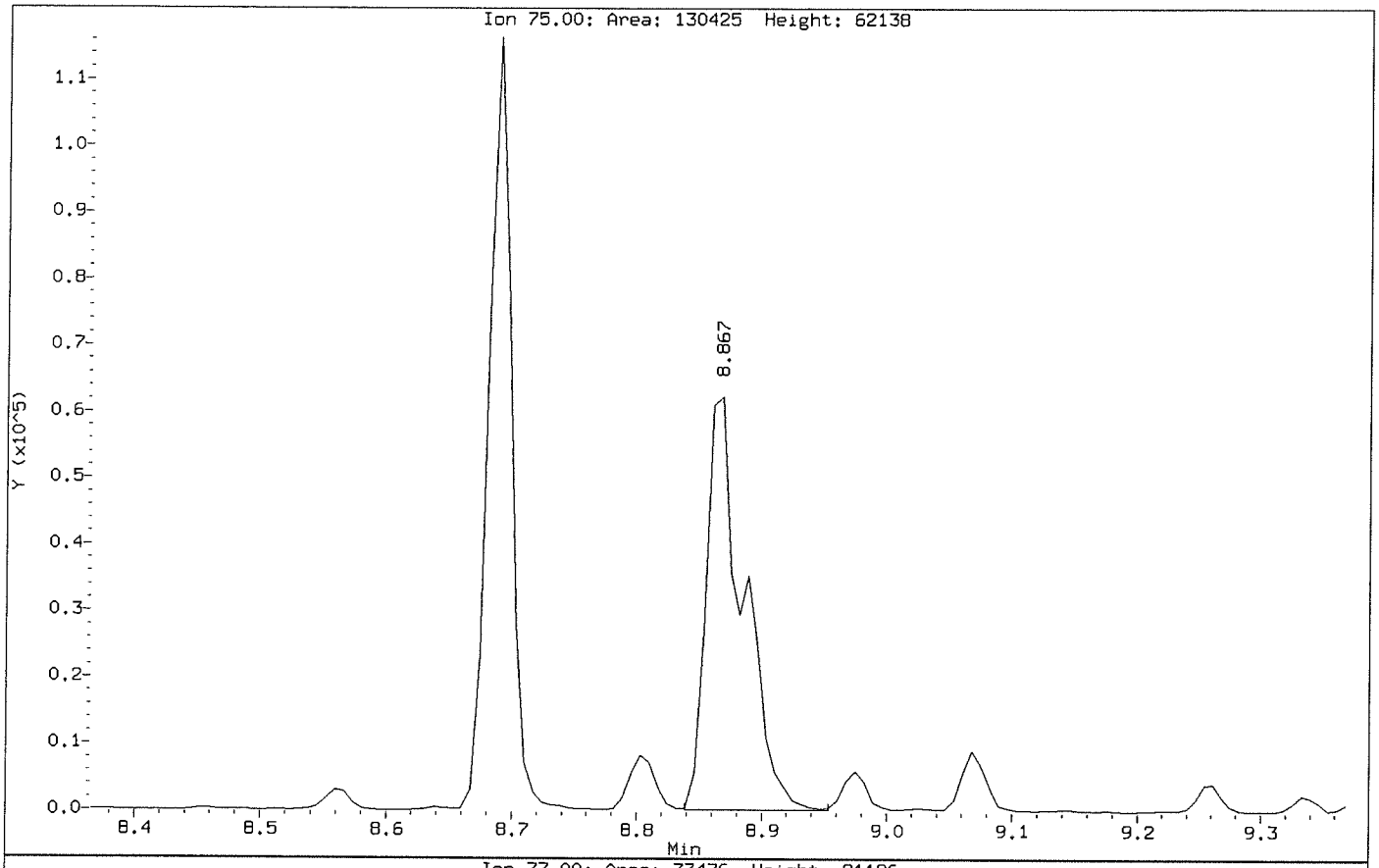
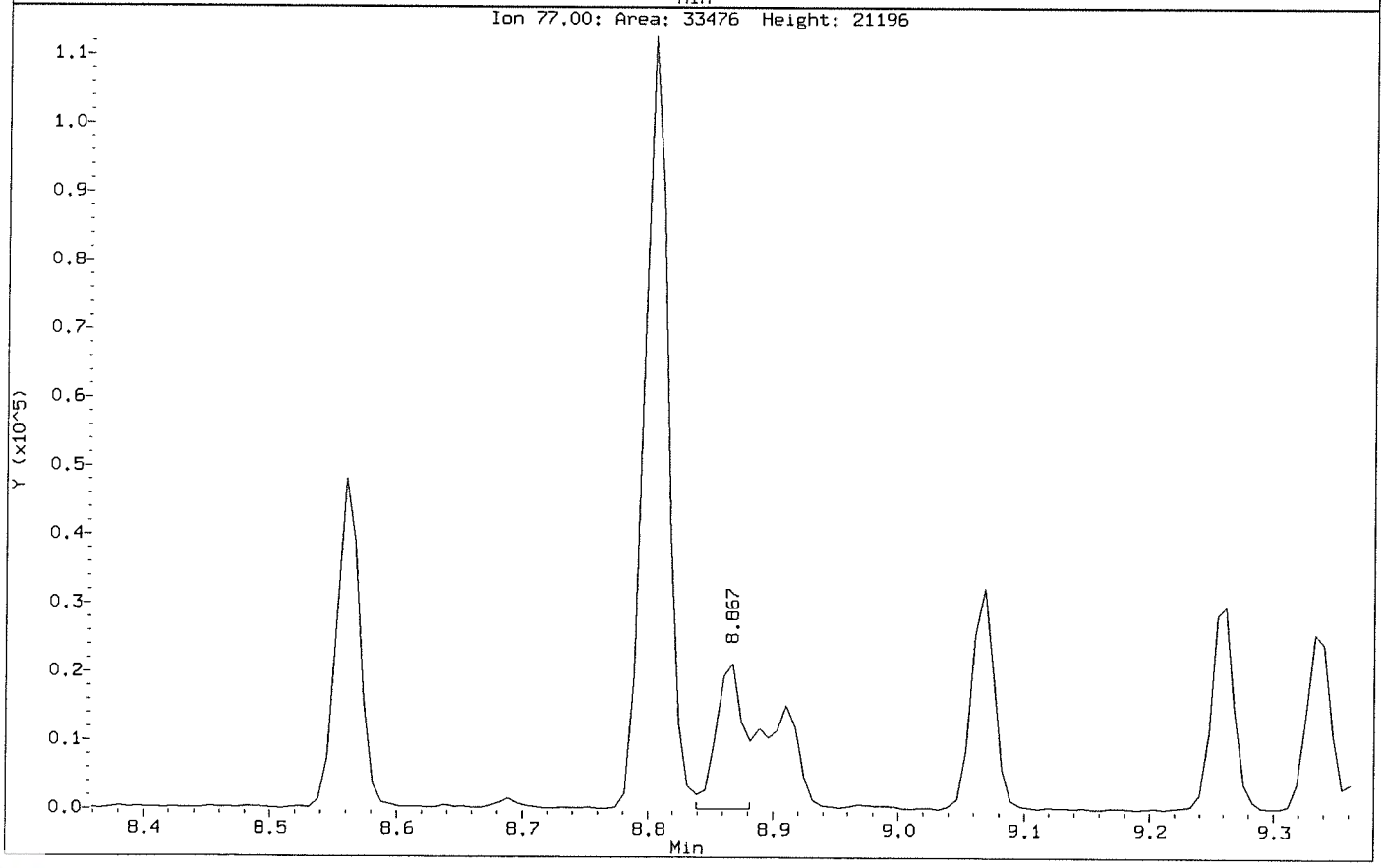
Date : 17-JUN-2021 15:20
Client ID: HS21060705-01MS
Sample Info: HS21060705-01MS;HS21060705-01MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210617.b\Before\X061714.D
Injection Date: 17-JUN-2021 15:20
Instrument: voa6.i
Client Sample ID: HS21060705-01MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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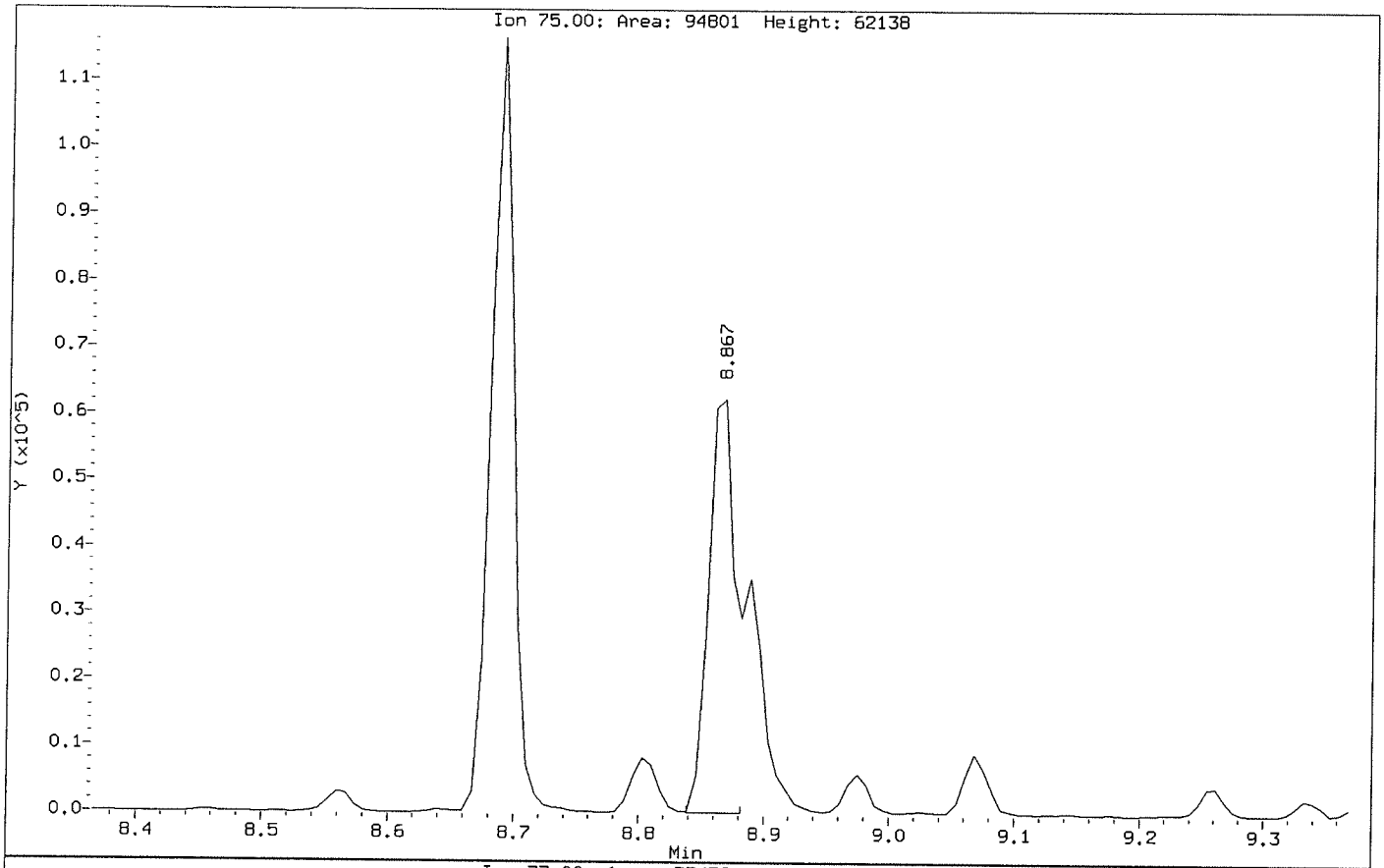
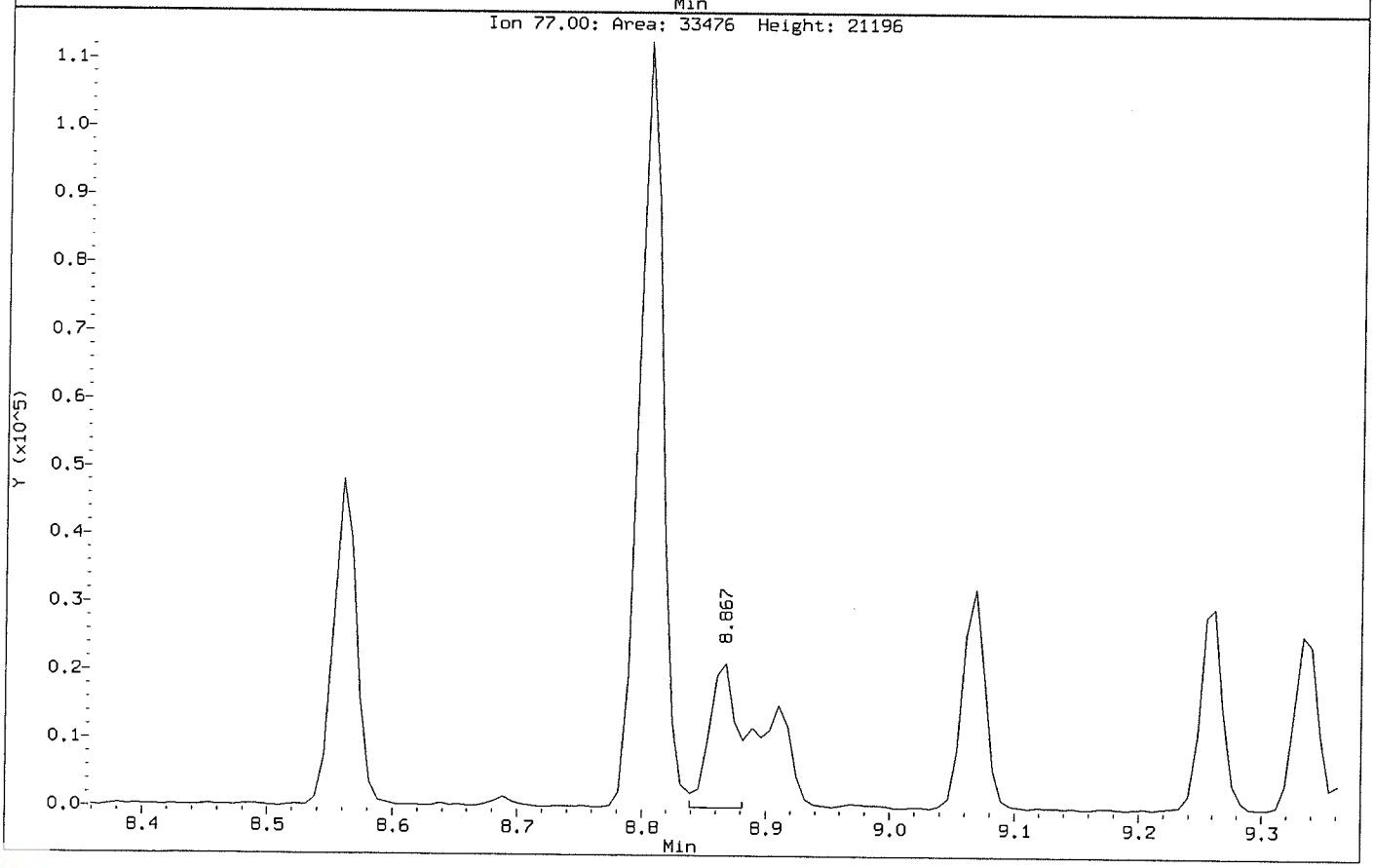
Injection Date: 17-JUN-2021 15:20
Instrument: voa6.i
Client Sample ID: HS21060705-01MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061715.D Page 1
Report Date: 26-Jul-2021 15:01

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061715.D
Lab Smp Id: HS21060705-01MSD Client Smp ID: HS21060705-01MSD
Inj Date : 17-JUN-2021 15:41
Operator : PC Inst ID: voa6.i
Smp Info : HS21060705-01MSD;HS21060705-01MSD;3;;MSD
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 15:01 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

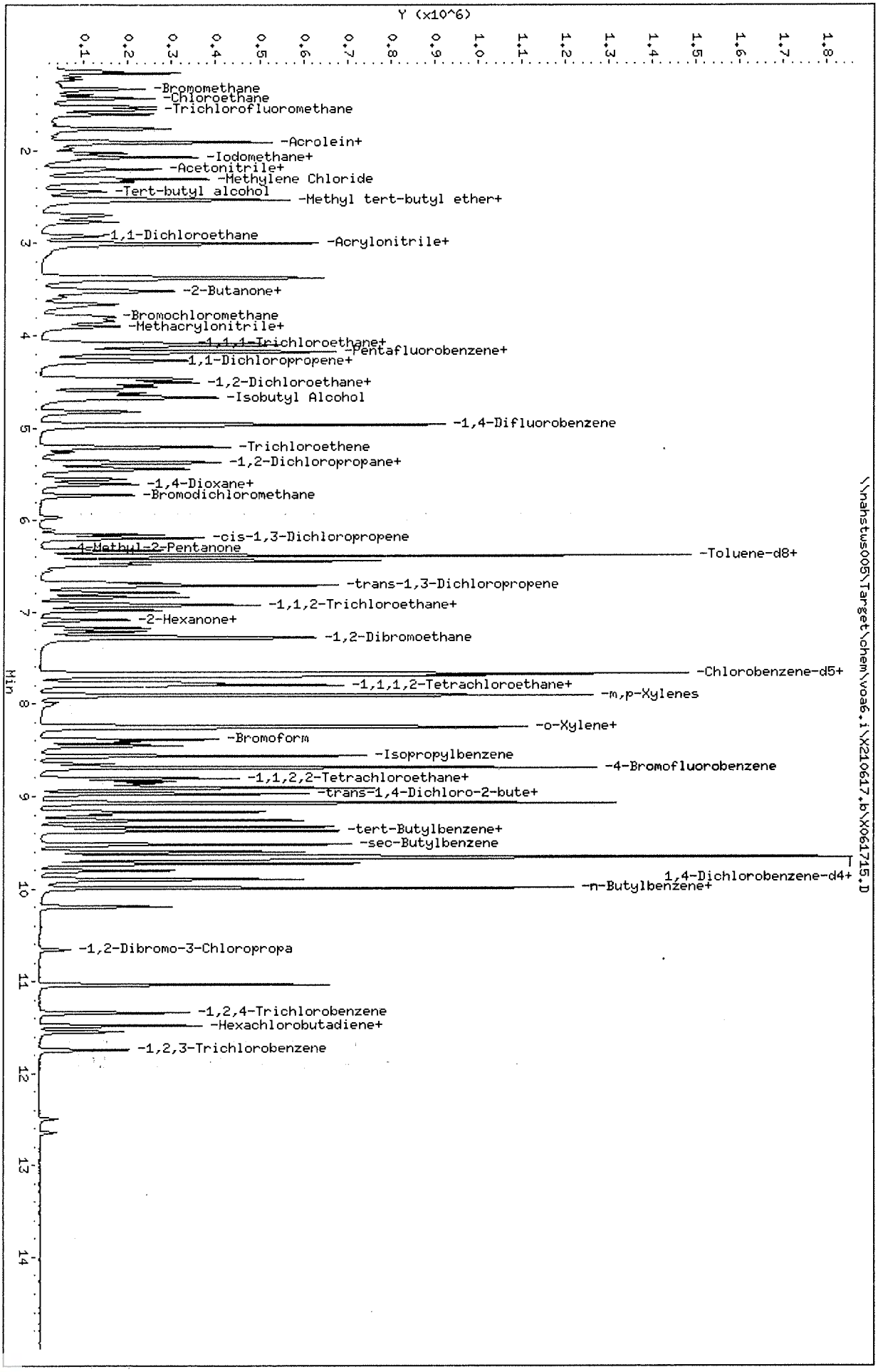
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	595203	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	828677	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	734641	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	383046	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	266040	45.3943	45.39
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	269422	47.3500	47.34
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	928964	50.7647	50.76
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	322575	49.9985	49.99
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	100020	18.4101	18.41
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	144615	16.4410	16.44
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	121967	22.4033	22.40
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	73759	18.5343	18.53
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	148952	15.8297	15.82
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	93129	15.1899	15.18
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	119958	18.9007	18.90
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	71878	30.9969	30.99
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	99624	20.8609	20.86(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	102454	27.0533	27.05
79 1,2,4-Trimethylbenzene	105	9.383	9.375	(0.971)	337329	19.3080	19.30
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	15346	25.5079	25.50
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	100026	18.4934	18.49
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	200487	19.2969	19.29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	119587	18.1118	18.11
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	84798	17.3842	17.38
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	337959	19.4374	19.43
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	213153	19.7287	19.72
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	144380	18.2454	18.24
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	217119	19.2580	19.25
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	134857	16.5609	16.56
24	2-Butanone	43	3.588	3.580	(0.858)	61183	33.7864	33.78
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	280259	19.5476	19.54
52	2-Hexanone	43	7.090	7.083	(0.924)	114881	42.0968	42.09
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	315968	18.5058	18.50
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	362727	20.4799	20.47
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	165357	39.0871	39.08
10	Acetone	43	1.976	1.976	(0.473)	49116	28.2705	28.27
37	Benzene	78	4.512	4.512	(0.909)	330709	17.3718	17.37
74	Bromobenzene	156	8.802	8.802	(0.911)	125855	19.8034	19.80
29	Bromochloromethane	128	3.795	3.795	(0.908)	57245	15.9060	15.90
39	Bromodichloromethane	83	5.729	5.722	(1.154)	121299	17.0267	17.02
66	Bromoform	173	8.408	8.408	(1.096)	81904	19.9935	19.99
6	Bromomethane	94	1.331	1.338	(0.318)	107913	17.6523	17.65
19	Carbon Disulfide	76	2.069	2.069	(0.495)	450144	30.9607	30.96
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	129249	18.8150	18.81
59	Chlorobenzene	112	7.692	7.692	(1.003)	264599	17.3017	17.30
7	Chloroethane	64	1.396	1.403	(0.334)	78471	17.9163	17.91
28	Chloroform	83	3.910	3.910	(0.935)	161463	15.4259	15.42
3	Chloromethane	50	1.073	1.073	(0.257)	91500	15.2025	15.20
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	108747	17.4315	17.43
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	148998	17.7492	17.74
55	Dibromochloromethane	129	7.176	7.176	(0.936)	113508	18.7724	18.77
44	Dibromomethane	93	5.550	5.550	(1.118)	65795	17.9486	17.94
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	94127	17.0778	17.07
61	Ethylbenzene	106	7.799	7.800	(1.017)	136312	19.3202	19.32
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	63063	27.6341	27.63
67	Isopropylbenzene	105	8.559	8.559	(1.116)	414601	19.2326	19.23
62	m,p-Xylenes	106	7.900	7.900	(1.030)	343829	37.3830	37.38
17	Methylene Chloride	84	2.305	2.305	(0.551)	88079	15.4232	15.42
87	n-Butylbenzene	91	9.991	9.991	(1.034)	308958	20.7333	20.73
73	n-Propylbenzene	91	8.910	8.910	(0.922)	479735	20.0778	20.07
92	Naphthalene	128	11.546	11.539	(1.195)	157033	28.6878	28.68
63	o-Xylene	106	8.244	8.244	(1.075)	166096	18.5200	18.51
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	418107	20.7871	20.78
64	Styrene	104	8.258	8.258	(1.077)	270415	18.0440	18.04
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	299601	20.0990	20.09
56	Tetrachloroethene	164	6.926	6.926	(0.903)	97095	21.4693	21.46
50	Toluene	91	6.446	6.446	(0.840)	377818	17.6163	17.61
20	trans-1,2-Dichloroethene	96	2.527	2.528	(0.604)	86607	15.5836	15.58
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	130043	17.9573	17.95
38	Trichloroethene	130	5.206	5.206	(1.049)	153118	26.9217	26.92
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	169574	15.7833	15.78
5	Vinyl Chloride	62	1.138	1.138	(0.272)	112904	16.0250	16.02

QC Flag Legend

M - Compound response manually integrated.



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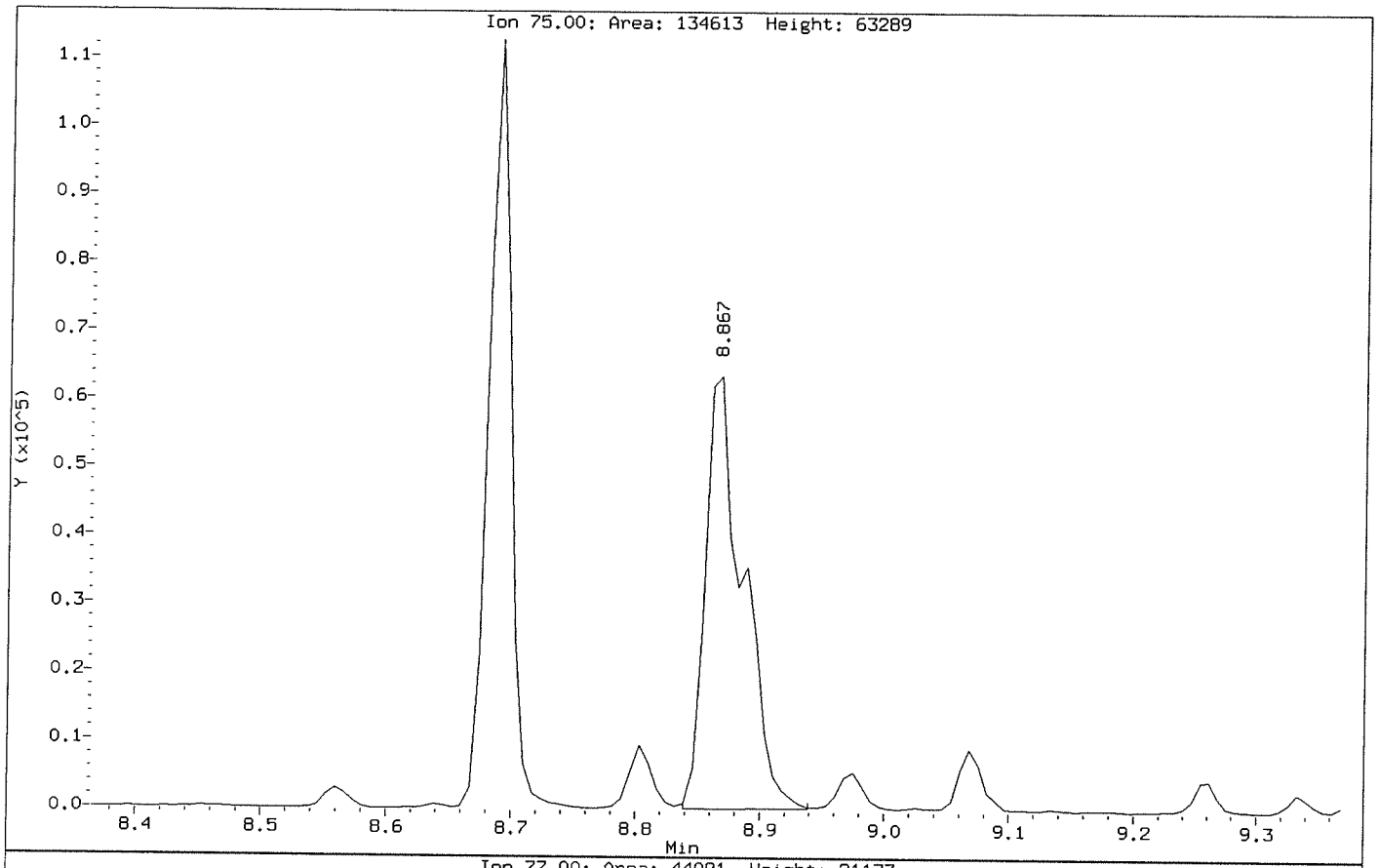
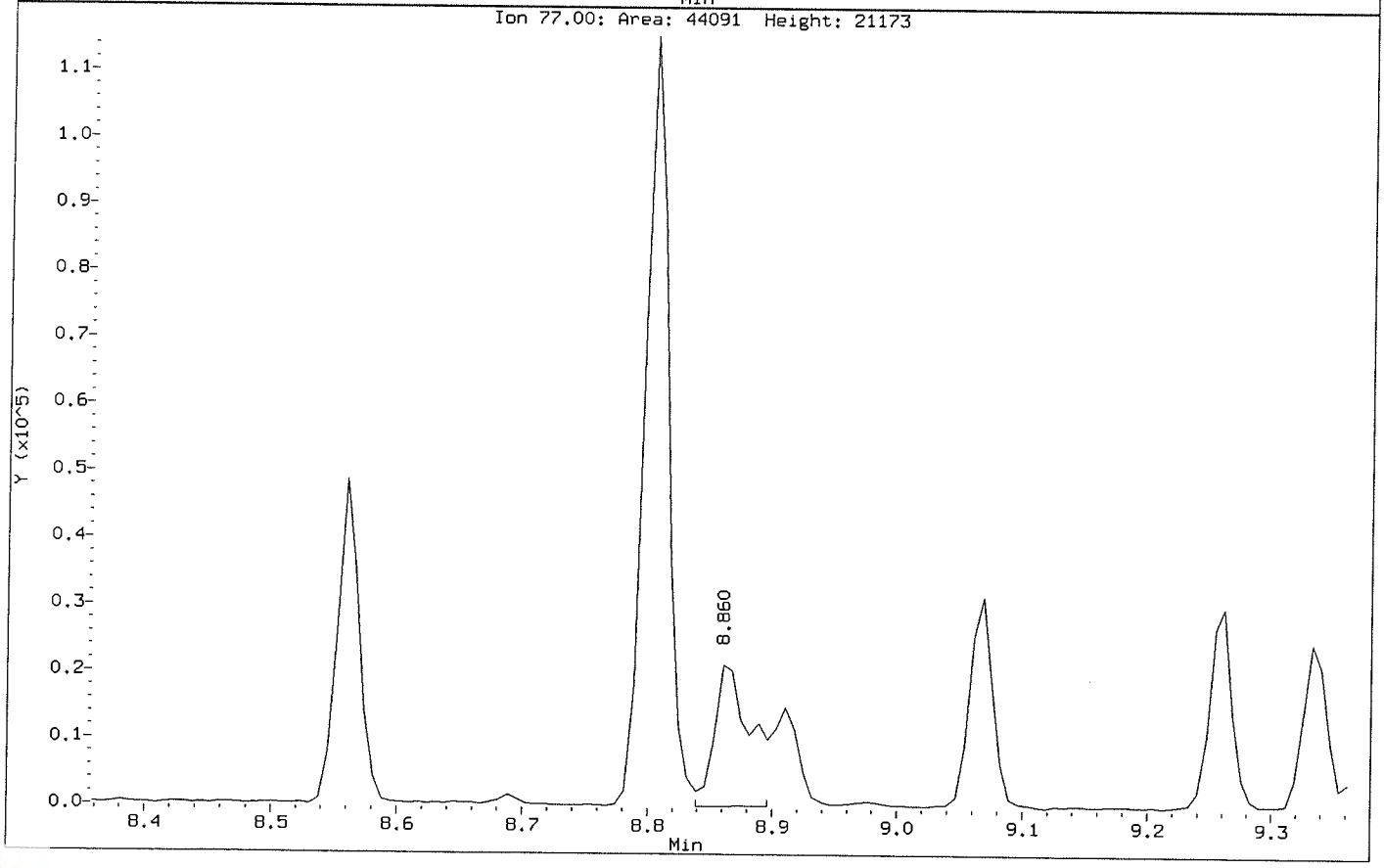
Date : 17-JUN-2021 15:41
Client ID: HS21060705-01HSD
Sample Info: HS21060705-01MSD;HS21060705-01MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210617.b\Before\X061715.D
Injection Date: 17-JUN-2021 15:41
Instrument: voa6.i
Client Sample ID: HS21060705-01MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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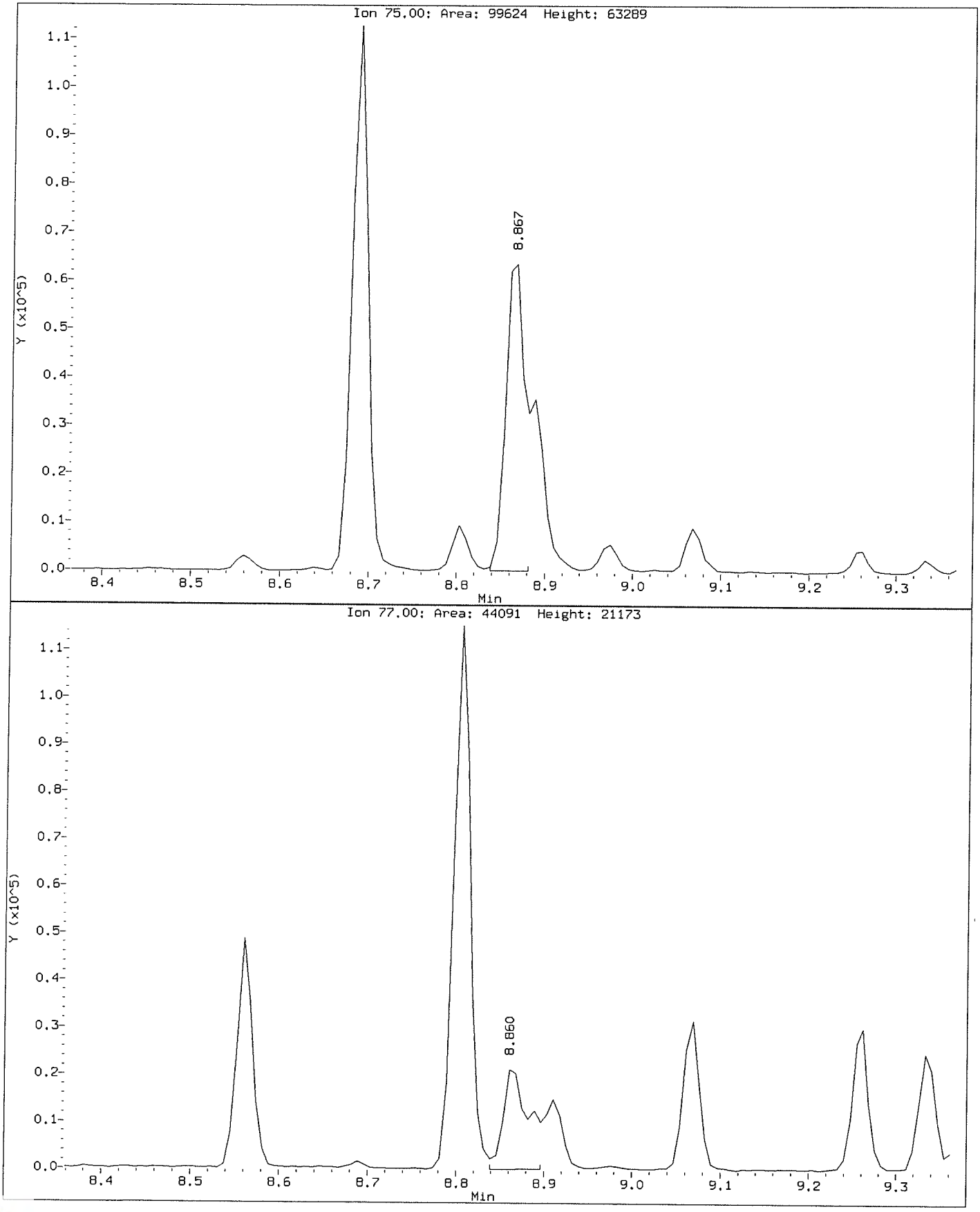
Injection Date: 17-JUN-2021 15:41
Instrument: voa6.i
Client Sample ID: HS21060705-01MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061716.D
Lab Smp Id: HS21060700-07 Client Smp ID: HS21060700-07
Inj Date : 17-JUN-2021 16:02
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-07;HS21060700-07;;;
Misc Info : HS18090001;WATER;0;50;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 15
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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

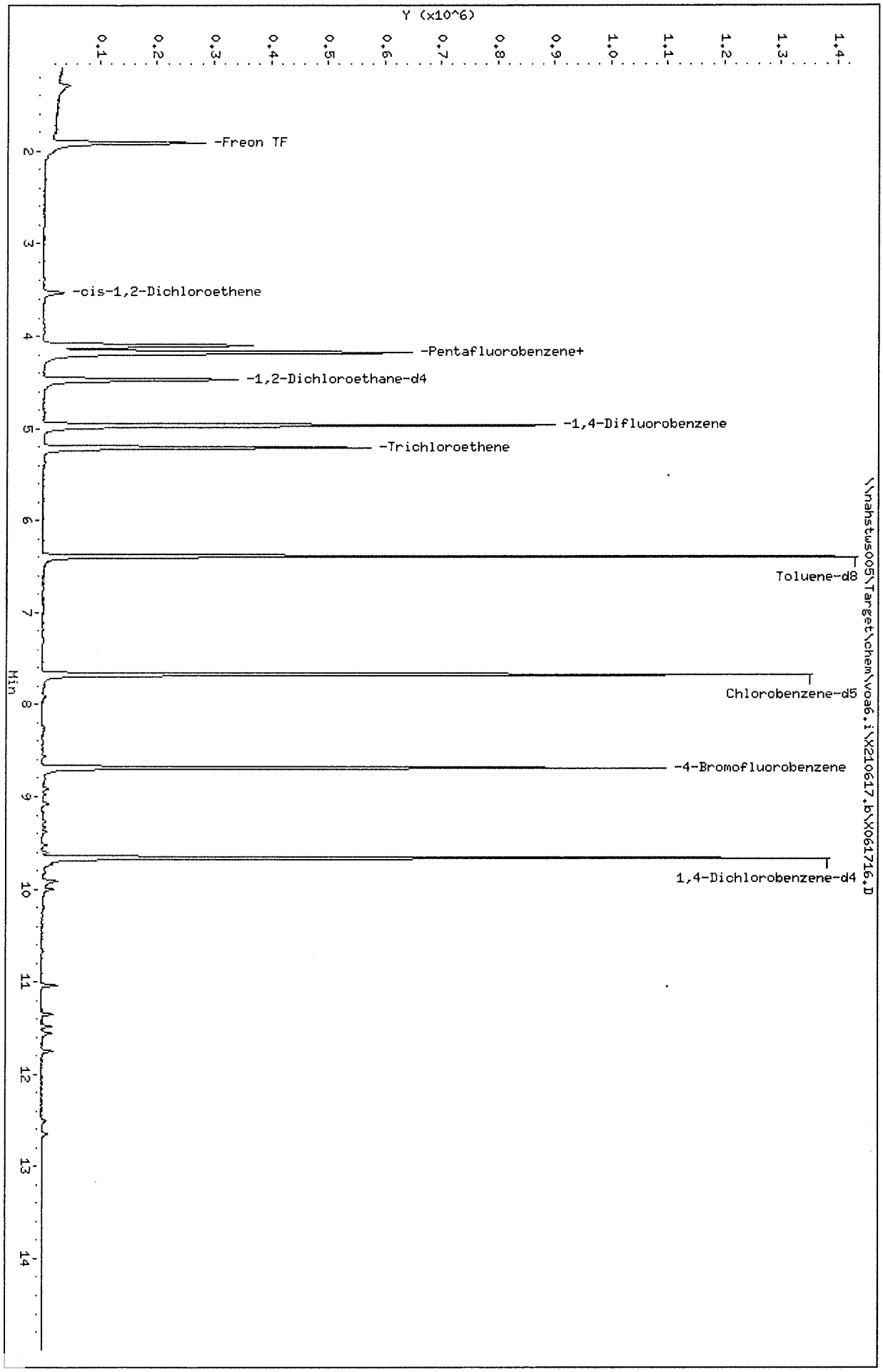
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	589545	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	811946	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	699967	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	349413	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	263561	45.4029	45.40
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	266596	47.3023	47.30
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	909731	52.1764	52.17
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	291275	47.4227	47.42
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	20817	3.36887	168.44(a)
38 Trichloroethene	130	5.207	5.207	(1.049)	210448	37.7640	1888.20

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061716.D
Date : 17-JUN-2021 16:02
Client ID: HS21060700-07
Sample Info: HS21060700-07;HS21060700-07;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061716.D Page 3

Date : 17-JUN-2021 16:02

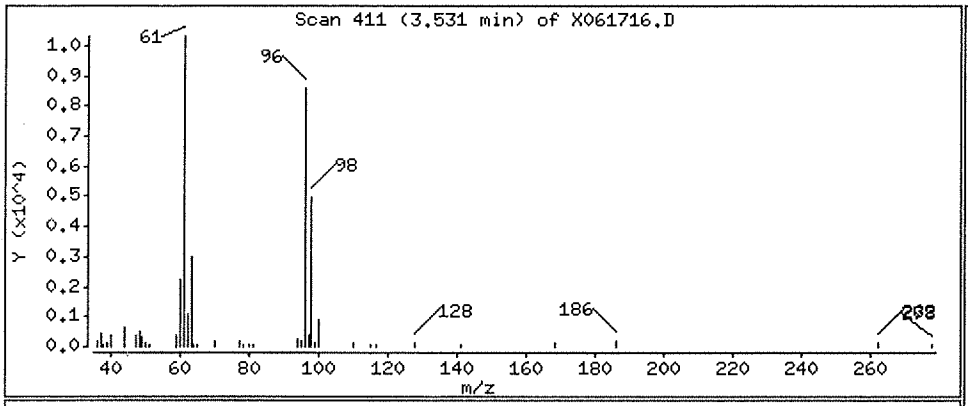
Client ID: HS21060700-07 Instrument: voa6.i

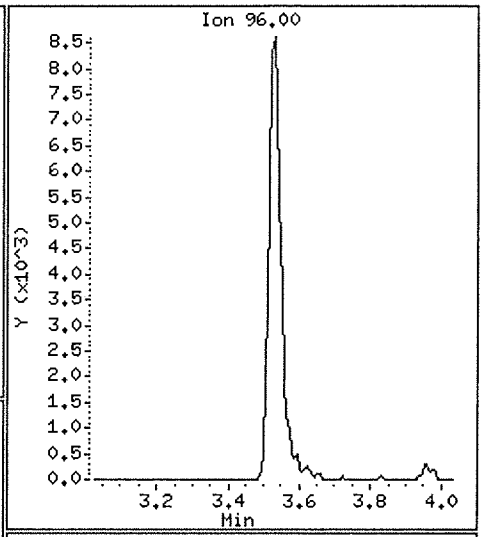
Sample Info: HS21060700-07;HS21060700-07;;;

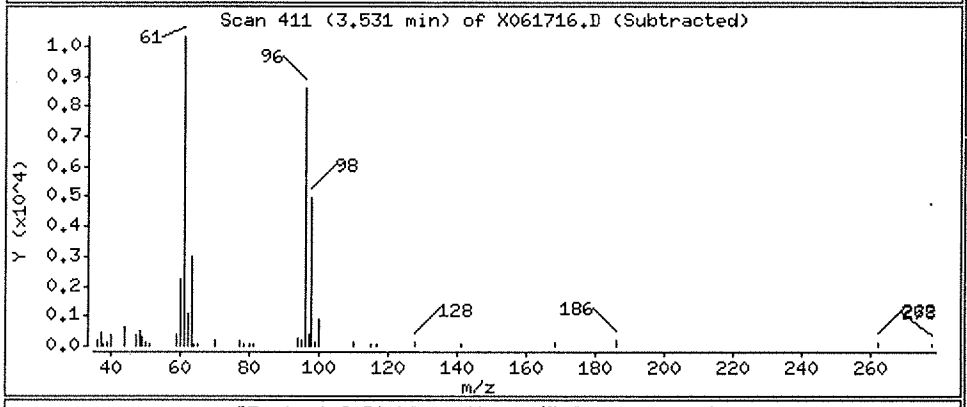
Purge Volume: 5.0 Operator: PC

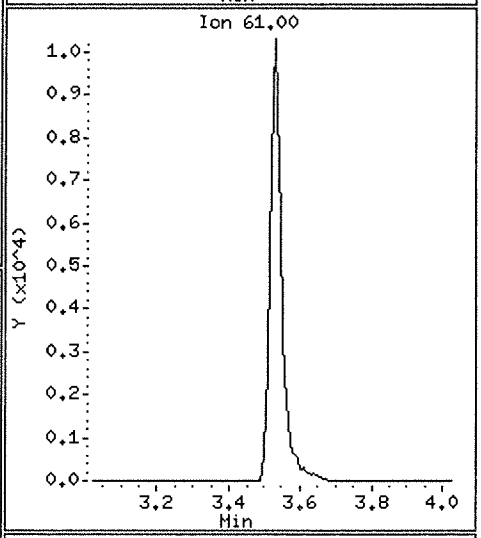
Column phase: DB624 Column diameter: 0.18

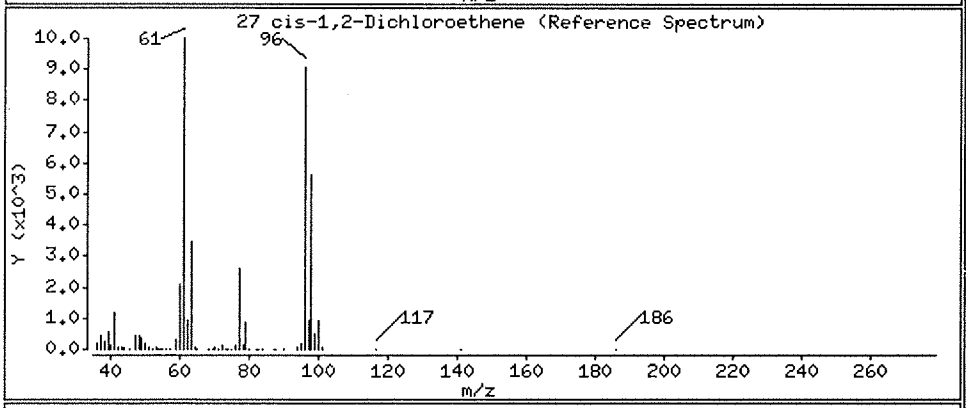
27 cis-1,2-Dichloroethene Concentration: 168.44 ug/l

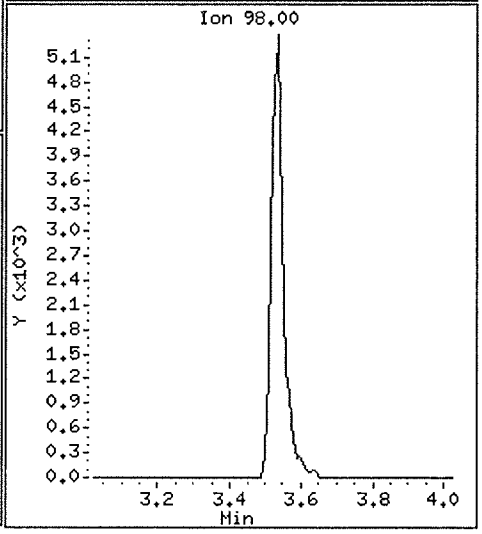


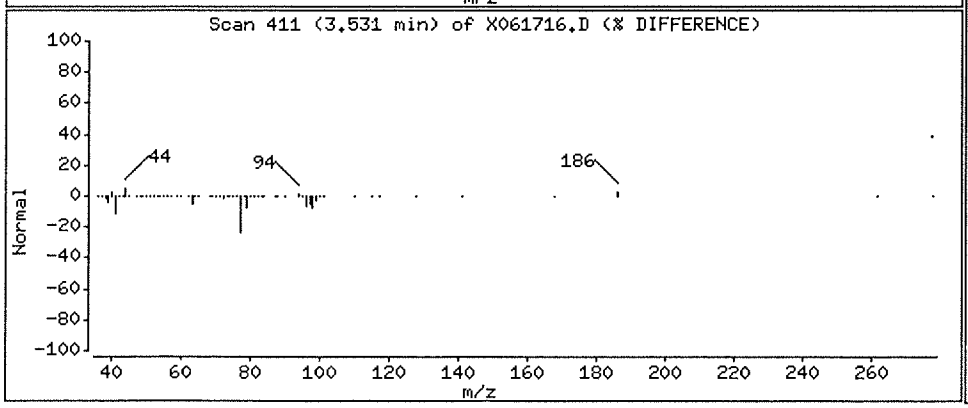












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061716.D

Date : 17-JUN-2021 16:02

Client ID: HS21060700-07

Instrument: voa6.i

Sample Info: HS21060700-07;HS21060700-07;;;

Purge Volume: 5.0

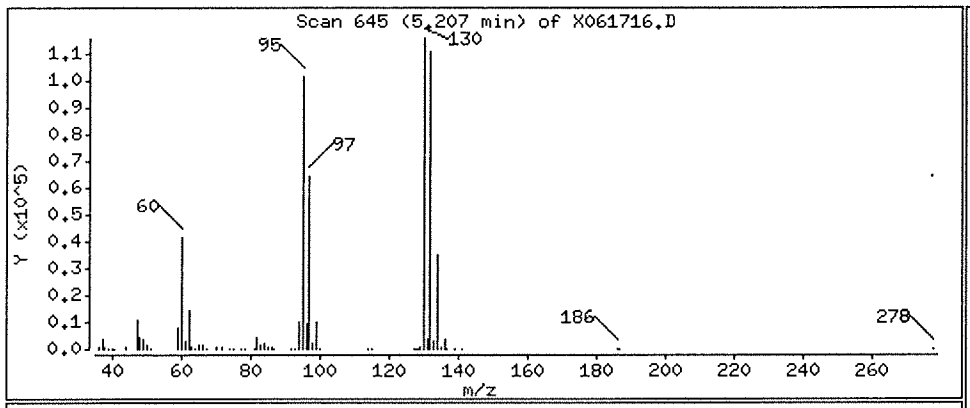
Operator: PC

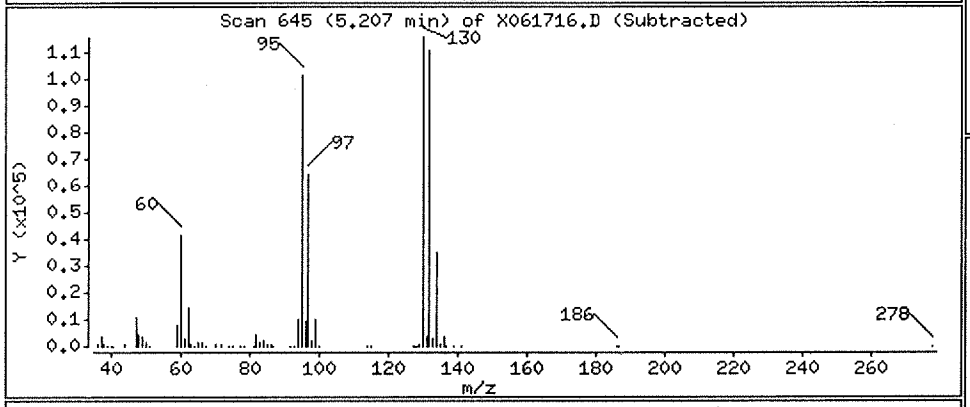
Column phase: DB624

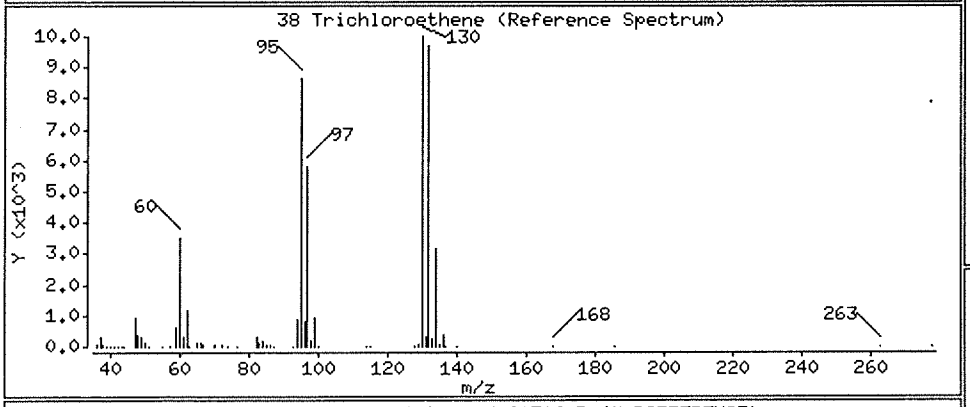
Column diameter: 0.18

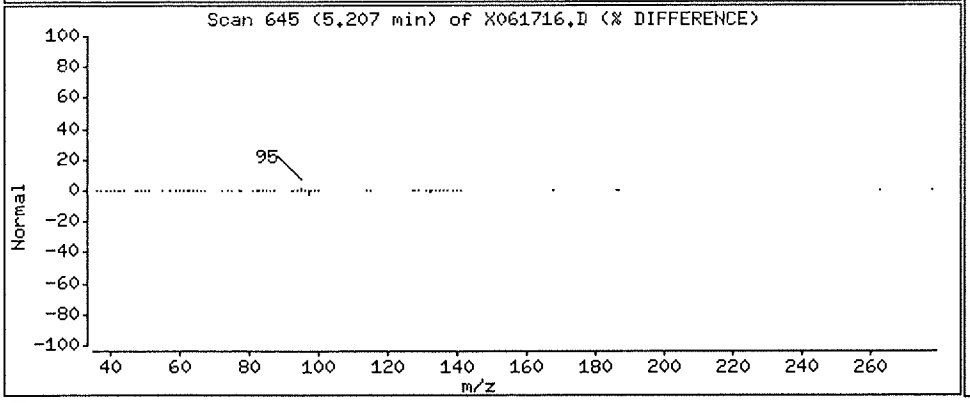
38 Trichloroethene

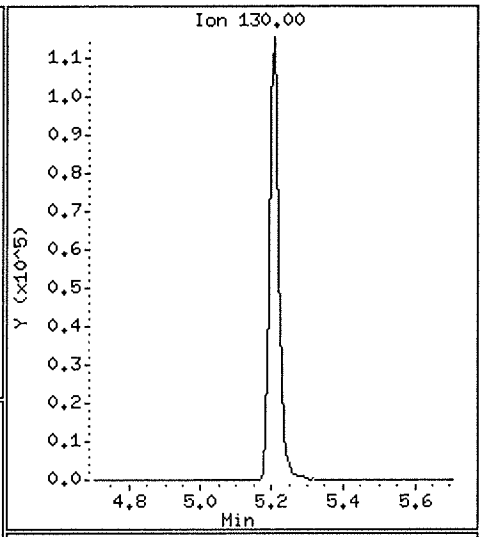
Concentration: 1888.20 ug/l

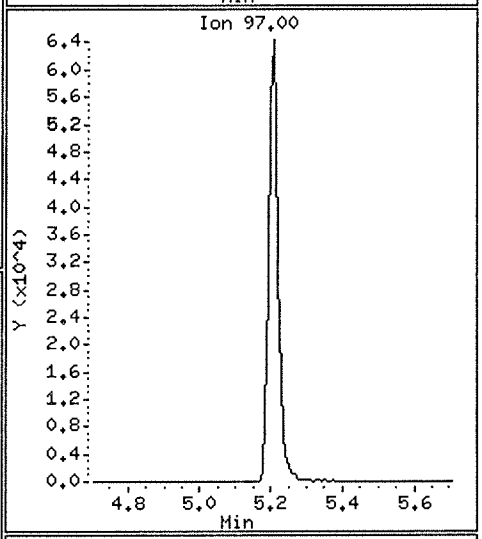


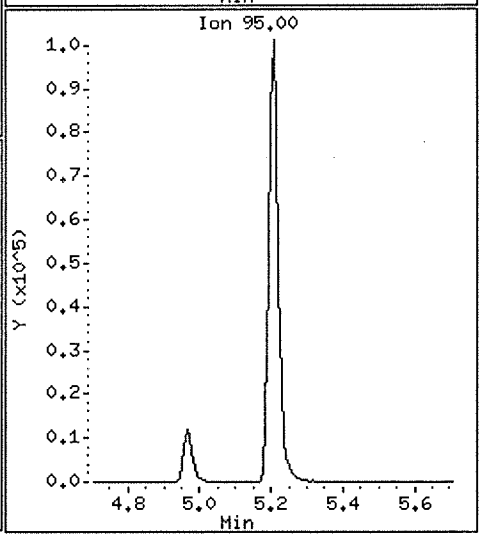












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061717.D
Lab Smp Id: HS21060700-08 Client Smp ID: HS21060700-08
Inj Date : 17-JUN-2021 16:23
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-08;HS21060700-08;;;
Misc Info : HS18090001;WATER;0;50;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 16
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.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

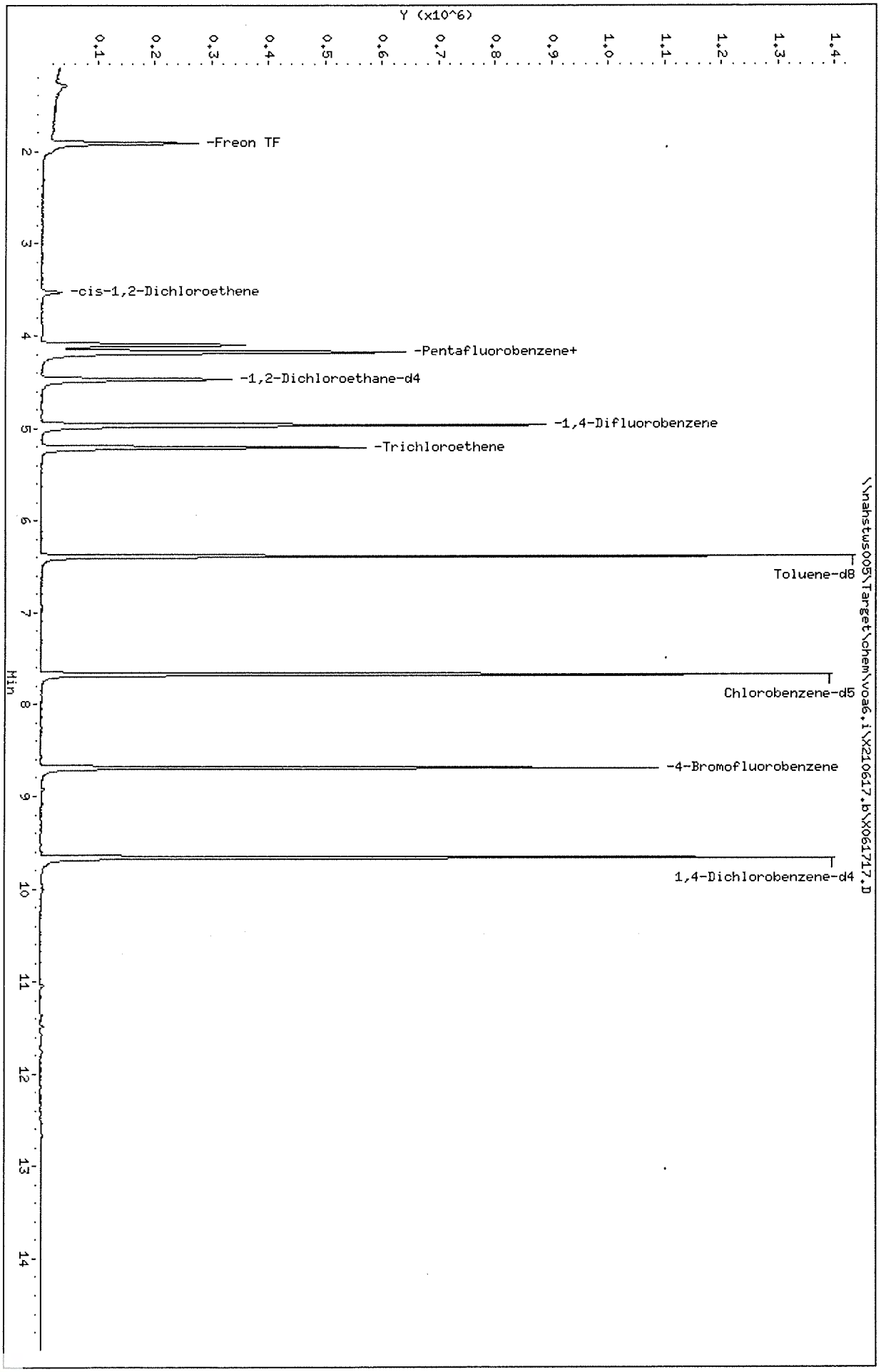
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	581452	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	792725	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	700174	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	358392	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	255973	44.7070	44.70
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	259631	46.6990	46.69
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	892489	51.1724	51.17
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	303165	49.3135	49.31
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	20125	3.30221	165.11(a)
38 Trichloroethene	130	5.206	5.207	(1.049)	202715	37.2584	1862.91

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061717.D
Date : 17-JUN-2021 16:23
Client ID: HS21060700-08
Sample Info: HS21060700-08;HS21060700-08;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061717.D

Date : 17-JUN-2021 16:23

Client ID: HS21060700-08

Instrument: voa6.i

Sample Info: HS21060700-08;HS21060700-08;;;

Purge Volume: 5.0

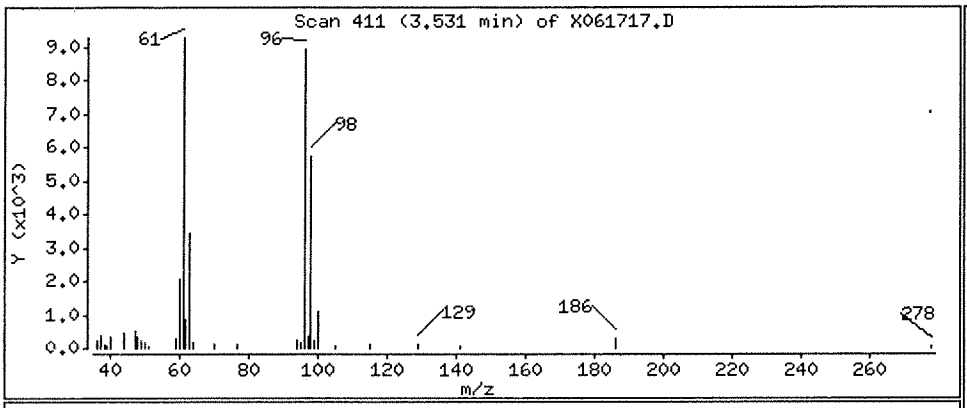
Operator: PC

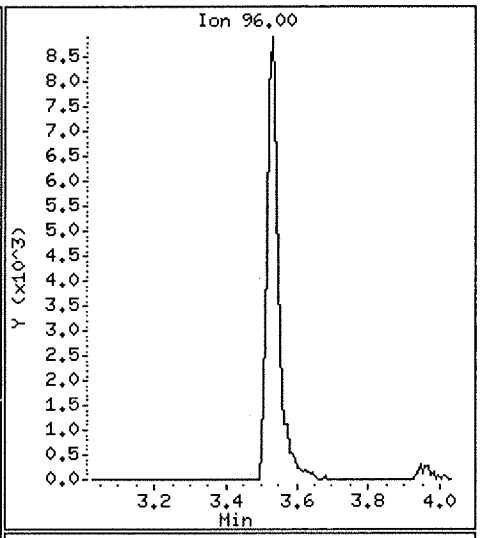
Column phase: DB624

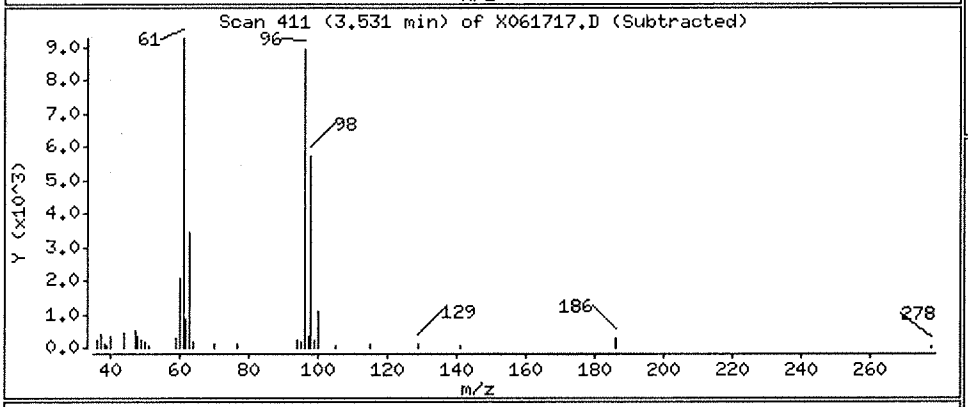
Column diameter: 0.18

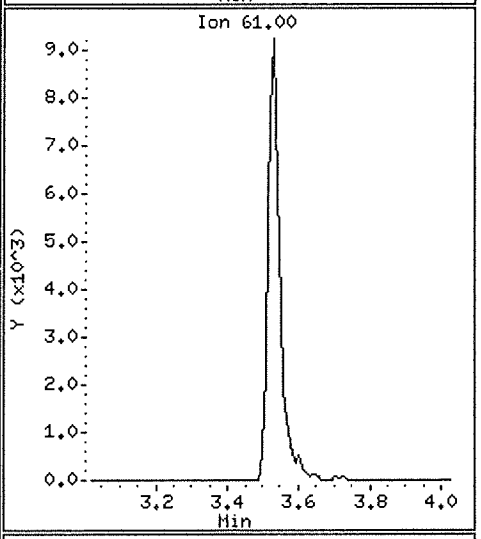
27 cis-1,2-Dichloroethene

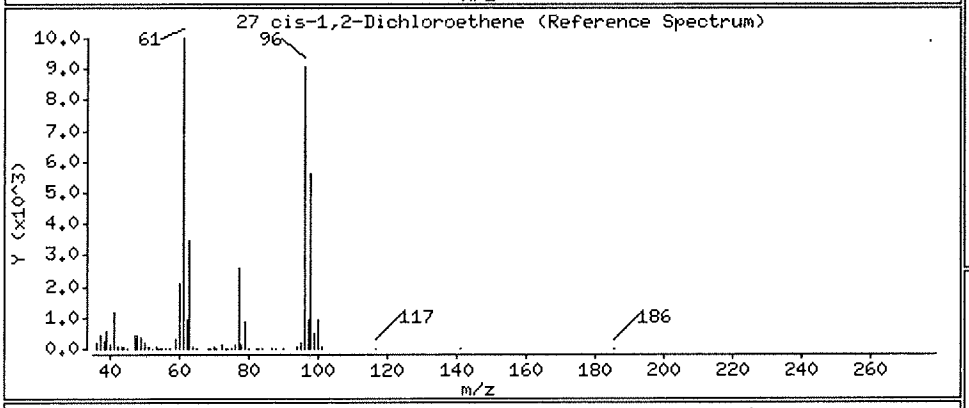
Concentration: 165.11 ug/l

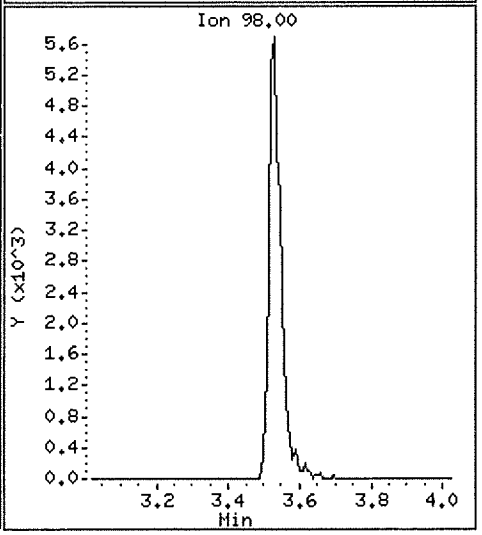


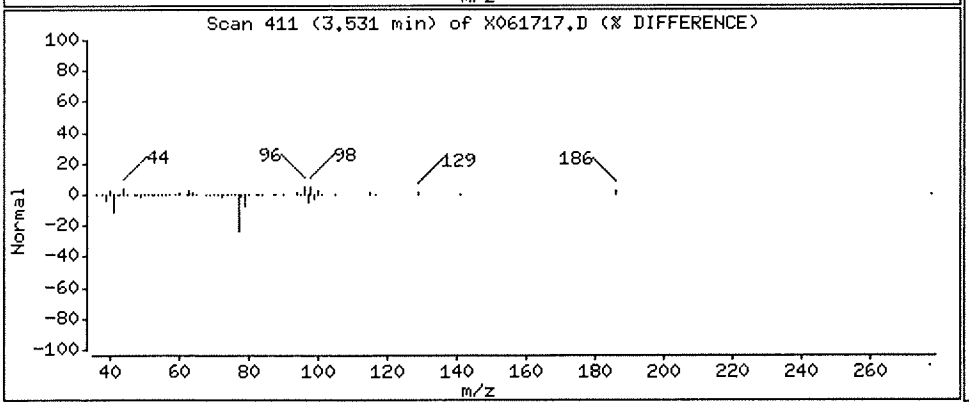












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061717.D

Date : 17-JUN-2021 16:23

Client ID: HS21060700-08

Instrument: voa6.i

Sample Info: HS21060700-08;HS21060700-08;;;

Purge Volume: 5.0

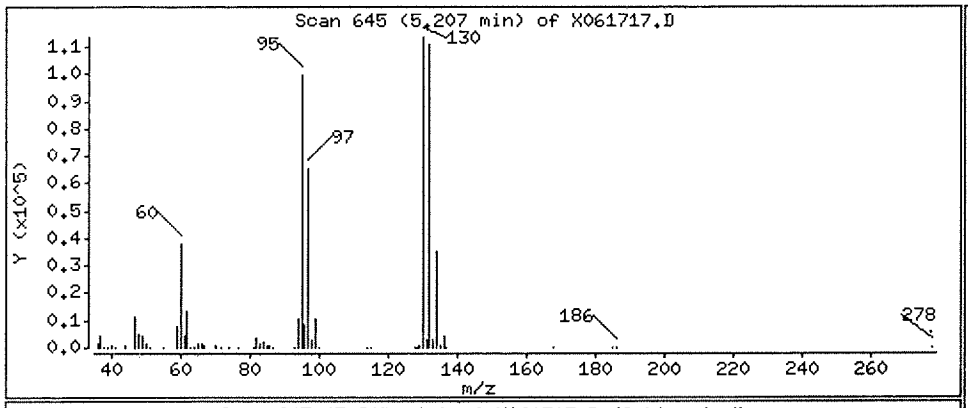
Operator: PC

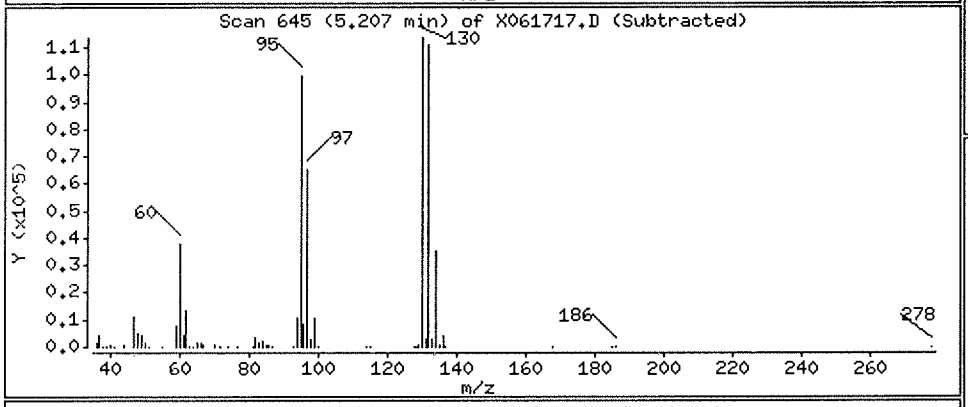
Column phase: DB624

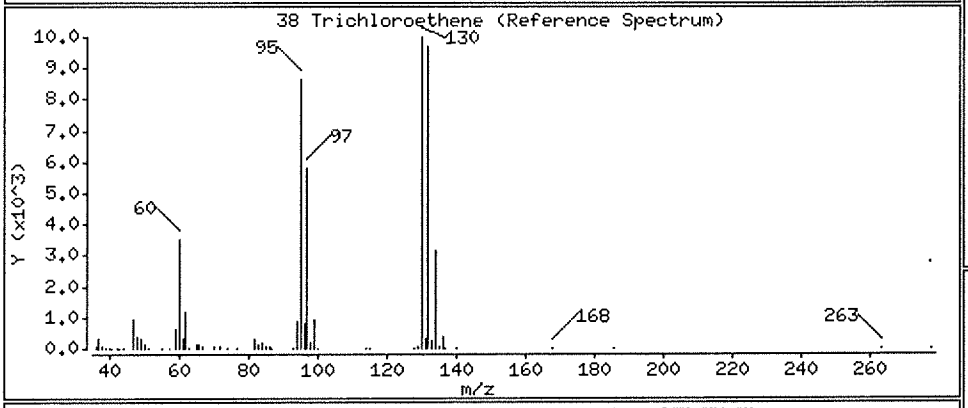
Column diameter: 0.18

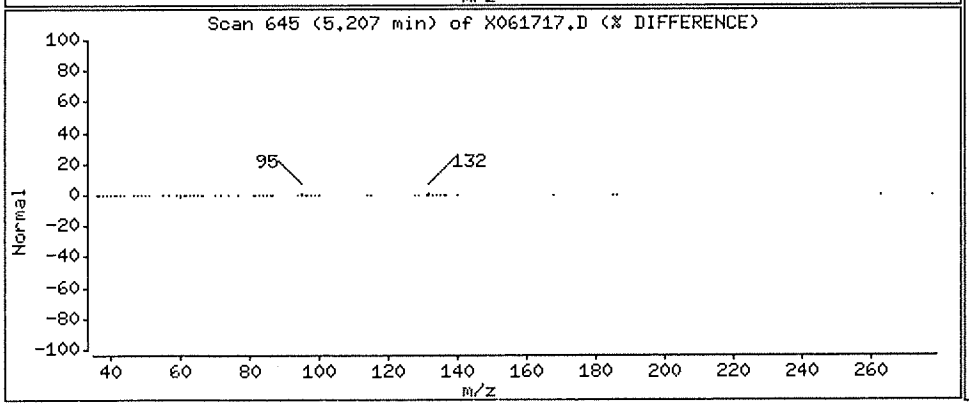
38 Trichloroethene

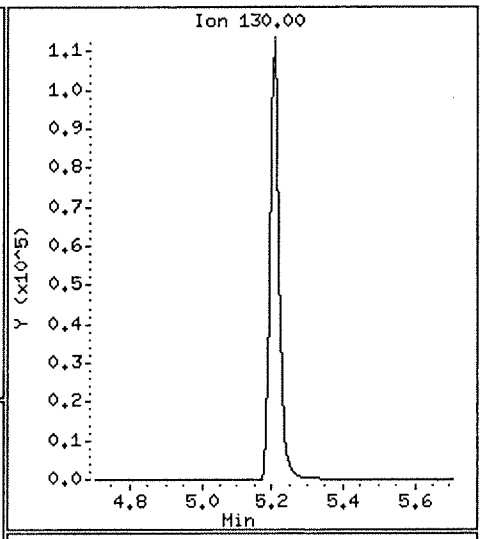
Concentration: 1862.91 ug/l

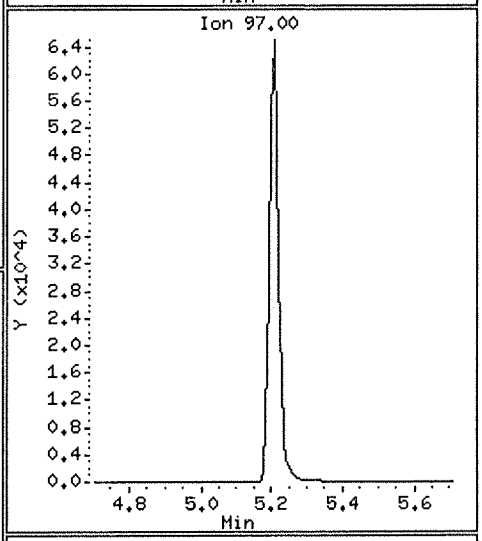


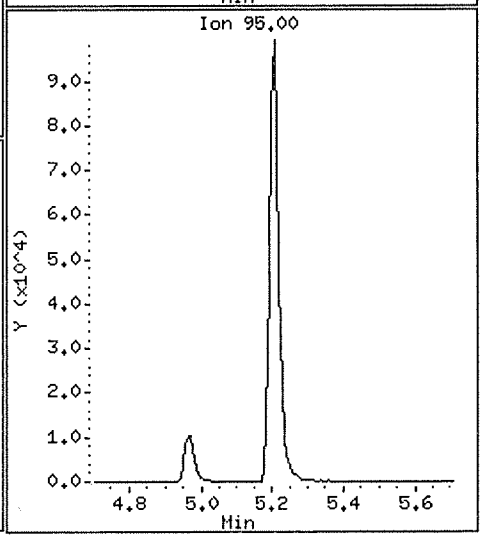












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061721.D
Lab Smp Id: HS21060700-10 Client Smp ID: HS21060700-10
Inj Date : 17-JUN-2021 17:48
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-10;HS21060700-10;;;
Misc Info : HS18090001;WATER;0;5;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 20
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.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

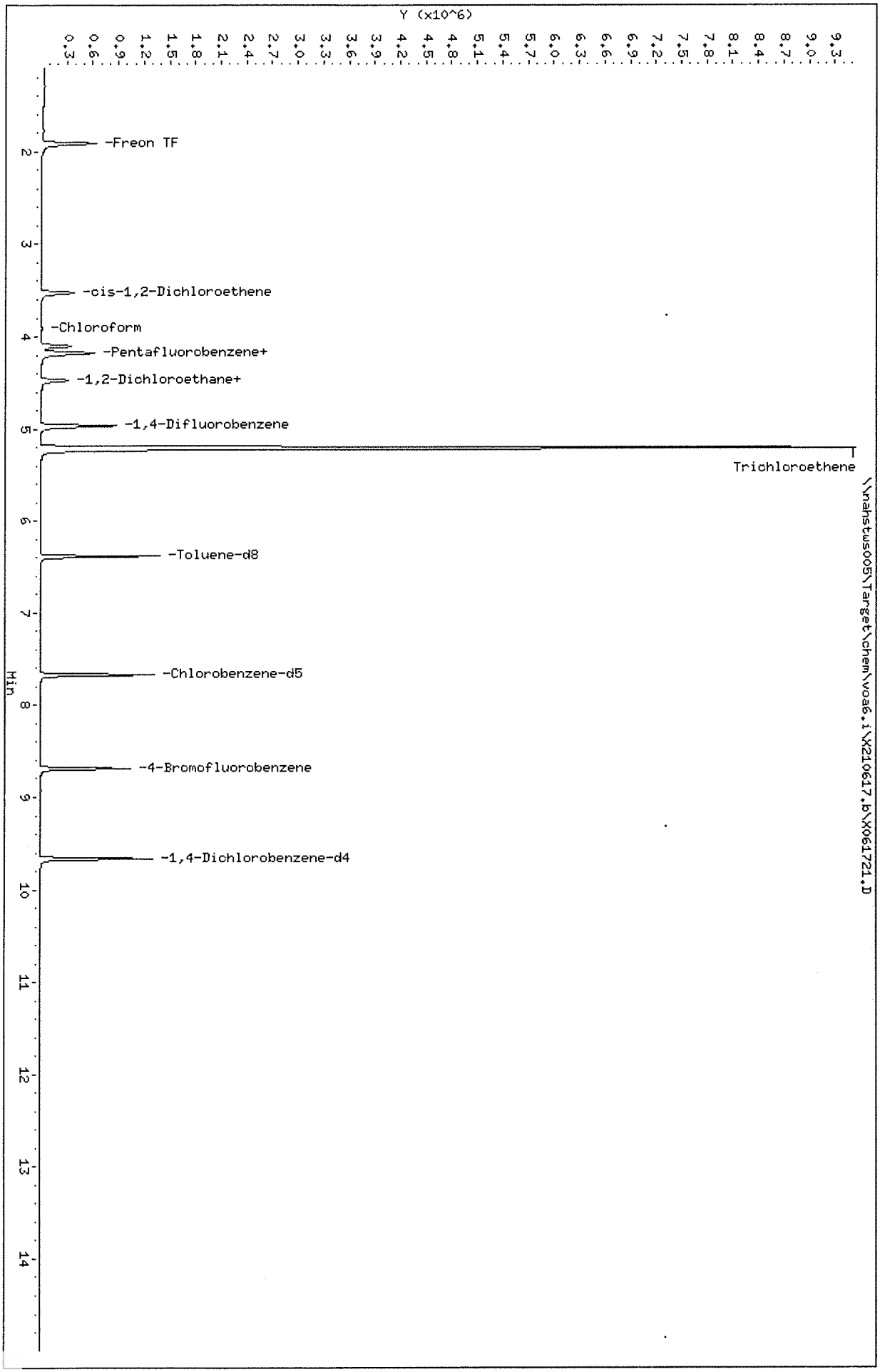
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	573706	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	787216	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	683225	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	340885	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	253641	44.8985	44.89
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	258046	47.0456	47.04
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	879420	51.6739	51.67
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	293715	48.9669	48.96
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	14742	2.35032	11.75(a)
28 Chloroform	83	3.910	3.910	(0.935)	15167	1.50333	7.51(a)
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	217985	36.2510	181.25
38 Trichloroethene	130	5.206	5.207	(1.049)	3301313	611.017	3055.08(A)

QC Flag Legend

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

Data File: \\nahstus005\Target\chem\voa6.i\X210617.b\X061721.D
Date : 17-JUN-2021 17:48
Client ID: HS21060700-10
Sample Info: HS21060700-10;HS21060700-10;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061721.D

Date : 17-JUN-2021 17:48

Client ID: HS21060700-10

Instrument: voa6.i

Sample Info: HS21060700-10;HS21060700-10;;;

Purge Volume: 5.0

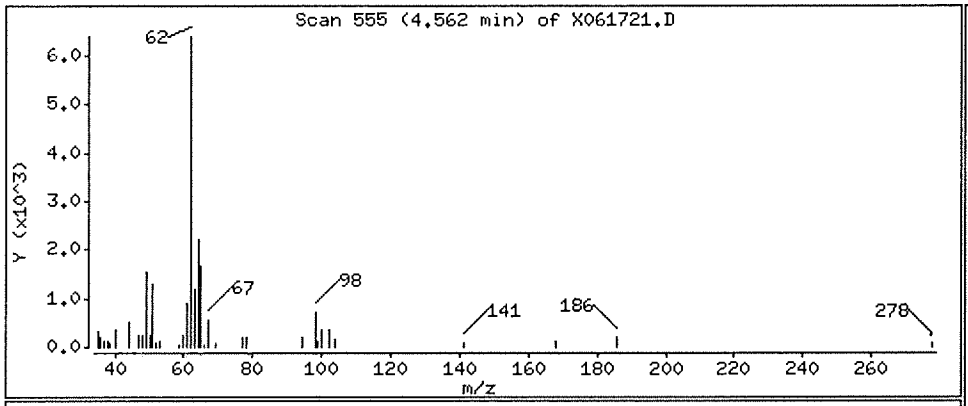
Operator: PC

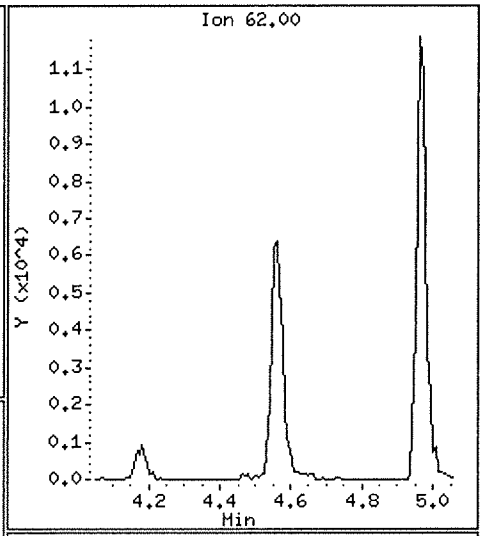
Column phase: DB624

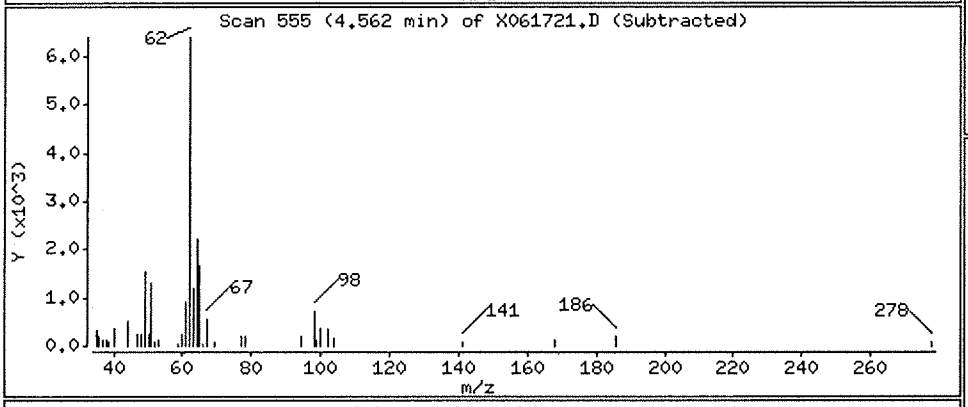
Column diameter: 0.18

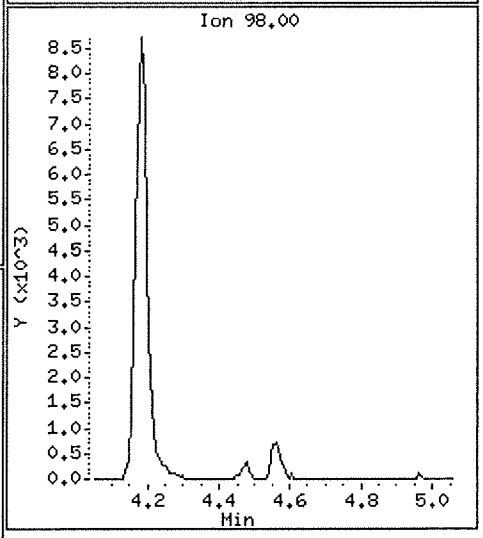
33 1,2-Dichloroethane

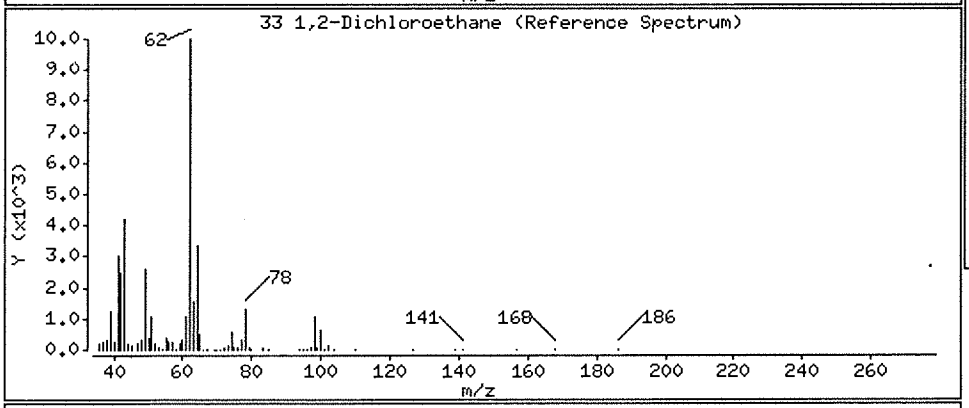
Concentration: 11.75 ug/l

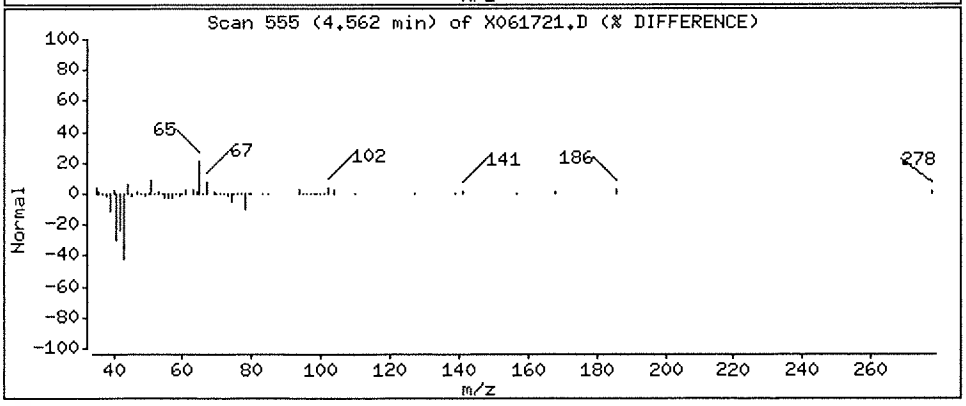












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061721.D

Date : 17-JUN-2021 17:48

Client ID: HS21060700-10

Instrument: voa6.i

Sample Info: HS21060700-10;HS21060700-10;;;

Purge Volume: 5.0

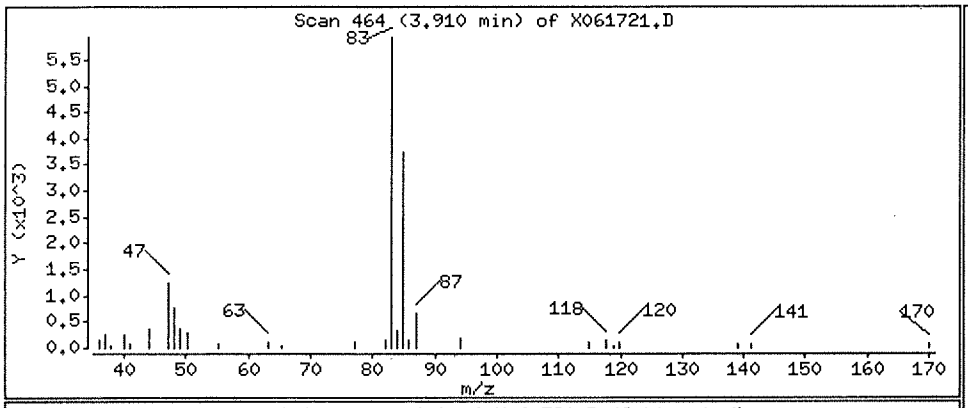
Operator: PC

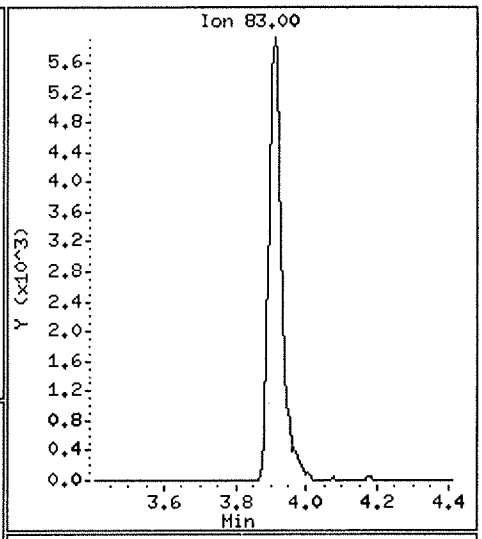
Column phase: DB624

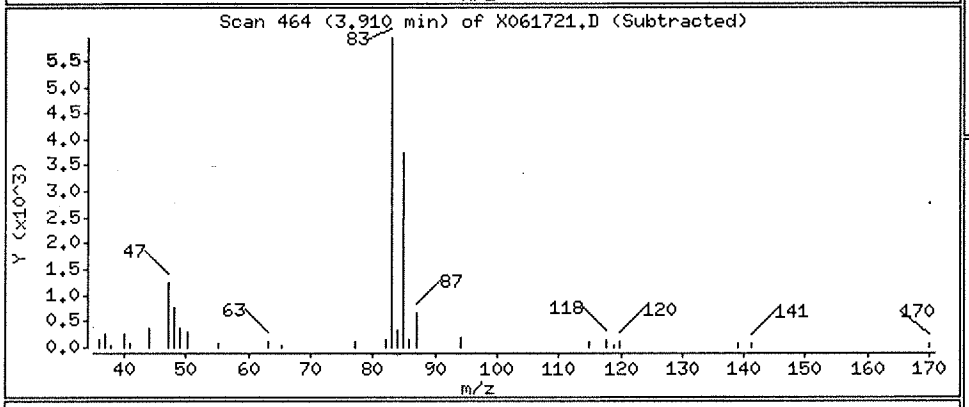
Column diameter: 0.18

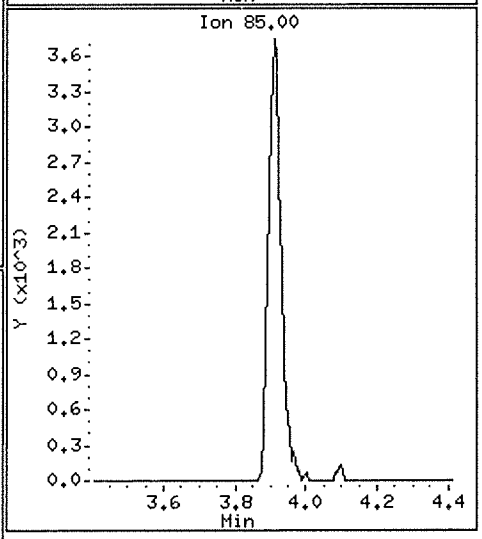
28 Chloroform

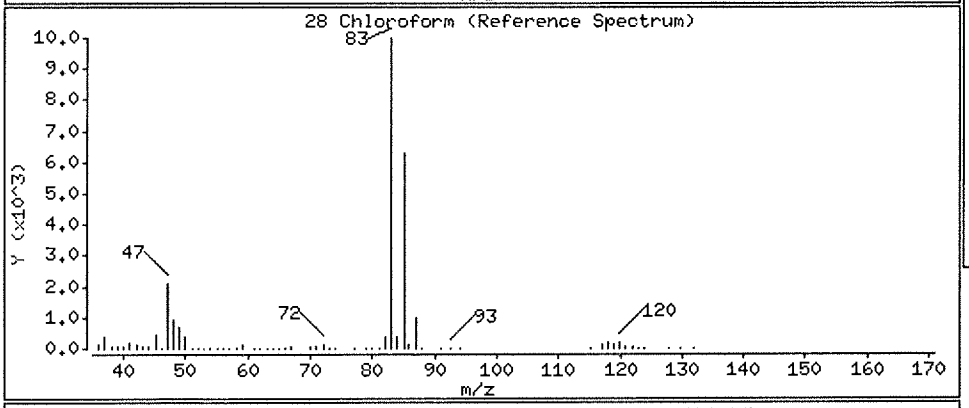
Concentration: 7.51 ug/l

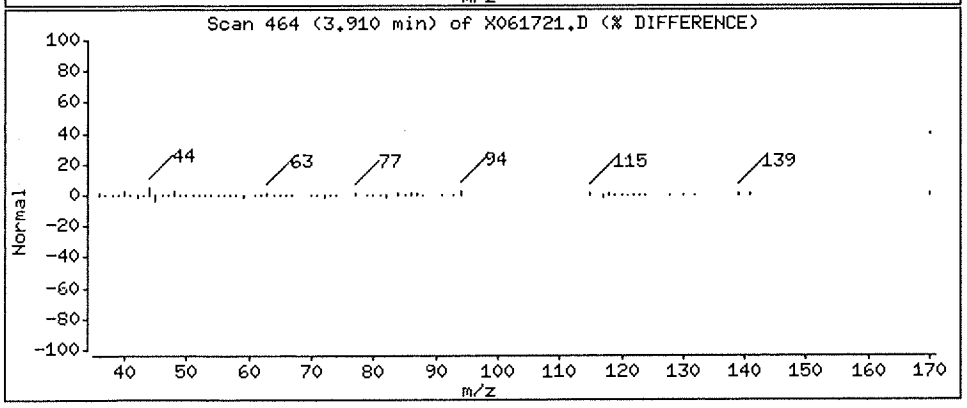












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061721.D

Date : 17-JUN-2021 17:48

Client ID: HS21060700-10

Instrument: voa6.i

Sample Info: HS21060700-10;HS21060700-10;;;

Purge Volume: 5.0

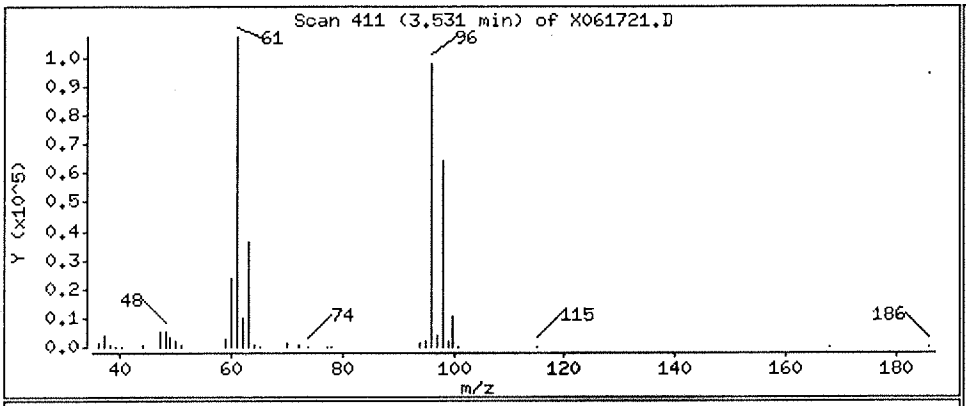
Operator: PC

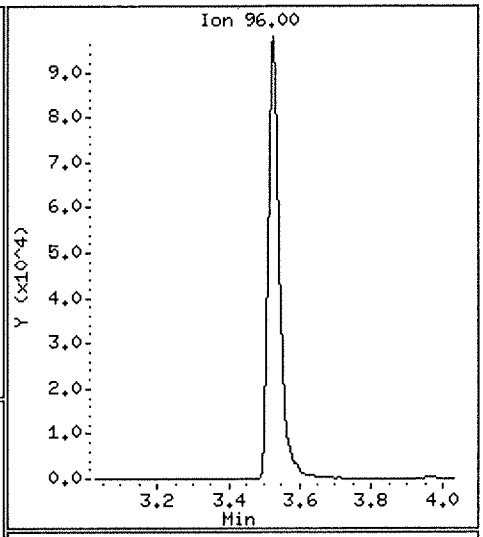
Column phase: DB624

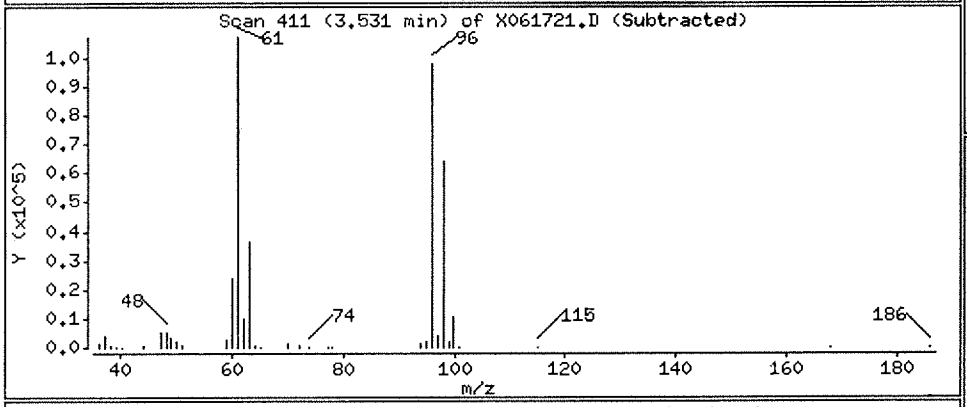
Column diameter: 0.18

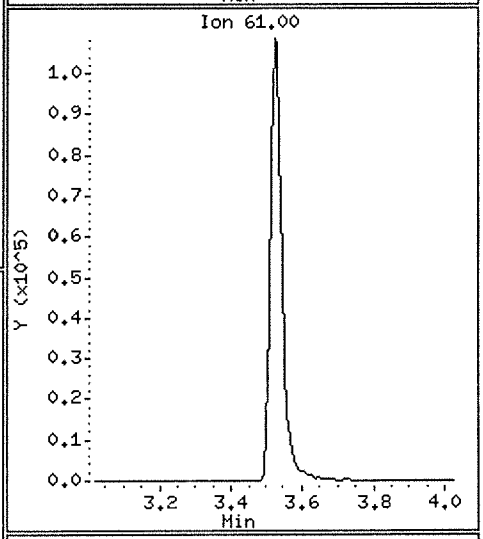
27 cis-1,2-Dichloroethene

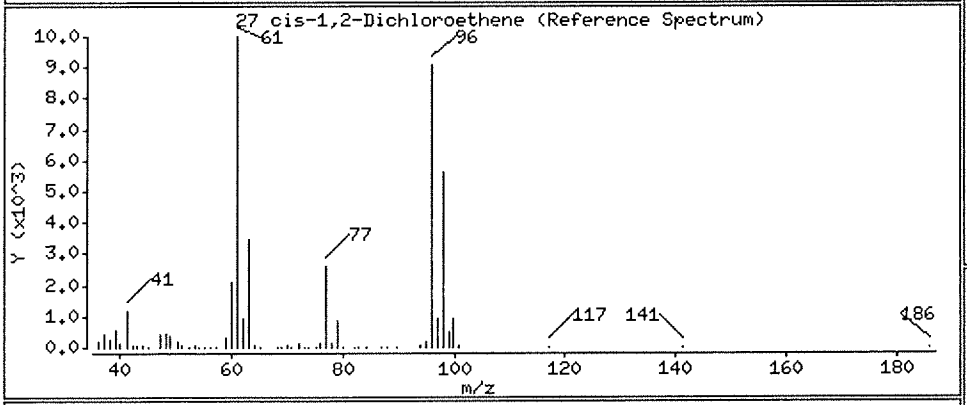
Concentration: 181.25 ug/l

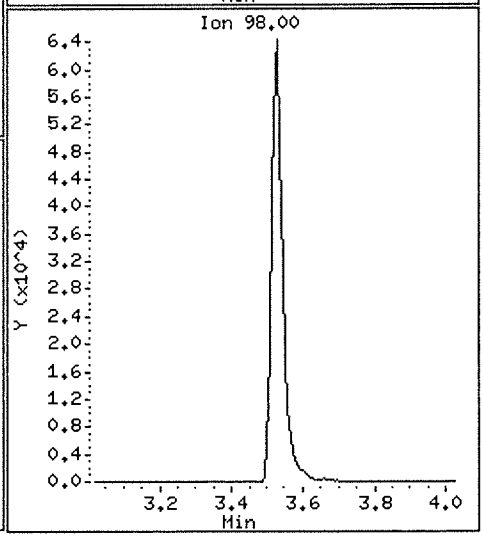


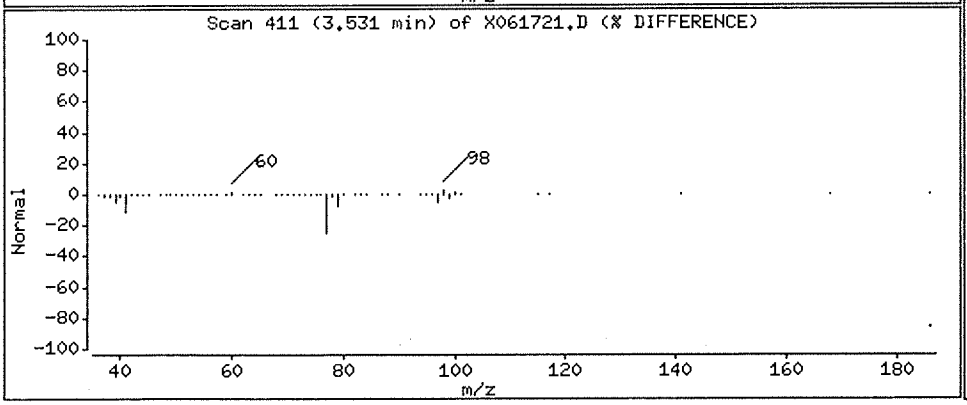












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061721.D

Date : 17-JUN-2021 17:48

Client ID: HS21060700-10

Instrument: voa6.i

Sample Info: HS21060700-10;HS21060700-10;;;

Purge Volume: 5.0

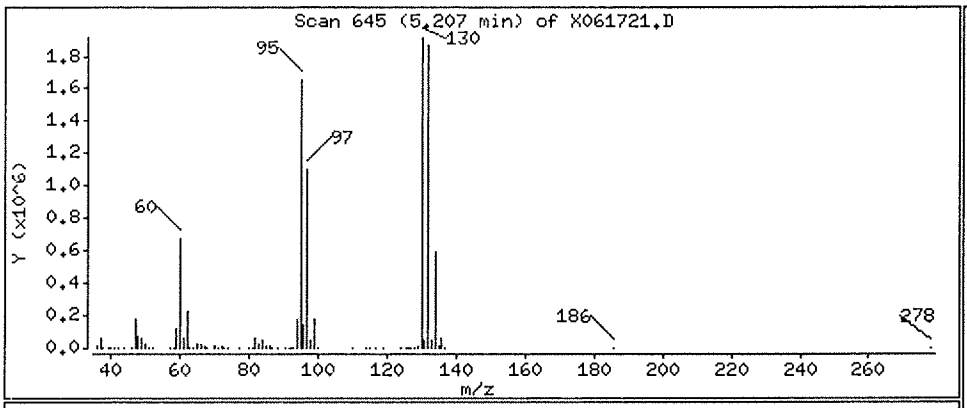
Operator: PC

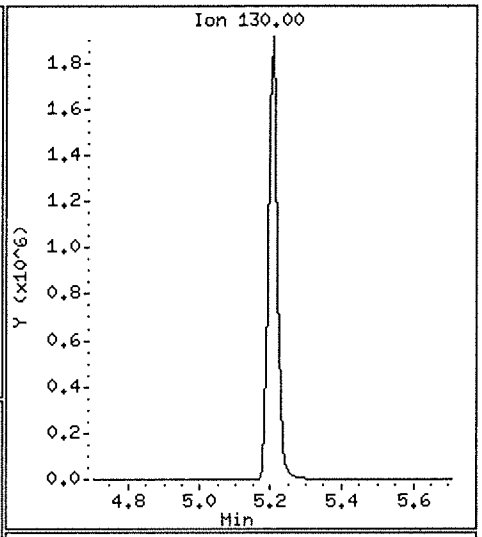
Column phase: DB624

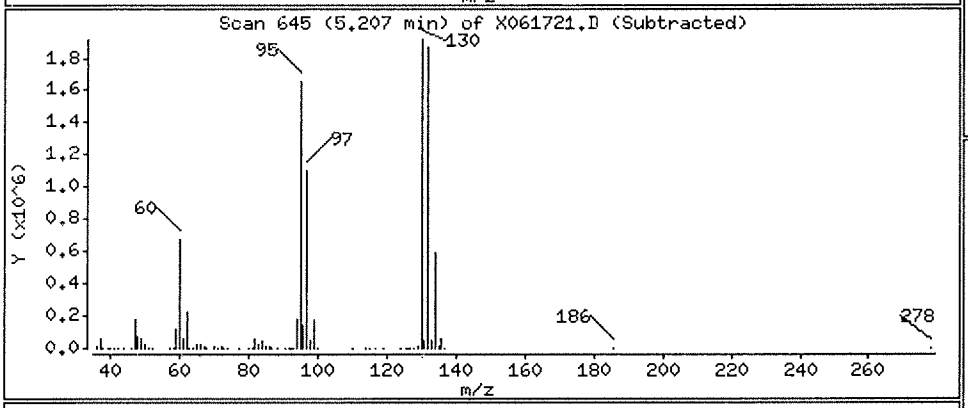
Column diameter: 0.18

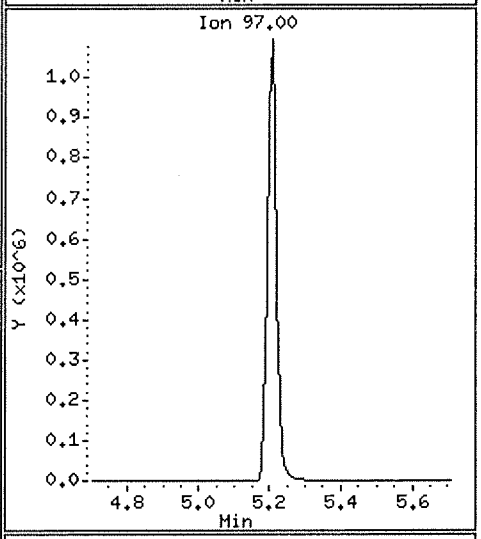
38 Trichloroethene

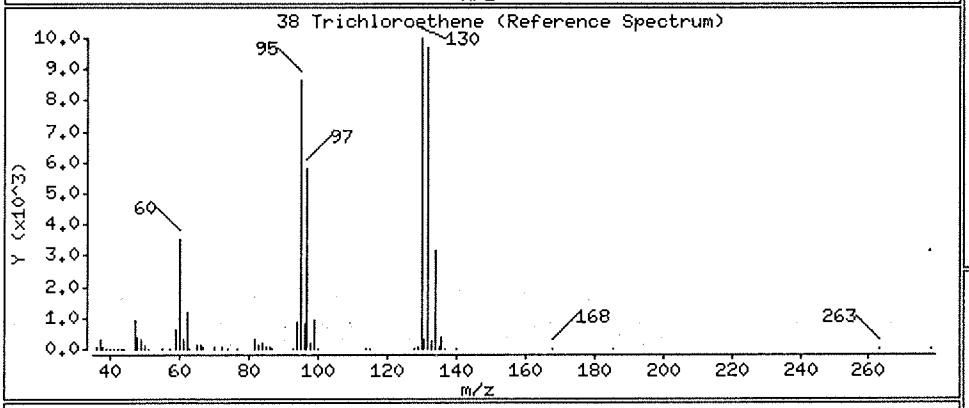
Concentration: 3055.08 ug/l

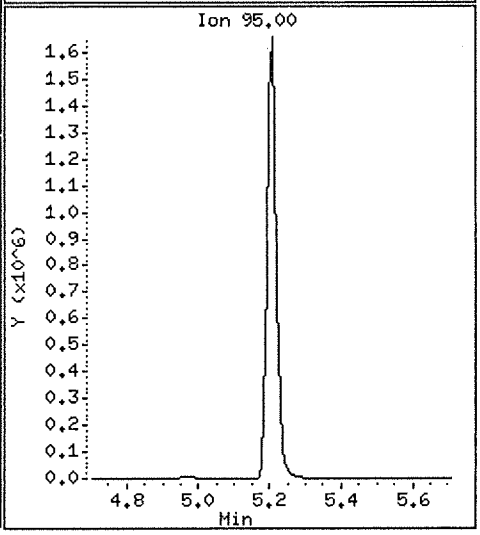


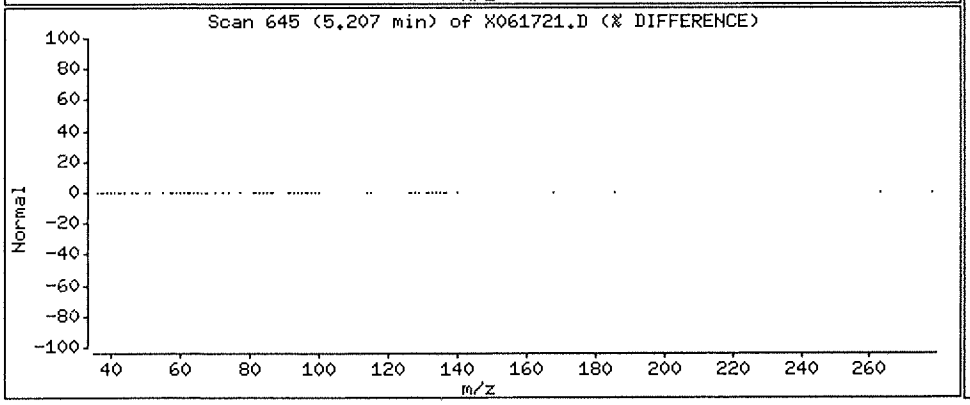












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061722.D
Lab Smp Id: HS21060700-10 Client Smp ID: HS21060700-10
Inj Date : 17-JUN-2021 18:09
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-10;HS21060700-10;;;
Misc Info : HS18090001;WATER;0;50;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 21
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

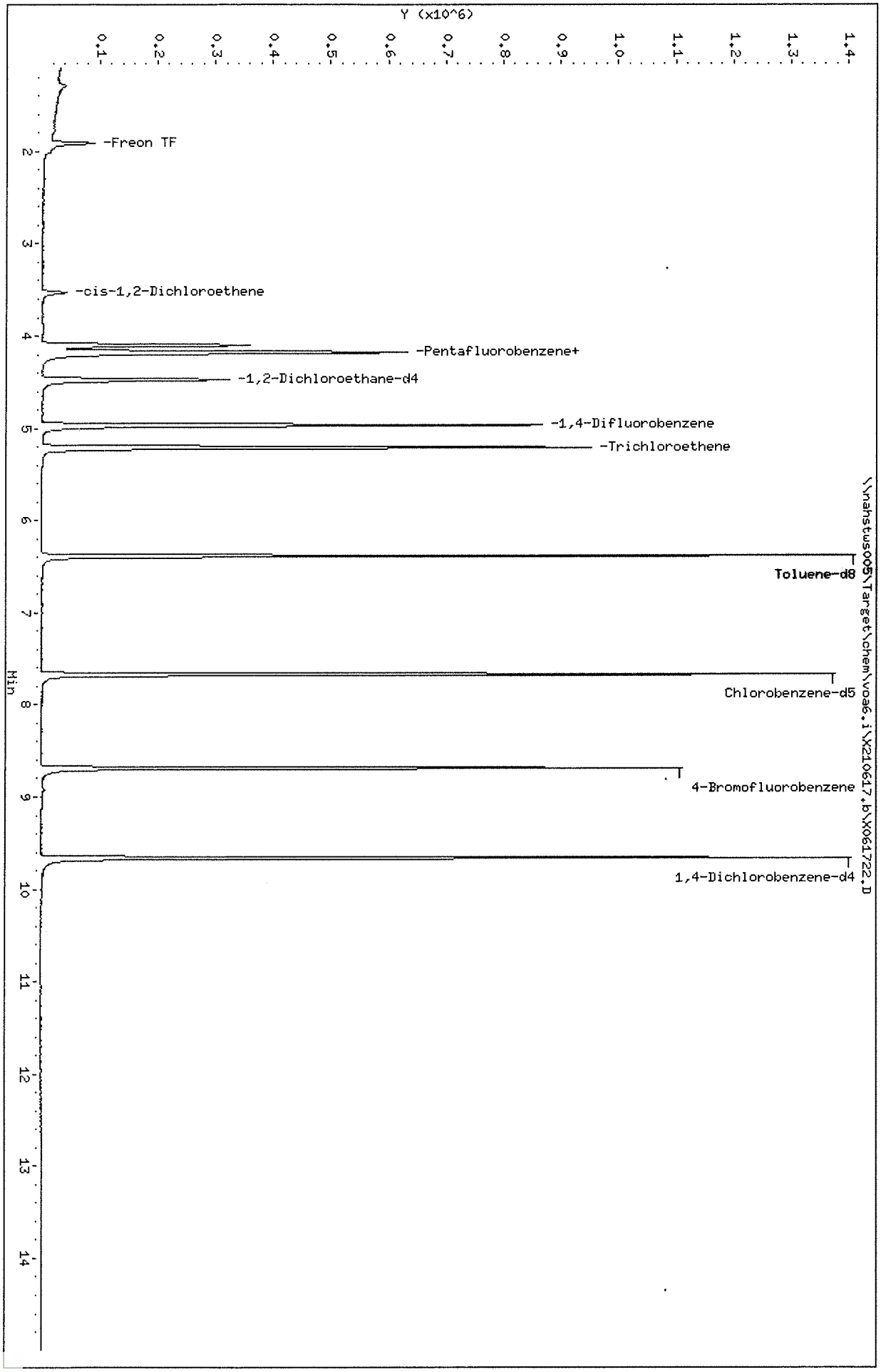
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	573987	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	788709	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	694108	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	362376	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	252975	44.7582	44.75
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	254888	46.4383	46.43
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	886371	51.2657	51.26
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	299281	49.1103	49.11
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	23685	3.93690	196.84(a)
38 Trichloroethene	130	5.207	5.207	(1.049)	336990	62.2531	3112.65

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061722.D
Date : 17-JUN-2021 18:09
Client ID: HS21060700-10
Sample Info: HS21060700-10;HS21060700-10;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061722.D

Date : 17-JUN-2021 18:09

Client ID: HS21060700-10

Instrument: voa6.i

Sample Info: HS21060700-10;HS21060700-10;;;

Purge Volume: 5.0

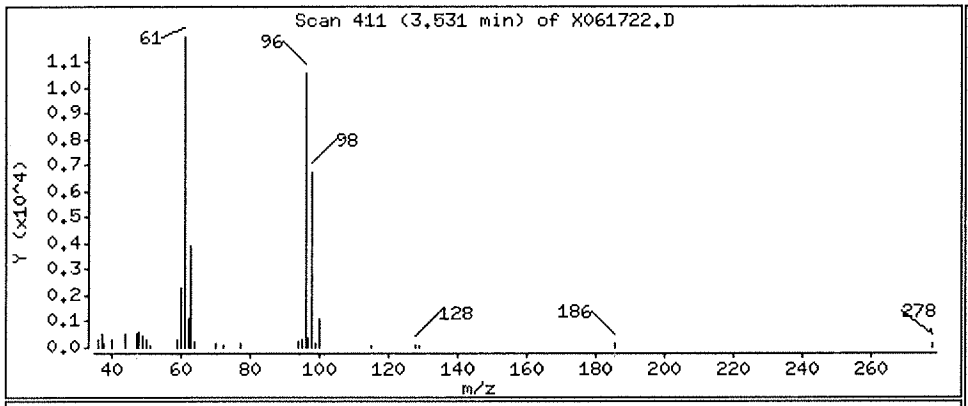
Operator: PC

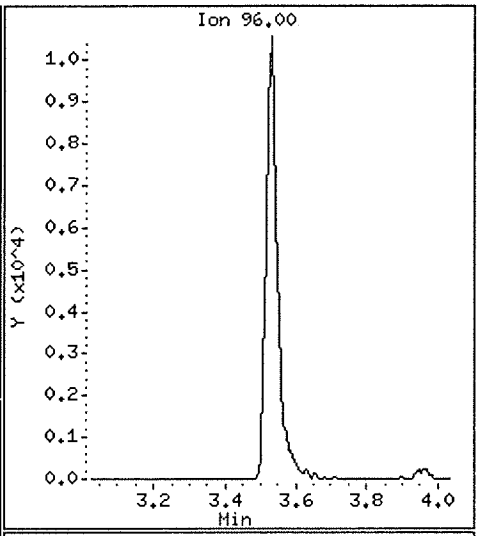
Column phase: DB624

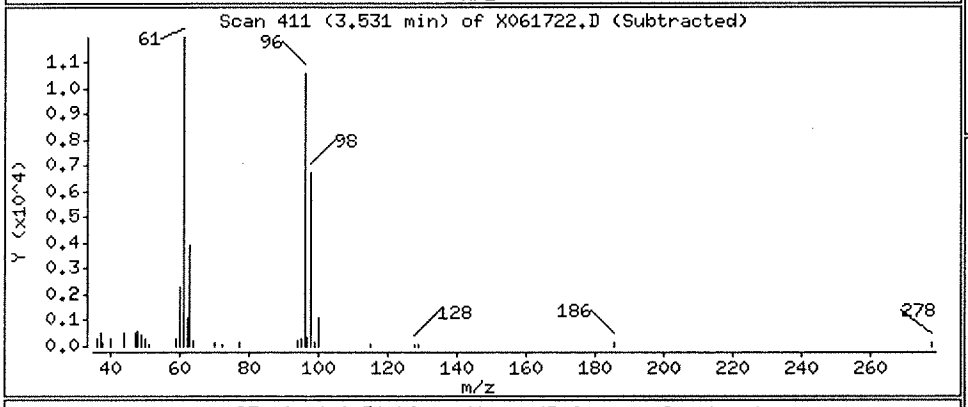
Column diameter: 0.18

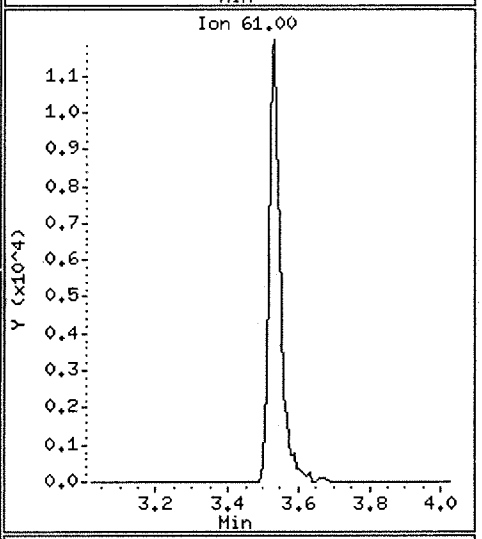
27 cis-1,2-Dichloroethene

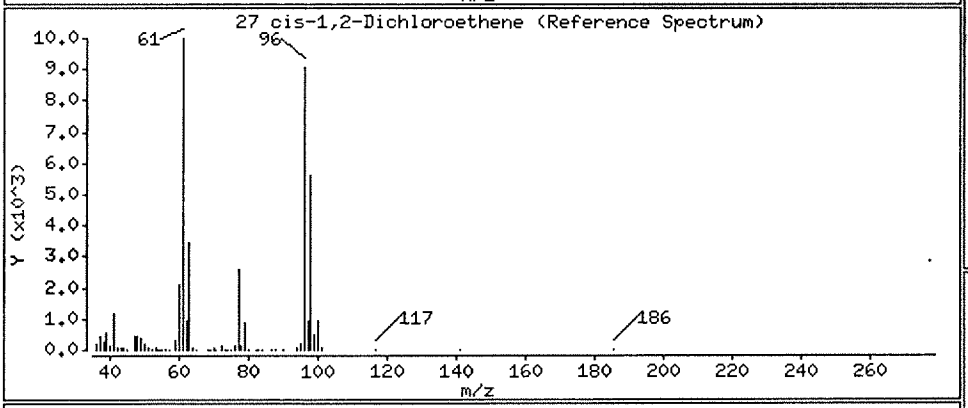
Concentration: 196.84 ug/l

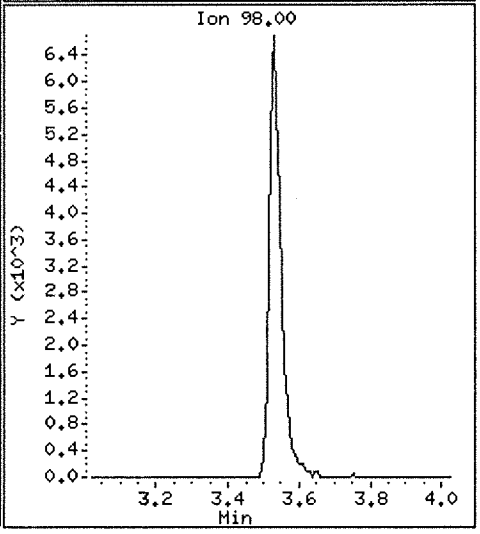


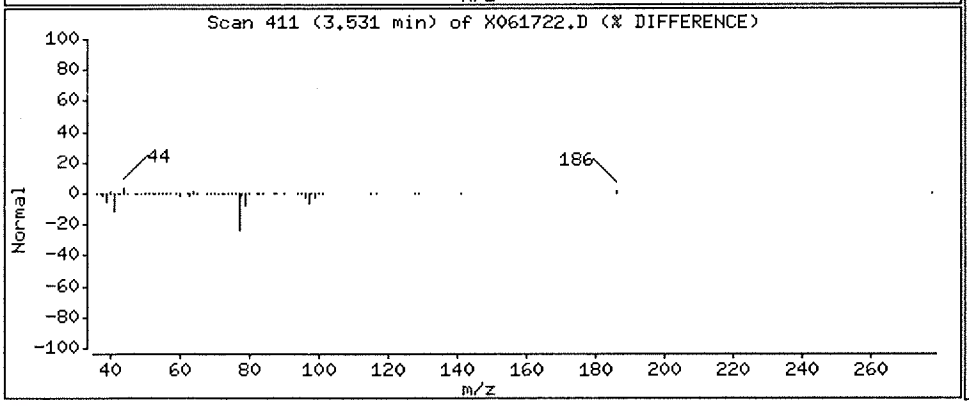












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061722.D

Date : 17-JUN-2021 18:09

Client ID: HS21060700-10

Instrument: voa6.i

Sample Info: HS21060700-10;HS21060700-10;;;

Purge Volume: 5.0

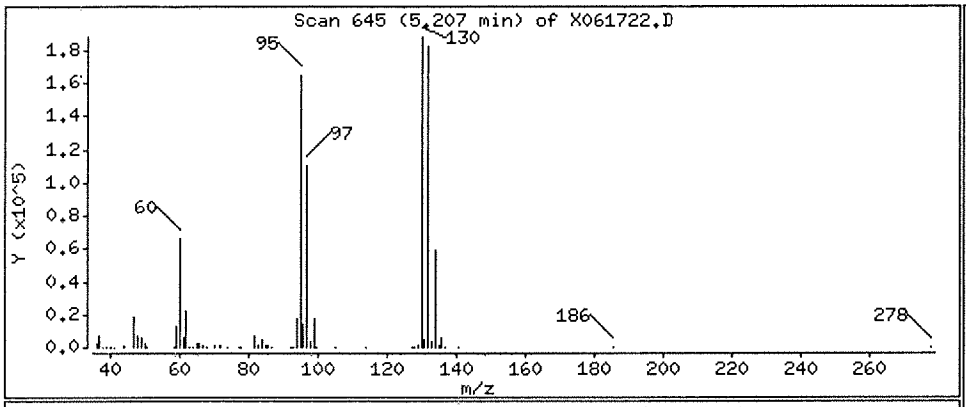
Operator: PC

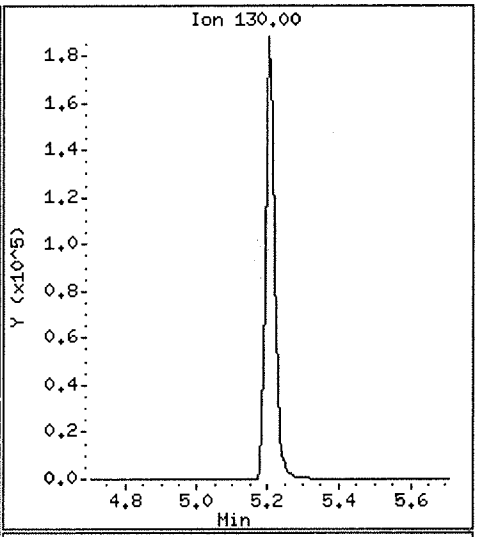
Column phase: DB624

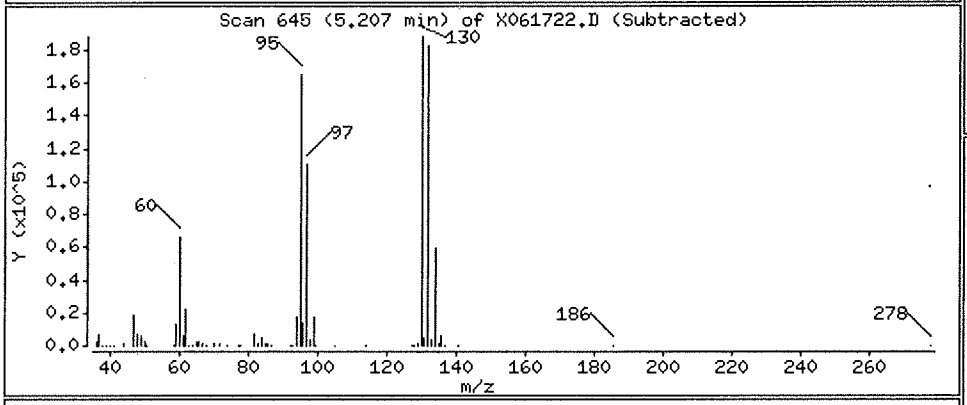
Column diameter: 0.18

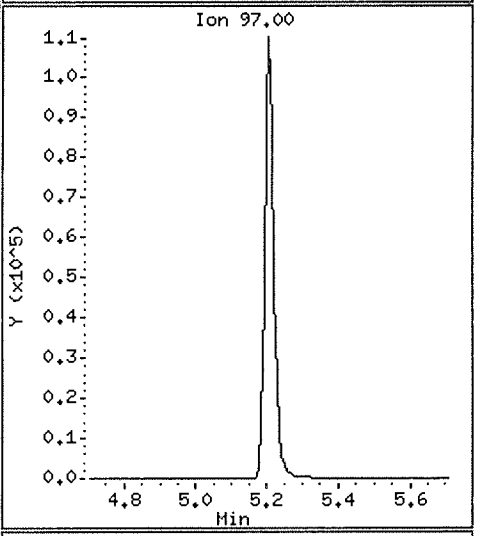
38 Trichloroethene

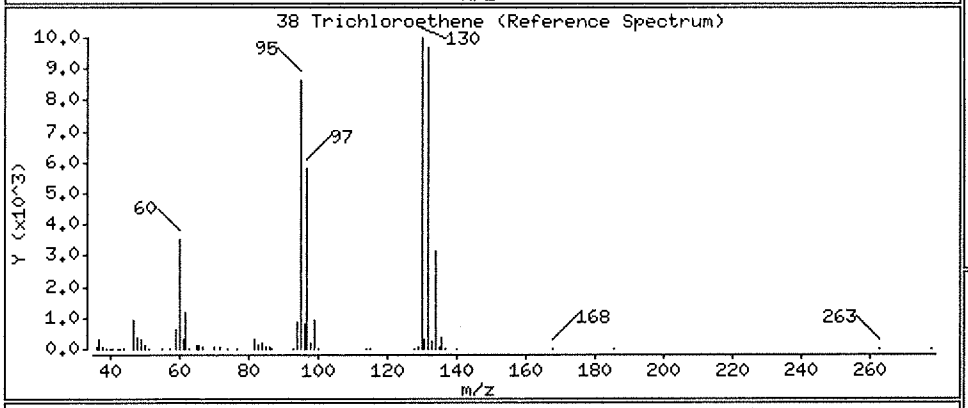
Concentration: 3112.65 ug/l

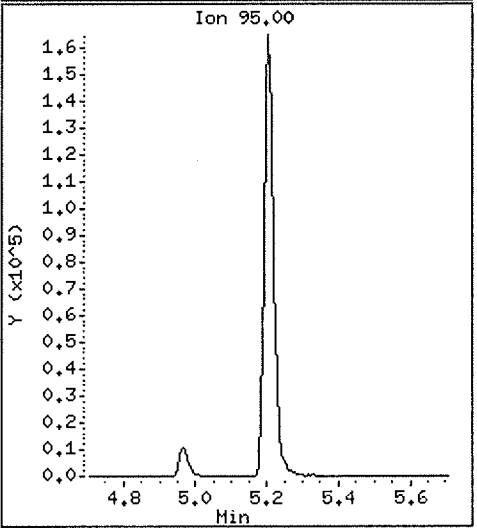


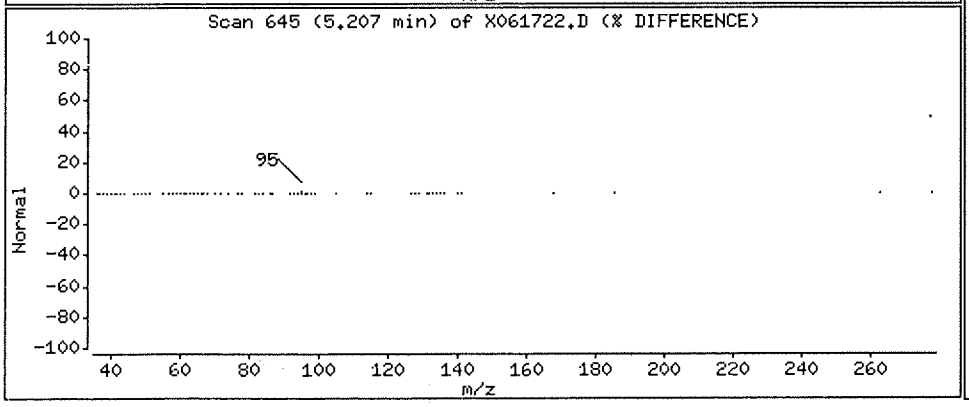












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061723.D
Lab Smp Id: HS21060700-11 Client Smp ID: HS21060700-11
Inj Date : 17-JUN-2021 18:30
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-11;HS21060700-11;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 22
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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

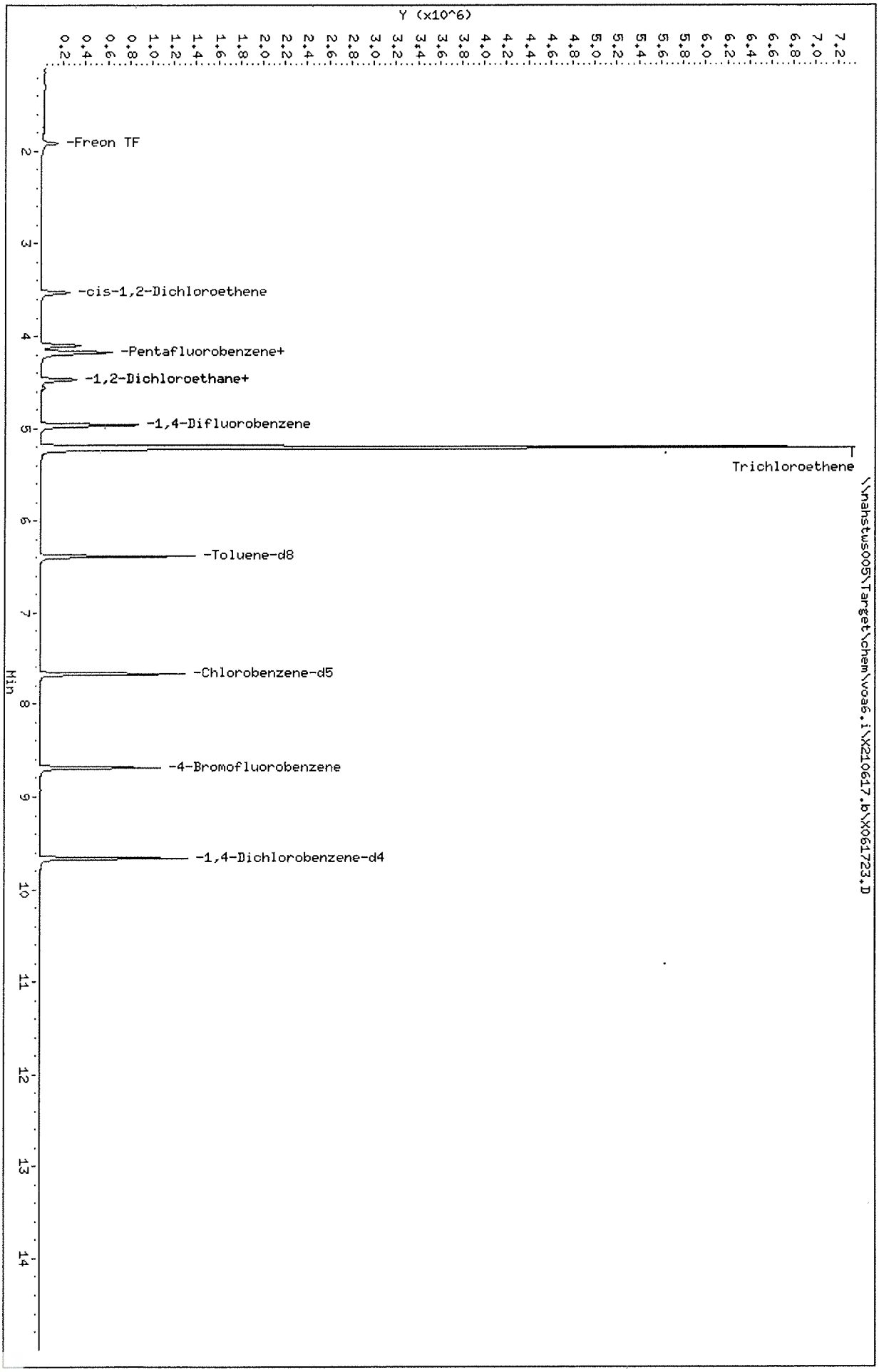
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	576629	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	784932	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	673661	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	335929	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	252812	44.5236	44.52
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	253441	45.9560	45.95
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	875830	52.1936	52.19
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	293693	49.6478	49.64
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	32762	5.23844	52.38
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	145080	24.0046	240.04
38 Trichloroethene	130	5.206	5.207	(1.049)	2525140	468.721	4687.20(A)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061723.D
Date : 17-JUN-2021 18:30
Client ID: HS21060700-11
Sample Info: HS21060700-11;HS21060700-11;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061723.D

Date : 17-JUN-2021 18:30

Client ID: HS21060700-11

Instrument: voa6.i

Sample Info: HS21060700-11;HS21060700-11;;;

Purge Volume: 5.0

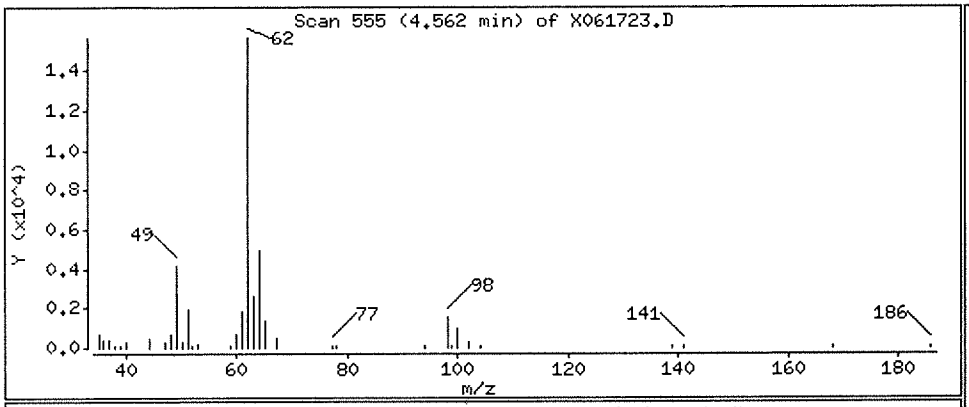
Operator: PC

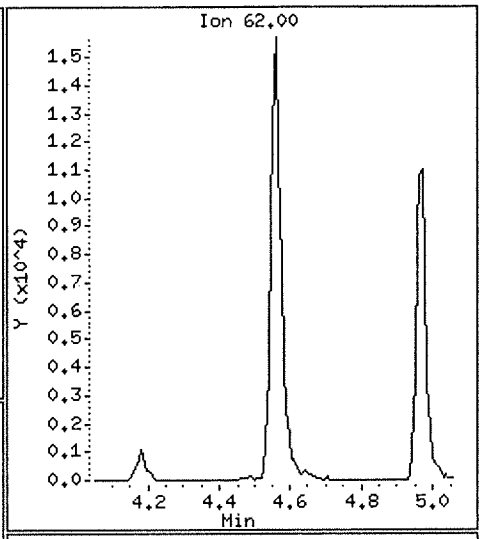
Column phase: DB624

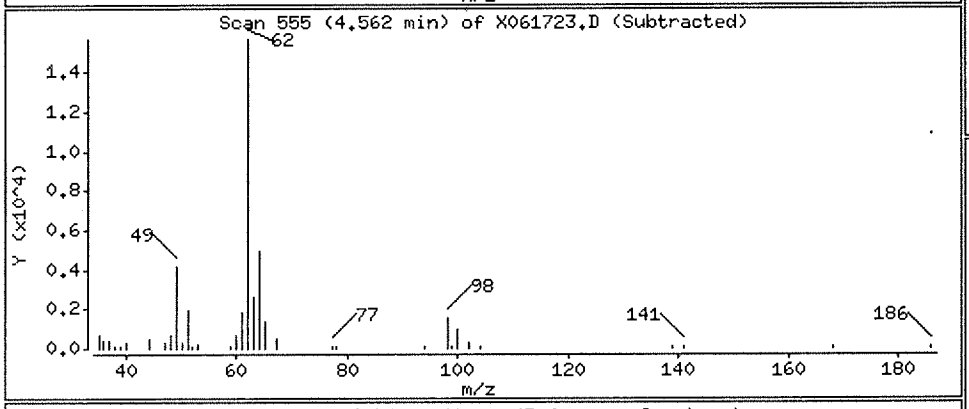
Column diameter: 0.18

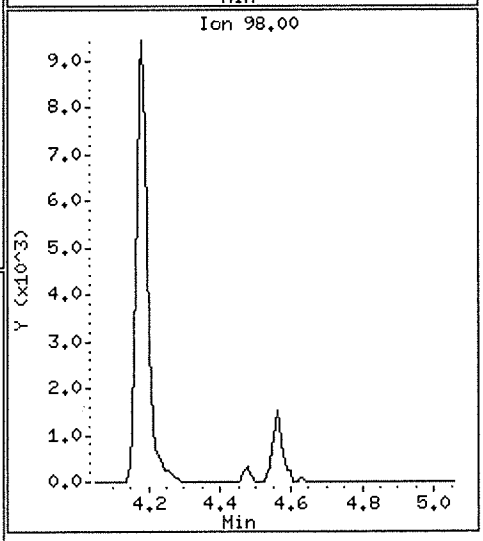
33 1,2-Dichloroethane

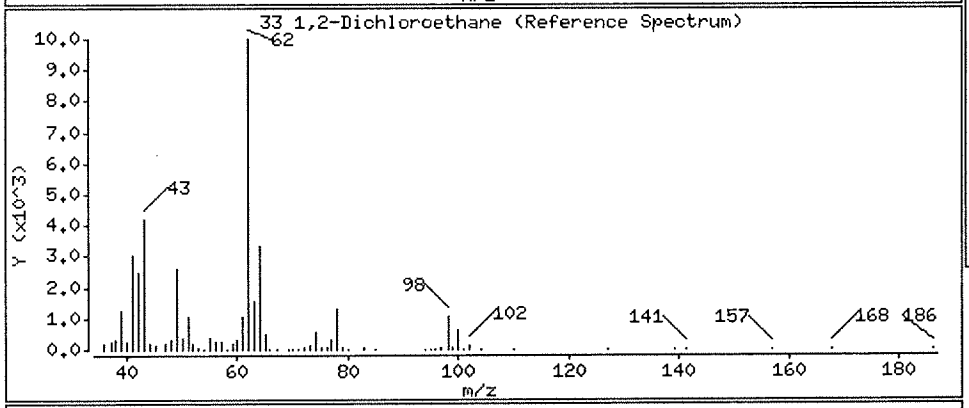
Concentration: 52.38 ug/l

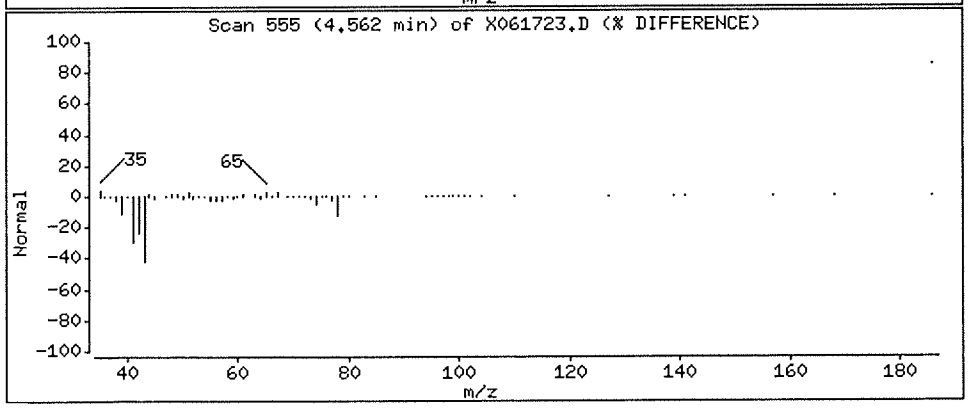












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061723.D

Date : 17-JUN-2021 18:30

Client ID: HS21060700-11

Instrument: voa6.i

Sample Info: HS21060700-11;HS21060700-11;;;

Purge Volume: 5.0

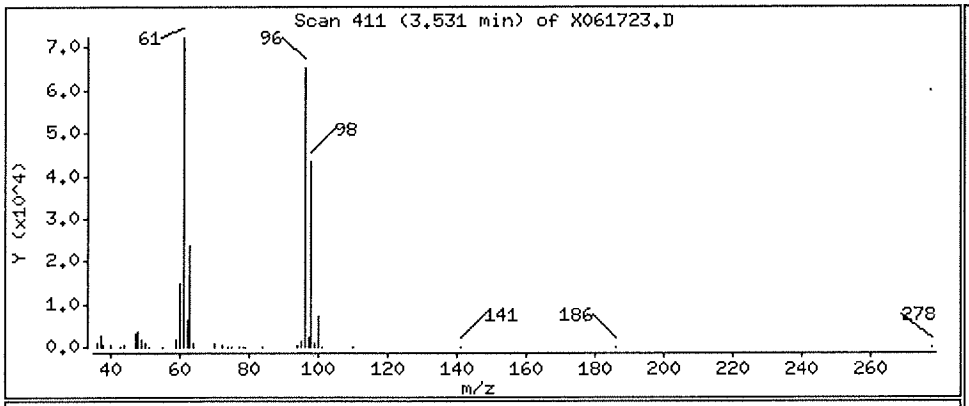
Operator: PC

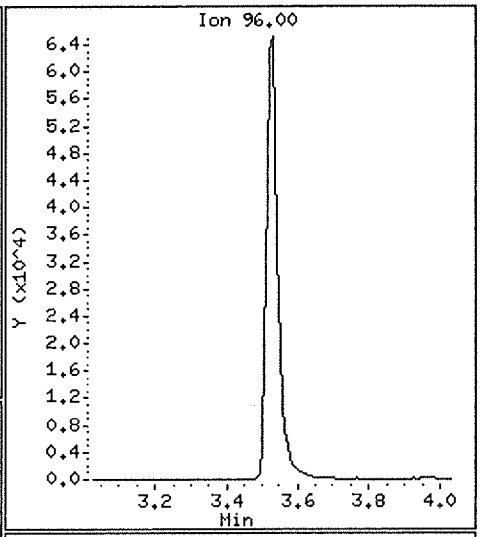
Column phase: DB624

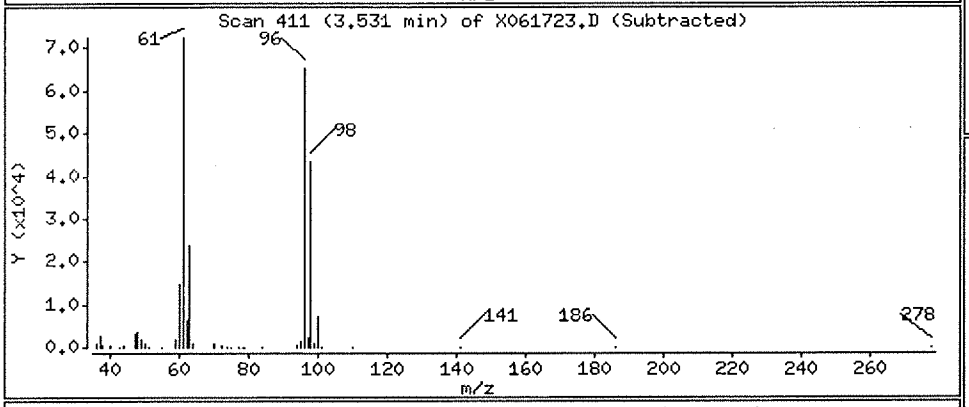
Column diameter: 0.18

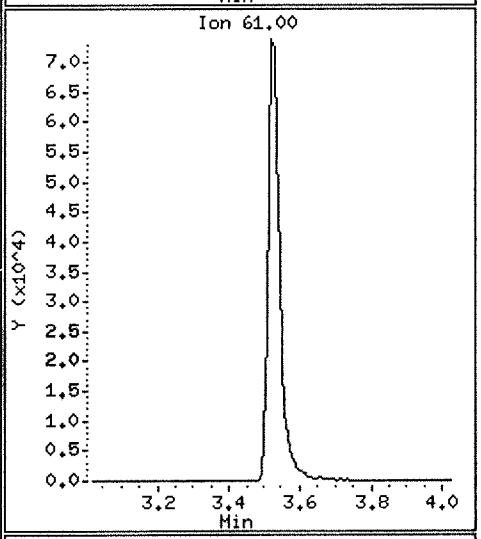
27 cis-1,2-Dichloroethene

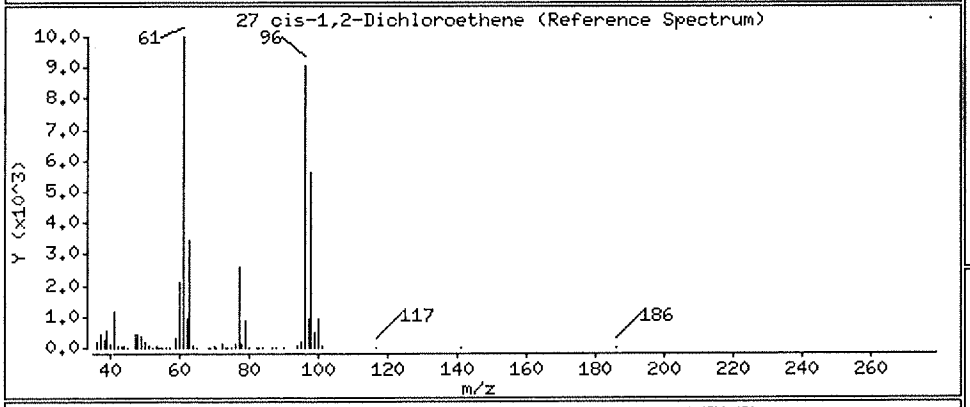
Concentration: 240.04 ug/l

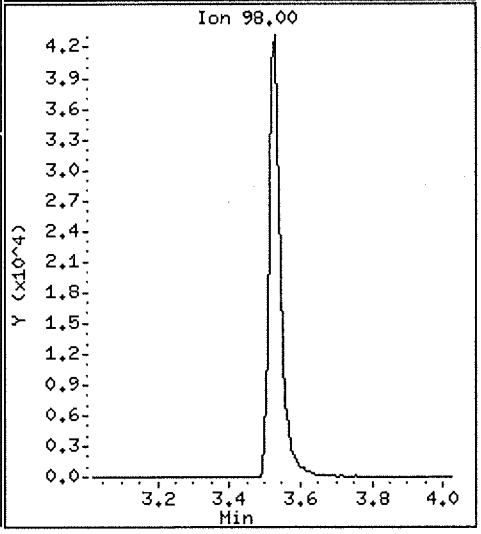


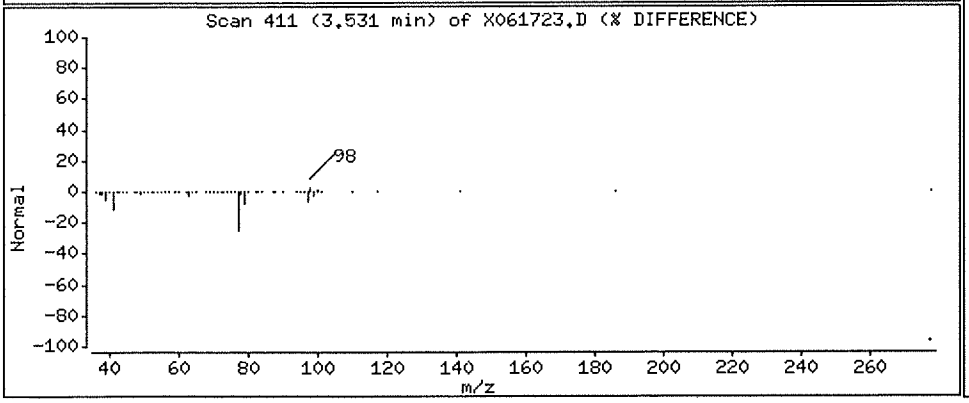












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061723.D Page 5

Date : 17-JUN-2021 18:30

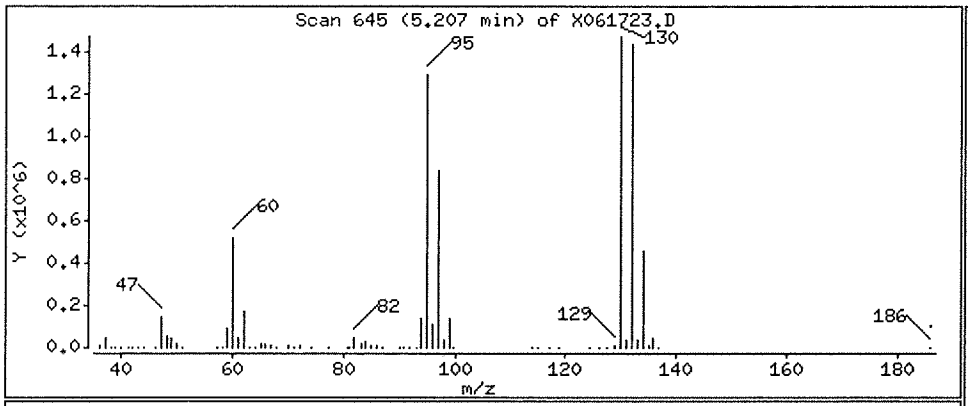
Client ID: HS21060700-11 Instrument: voa6.i

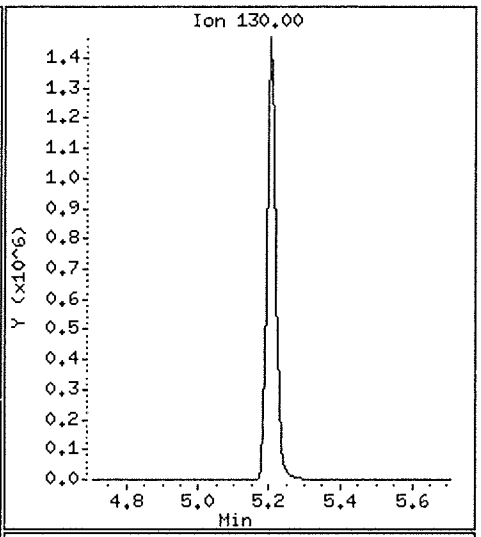
Sample Info: HS21060700-11;HS21060700-11;;;

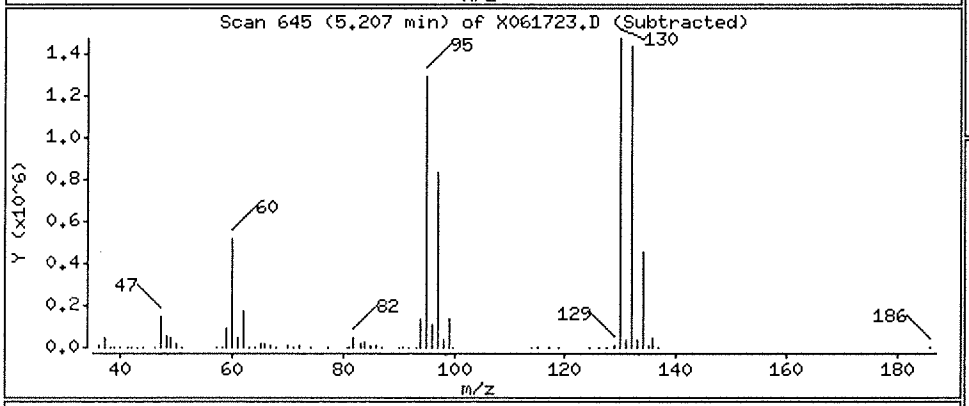
Purge Volume: 5.0 Operator: PC

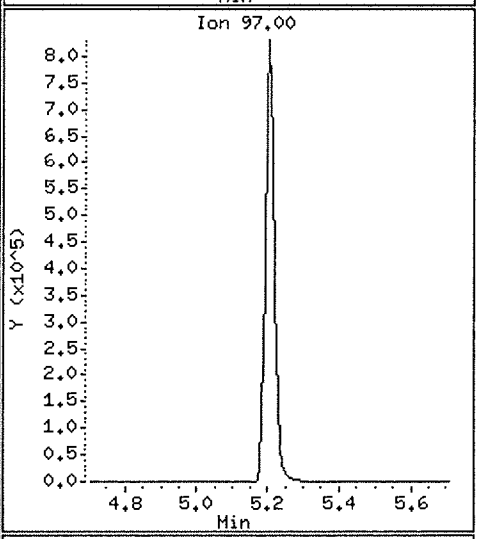
Column phase: DB624 Column diameter: 0.18

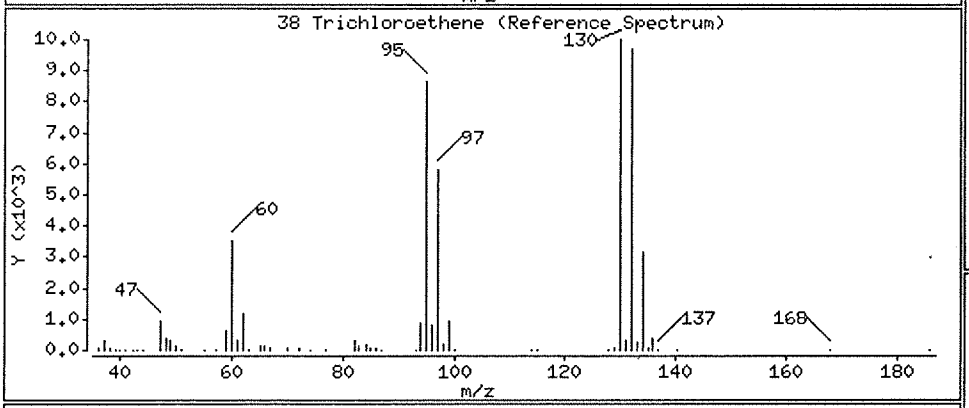
38 Trichloroethene Concentration: 4687.20 ug/l

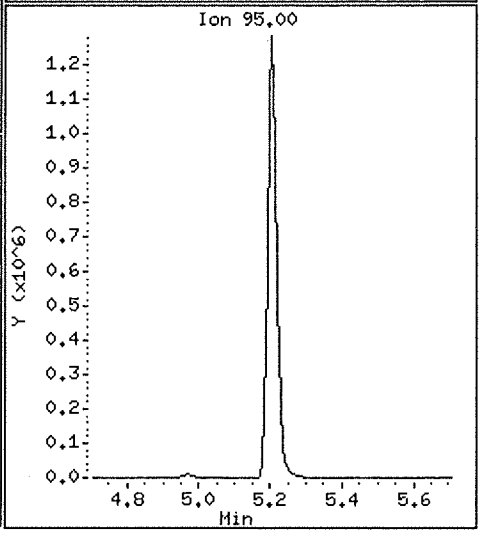


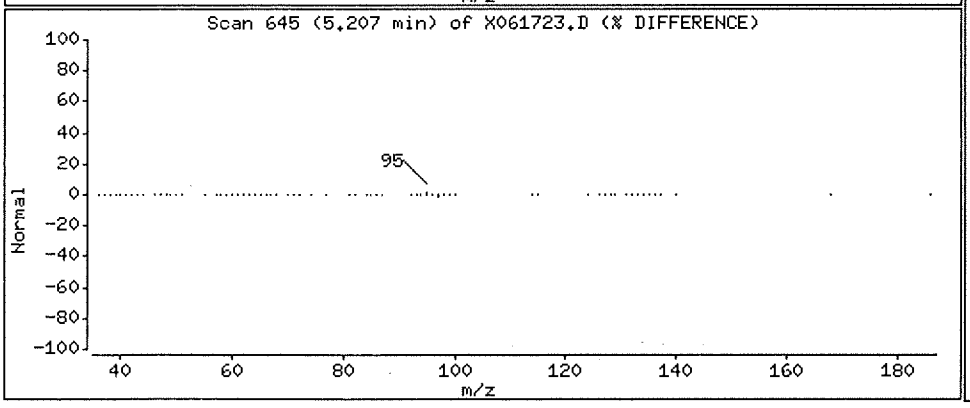












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061724.D
Lab Smp Id: HS21060700-11 Client Smp ID: HS21060700-11
Inj Date : 17-JUN-2021 18:51
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-11;HS21060700-11;;;
Misc Info : HS18090001;WATER;0;100;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 23
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

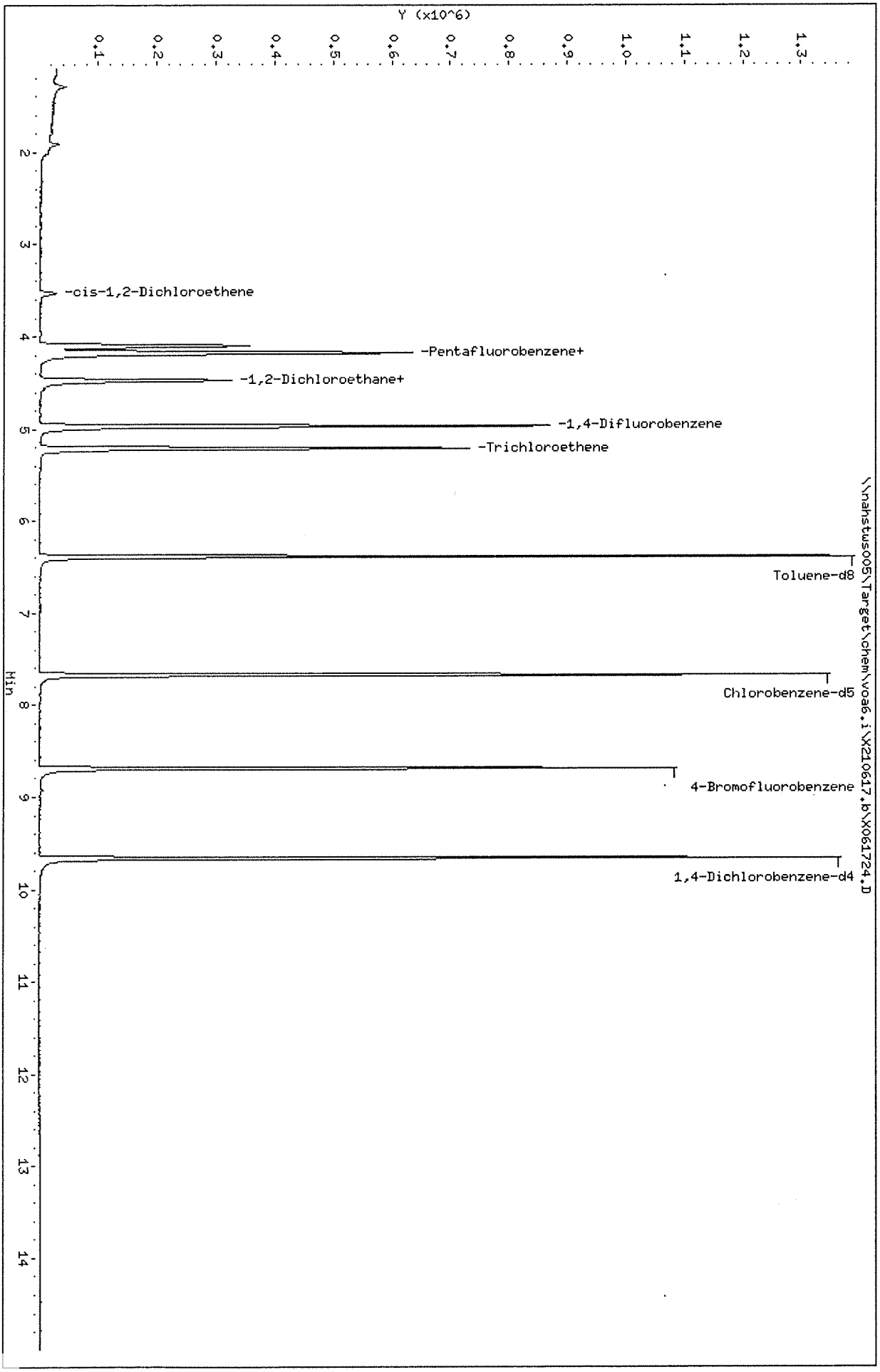
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	580527	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	790468	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	691153	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	339632	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	257833	45.1051	45.10
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	260555	46.9434	46.94
$ 48 Toluene-d8	98	6.389	6.388	(0.833)	896301	52.0617	52.06
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	292768	48.2602	48.26
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	3885	0.61684	61.68(a)
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	16383	2.69249	269.24(a)
38 Trichloroethene	130	5.207	5.207	(1.049)	262906	48.4593	4845.92

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061724.D
Date : 17-JUN-2021 18:51
Client ID: HS21060700-11
Sample Info: HS21060700-11;HS21060700-11;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061724.D

Date : 17-JUN-2021 18:51

Client ID: HS21060700-11

Instrument: voa6.i

Sample Info: HS21060700-11;HS21060700-11;;;

Purge Volume: 5.0

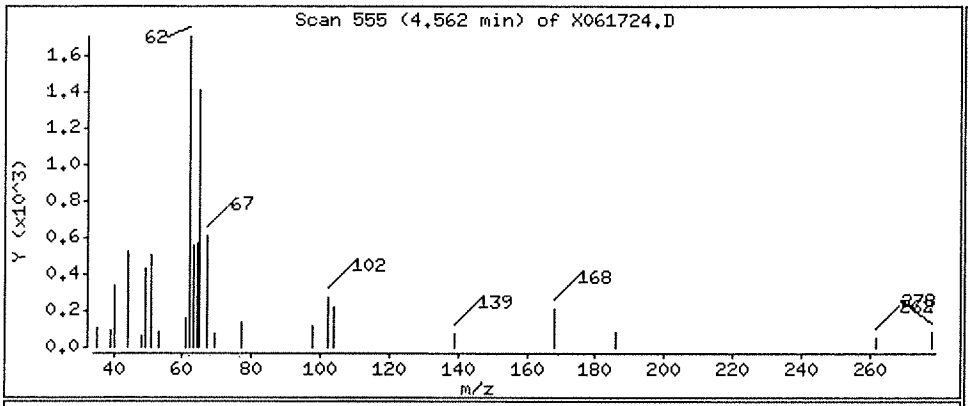
Operator: PC

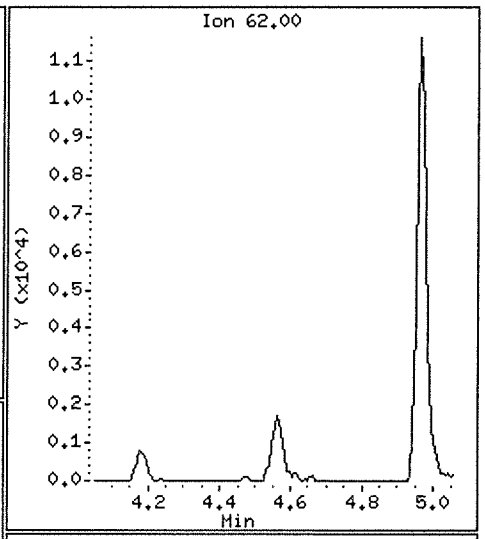
Column phase: DB624

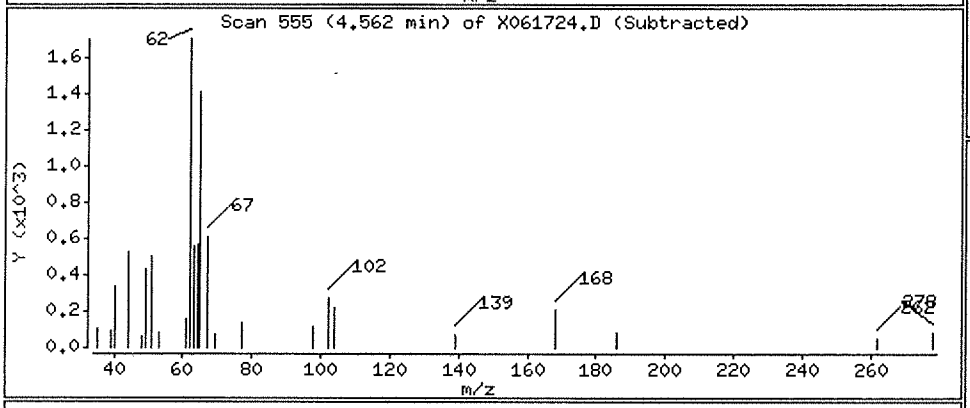
Column diameter: 0.18

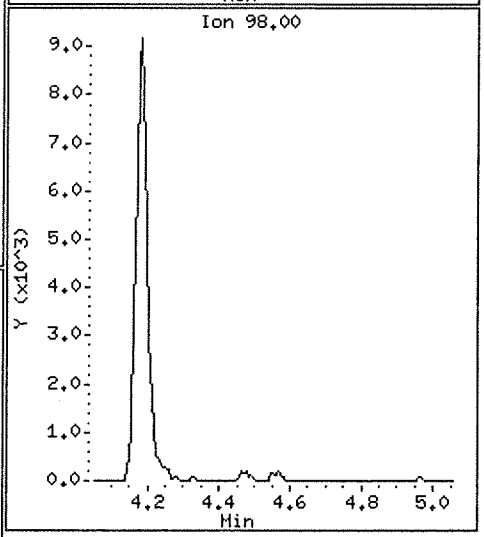
33 1,2-Dichloroethane

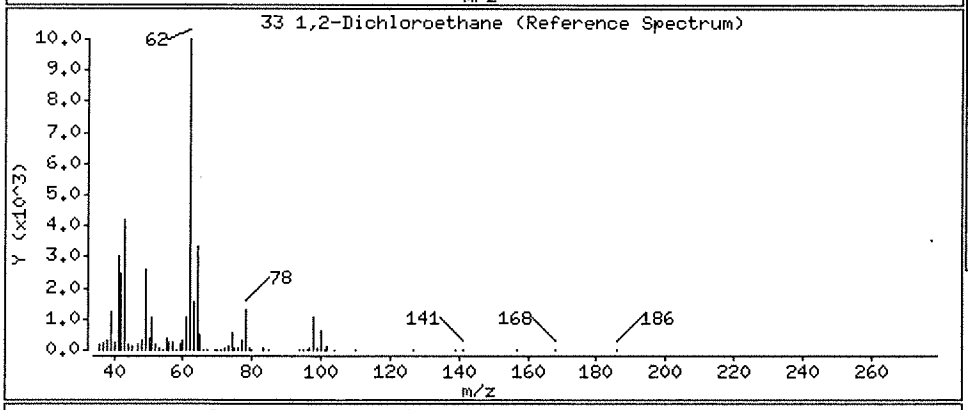
Concentration: 61.68 ug/l

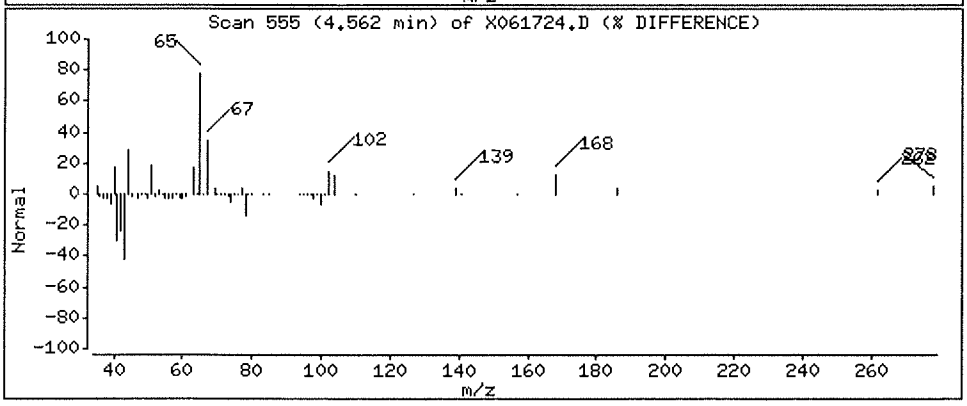












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061724.D

Date : 17-JUN-2021 18:51

Client ID: HS21060700-11

Instrument: voa6.i

Sample Info: HS21060700-11;HS21060700-11;;;

Purge Volume: 5.0

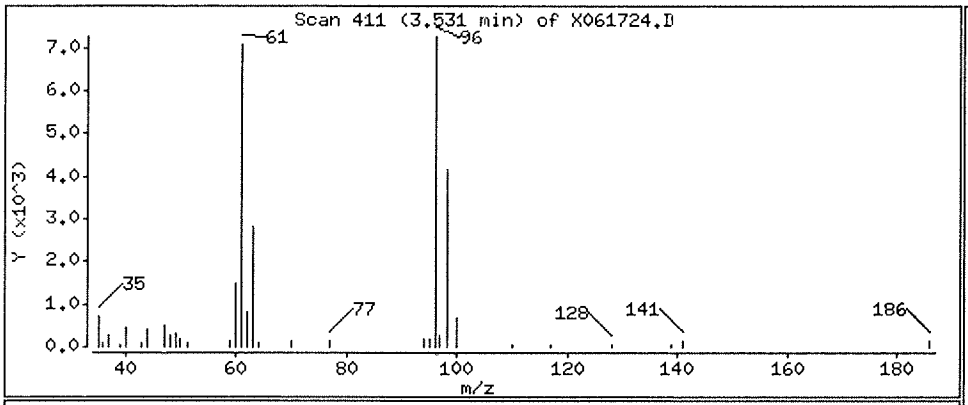
Operator: PC

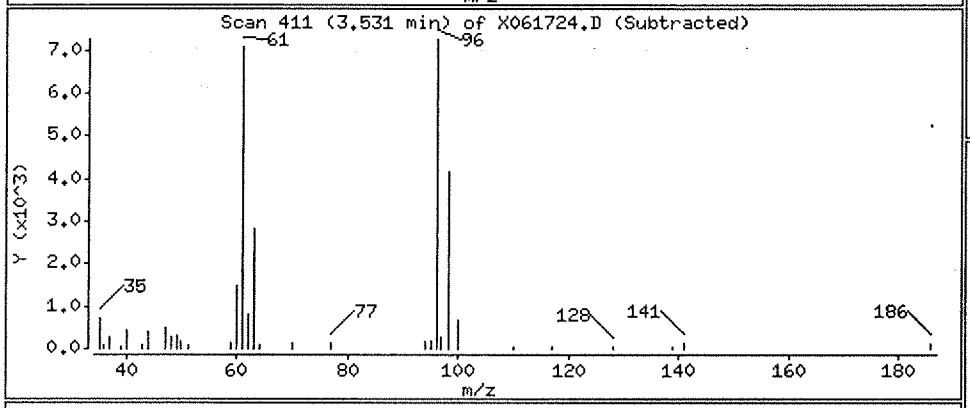
Column phase: DB624

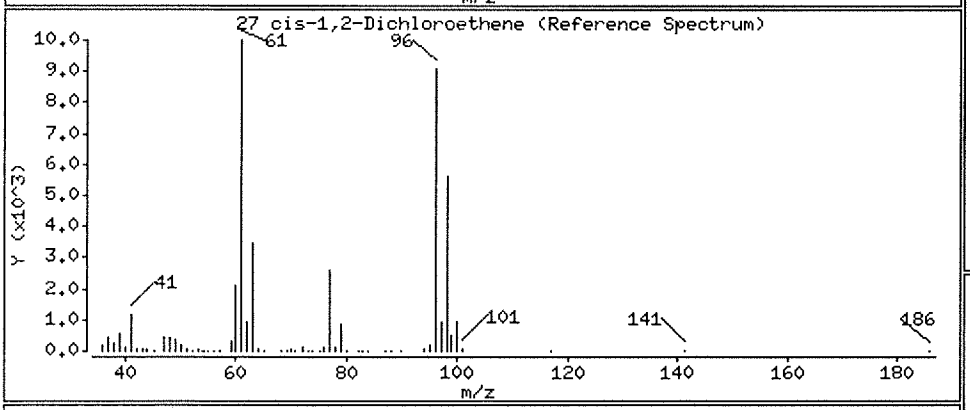
Column diameter: 0.18

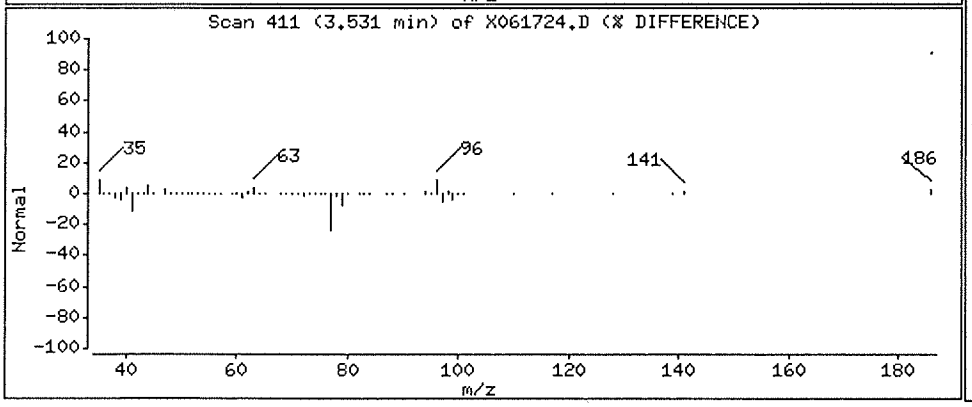
27 cis-1,2-Dichloroethene

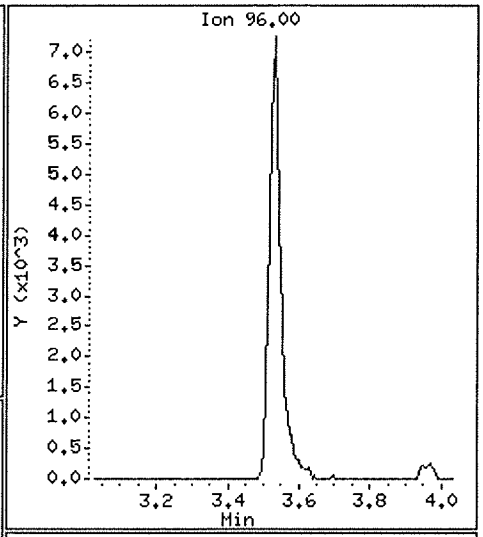
Concentration: 269.24 ug/l

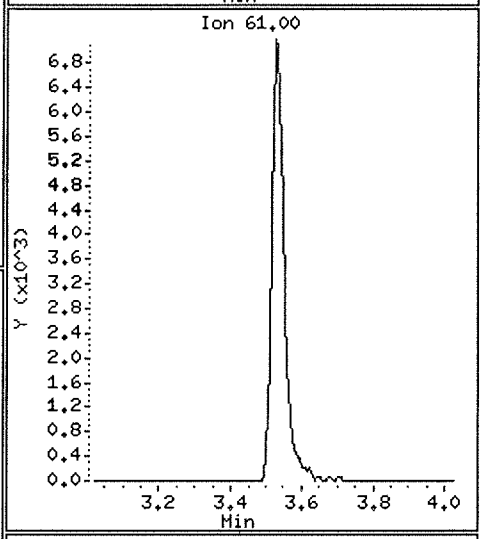


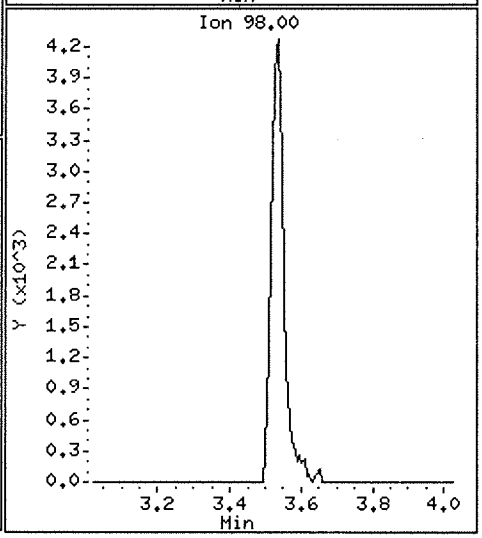












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061724.D

Date : 17-JUN-2021 18:51

Client ID: HS21060700-11

Instrument: voa6.i

Sample Info: HS21060700-11;HS21060700-11;;;

Purge Volume: 5.0

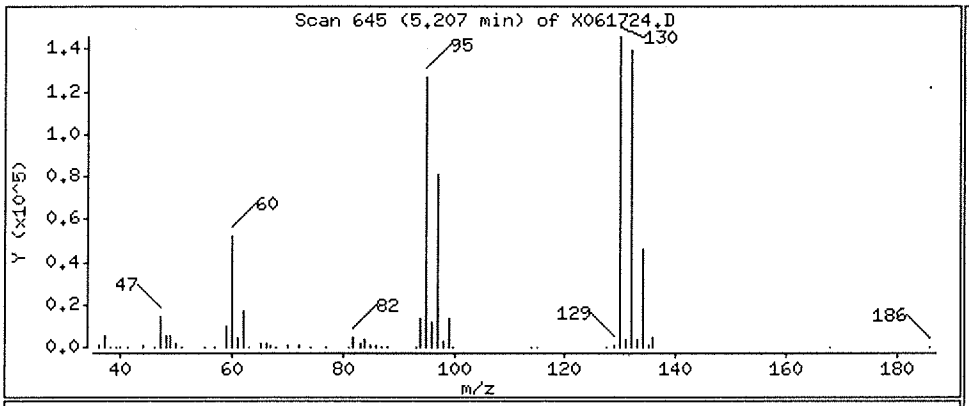
Operator: PC

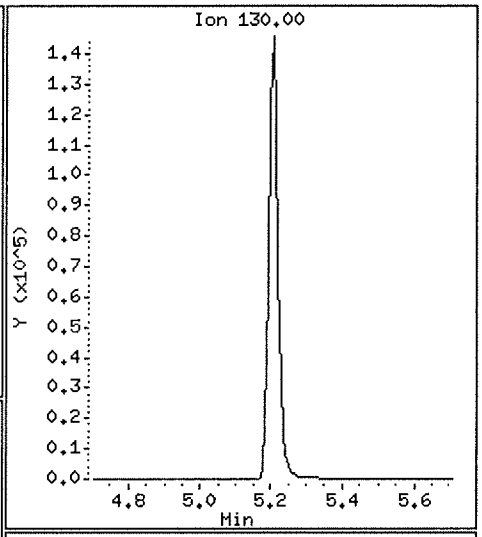
Column phase: DB624

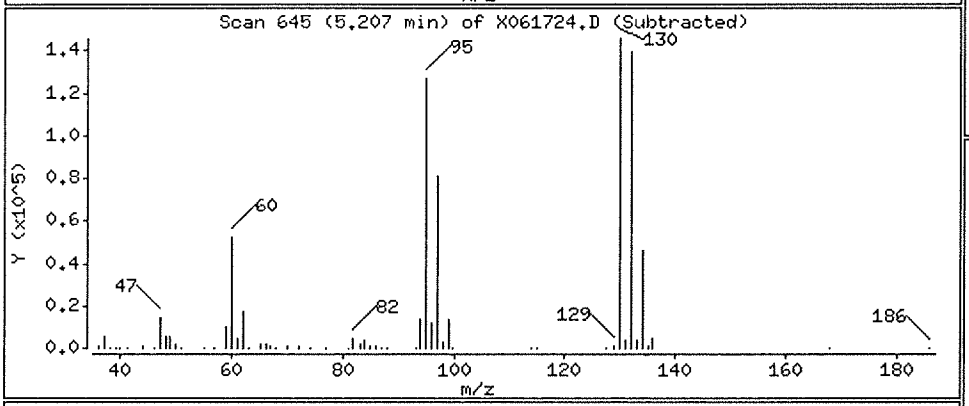
Column diameter: 0.18

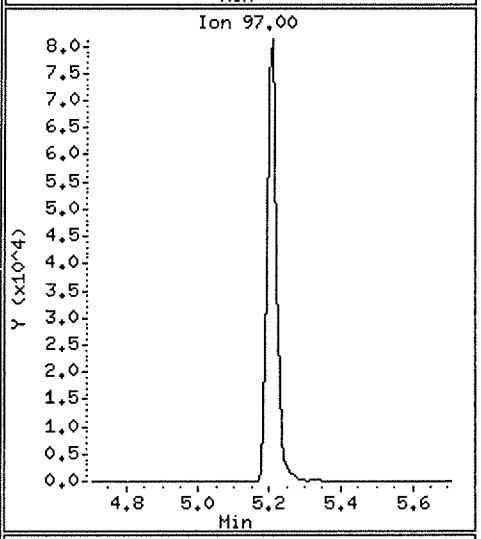
38 Trichloroethene

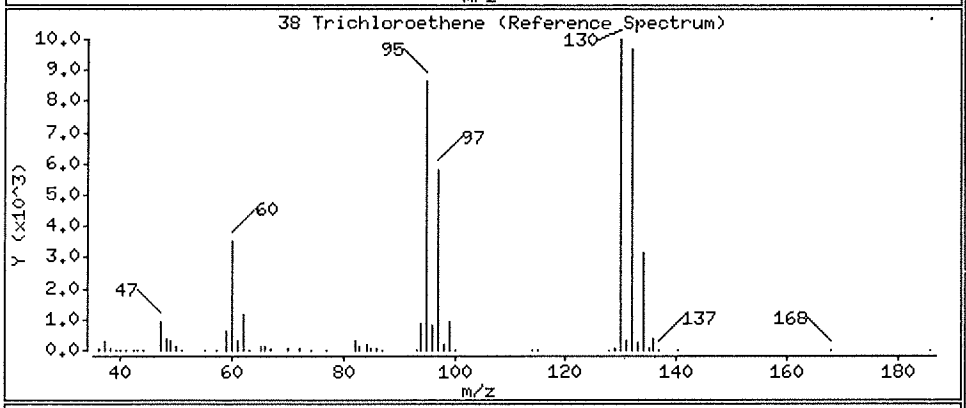
Concentration: 4845.92 ug/l

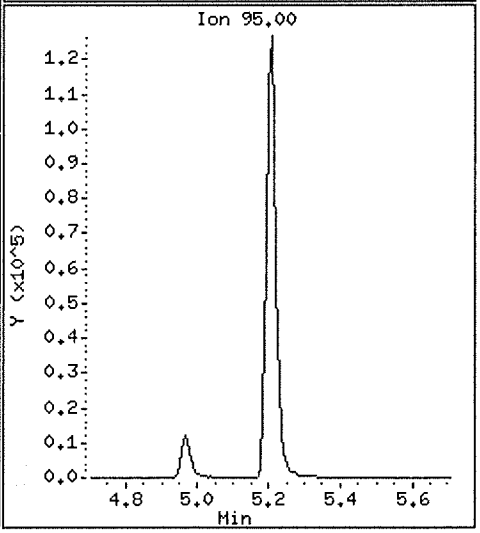


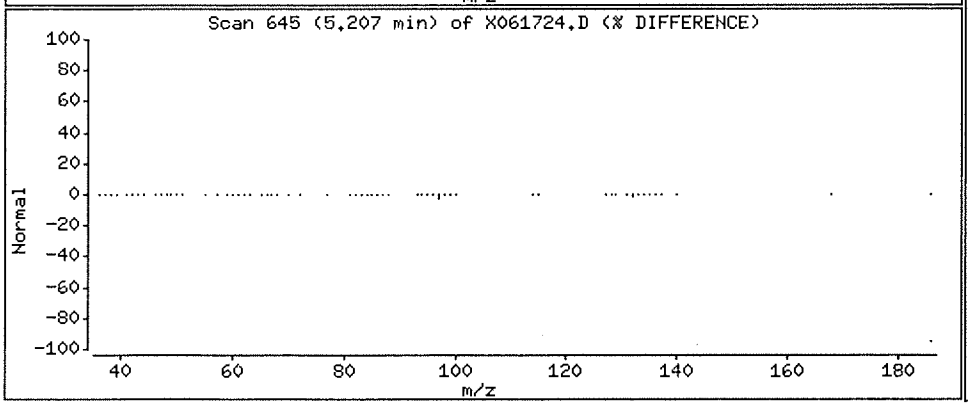












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D Page 1
Report Date: 26-Jul-2021 14:57

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D
Lab Smp Id: HS21060700-22 Client Smp ID: HS21060700-22
Inj Date : 17-JUN-2021 19:12
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-22;HS21060700-22;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 24
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.182	4.182	(1.000)	554070	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	761696	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	647366	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	322082	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	242852	44.5108	44.51
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	252626	47.6992	47.69
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	853560	52.9325	52.93
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	275115	48.4152	48.41
53 1,1,2-Trichloroethane	83	6.847	6.840	(0.893)	2011	0.57345	5.73(a)
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	9060	1.03432	10.34(a)
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	77321	13.5478	135.47
28 Chloroform	83	3.910	3.910	(0.935)	30428	3.12285	31.22(a)
27 cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	4434001	763.508	7635.08(A)
56 Tetrachloroethene	164	6.933	6.926	(0.904)	4832	1.21248	12.12(a)
20 trans-1,2-Dichloroethene	96	2.535	2.528	(0.606)	20058	3.87706	38.77(a)
38 Trichloroethene	130	5.207	5.207	(1.049)	4227998	808.749	8087.49(A)
5 Vinyl Chloride	62	1.138	1.138	(0.272)	1052531	160.481	1604.81

QC Flag Legend

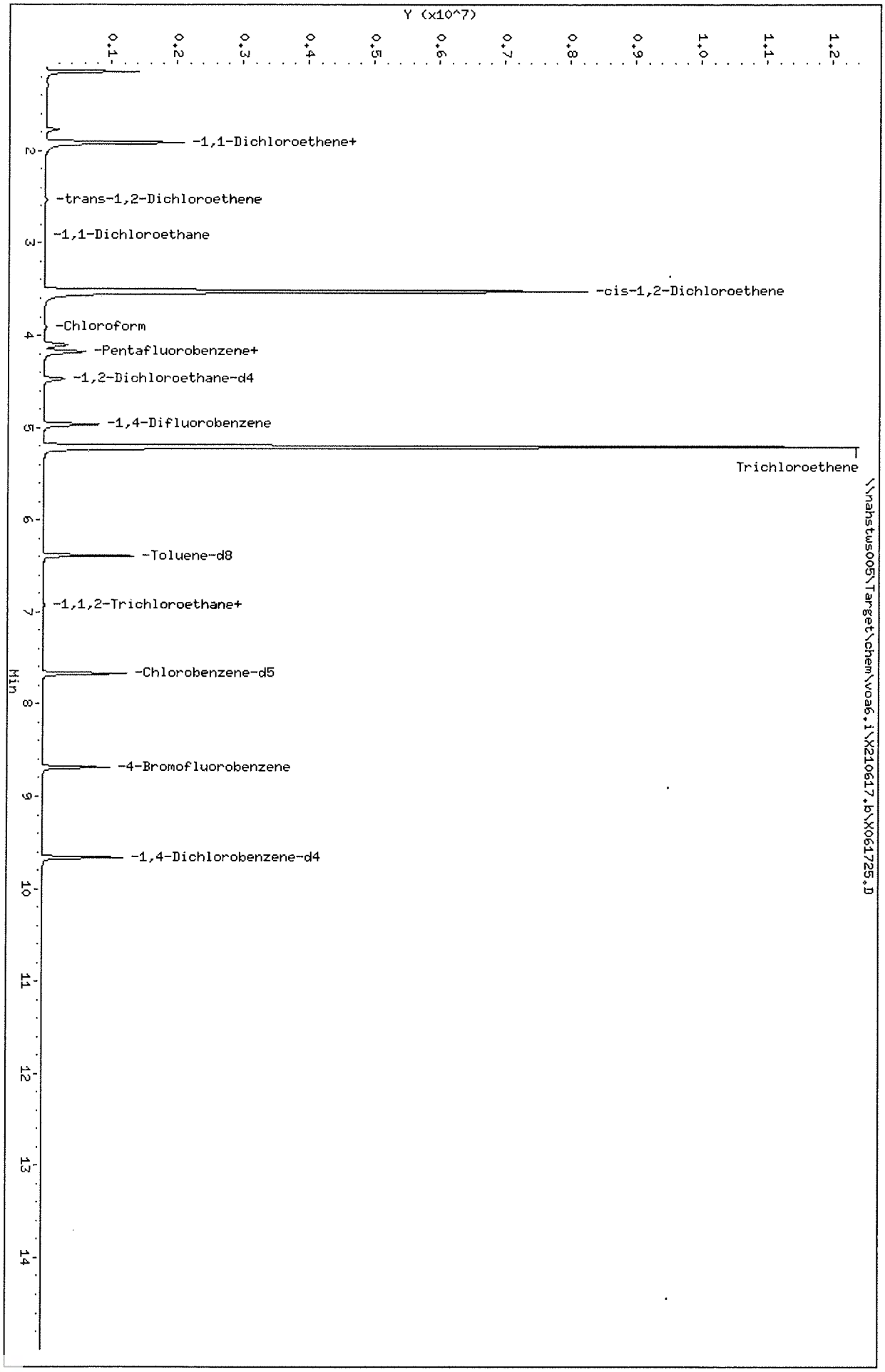
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D
Date : 17-JUN-2021 19:12
Client ID: HS21060700-22
Sample Info: HS21060700-22;HS21060700-22;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D

Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

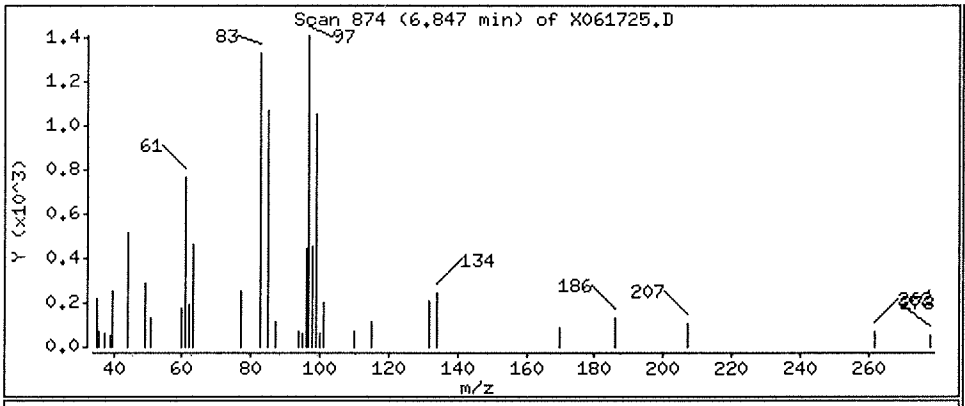
Operator: PC

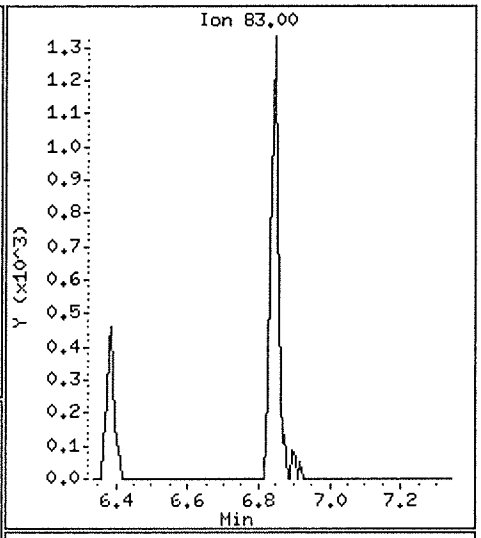
Column phase: DB624

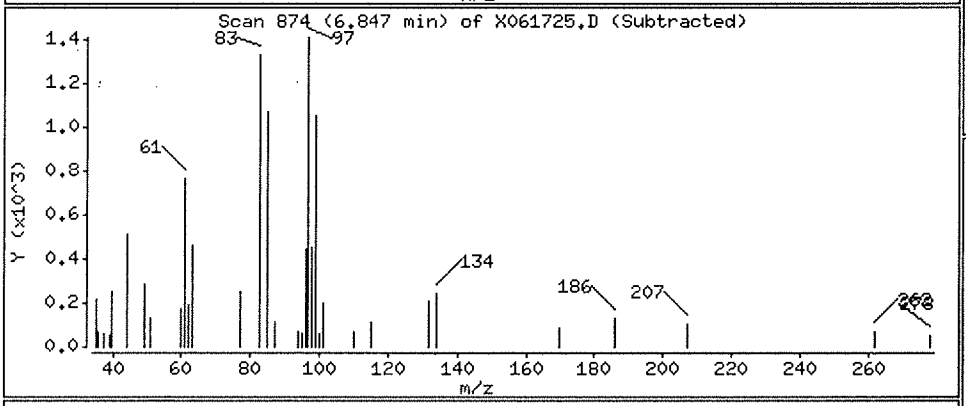
Column diameter: 0.18

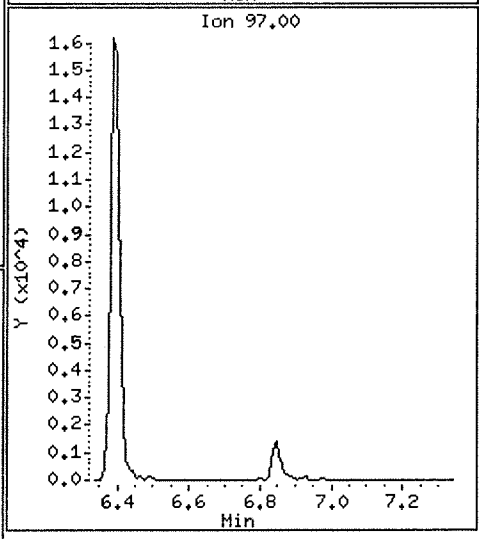
53 1,1,2-Trichloroethane

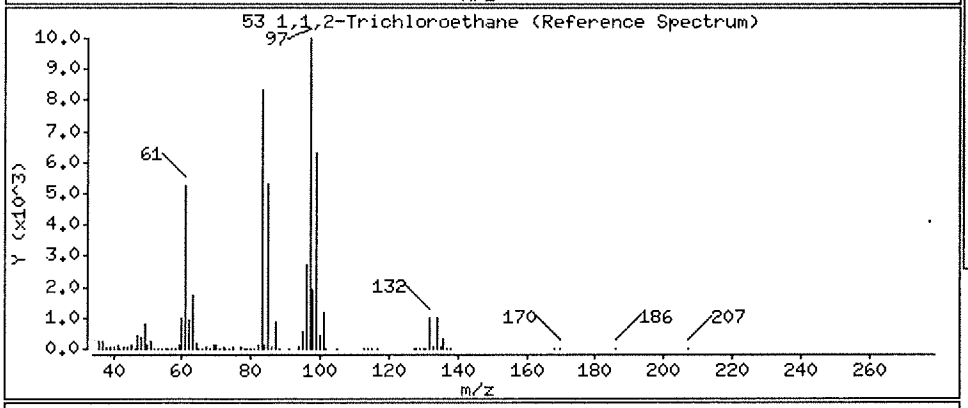
Concentration: 5.73 ug/l

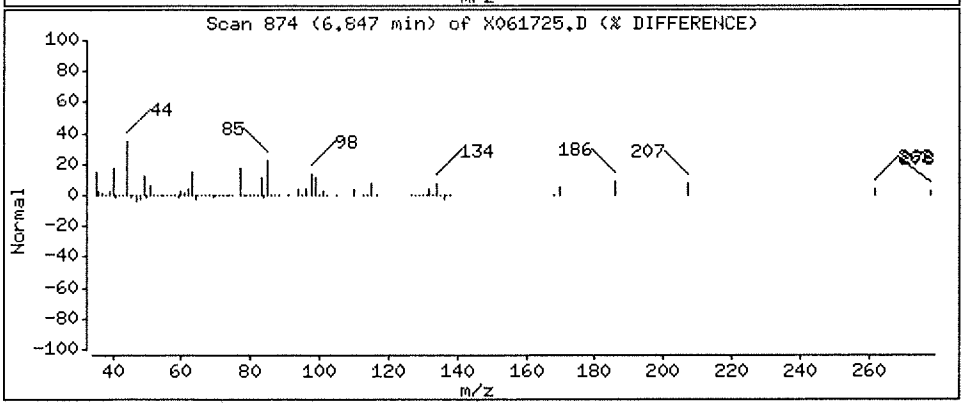












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D

Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

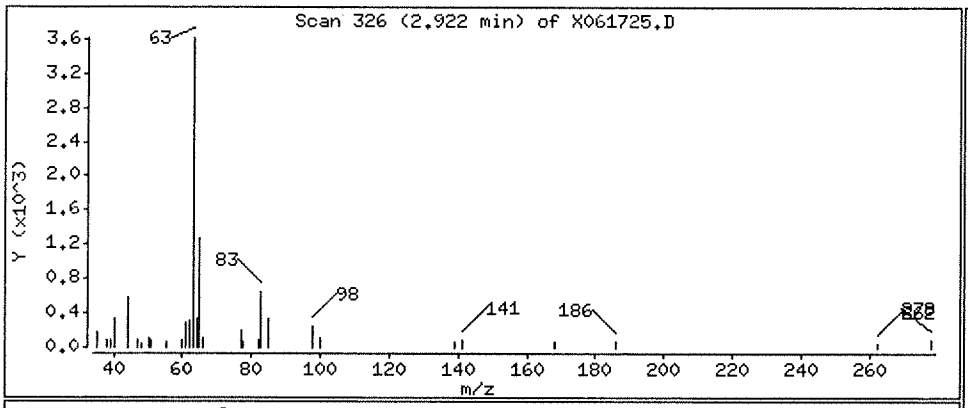
Operator: PC

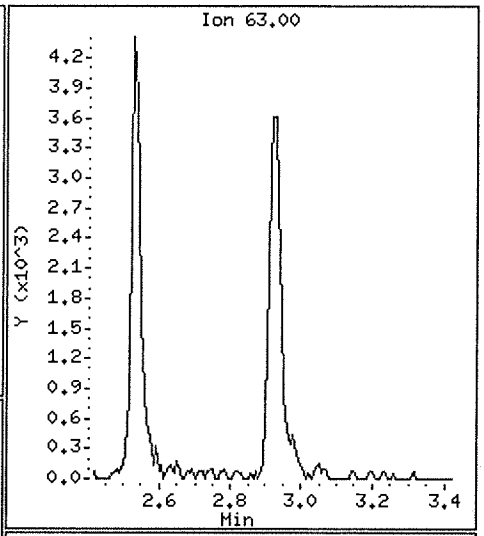
Column phase: DB624

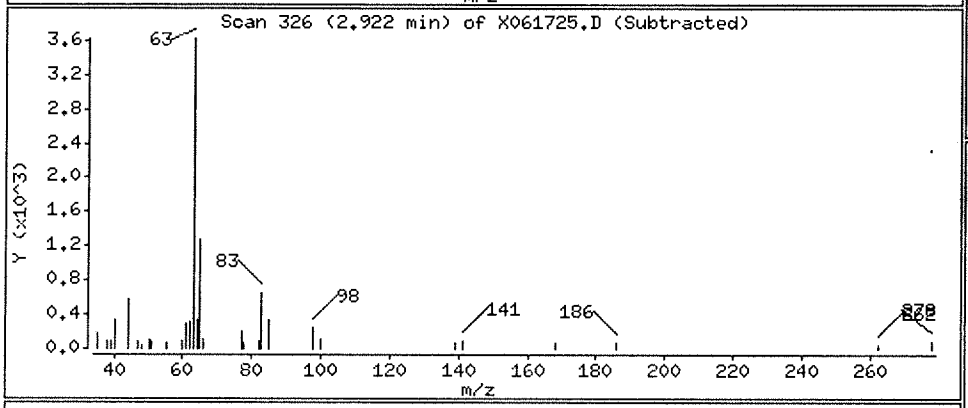
Column diameter: 0.18

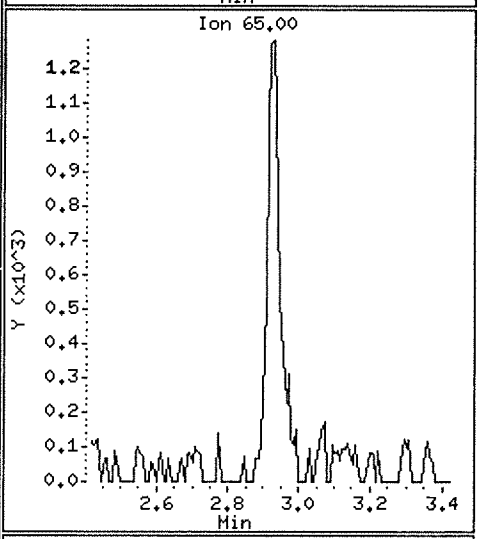
22 1,1-Dichloroethane

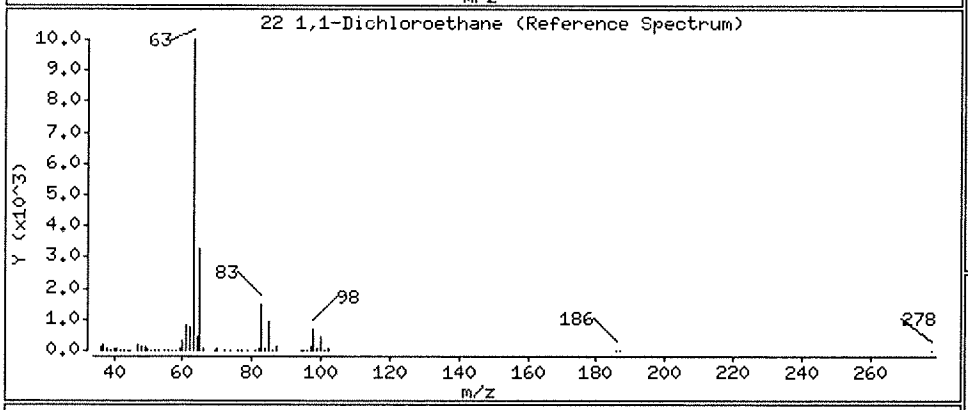
Concentration: 10.34 ug/l

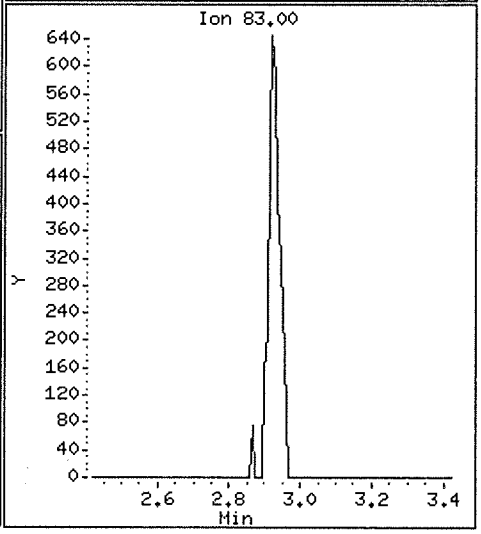


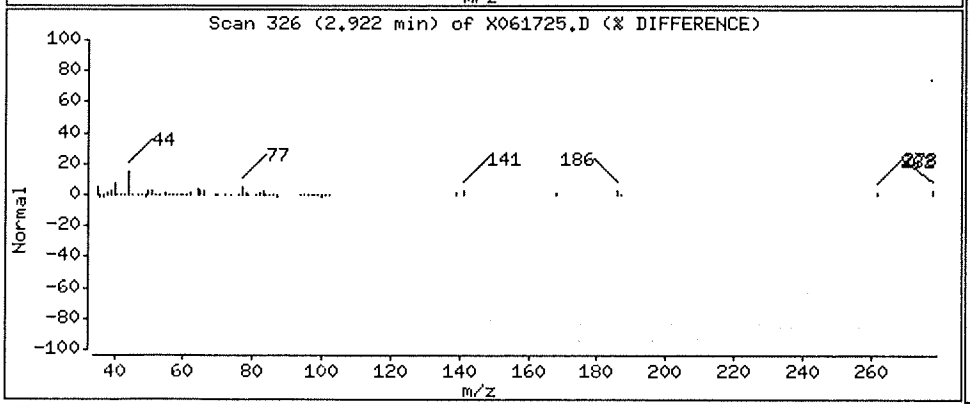












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D

Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

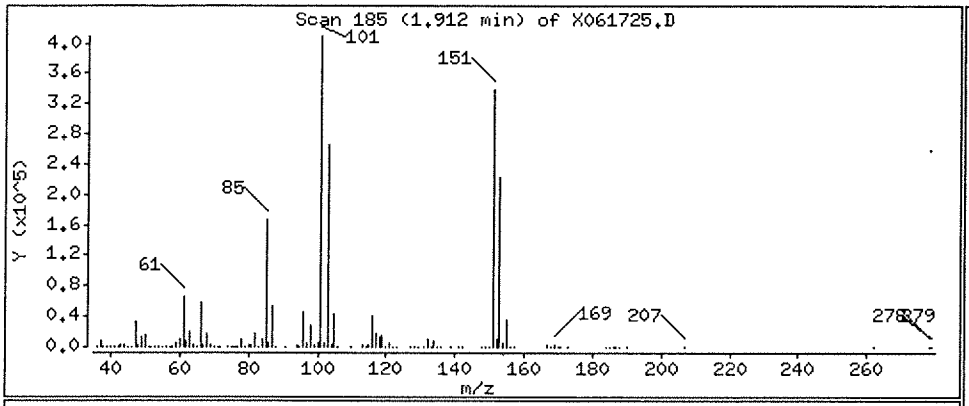
Operator: PC

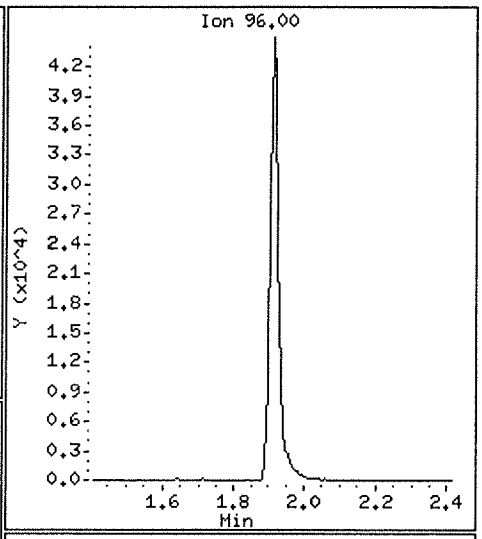
Column phase: DB624

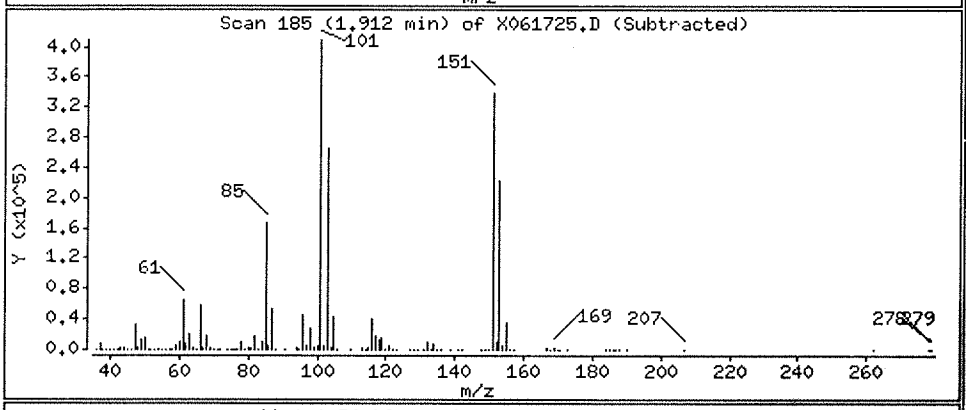
Column diameter: 0.18

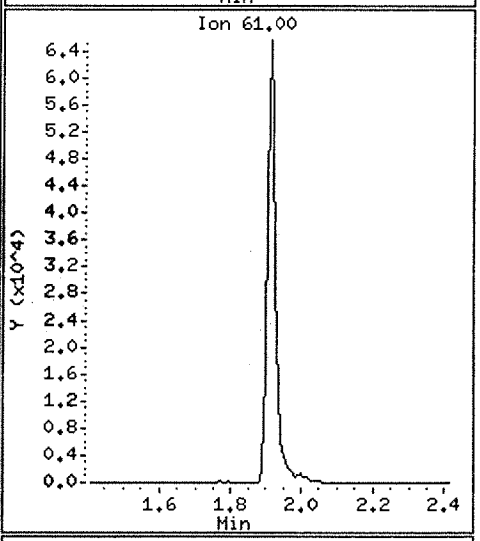
11 1,1-Dichloroethene

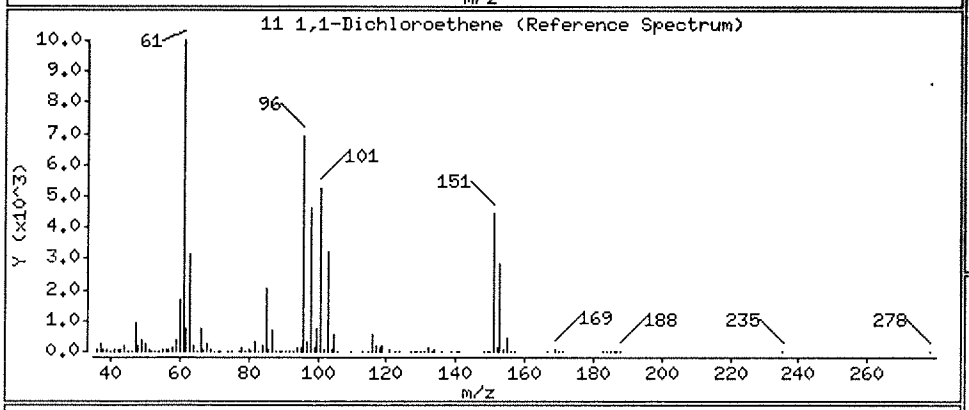
Concentration: 135.47 ug/l

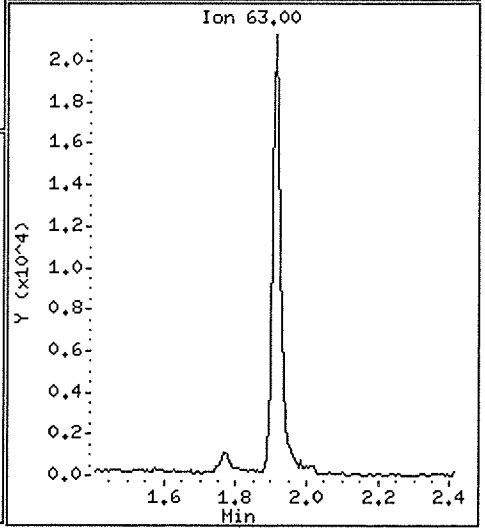


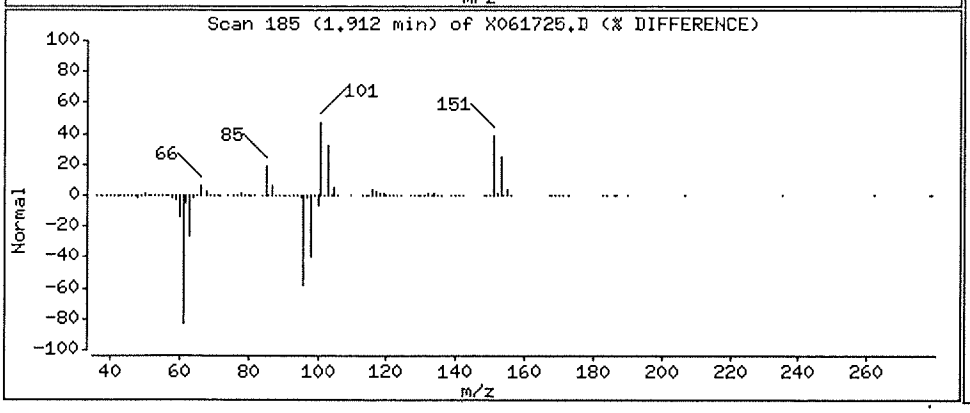












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Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

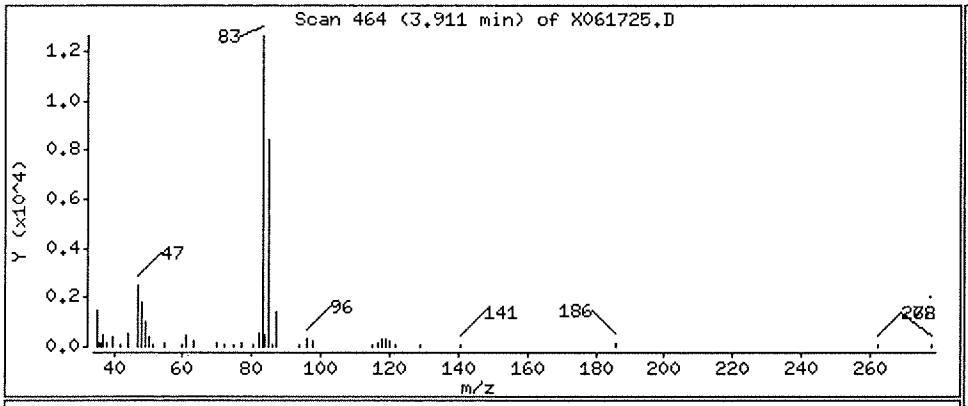
Operator: PC

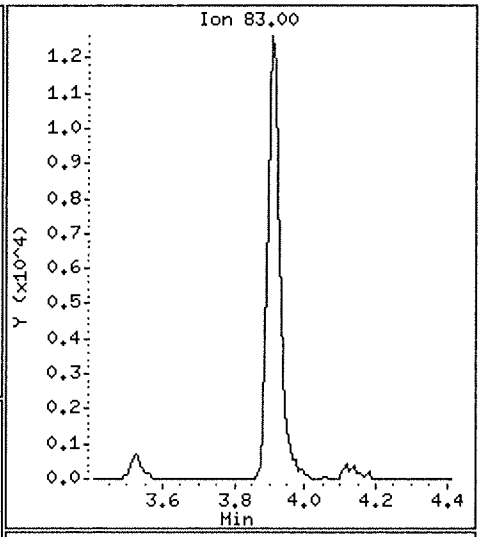
Column phase: DB624

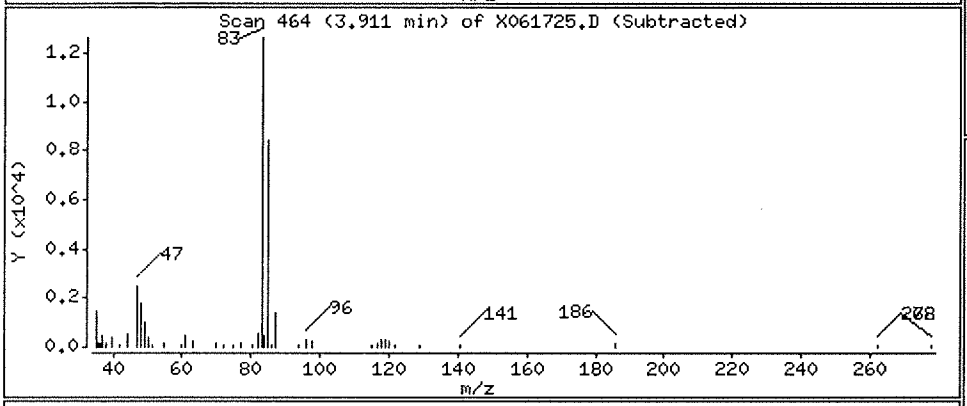
Column diameter: 0.18

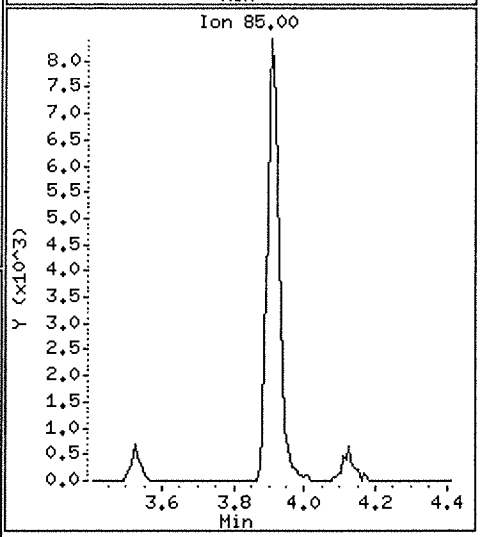
28 Chloroform

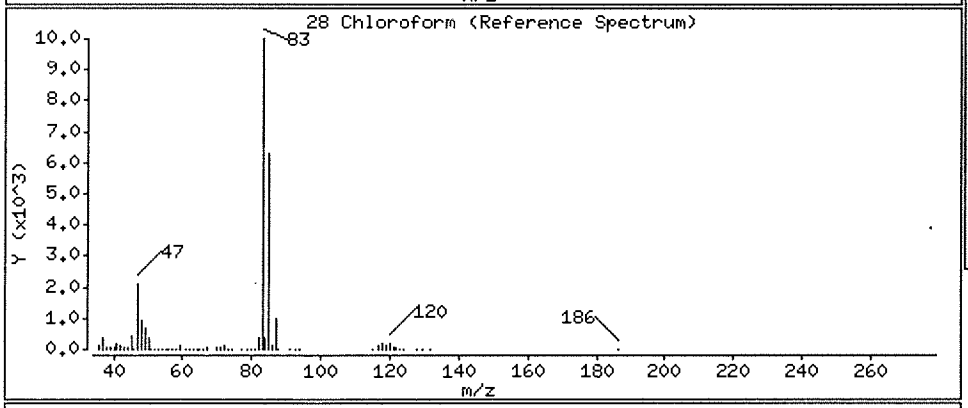
Concentration: 31.22 ug/l

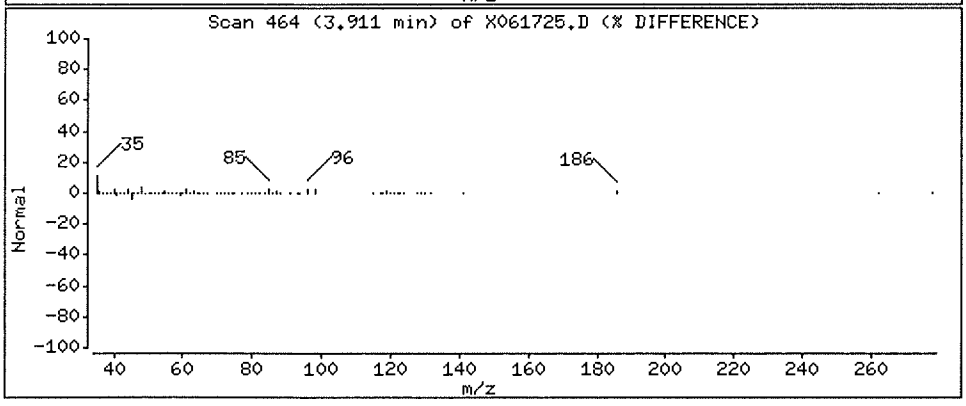












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D

Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

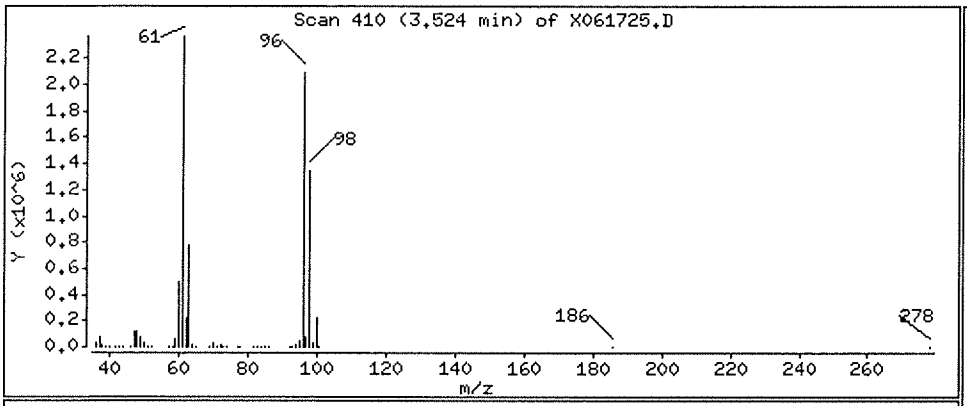
Operator: PC

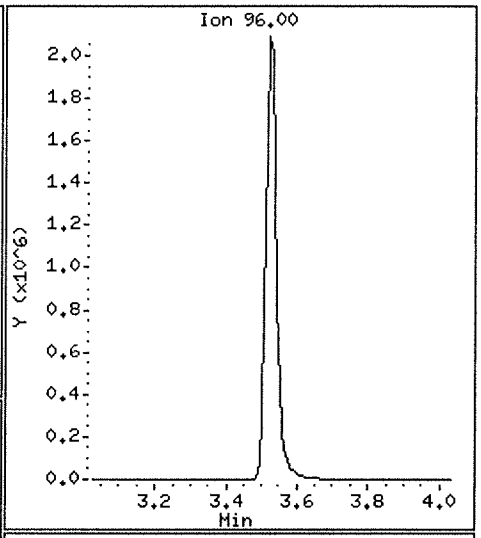
Column phase: DB624

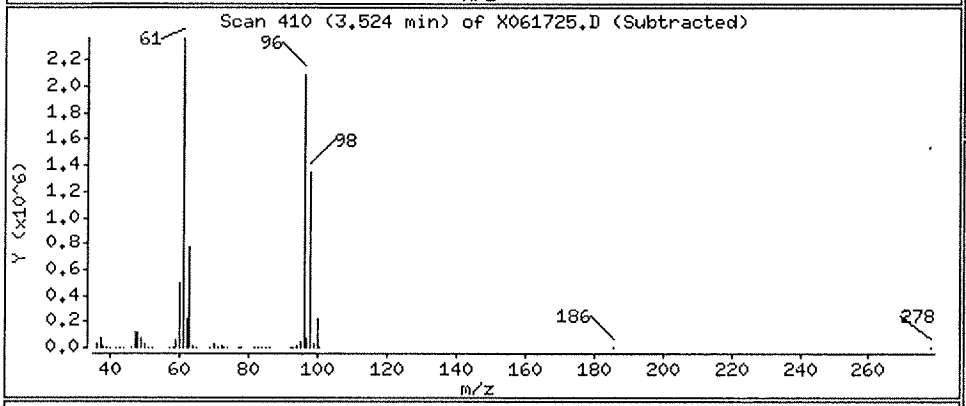
Column diameter: 0.18

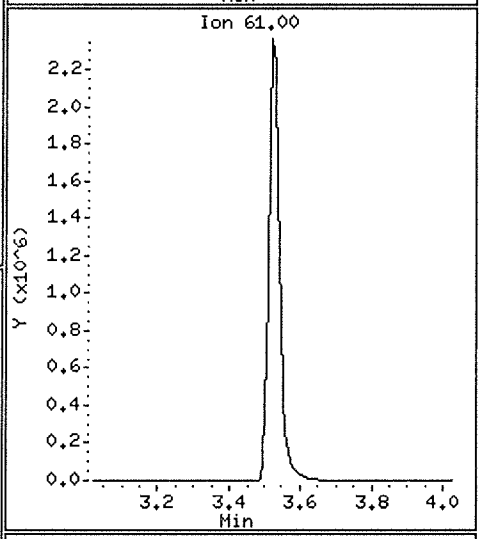
27 cis-1,2-Dichloroethene

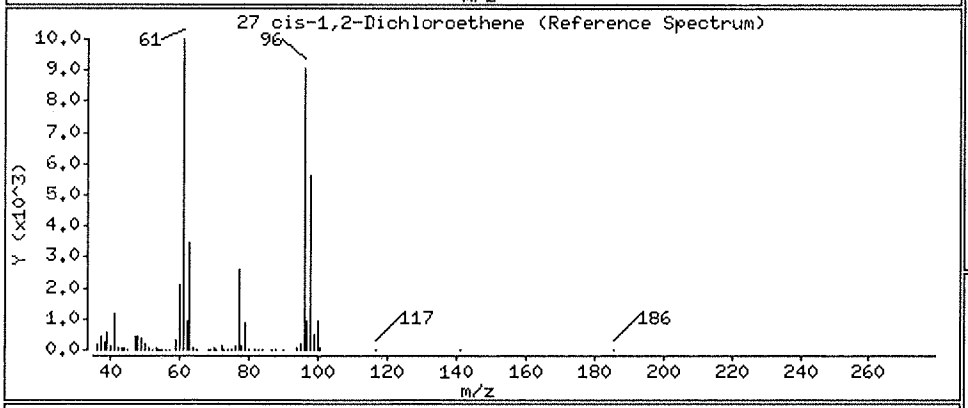
Concentration: 7635.08 ug/l

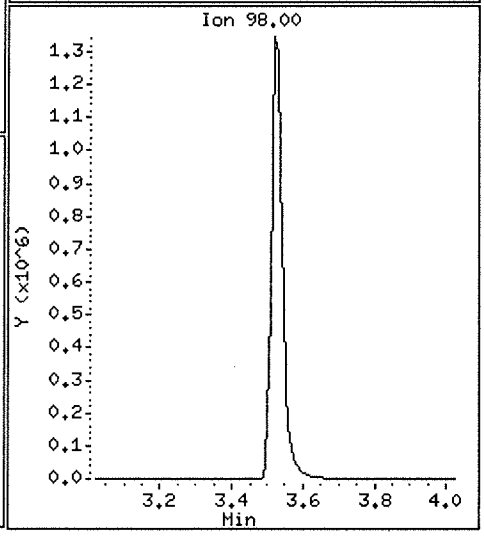


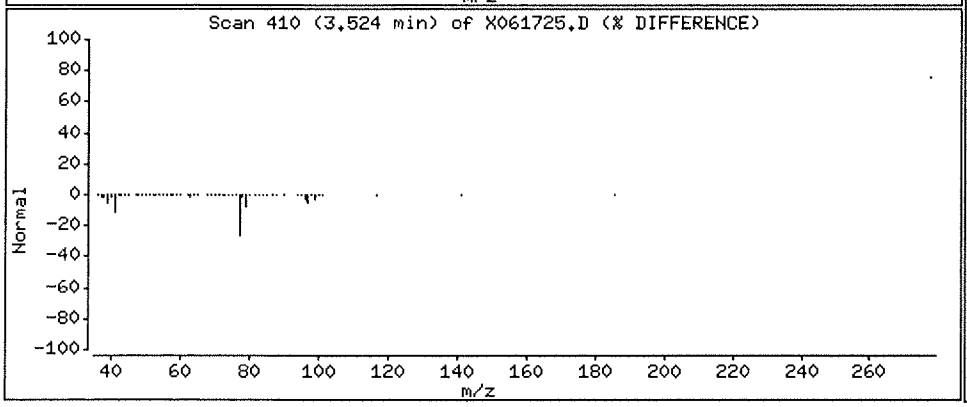












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D

Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

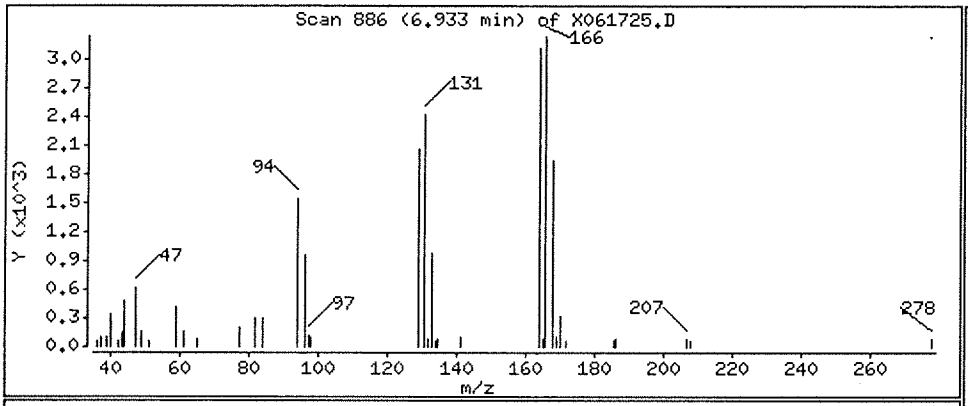
Operator: PC

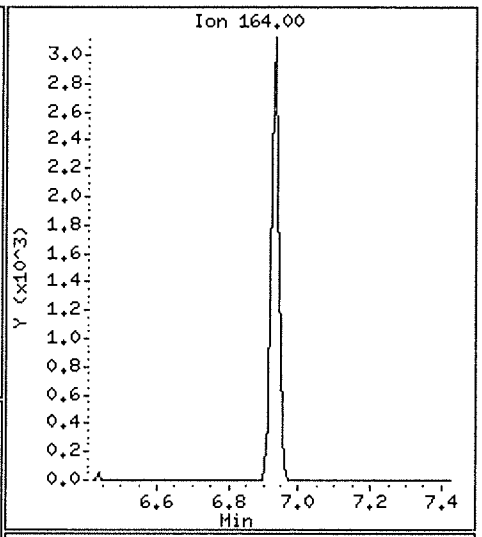
Column phase: DB624

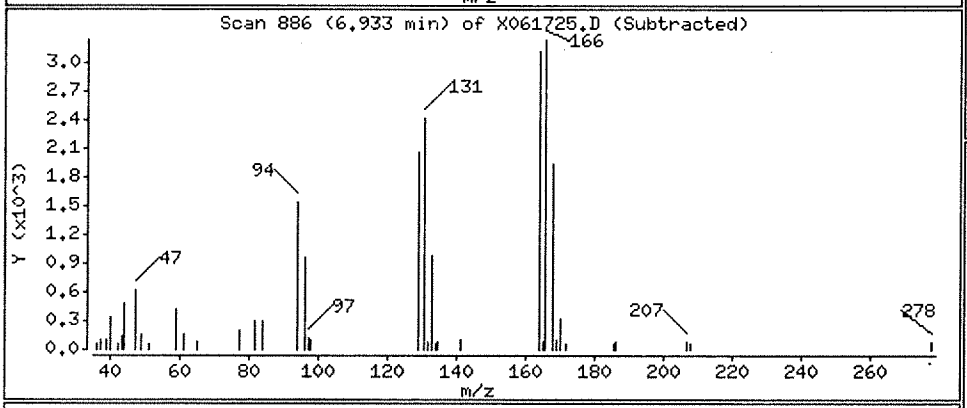
Column diameter: 0.18

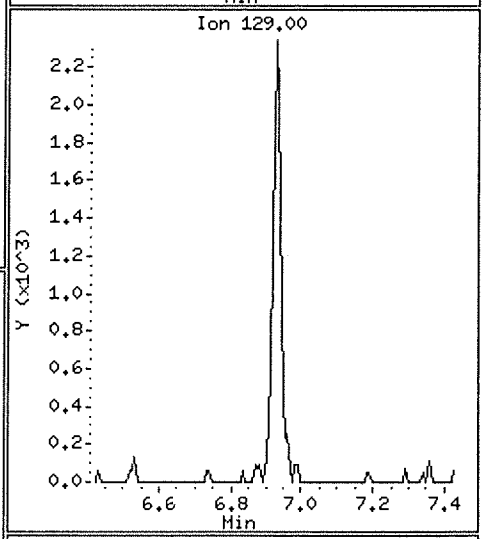
56 Tetrachloroethene

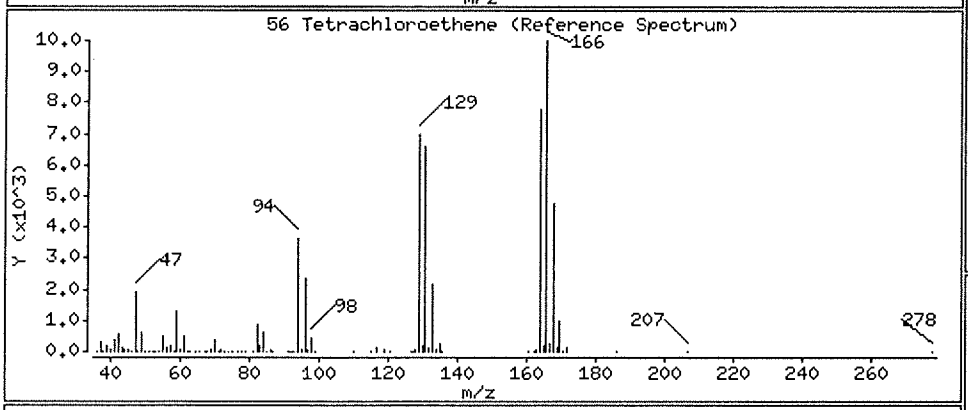
Concentration: 12.12 ug/l

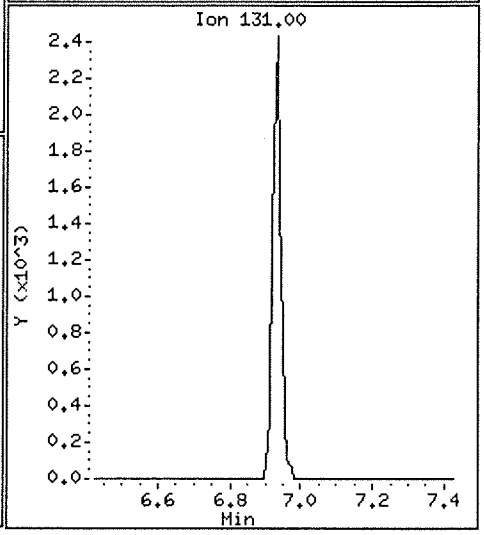


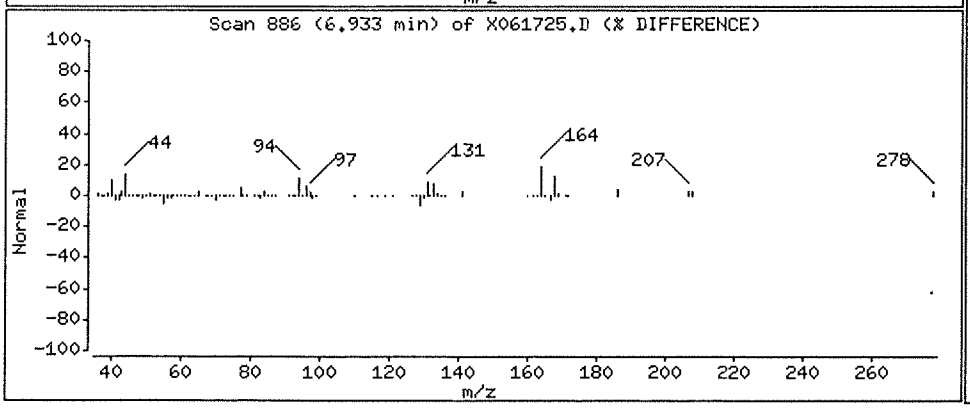












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D

Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

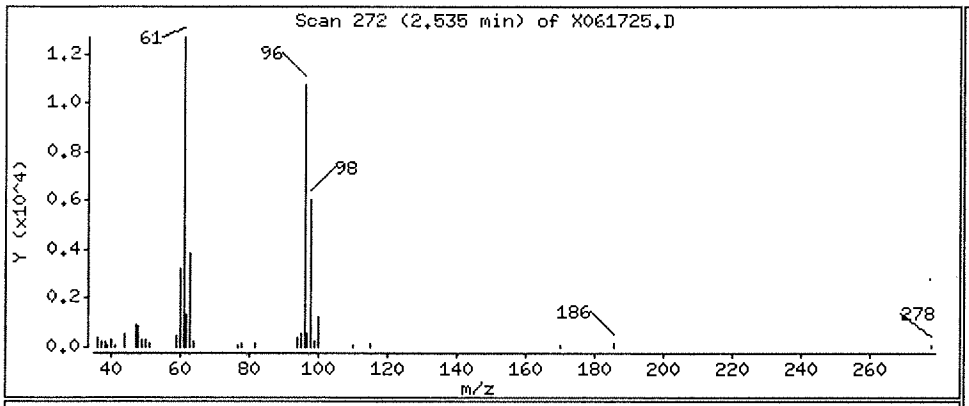
Operator: PC

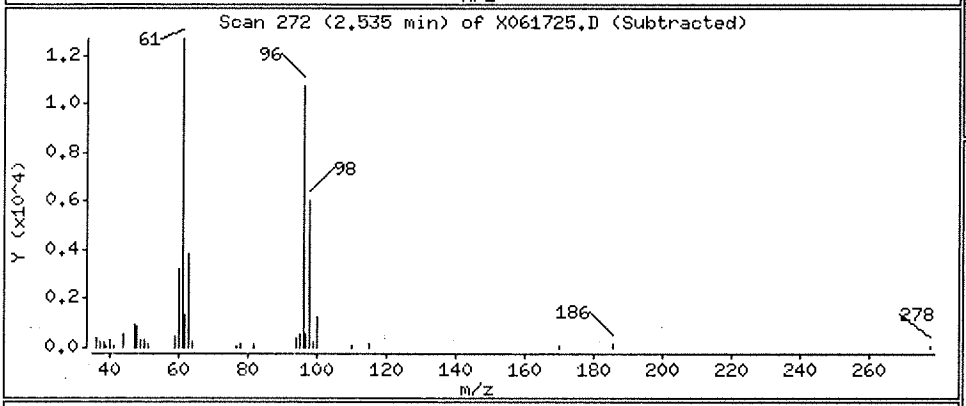
Column phase: DB624

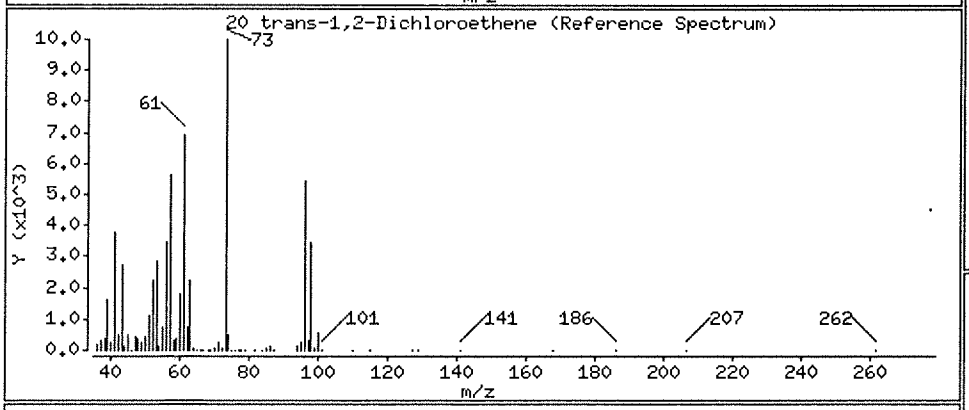
Column diameter: 0.18

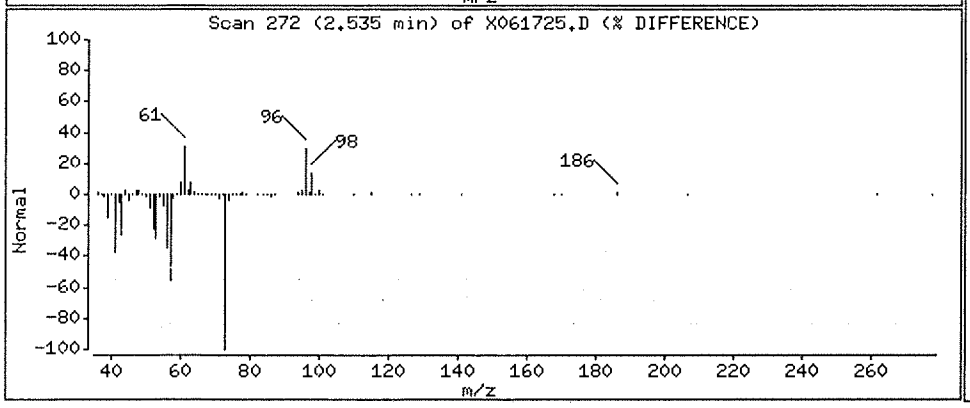
20 trans-1,2-Dichloroethene

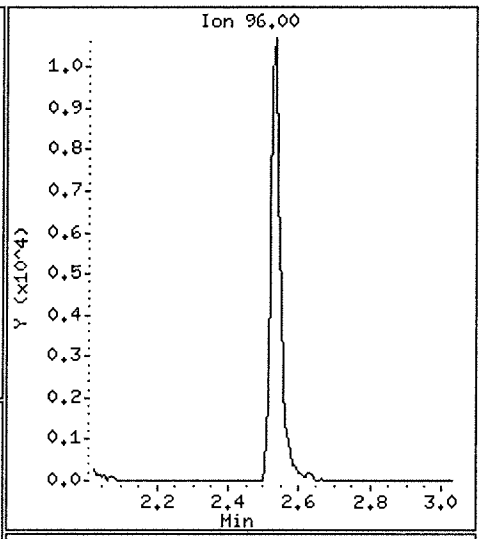
Concentration: 38.77 ug/l

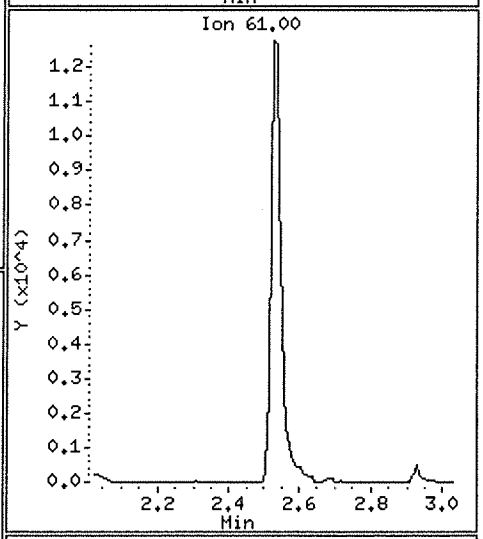


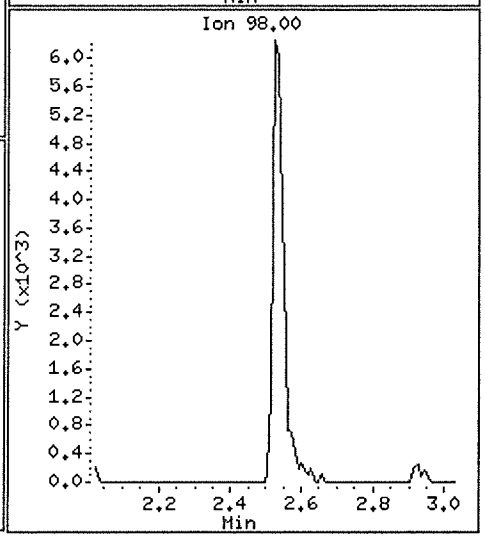












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D

Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

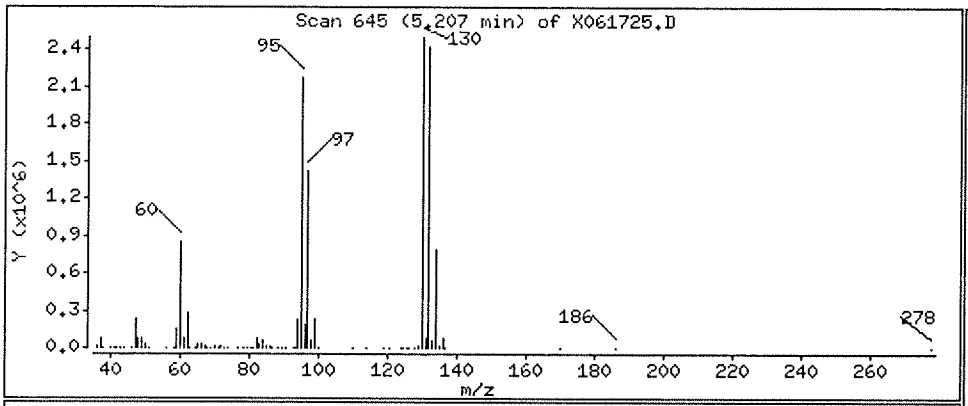
Operator: PC

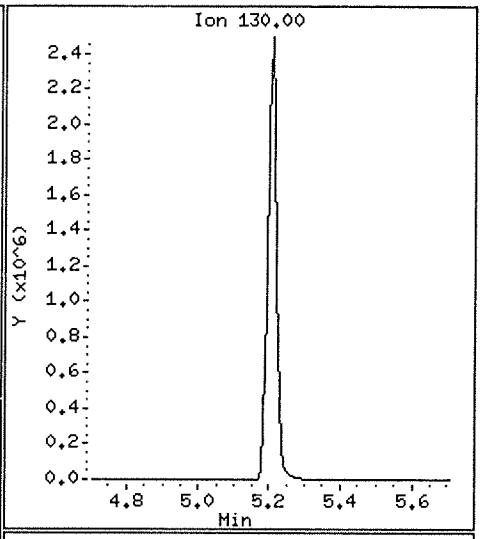
Column phase: DB624

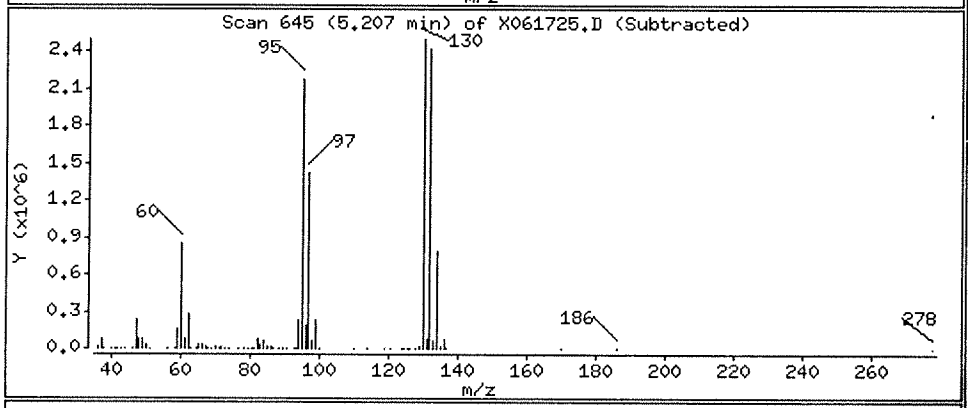
Column diameter: 0.18

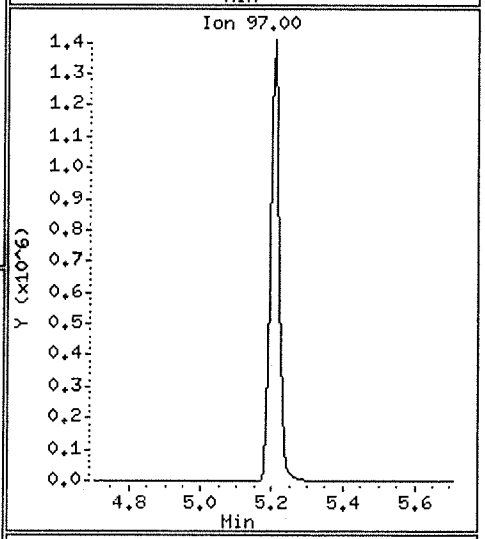
38 Trichloroethene

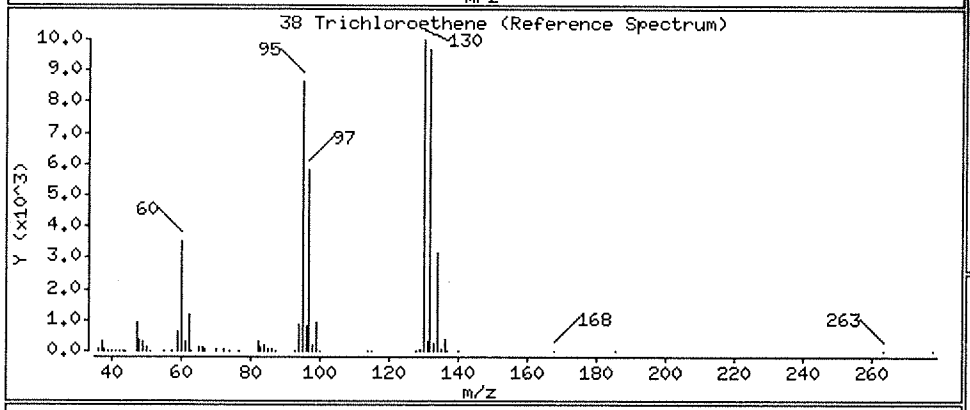
Concentration: 8087.49 ug/l

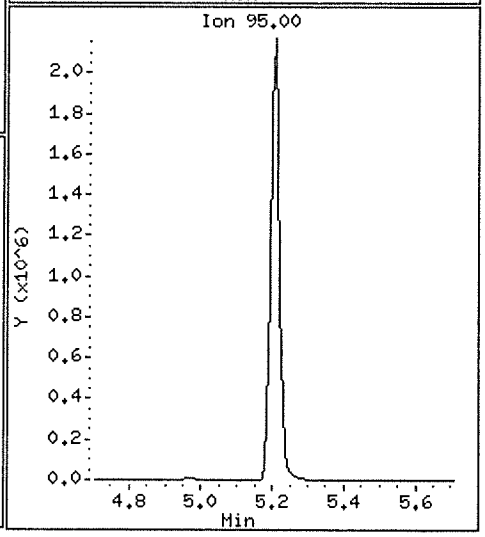


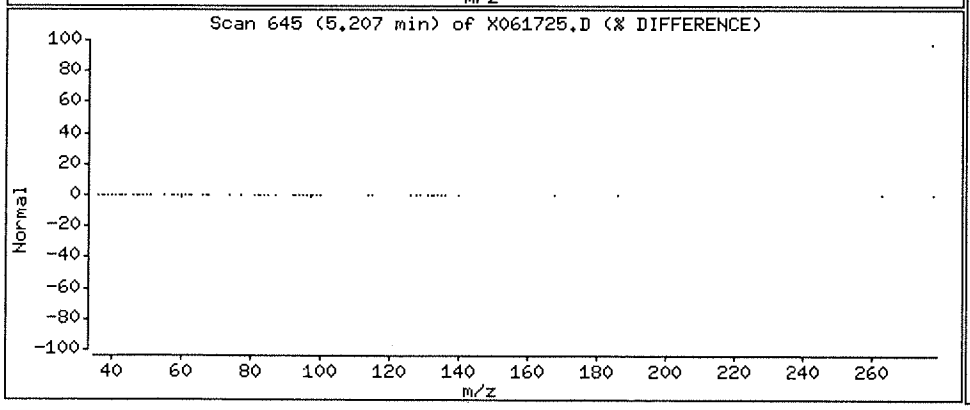












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061725.D

Date : 17-JUN-2021 19:12

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

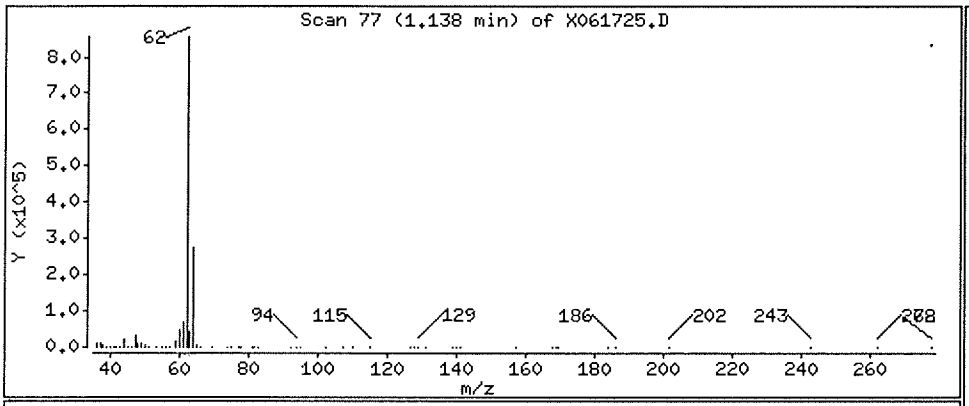
Operator: PC

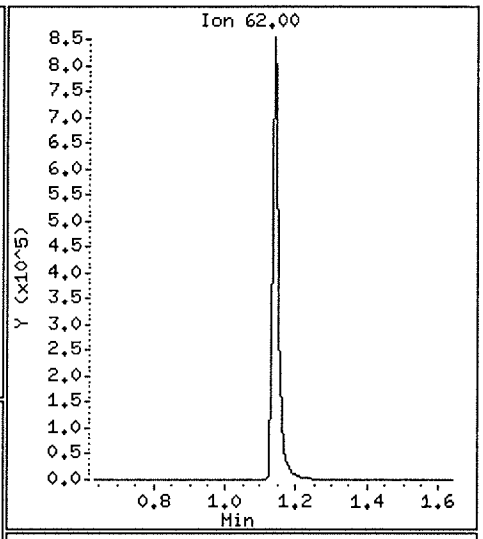
Column phase: DB624

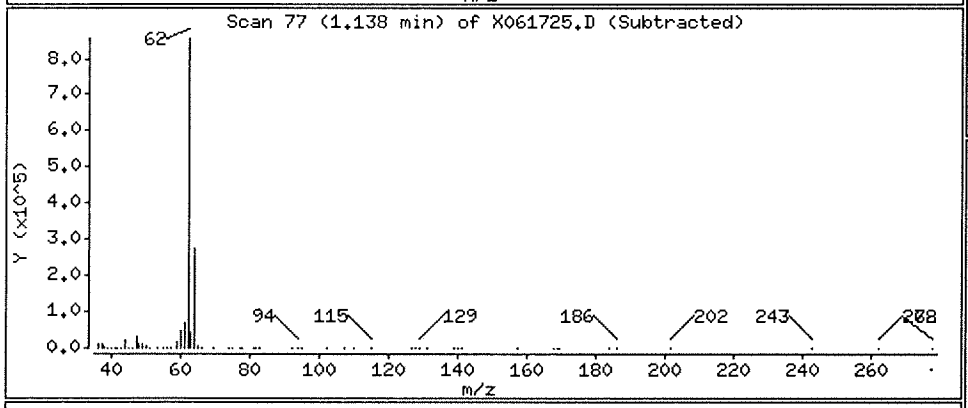
Column diameter: 0.18

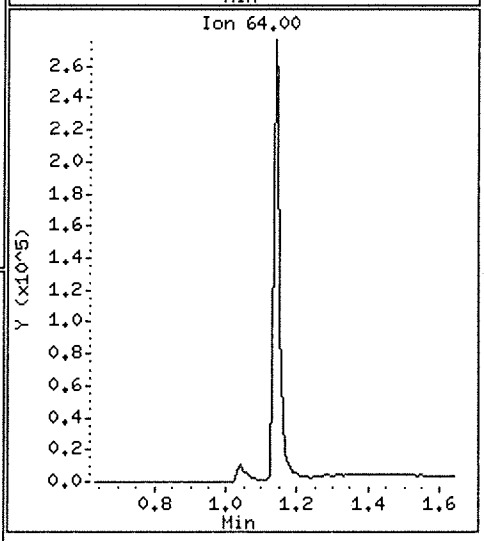
5 Vinyl Chloride

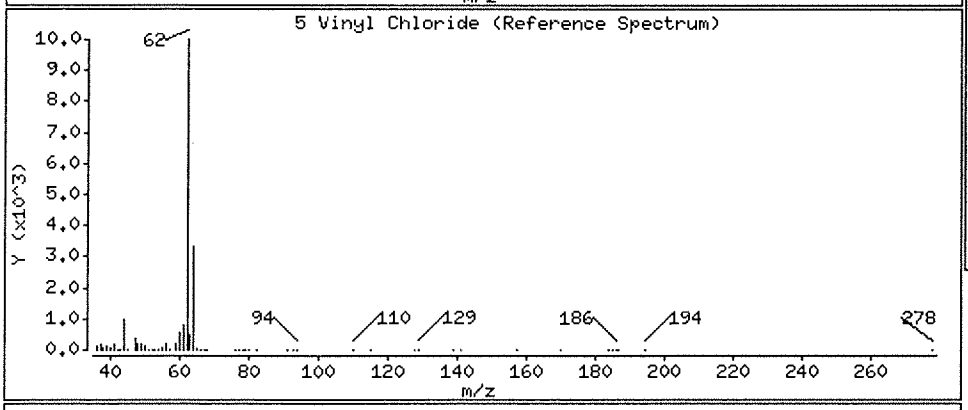
Concentration: 1604.81 ug/l

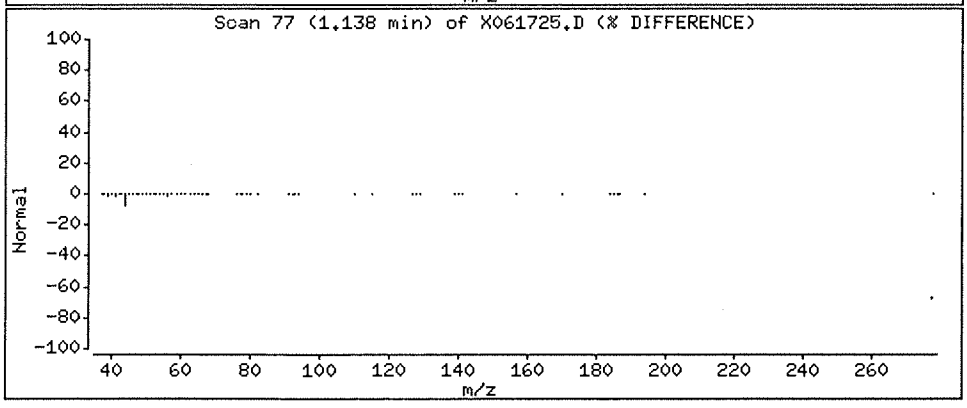












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061726.D
Lab Smp Id: HS21060700-22 Client Smp ID: HS21060700-22
Inj Date : 17-JUN-2021 19:33
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-22;HS21060700-22;;;
Misc Info : HS18090001;WATER;0;100;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 25
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

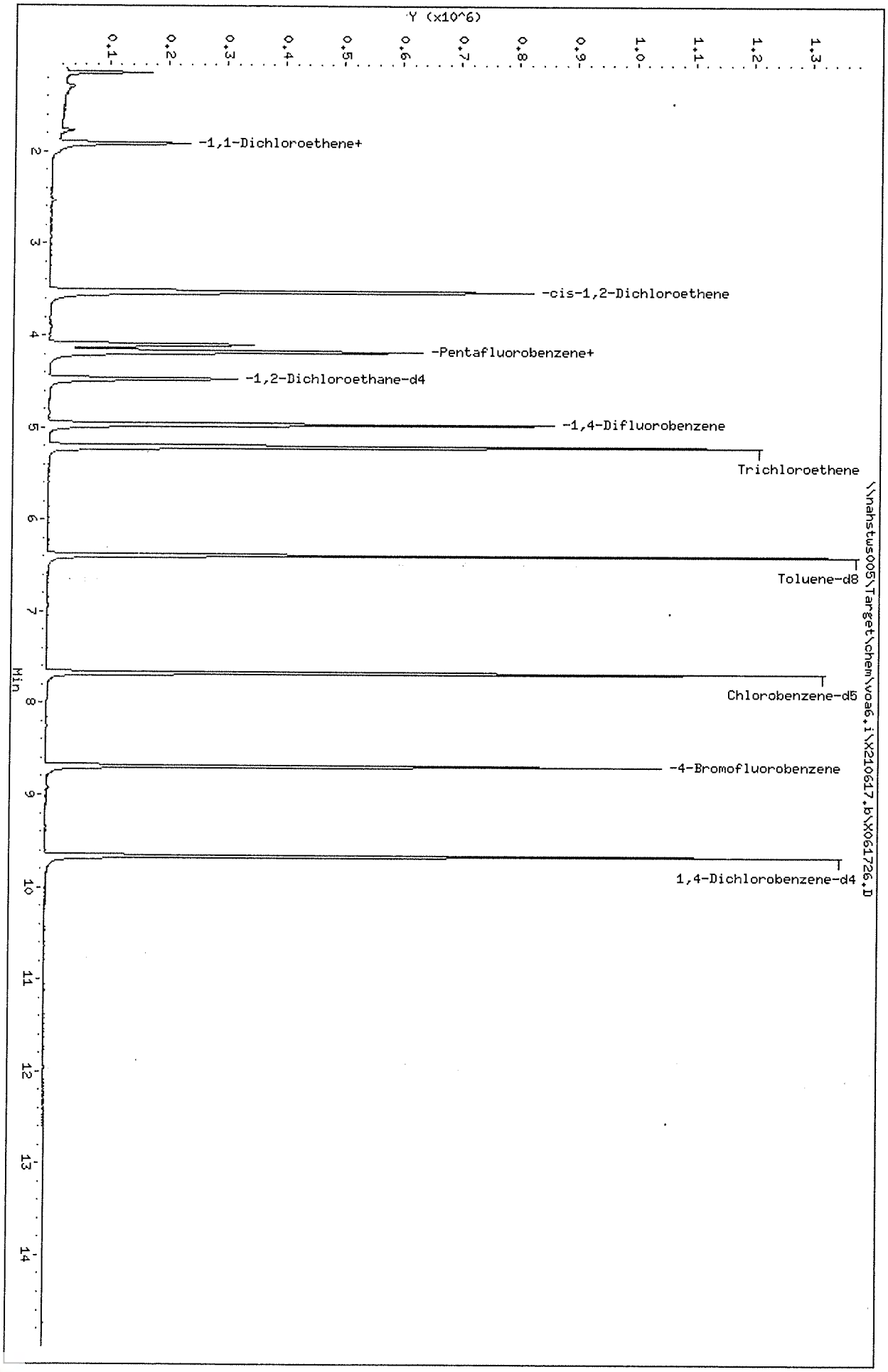
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	570279	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	773430	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	678290	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	345644	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	249398	44.4110	44.41
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	252641	46.3265	46.32
$ 48 Toluene-d8	98	6.389	6.388	(0.833)	879885	52.0774	52.07
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	285797	48.0085	48.00
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	8418	1.43304	143.30(a)
27 cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	466507	78.0465	7804.64
38 Trichloroethene	130	5.207	5.207	(1.049)	428452	80.7127	8071.27
5 Vinyl Chloride	62	1.138	1.138	(0.272)	112786	16.7079	1670.78

QC Flag Legend

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061726.D
Date : 17-JUN-2021 19:33
Client ID: HS21060700-22
Sample Info: HS21060700-22;HS21060700-22;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061726.D

Date : 17-JUN-2021 19:33

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

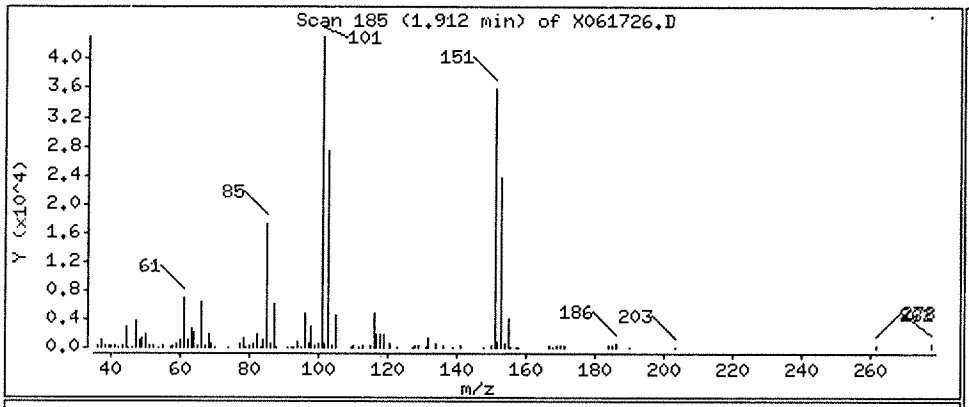
Operator: PC

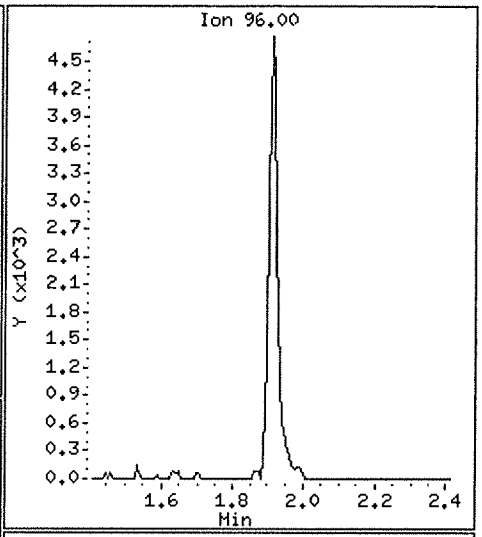
Column phase: DB624

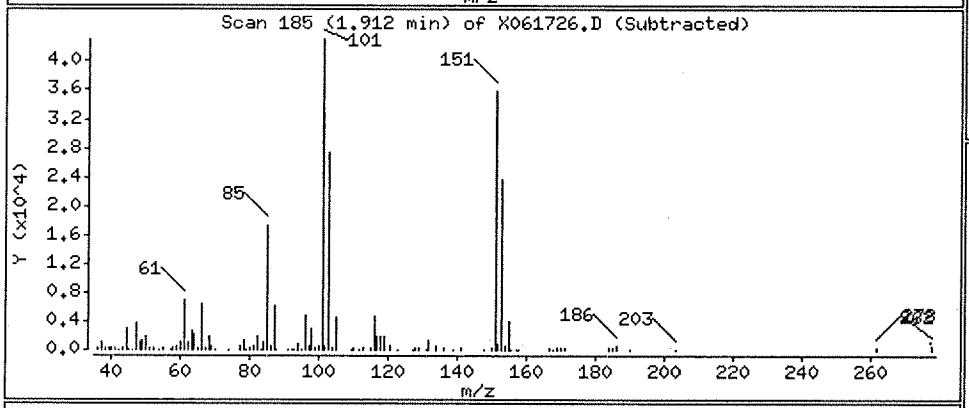
Column diameter: 0.18

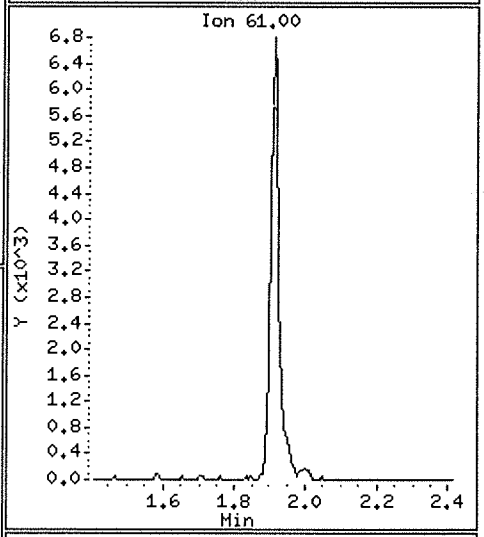
11 1,1-Dichloroethene

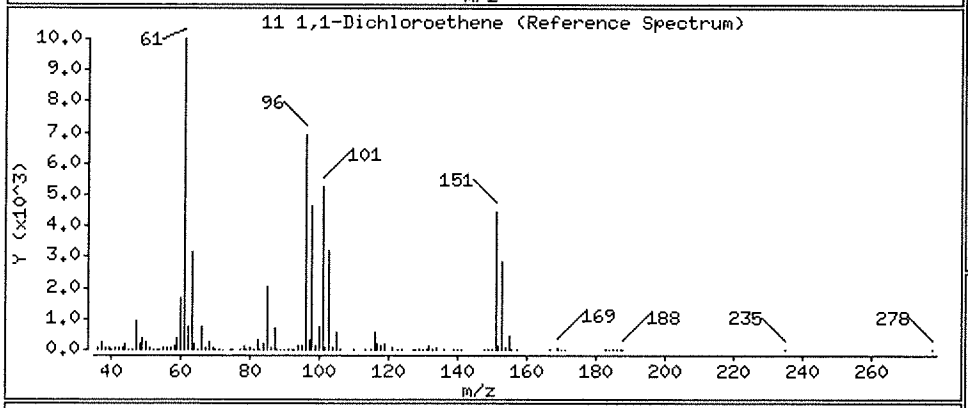
Concentration: 143.30 ug/l

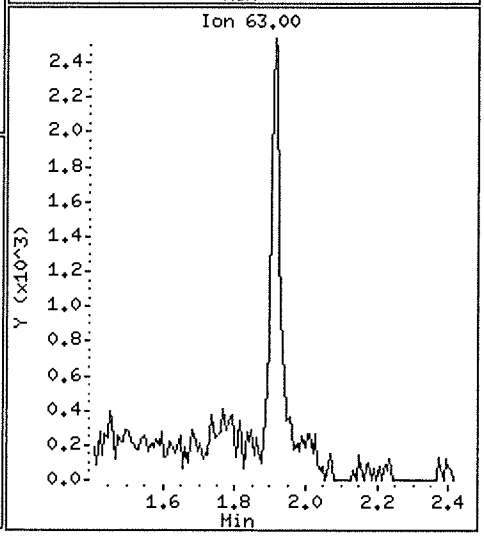


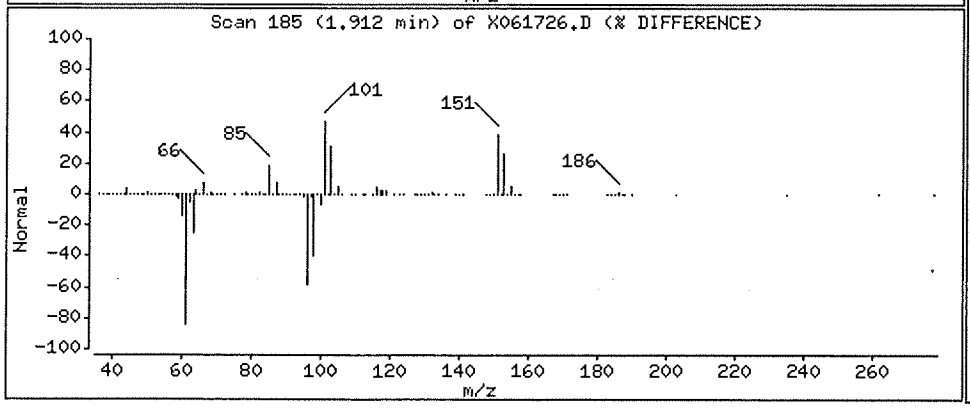












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061726.D

Date : 17-JUN-2021 19:33

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

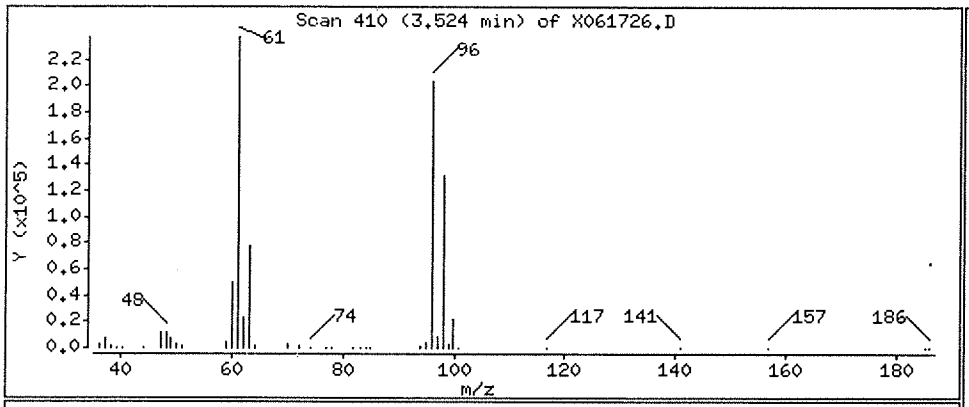
Operator: PC

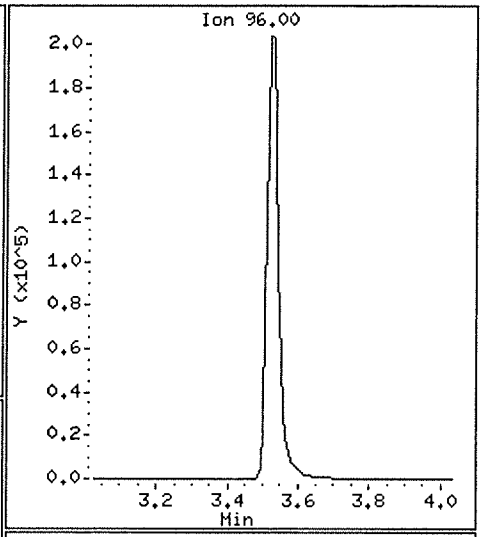
Column phase: DB624

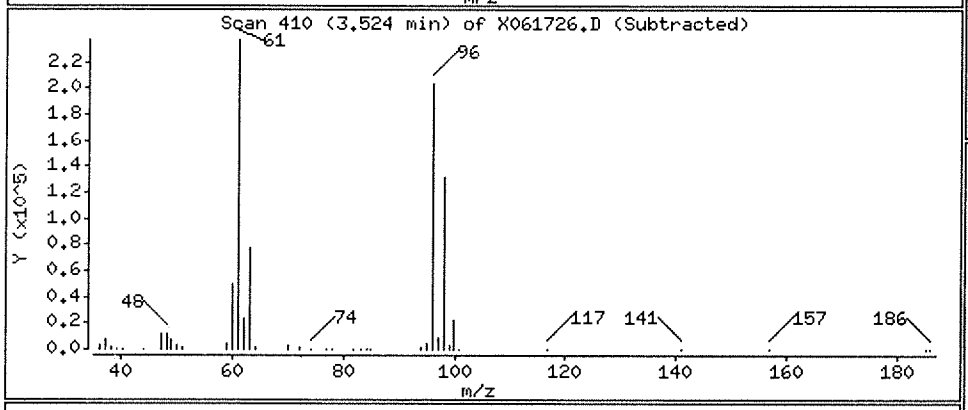
Column diameter: 0.18

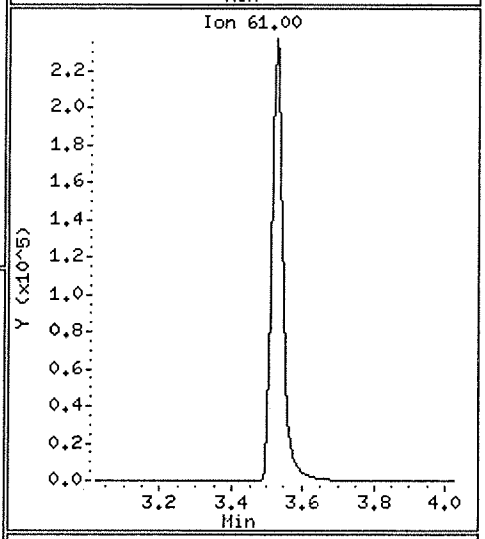
27 cis-1,2-Dichloroethene

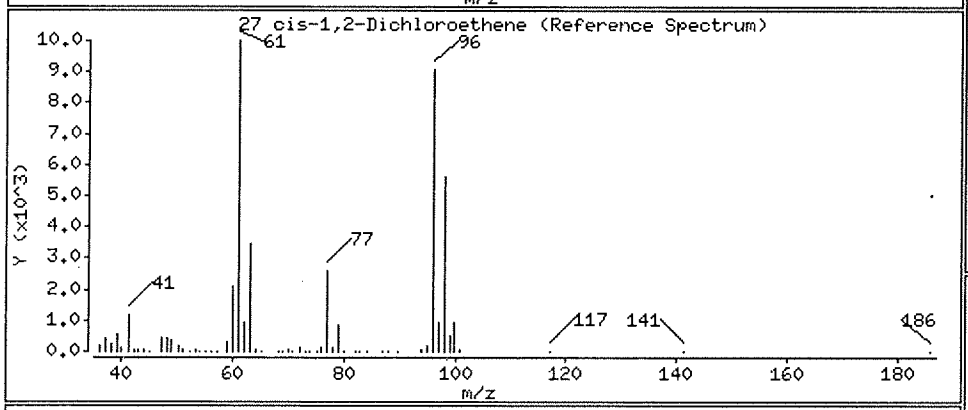
Concentration: 7804.64 ug/l

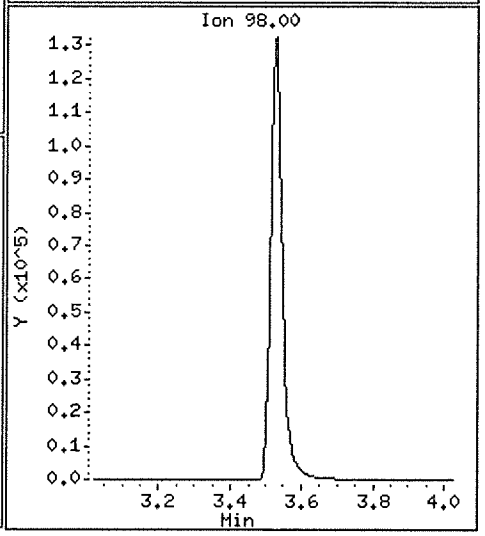


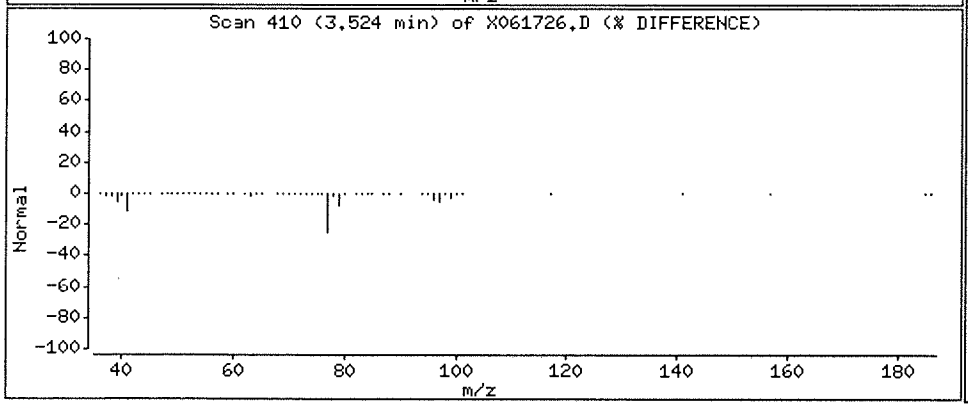












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061726.D

Date : 17-JUN-2021 19:33

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

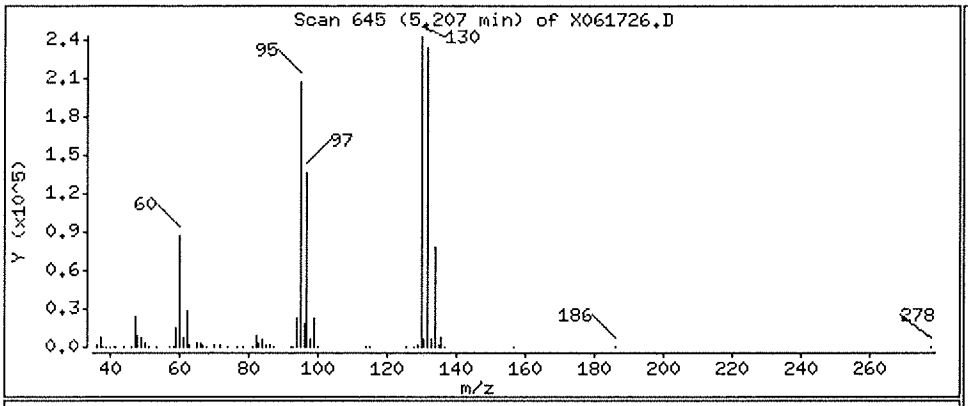
Operator: PC

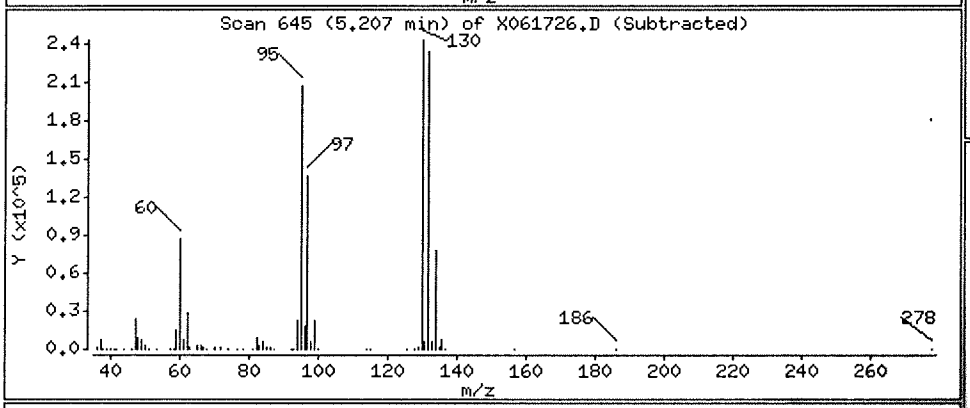
Column phase: DB624

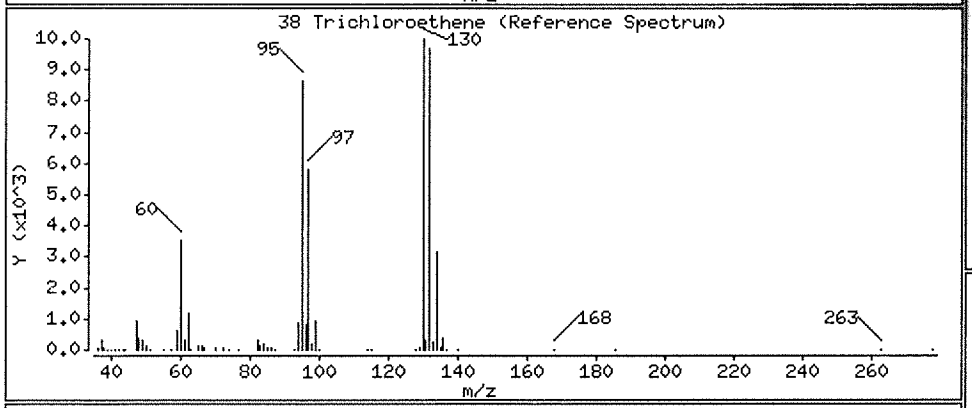
Column diameter: 0.18

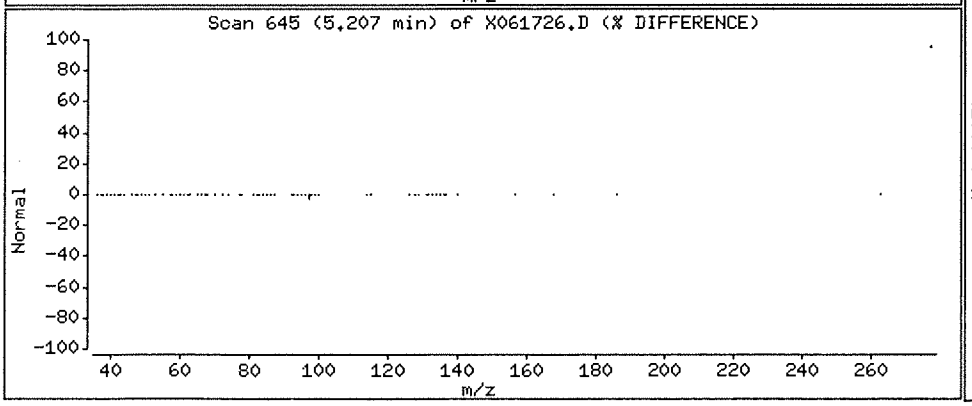
38 Trichloroethene

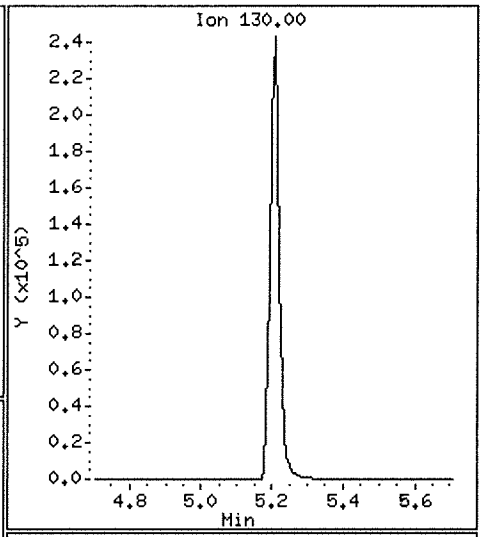
Concentration: 8071.27 ug/l

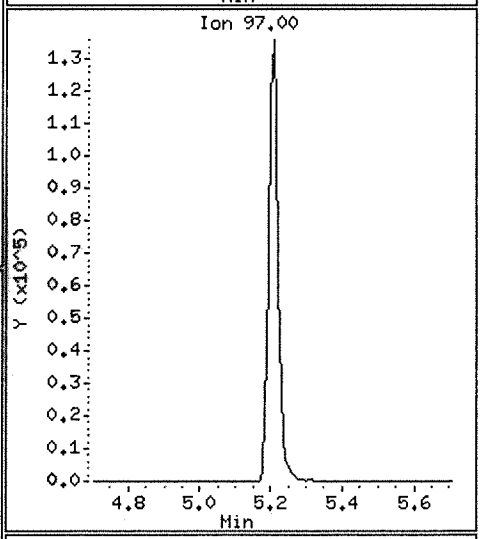


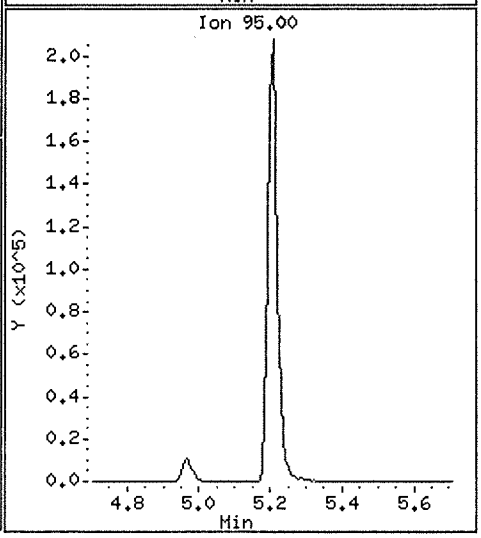












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061726.D

Date : 17-JUN-2021 19:33

Client ID: HS21060700-22

Instrument: voa6.i

Sample Info: HS21060700-22;HS21060700-22;;;

Purge Volume: 5.0

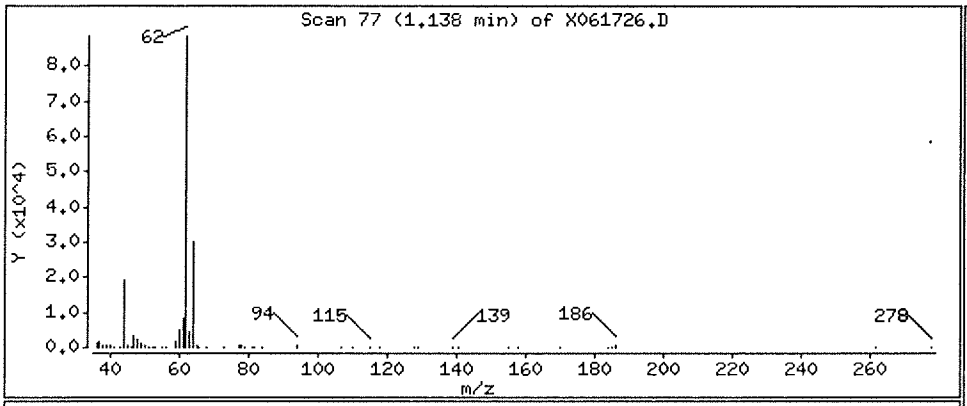
Operator: PC

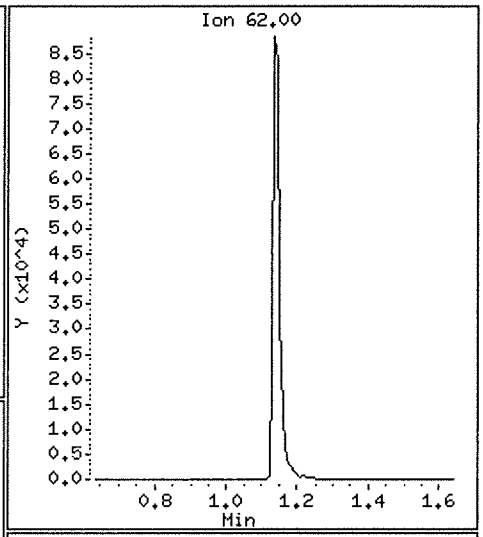
Column phase: DB624

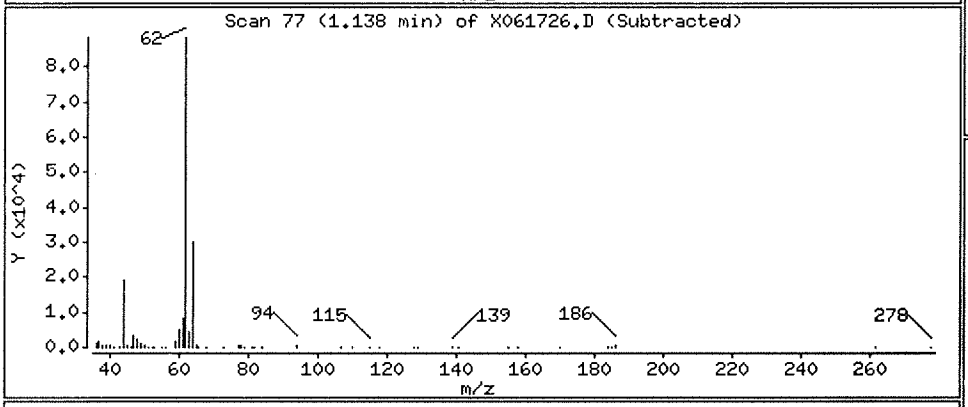
Column diameter: 0.18

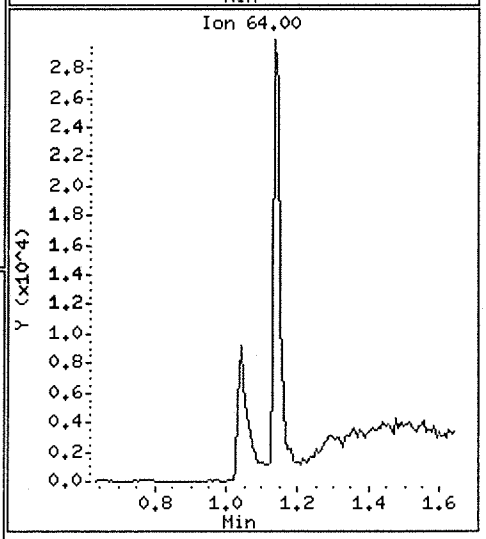
5 Vinyl Chloride

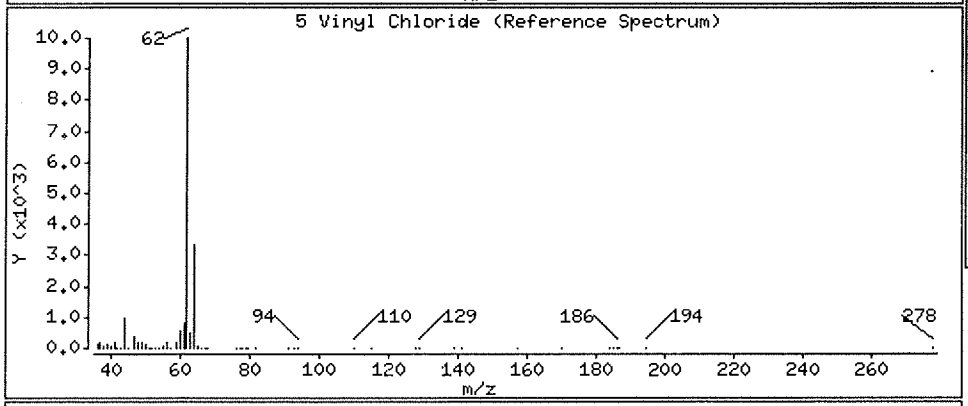
Concentration: 1670.78 ug/l

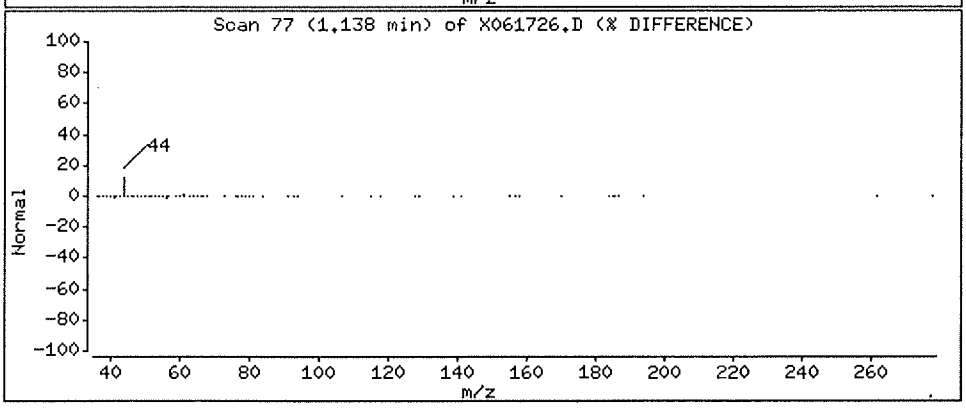












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061727.D
Lab Smp Id: HS21060700-23 Client Smp ID: HS21060700-23
Inj Date : 17-JUN-2021 19:54
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-23;HS21060700-23;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 26
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.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

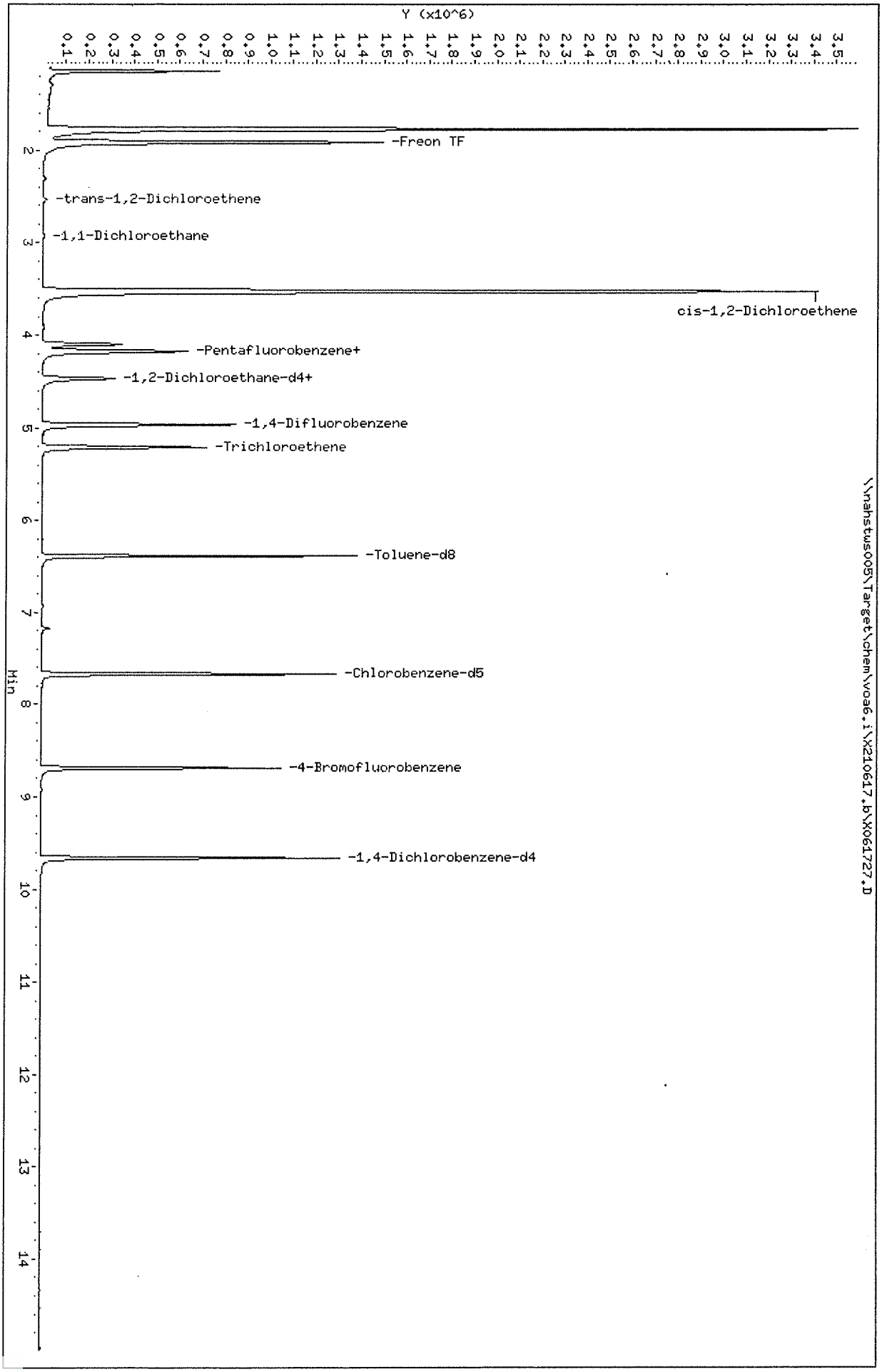
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	569330	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	773219	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	664711	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	338462	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	247856	44.2092	44.20
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	251456	46.1840	46.18
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	863279	52.1383	52.13
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	282522	48.4213	48.42
22 1,1-Dichloroethane	63	2.929	2.922	(0.700)	7284	0.80928	8.09(a)
37 Benzene	78	4.512	4.512	(0.909)	14170	0.79772	7.97(a)
27 cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	1875960	314.371	3143.70(A)
20 trans-1,2-Dichloroethene	96	2.535	2.528	(0.606)	7327	1.37829	13.78(a)
38 Trichloroethene	130	5.206	5.207	(1.049)	254573	47.9701	479.70
5 Vinyl Chloride	62	1.138	1.138	(0.272)	589020	87.4016	874.01

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061727.D
Date : 17-JUN-2021 19:54
Client ID: HS21060700-23
Sample Info: HS21060700-23;HS21060700-23;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061727.D

Date : 17-JUN-2021 19:54

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

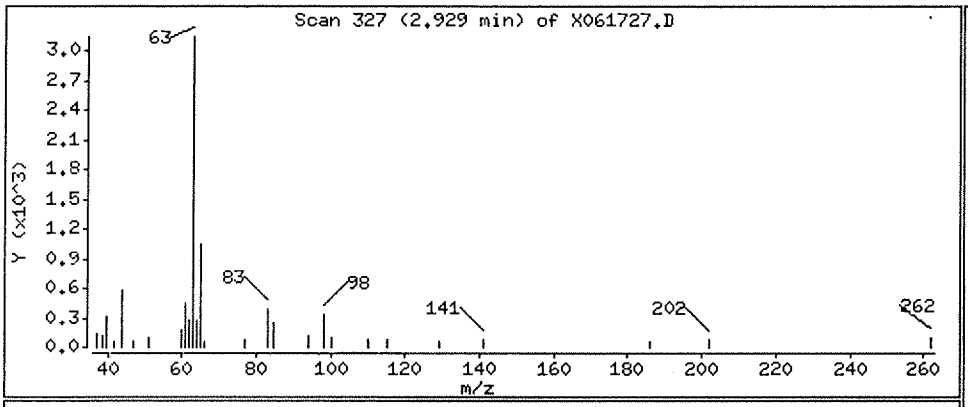
Operator: PC

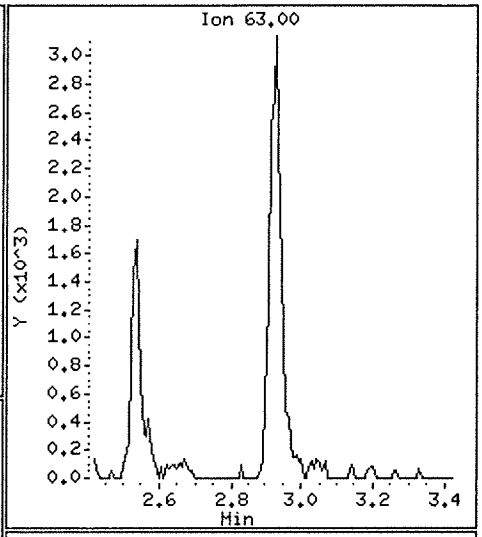
Column phase: DB624

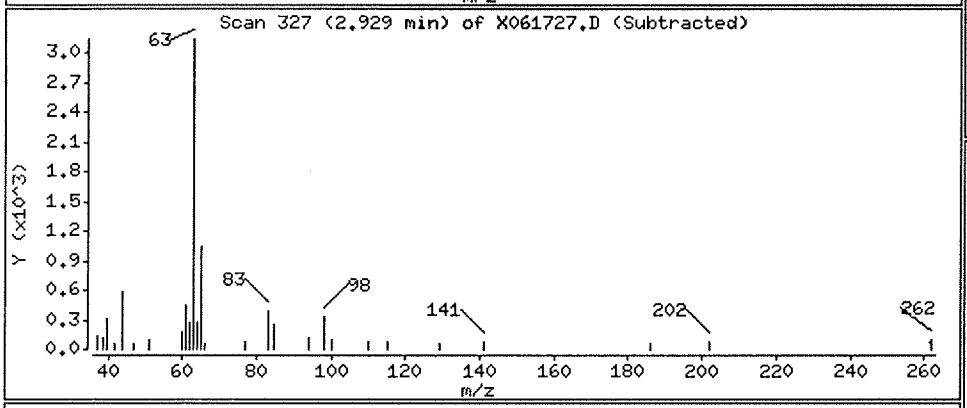
Column diameter: 0.18

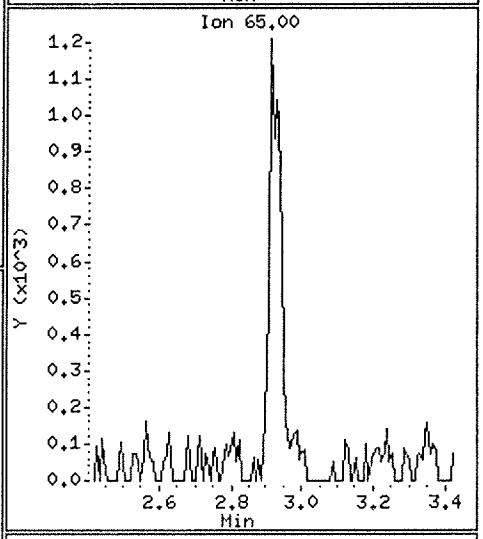
22 1,1-Dichloroethane

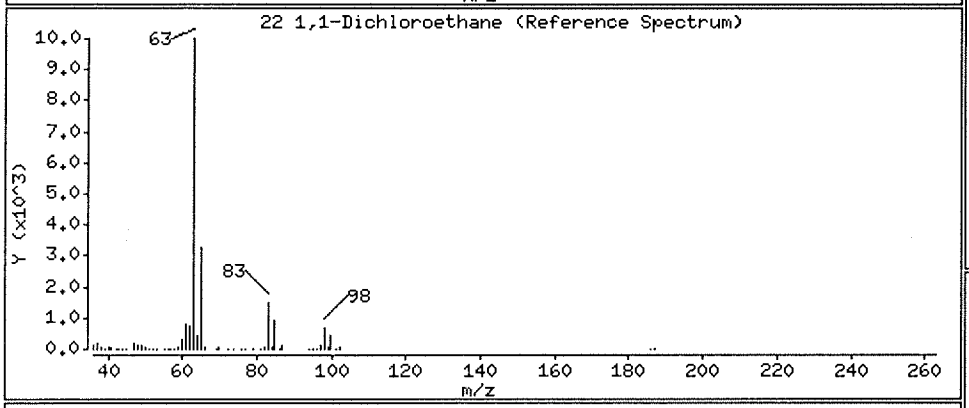
Concentration: 8.09 ug/l

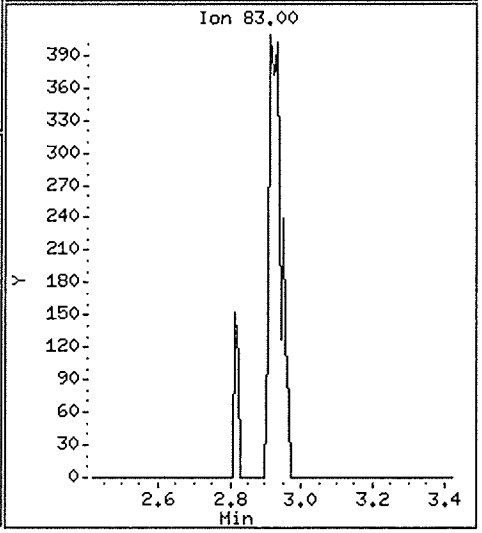


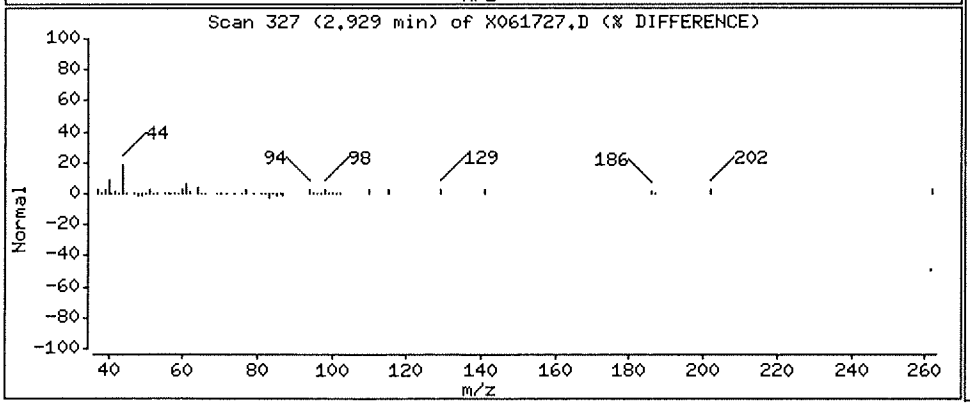












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Date : 17-JUN-2021 19:54

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

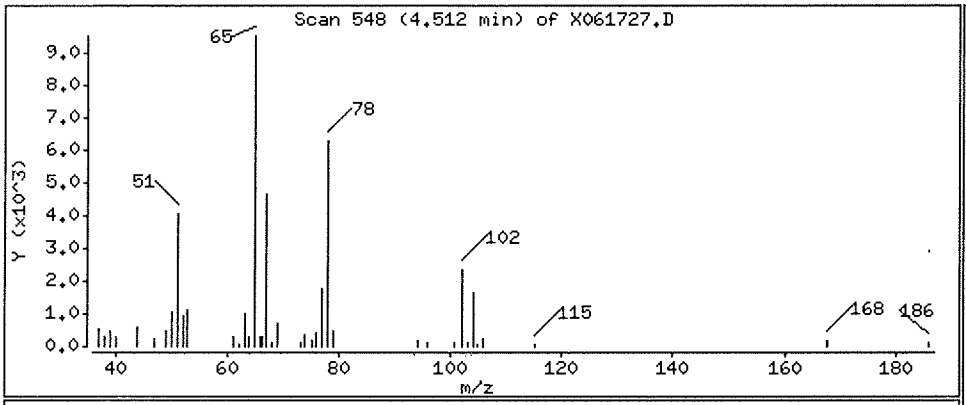
Operator: PC

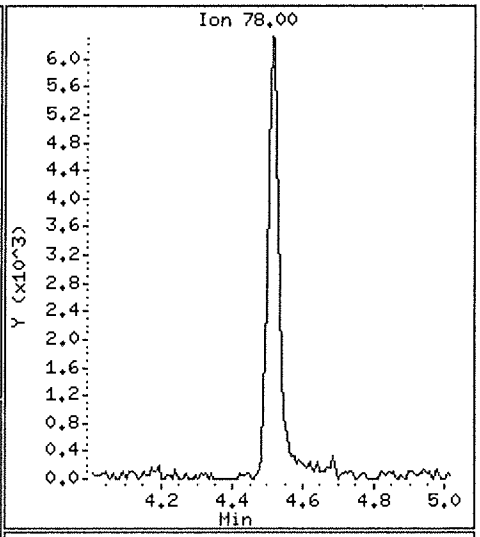
Column phase: DB624

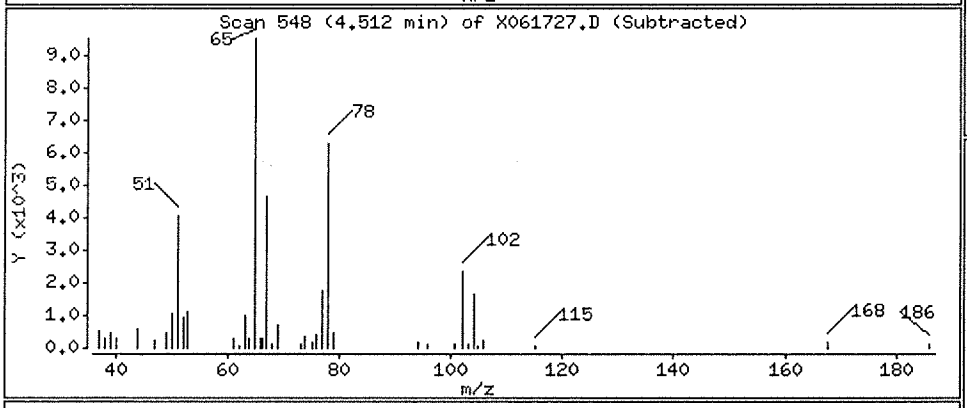
Column diameter: 0.18

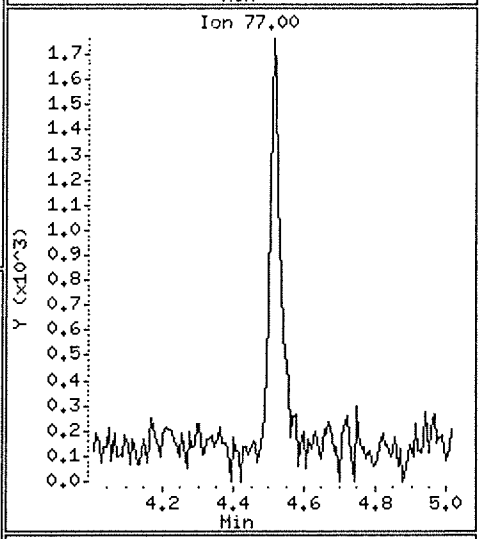
37 Benzene

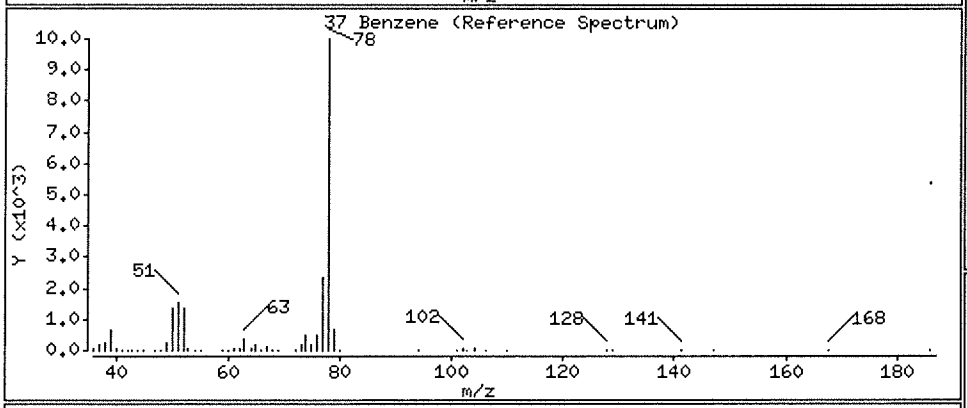
Concentration: 7.97 ug/l

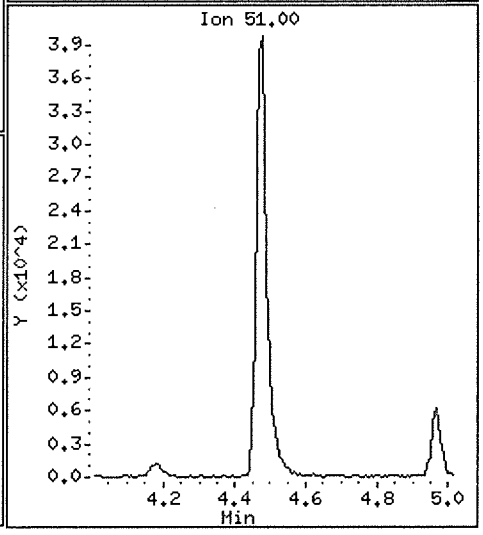


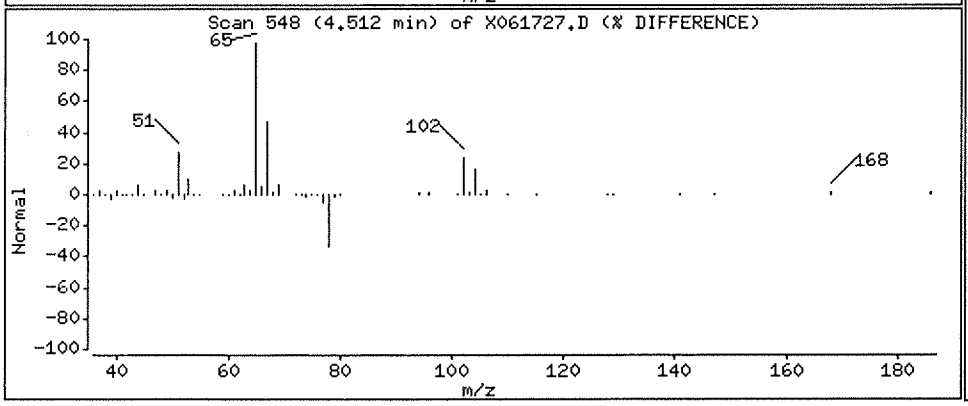












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Date : 17-JUN-2021 19:54

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

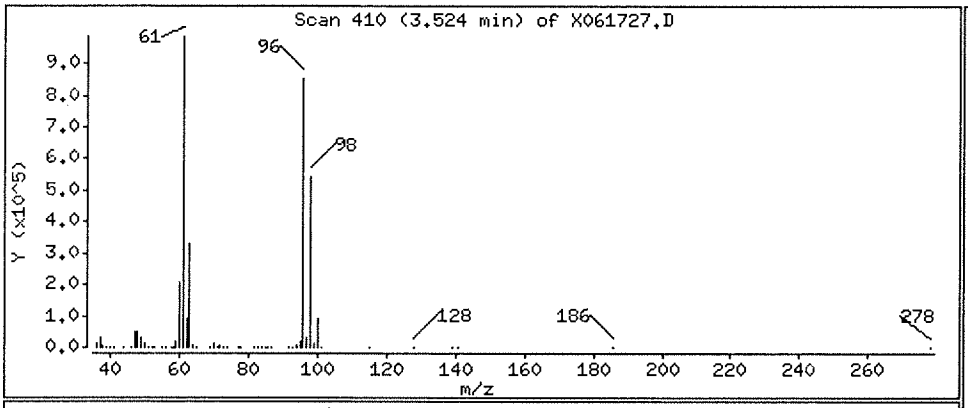
Operator: PC

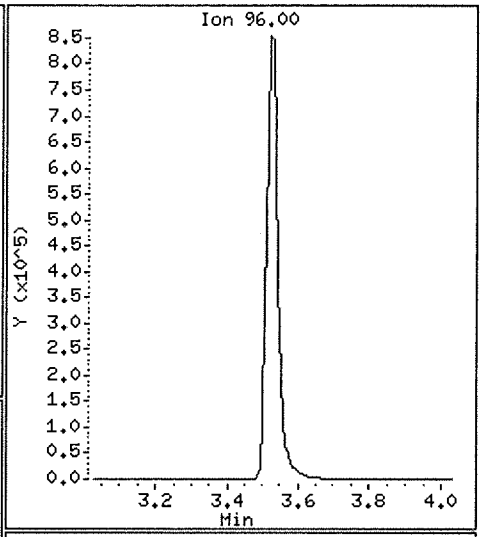
Column phase: DB624

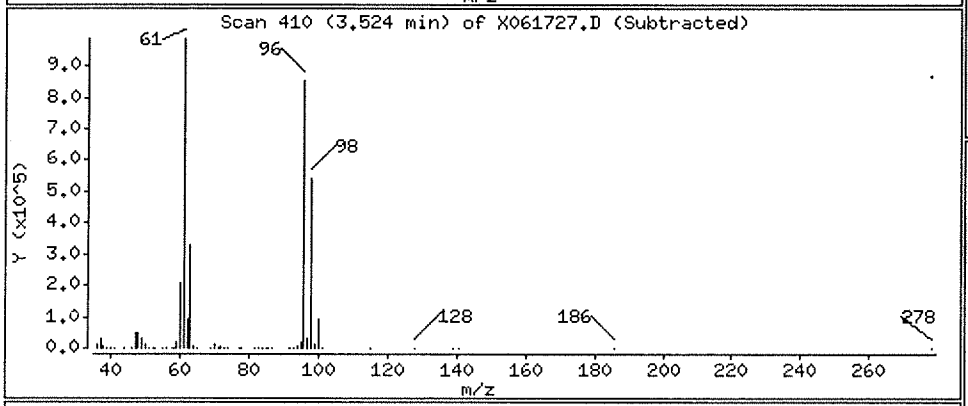
Column diameter: 0.18

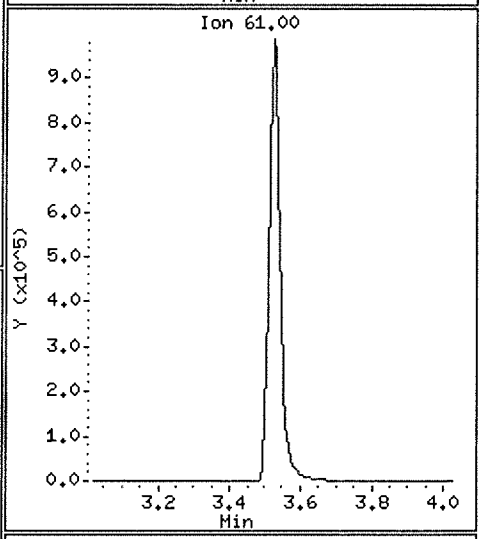
27 cis-1,2-Dichloroethene

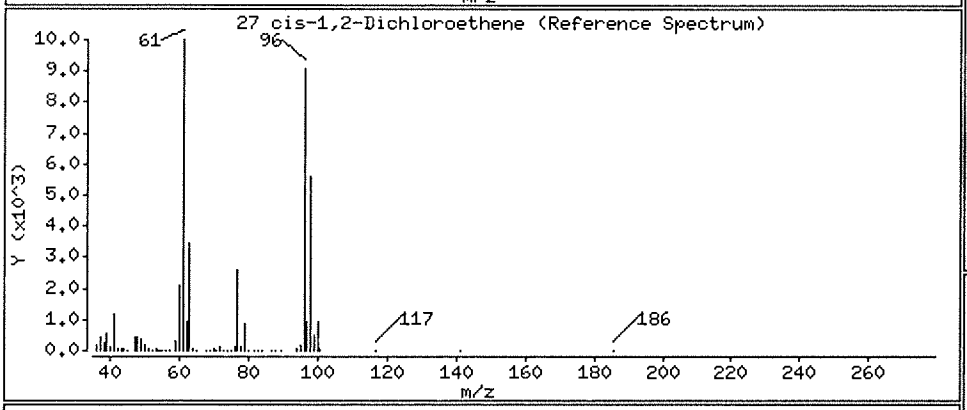
Concentration: 3143.70 ug/l

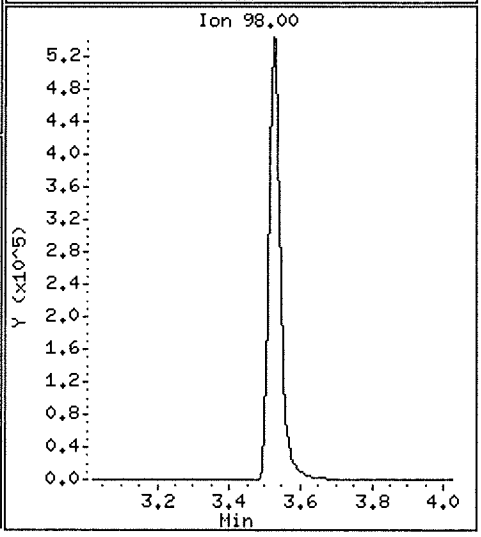


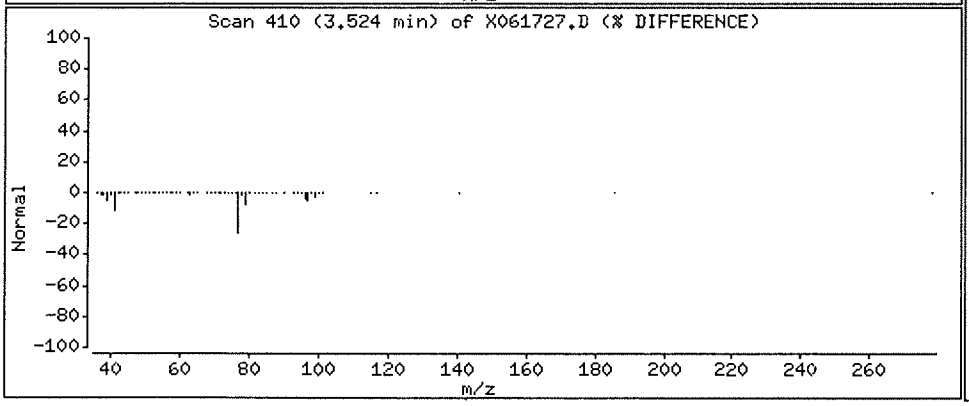












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Date : 17-JUN-2021 19:54

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

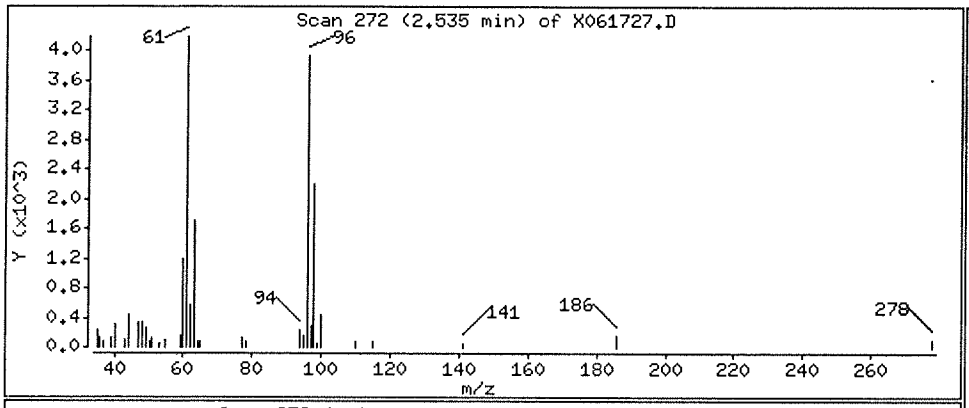
Operator: PC

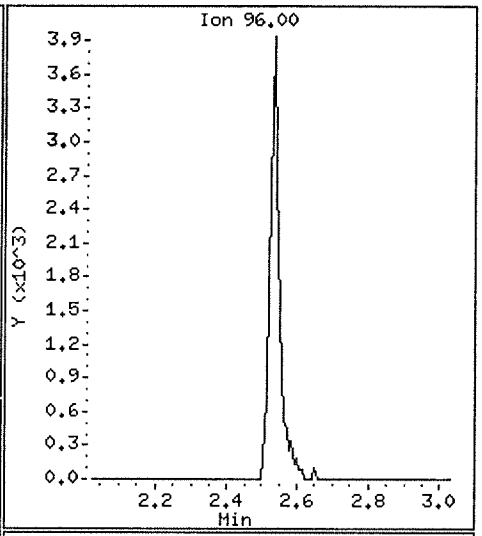
Column phase: DB624

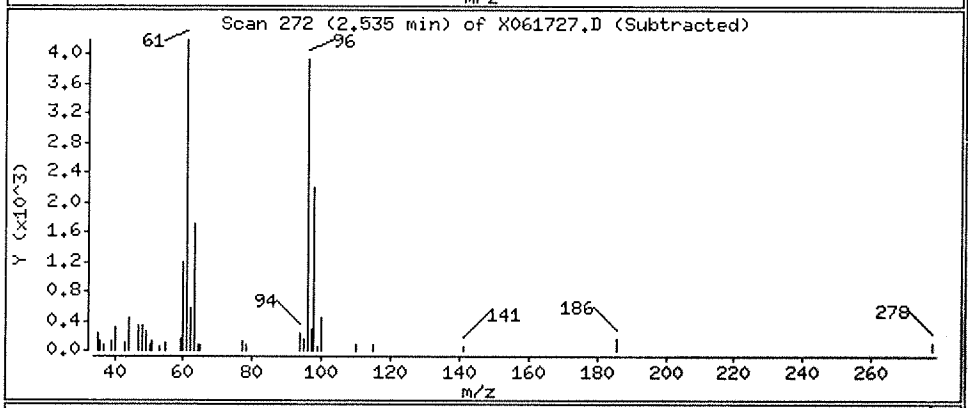
Column diameter: 0.18

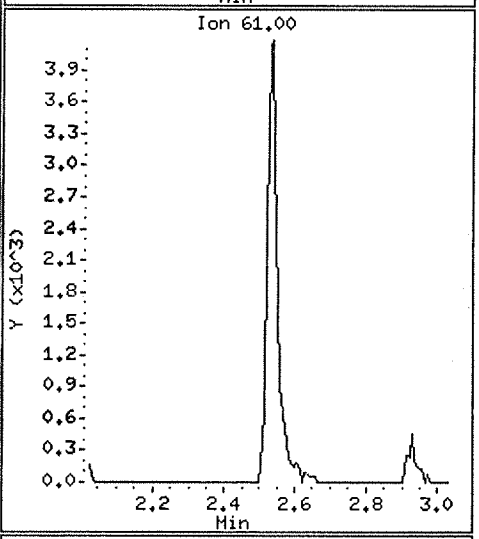
20 trans-1,2-Dichloroethene

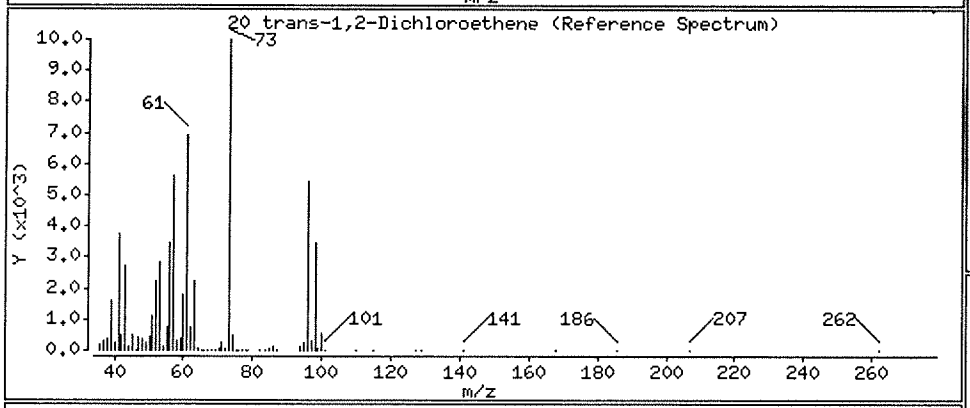
Concentration: 13.78 ug/l

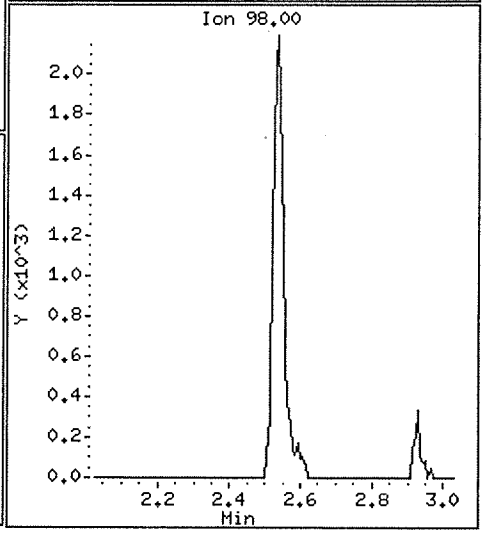


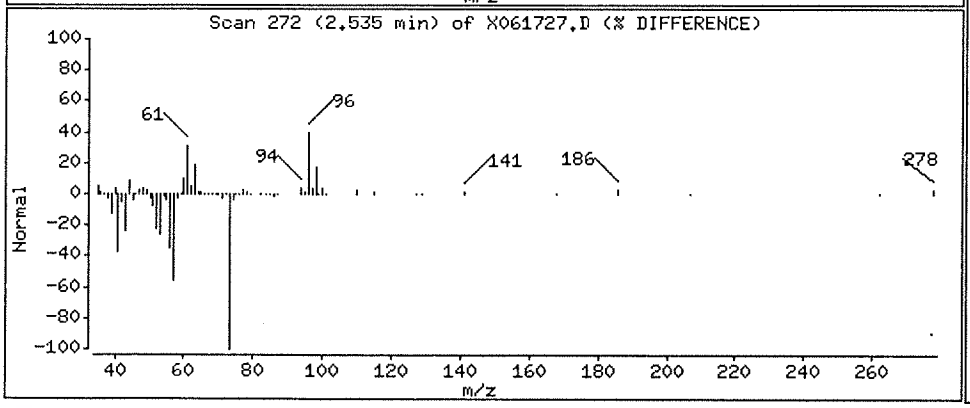












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Date : 17-JUN-2021 19:54

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

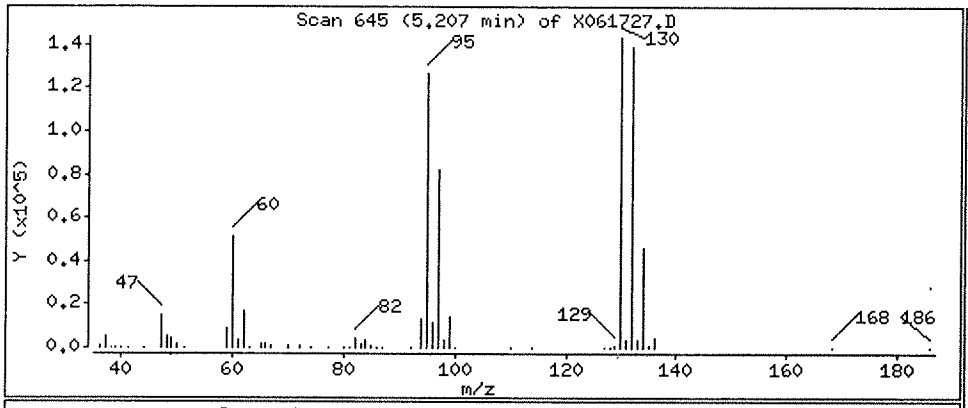
Operator: PC

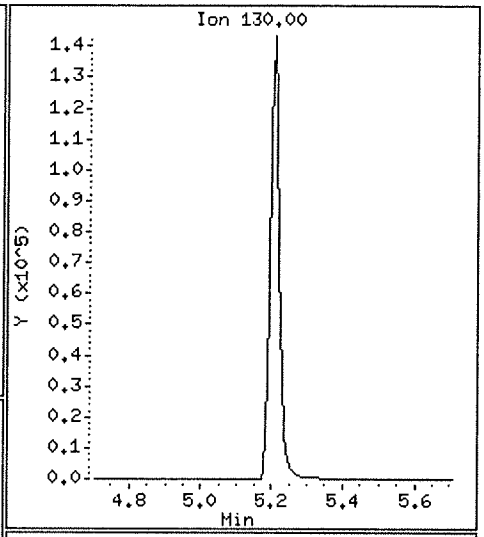
Column phase: DB624

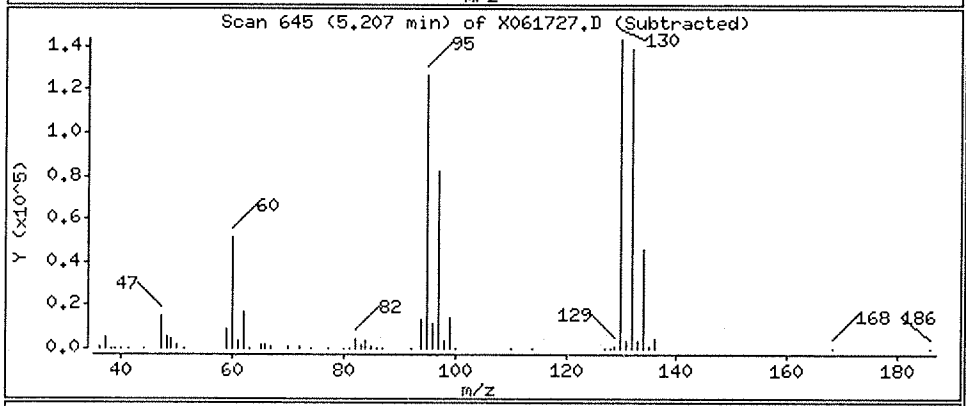
Column diameter: 0.18

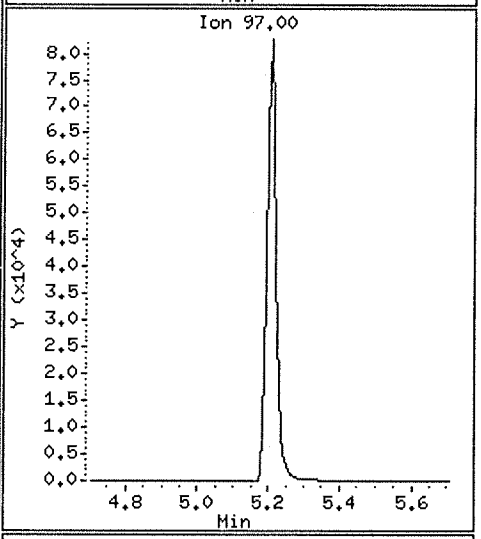
38 Trichloroethene

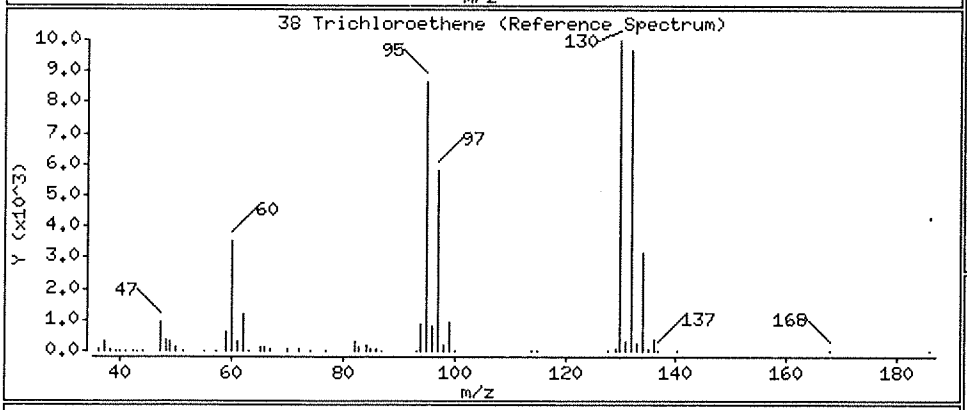
Concentration: 479.70 ug/l

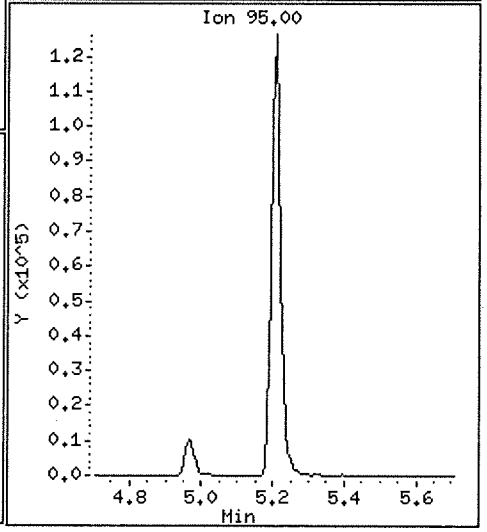


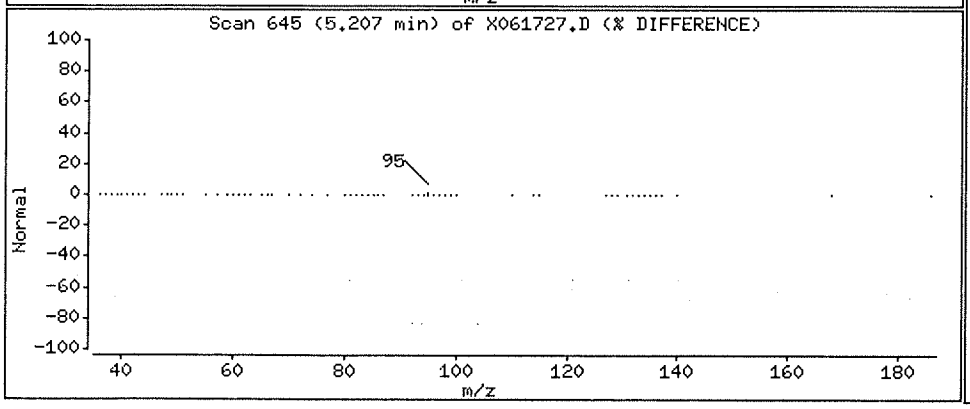












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061727.D

Date : 17-JUN-2021 19:54

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

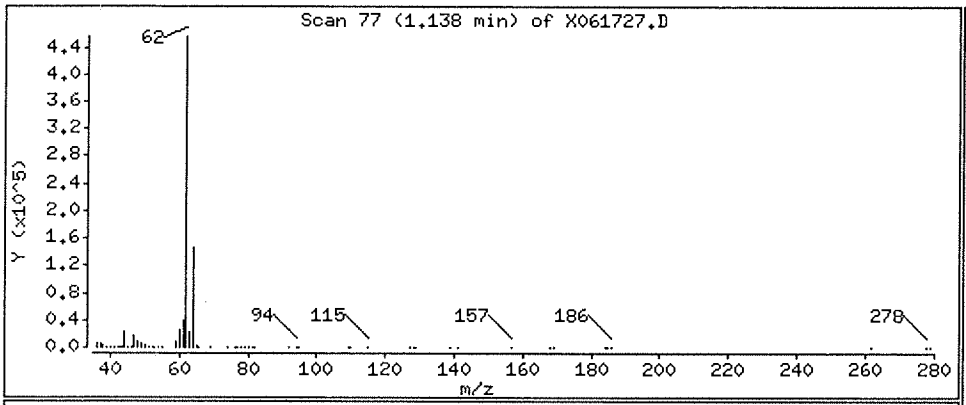
Operator: PC

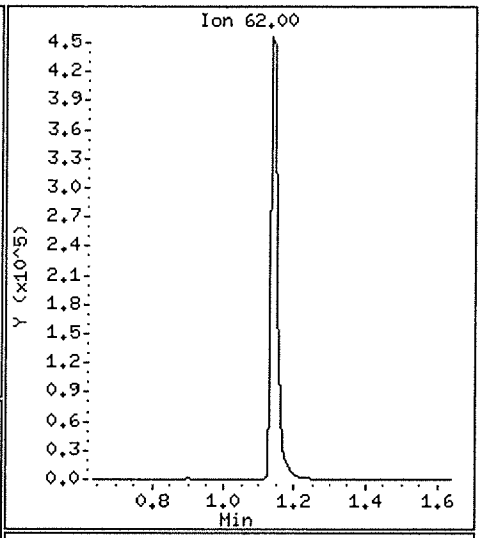
Column phase: DB624

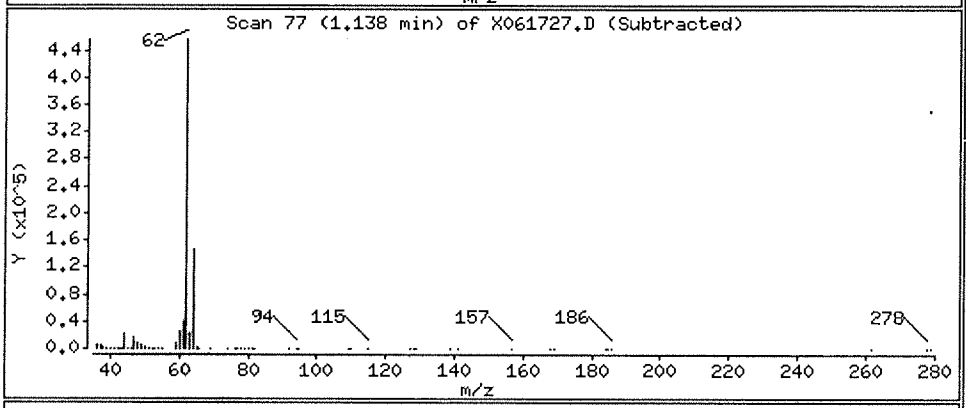
Column diameter: 0.18

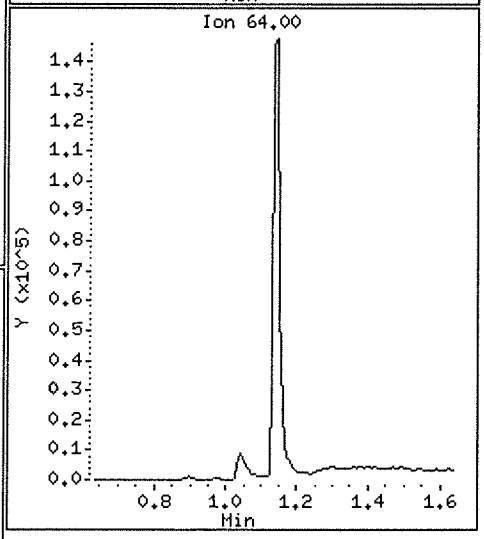
5 Vinyl Chloride

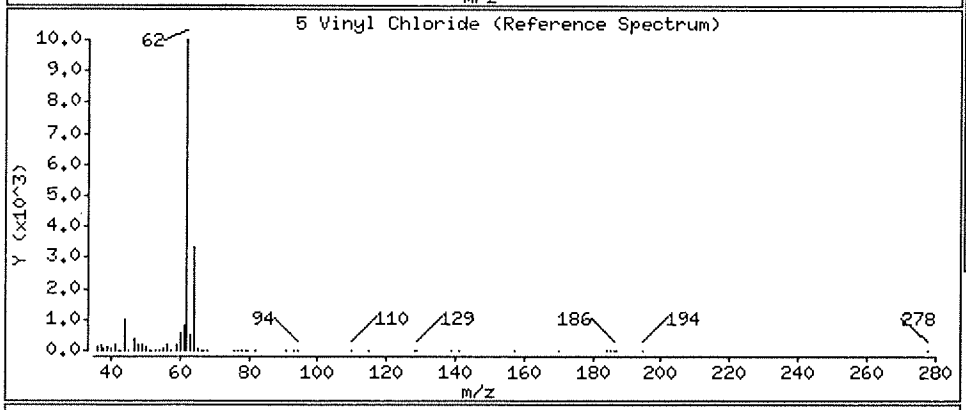
Concentration: 874.01 ug/l

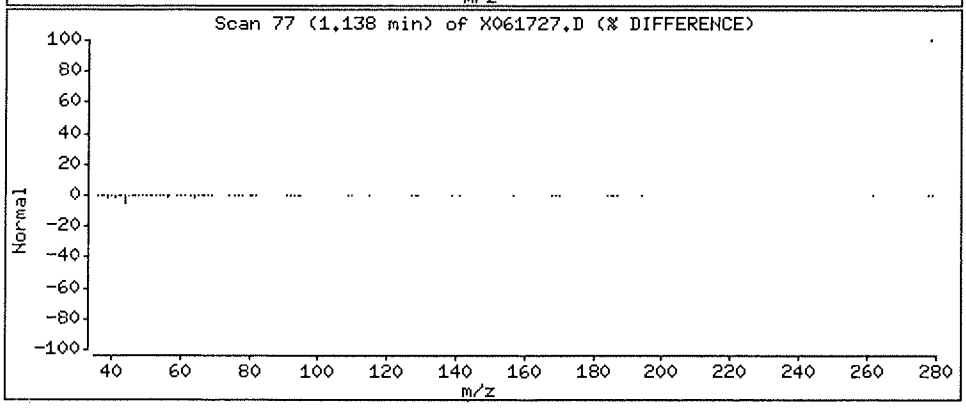












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061728.D
Lab Smp Id: HS21060700-23 Client Smp ID: HS21060700-23
Inj Date : 17-JUN-2021 20:15
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-23;HS21060700-23;;;
Misc Info : HS18090001;WATER;0;100;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 27
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: NAHSTW7056

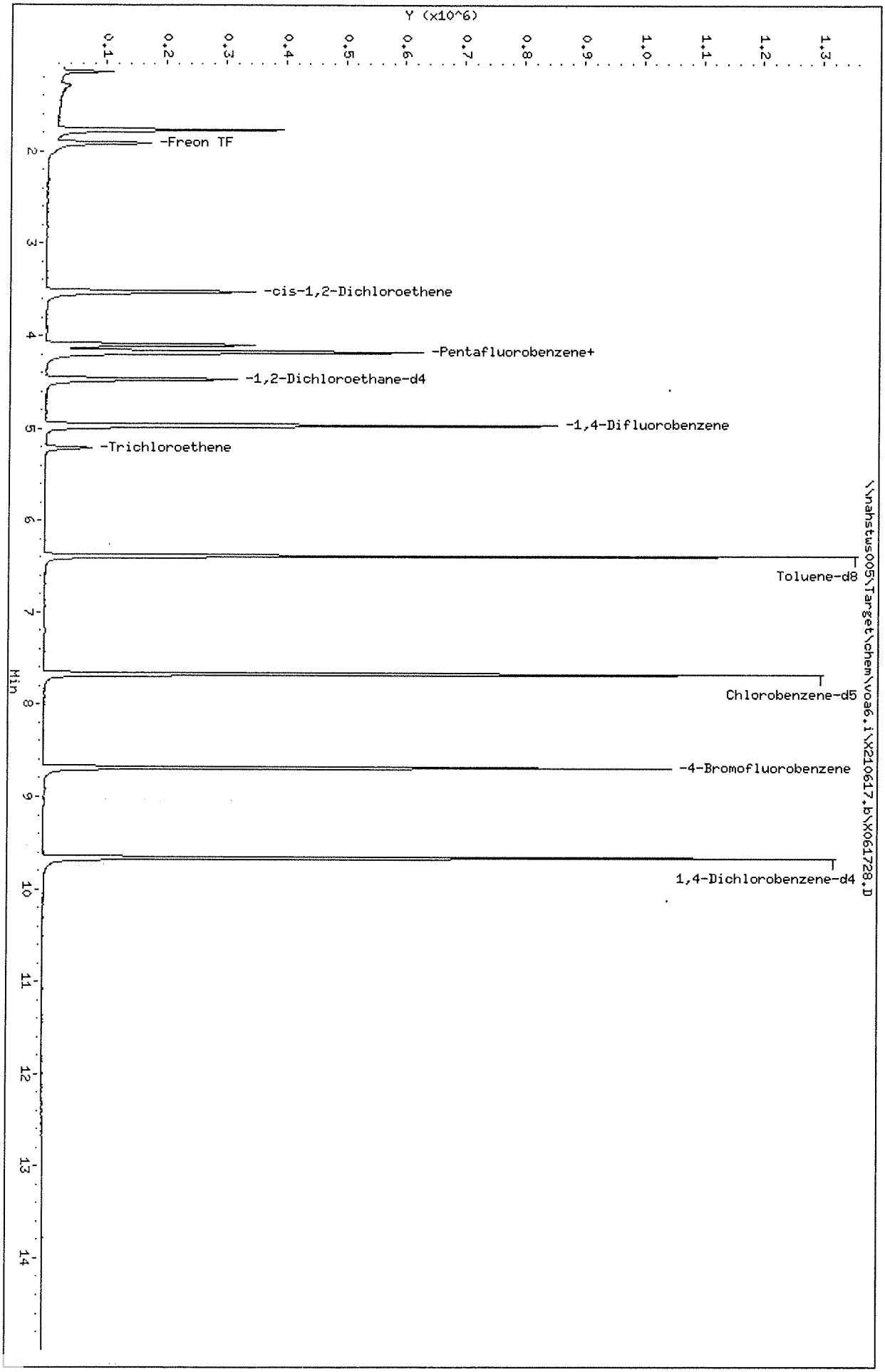
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	564180	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	776928	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	680772	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	338700	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	250090	45.0179	45.01
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	251397	46.6008	46.60
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	862438	50.8586	50.85
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	281888	47.1922	47.19
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	197502	33.3992	3339.92
38 Trichloroethene	130	5.206	5.207	(1.049)	28820	5.40473	540.47
5 Vinyl Chloride	62	1.145	1.138	(0.274)	63722	9.54169	954.16

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061728.D
Date : 17-JUN-2021 20:15
Client ID: HS21060700-23
Sample Info: HS21060700-23;HS21060700-23;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061728.D

Date : 17-JUN-2021 20:15

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

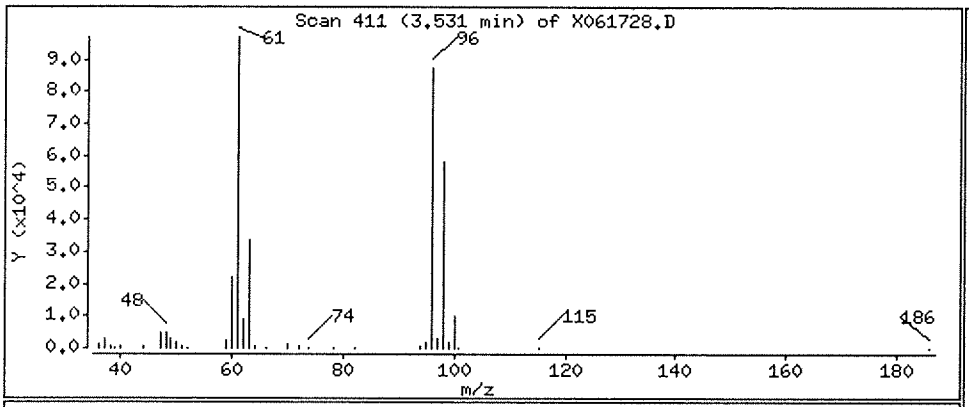
Operator: PC

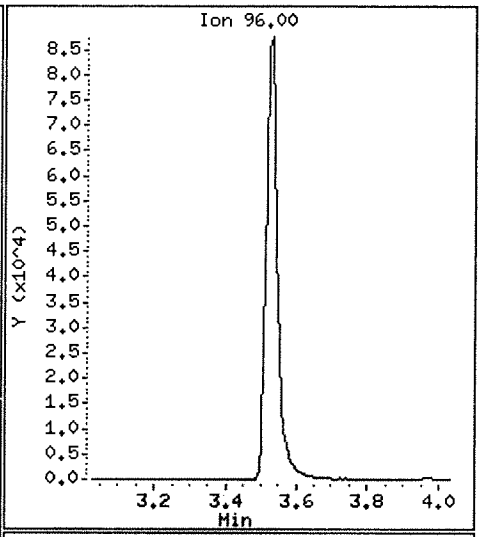
Column phase: DB624

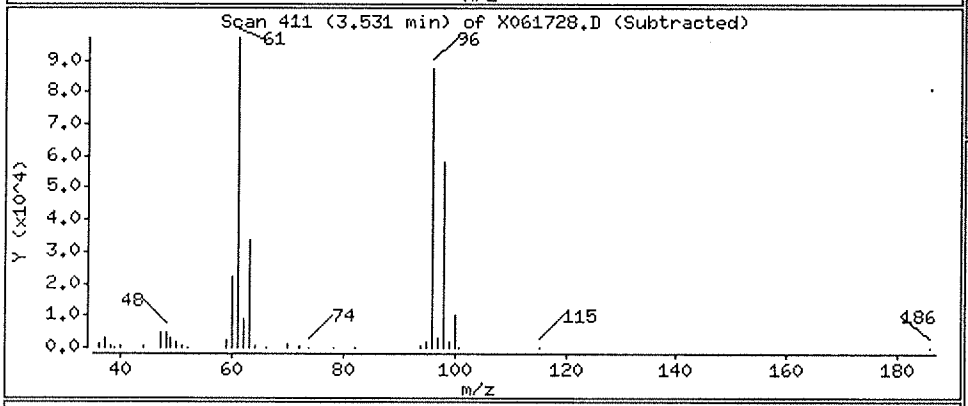
Column diameter: 0.18

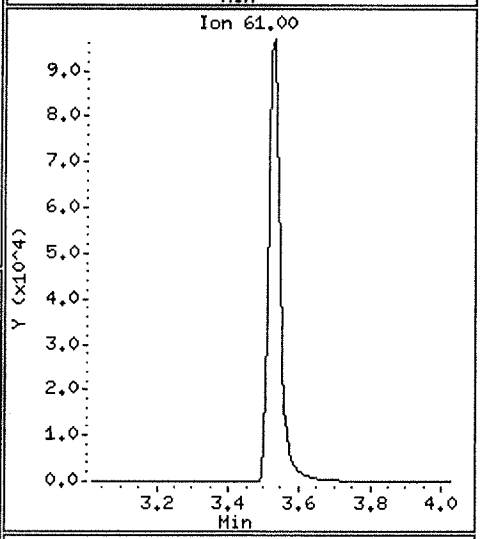
27 cis-1,2-Dichloroethene

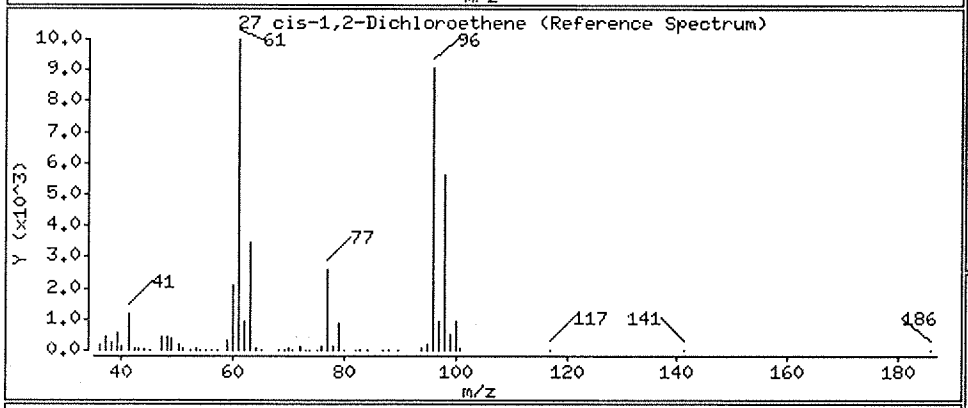
Concentration: 3339.92 ug/l

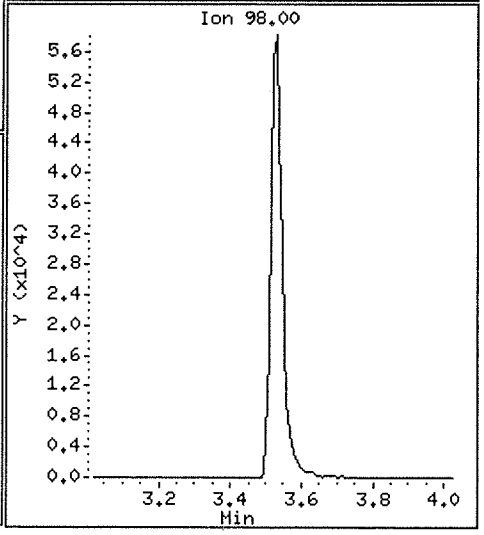


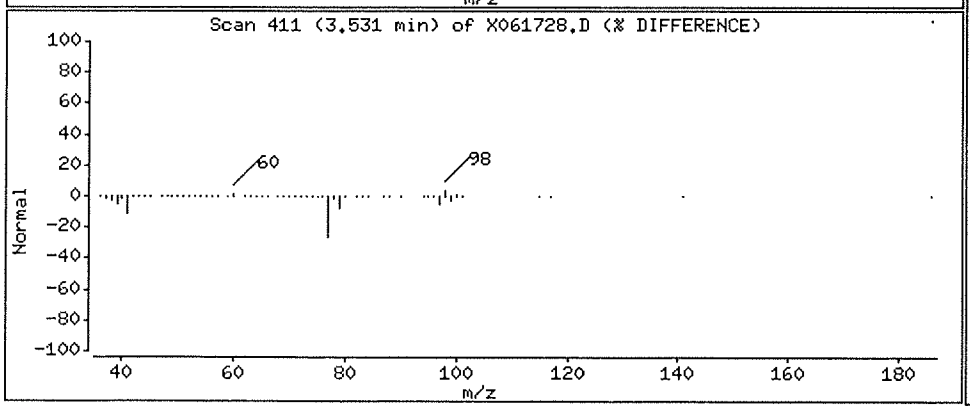












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061728.D

Date : 17-JUN-2021 20:15

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

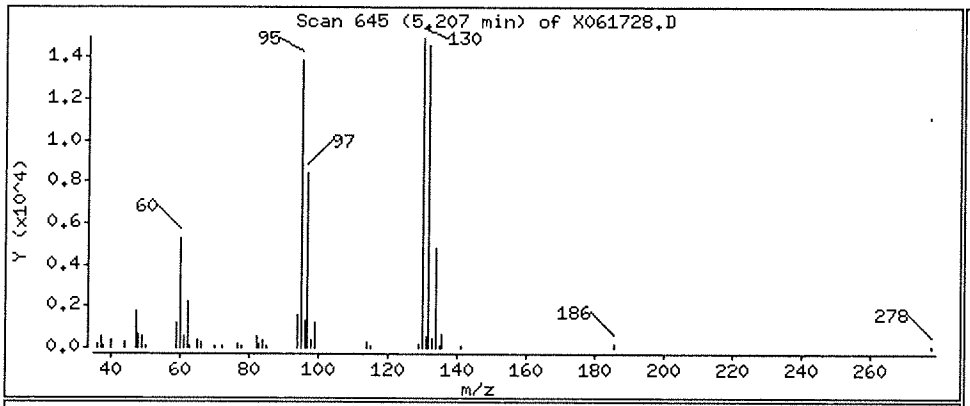
Operator: PC

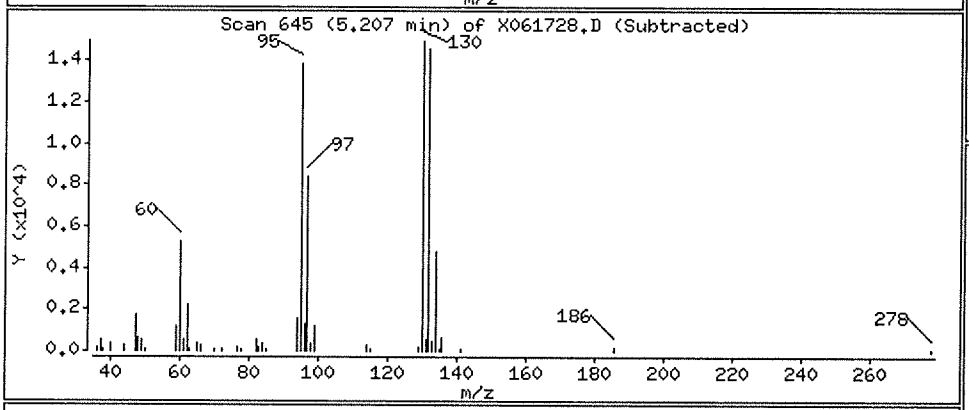
Column phase: DB624

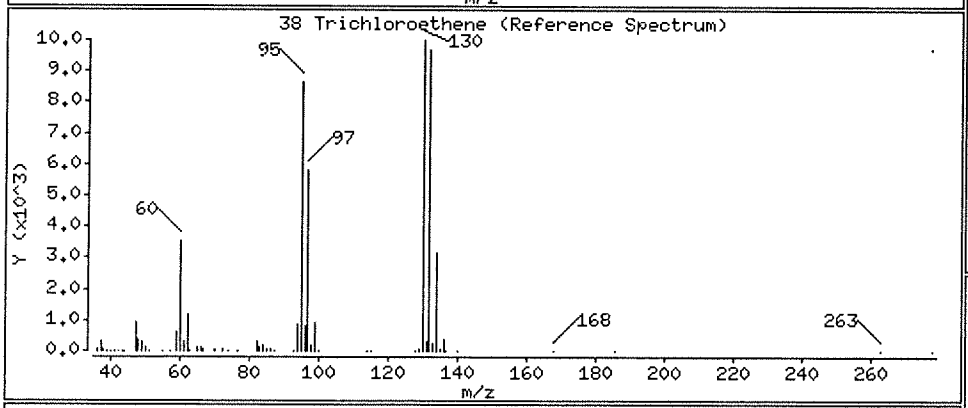
Column diameter: 0.18

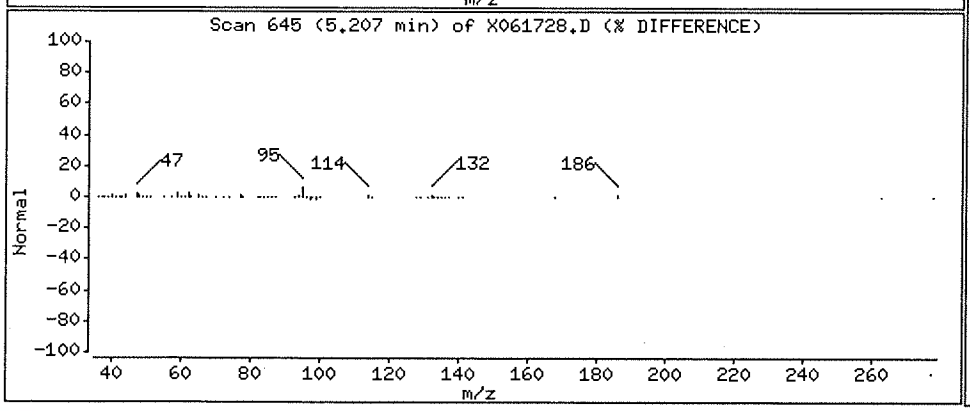
38 Trichloroethene

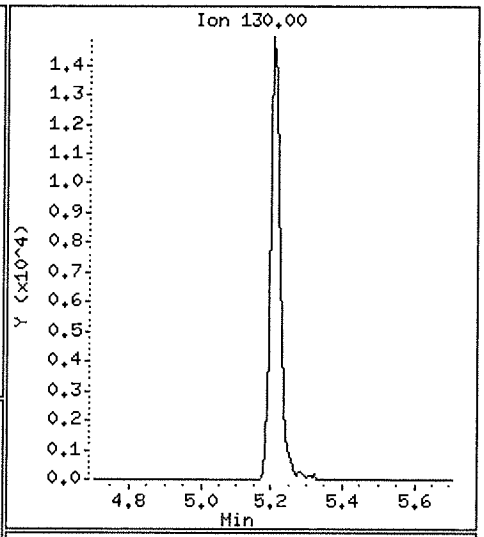
Concentration: 540.47 ug/l

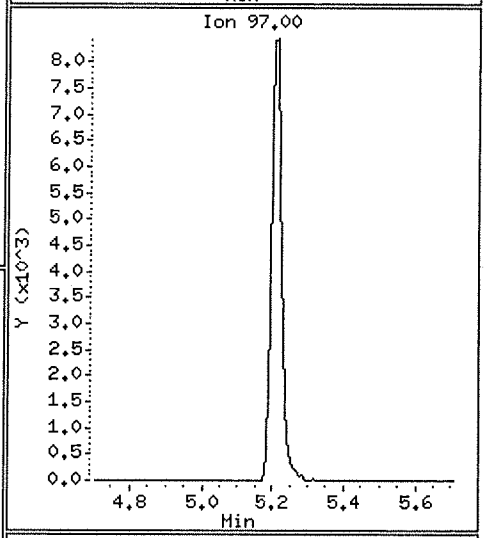


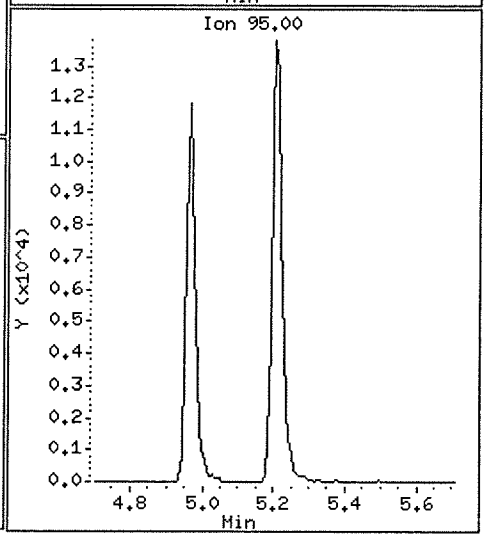












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061728.D

Date : 17-JUN-2021 20:15

Client ID: HS21060700-23

Instrument: voa6.i

Sample Info: HS21060700-23;HS21060700-23;;;

Purge Volume: 5.0

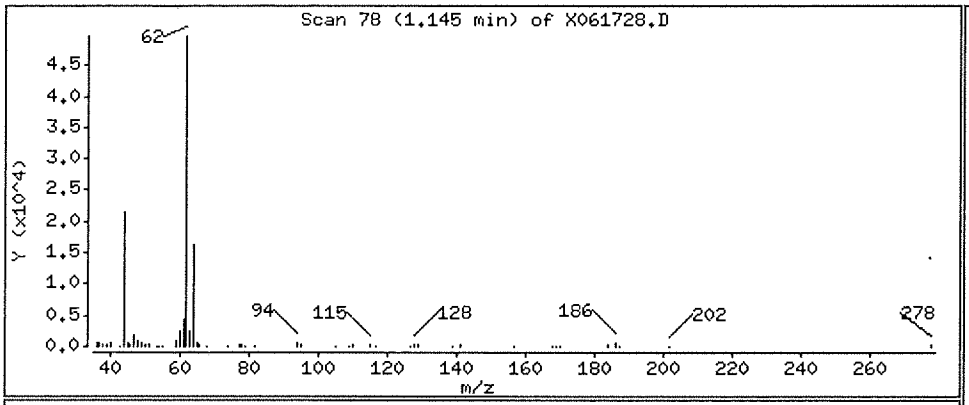
Operator: PC

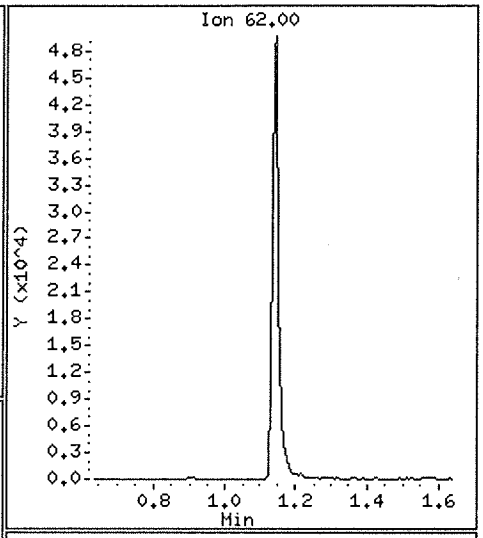
Column phase: DB624

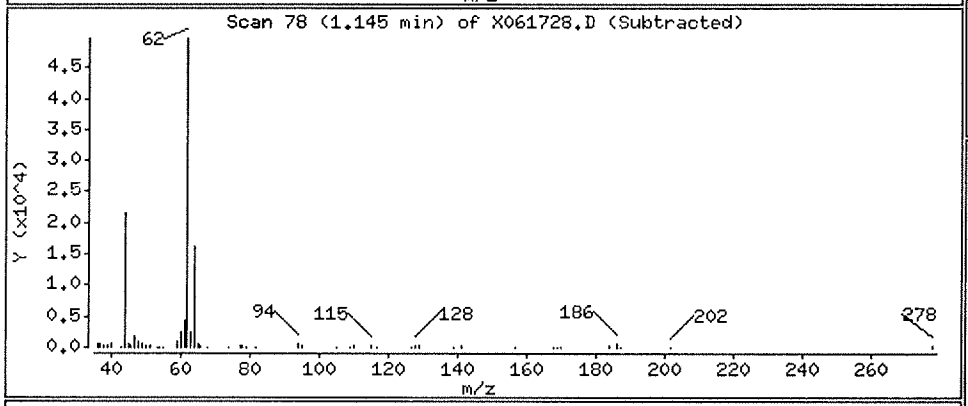
Column diameter: 0.18

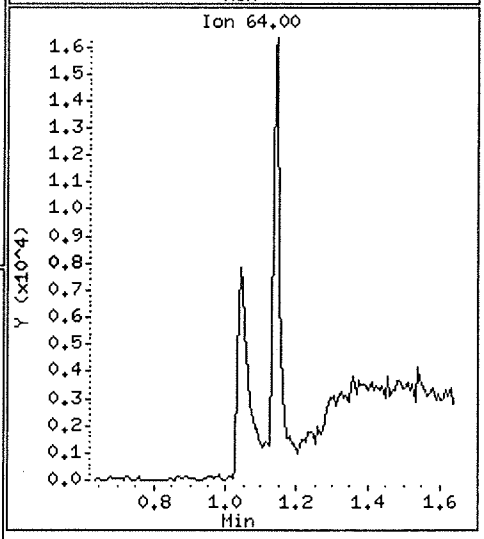
5 Vinyl Chloride

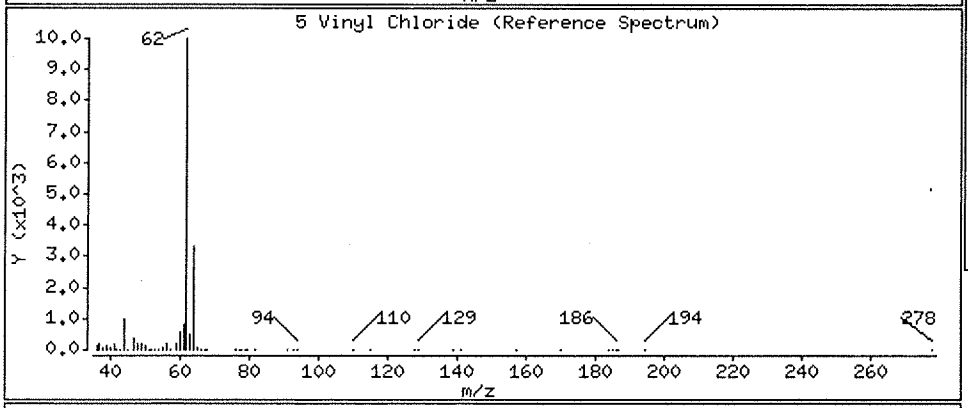
Concentration: 954.16 ug/l

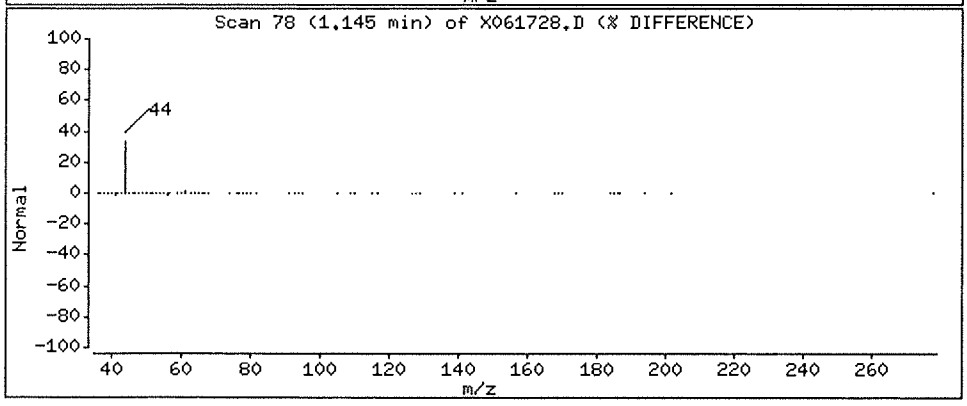












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061729.D
Lab Smp Id: HS21060700-13 Client Smp ID: HS21060700-13
Inj Date : 17-JUN-2021 20:36
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-13;HS21060700-13;;;
Misc Info : HS18090001;WATER;0;25;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 28
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: bhate.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	4.182	4.182	(1.000)	564440	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	778058	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	684996	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	339097	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	245424	44.1545	44.15
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	249682	46.2566	46.25
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	867207	50.8245	50.82
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	289314	48.1217	48.12
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	24181	2.70986	67.74(a)
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	69034	11.8736	296.83
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	10611	1.71162	42.79(a)
28 Chloroform	83	3.910	3.910	(0.935)	15617	1.57334	39.33(a)
27 cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	1920599	324.640	8115.98(A)
17 Methylene Chloride	84	2.306	2.298	(0.551)	54011	9.50370	237.59
50 Toluene	91	6.446	6.446	(0.840)	12522	0.62617	15.65(a)
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	4559	0.86503	21.62(a)
38 Trichloroethene	130	5.207	5.207	(1.049)	7632611	1429.30	35732.37(A)
5 Vinyl Chloride	62	1.145	1.138	(0.274)	71620	10.7194	267.98

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061729.D

Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

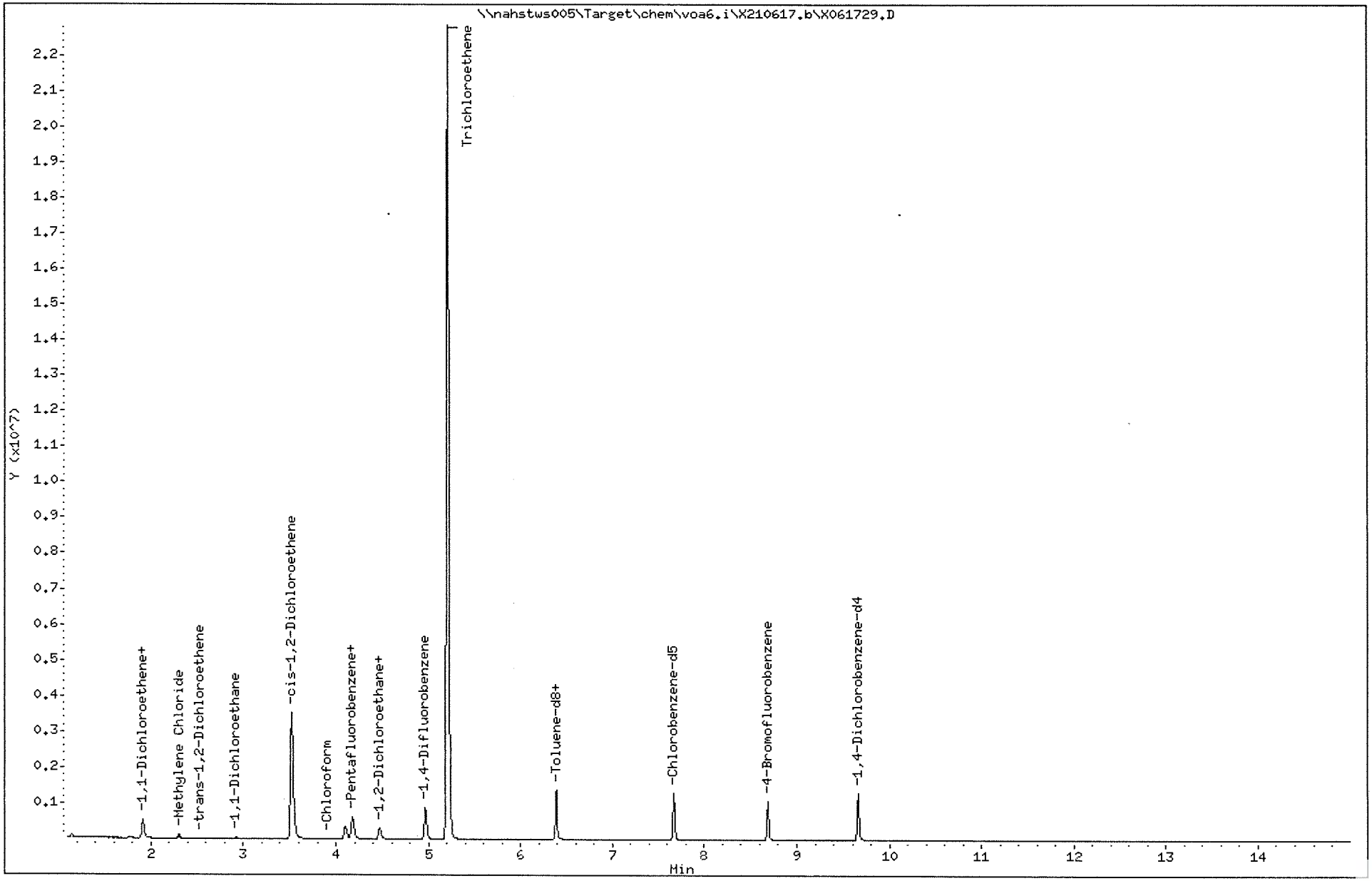
Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061729.D

Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

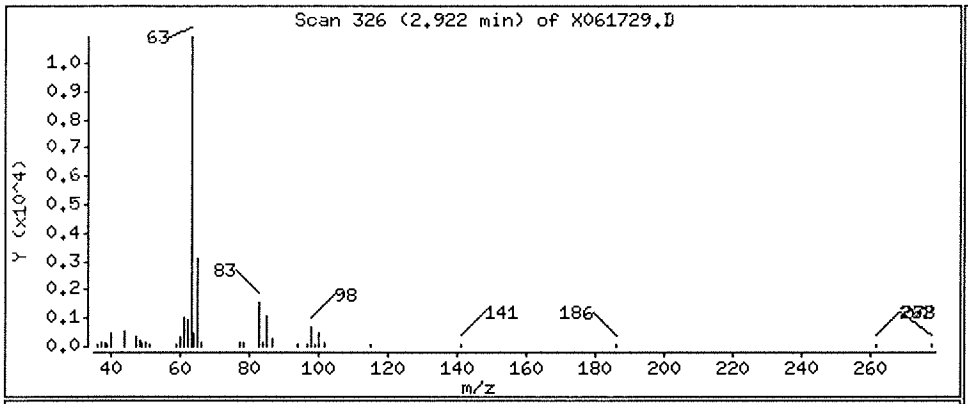
Operator: PC

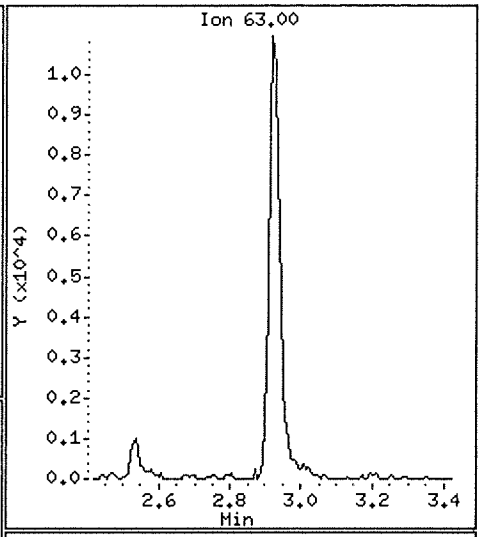
Column phase: DB624

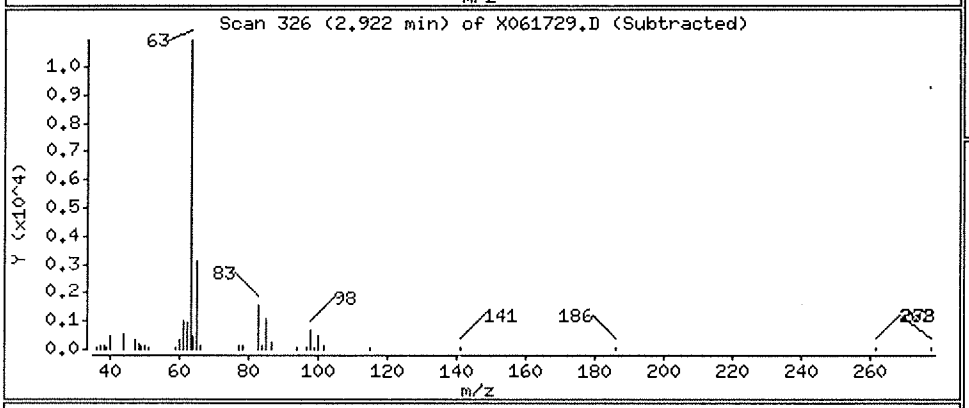
Column diameter: 0.18

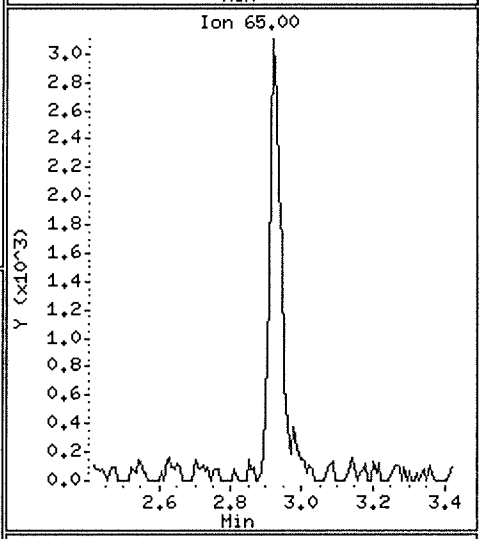
22 1,1-Dichloroethane

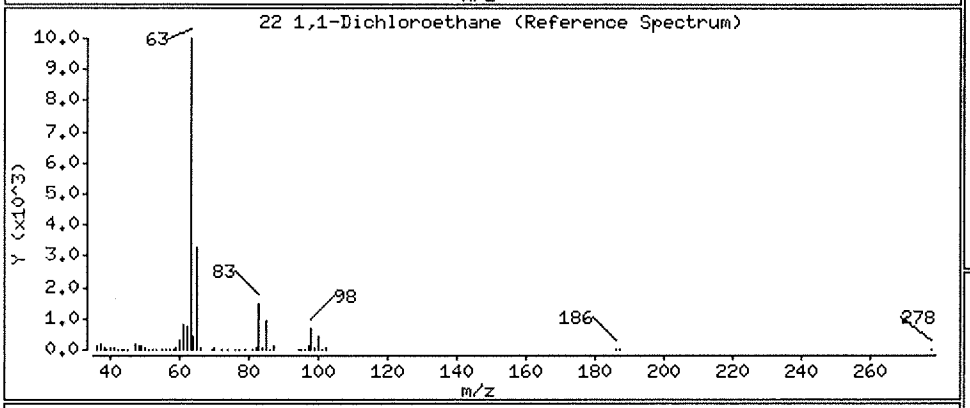
Concentration: 67.74 ug/l

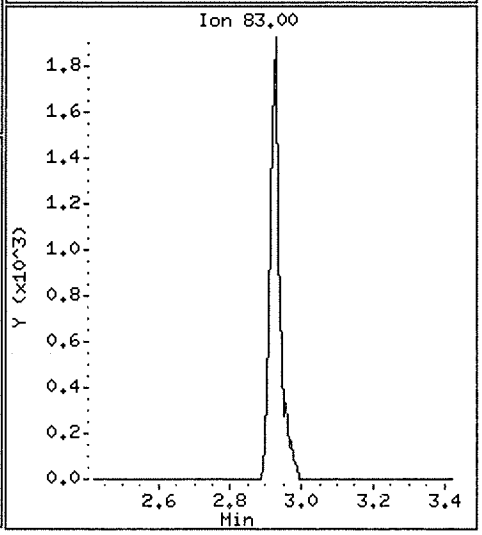


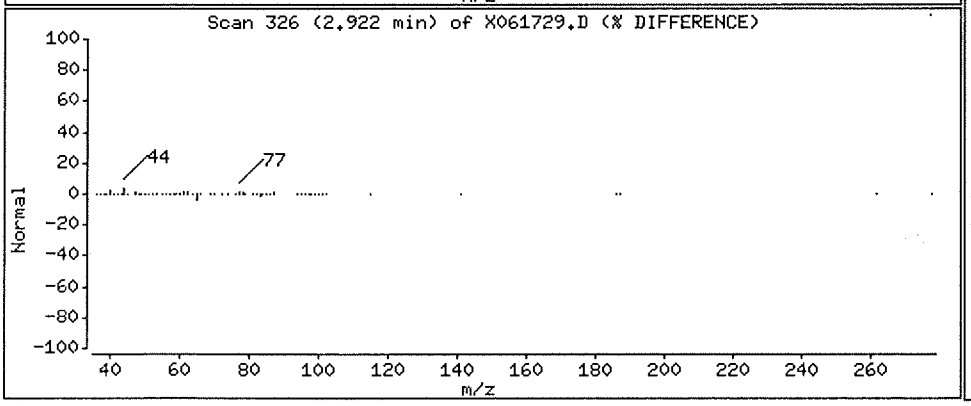












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061729.D

Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

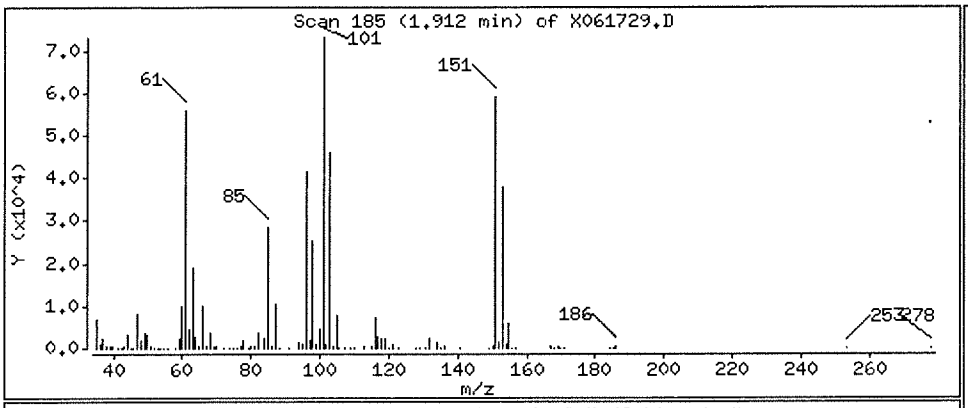
Operator: PC

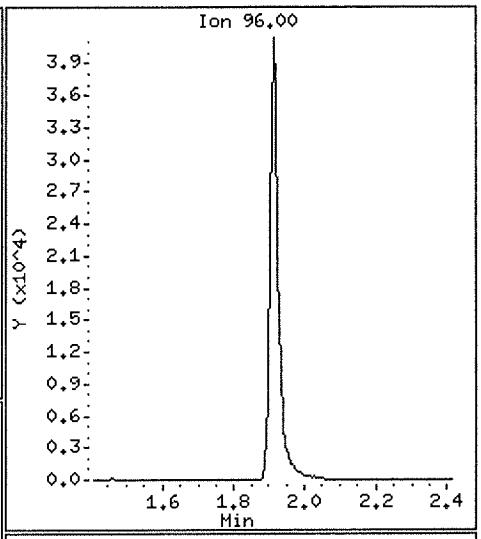
Column phase: DB624

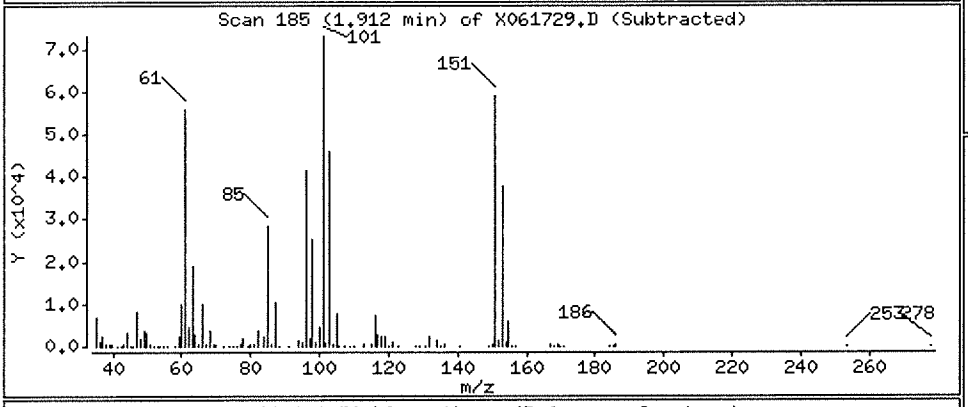
Column diameter: 0.18

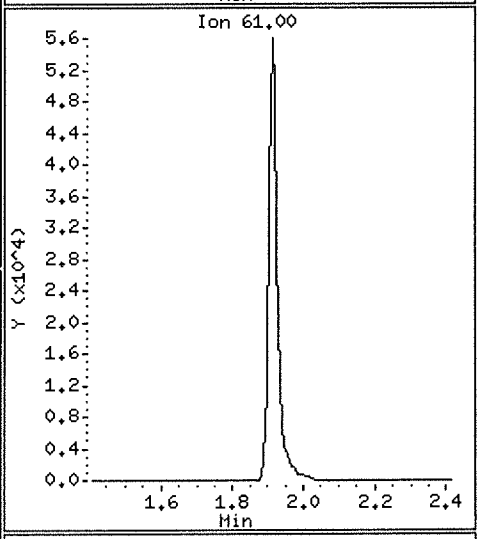
11 1,1-Dichloroethene

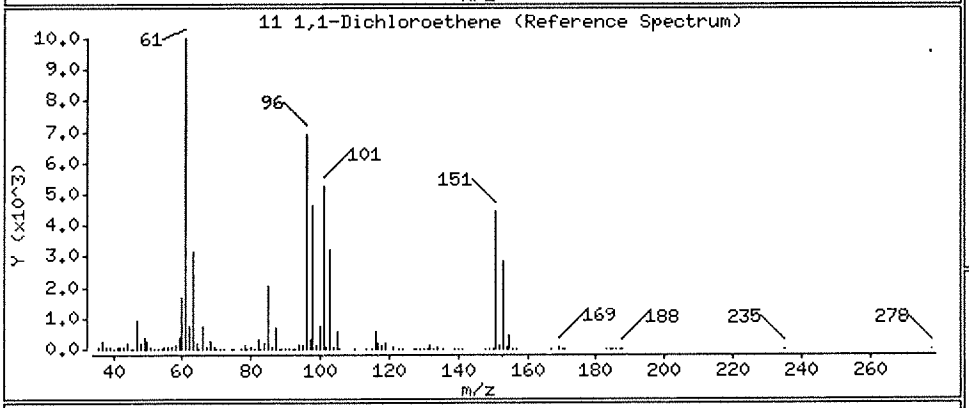
Concentration: 296.83 ug/l

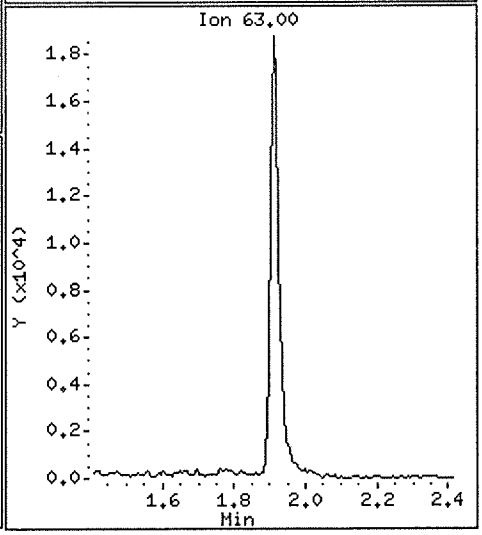


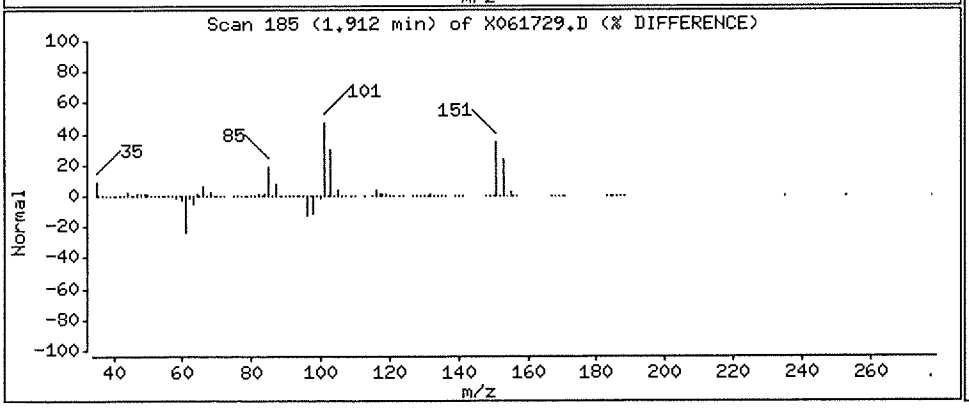












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061729.D

Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

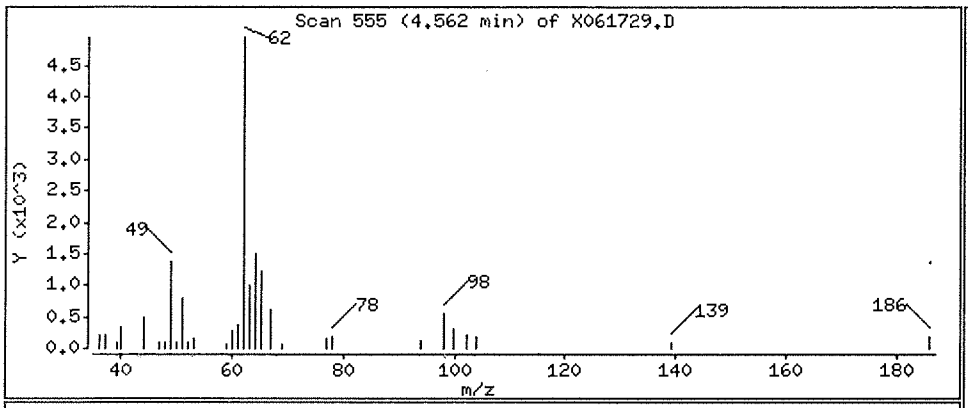
Operator: PC

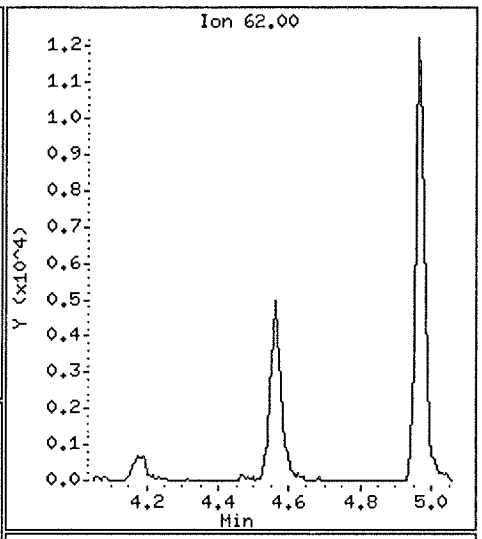
Column phase: DB624

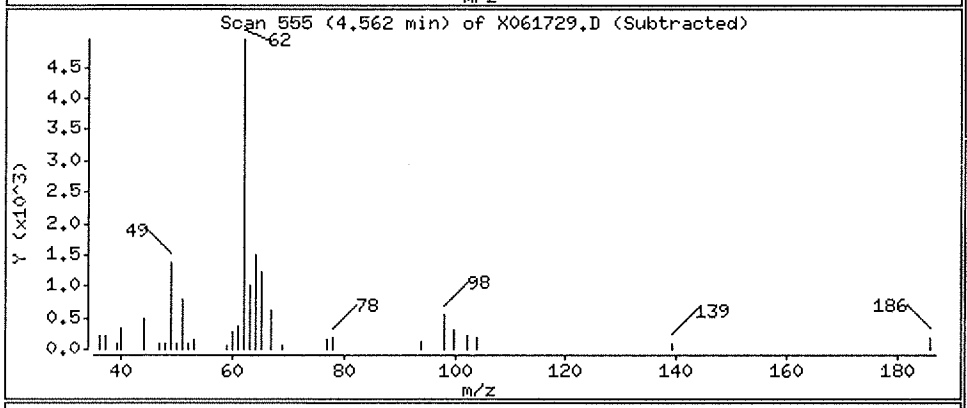
Column diameter: 0.18

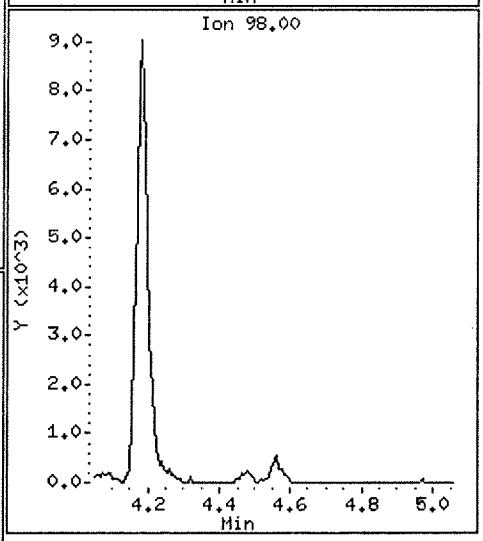
33 1,2-Dichloroethane

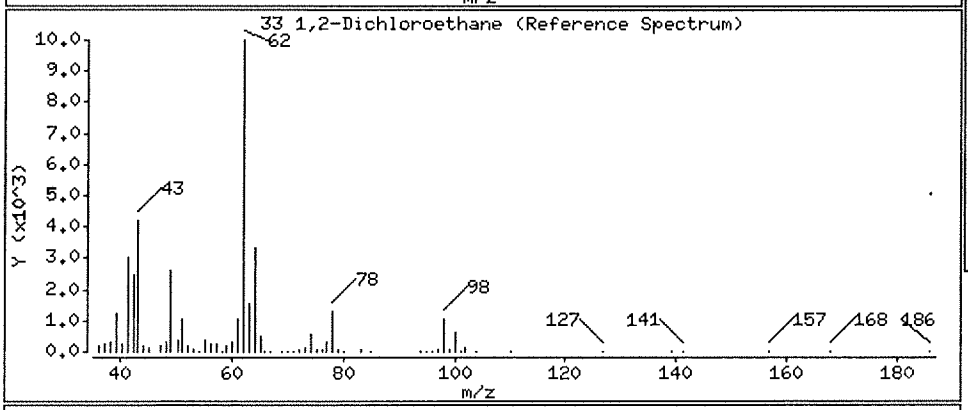
Concentration: 42.79 ug/l

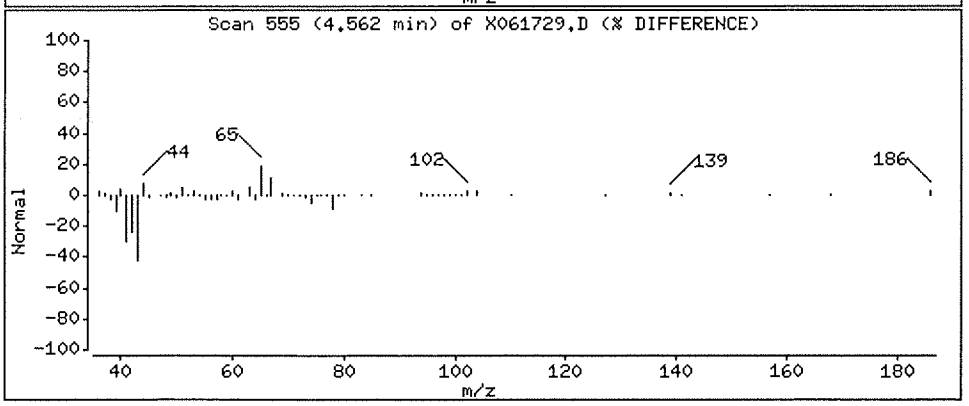












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061729.D

Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

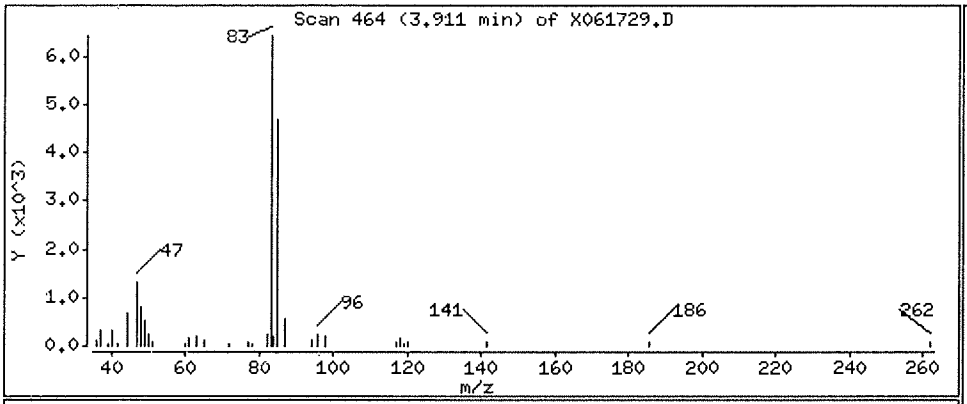
Operator: PC

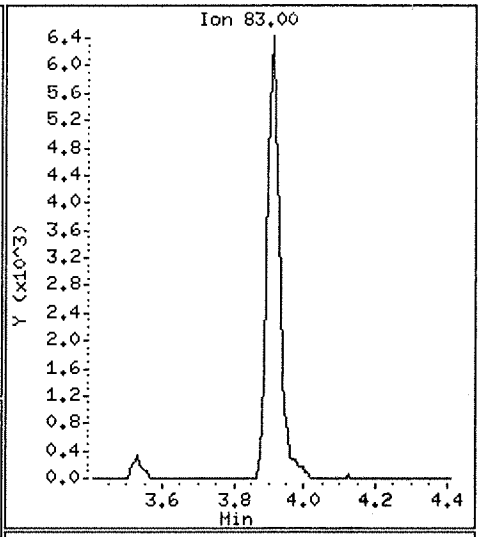
Column phase: DB624

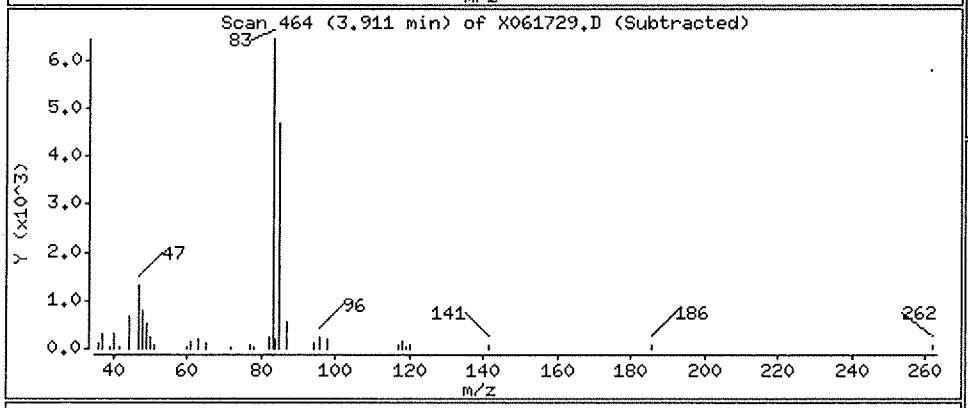
Column diameter: 0.18

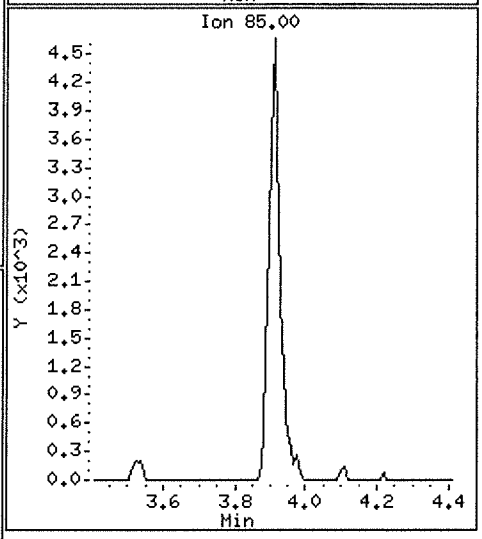
28 Chloroform

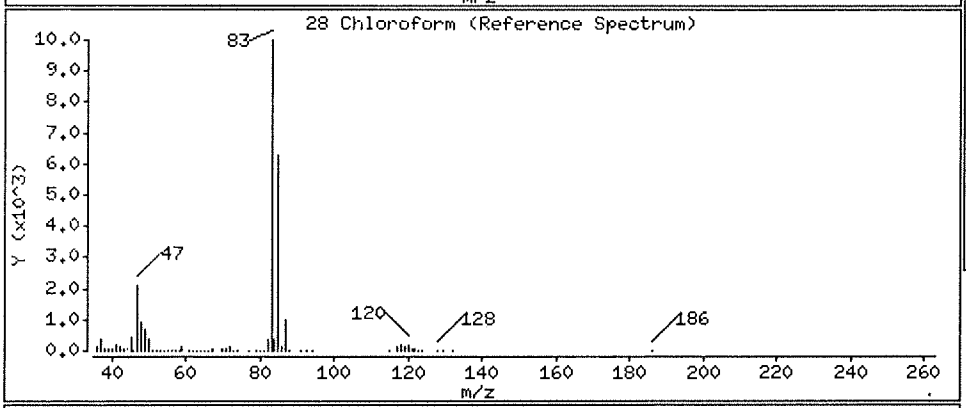
Concentration: 39.33 ug/l

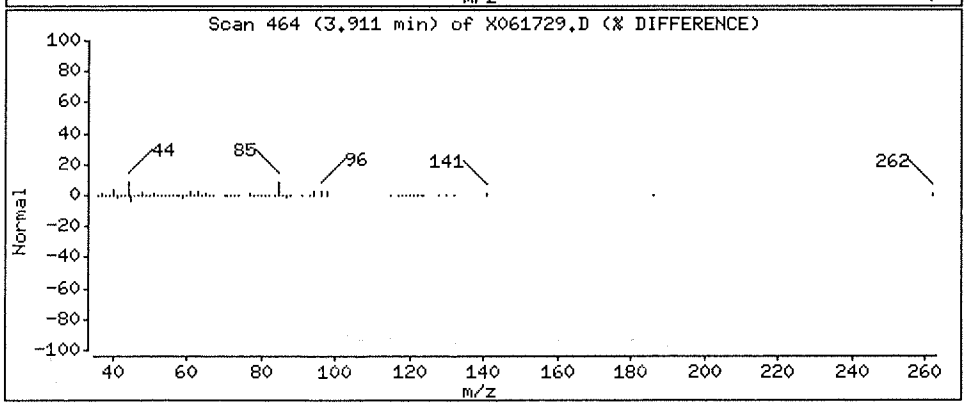












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061729.D

Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

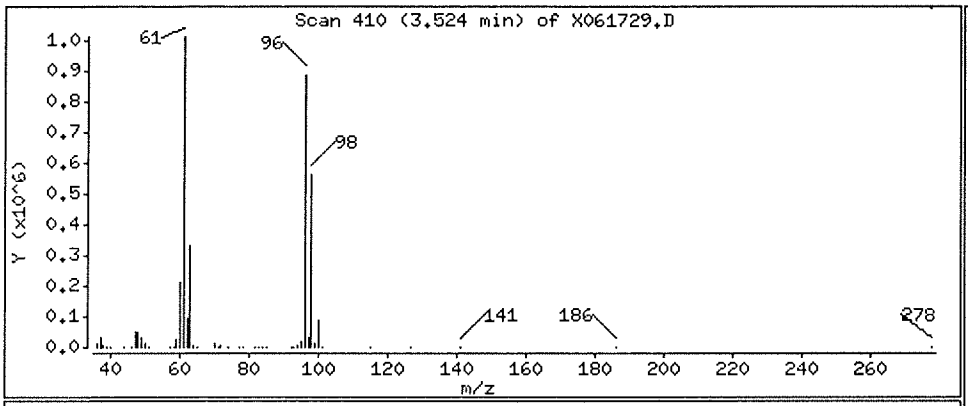
Operator: PC

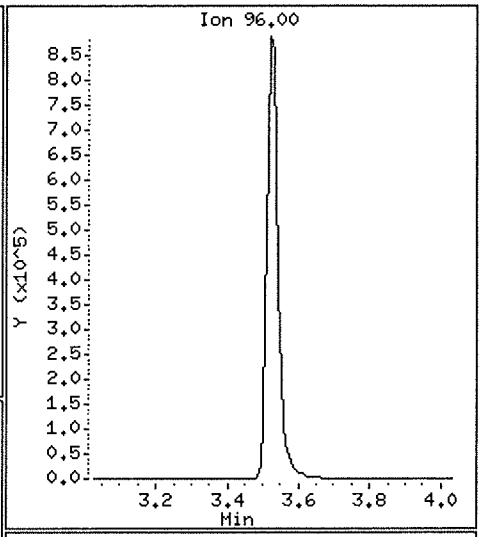
Column phase: DB624

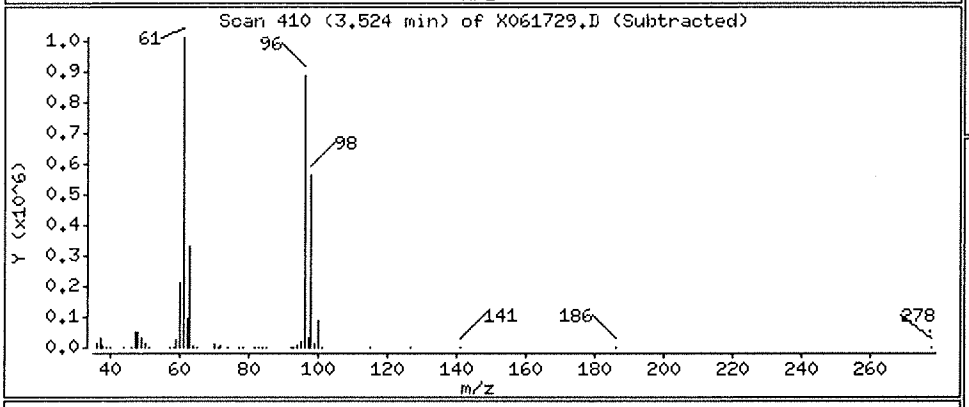
Column diameter: 0.18

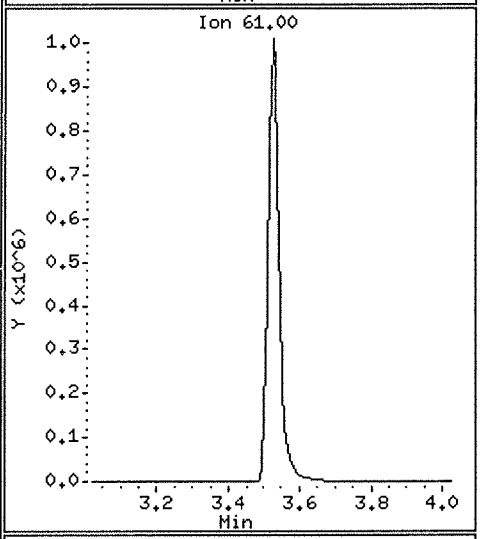
27 cis-1,2-Dichloroethene

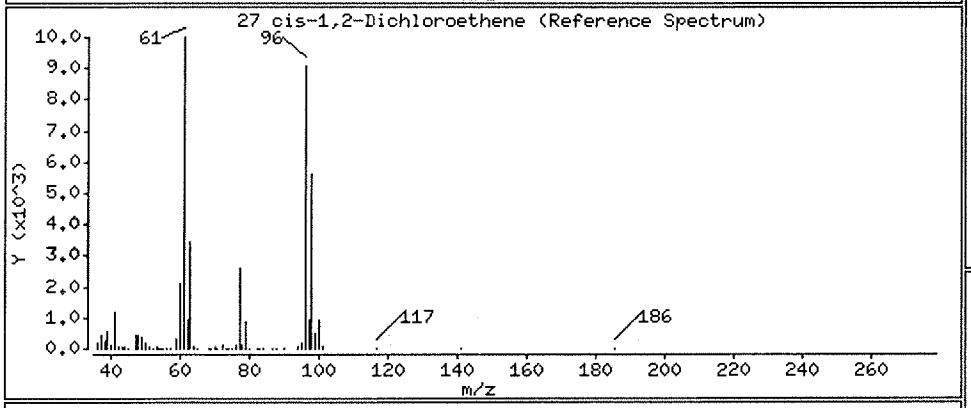
Concentration: 8115.98 ug/l

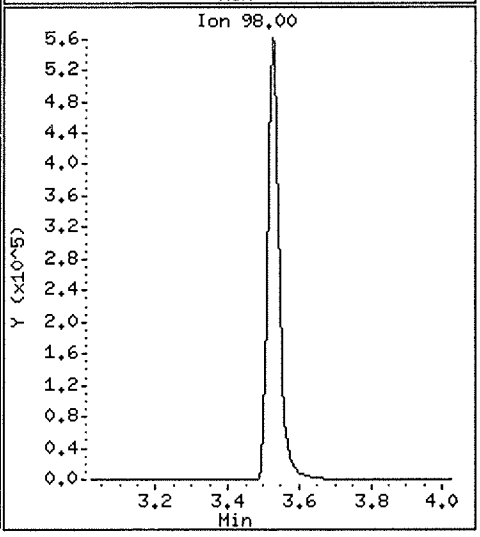


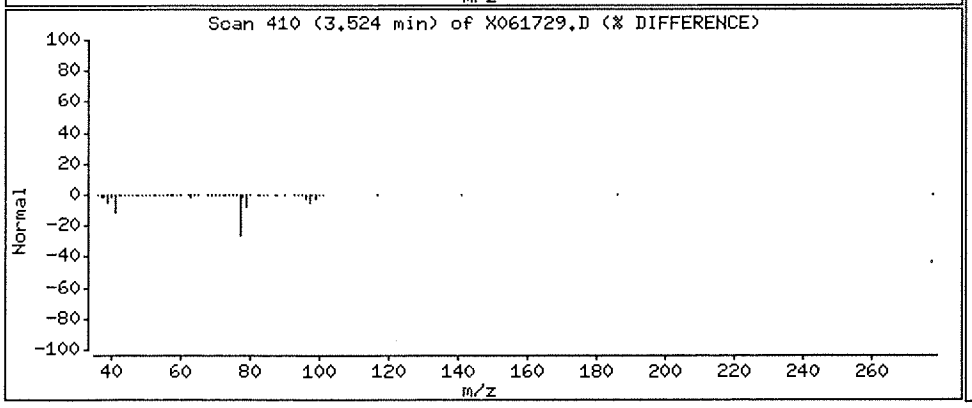












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061729.D

Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

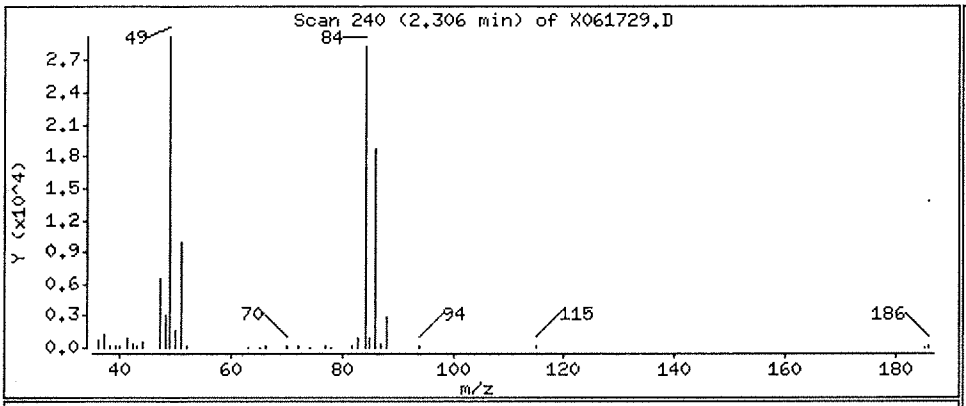
Operator: PC

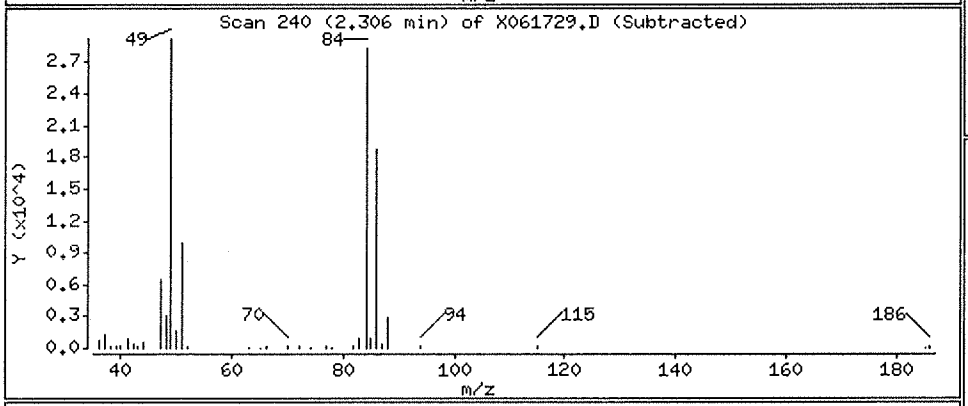
Column phase: DB624

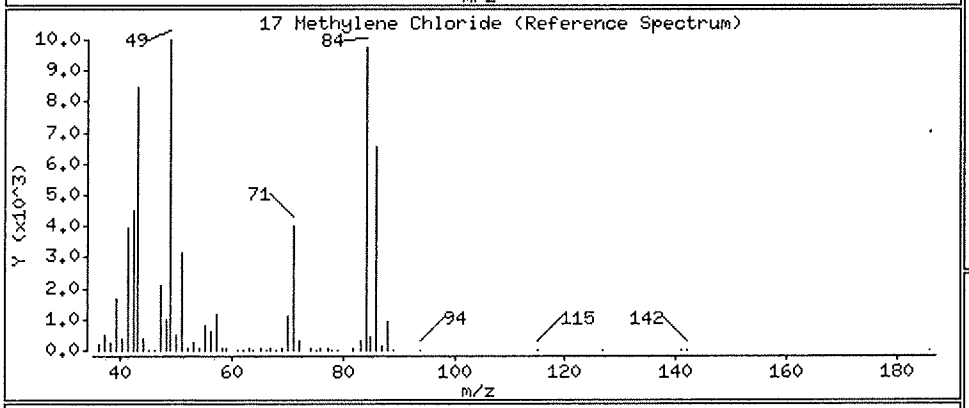
Column diameter: 0.18

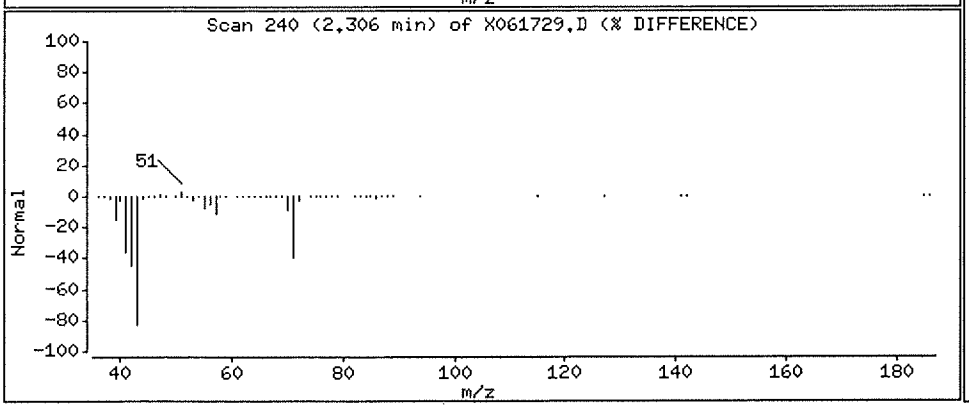
17 Methylene Chloride

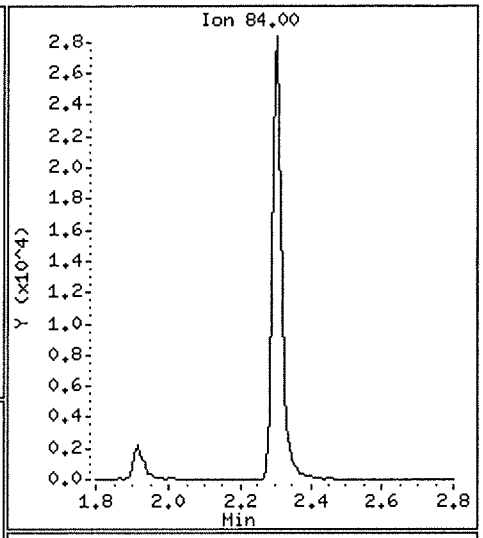
Concentration: 237.59 ug/l

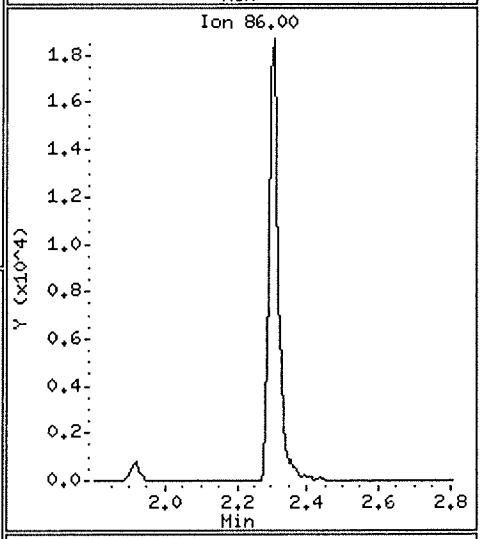


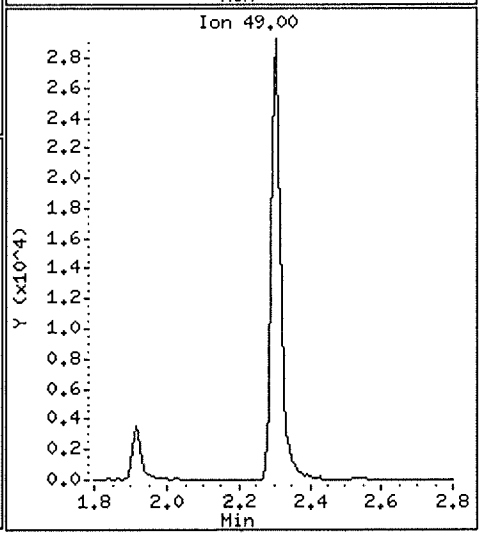












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Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

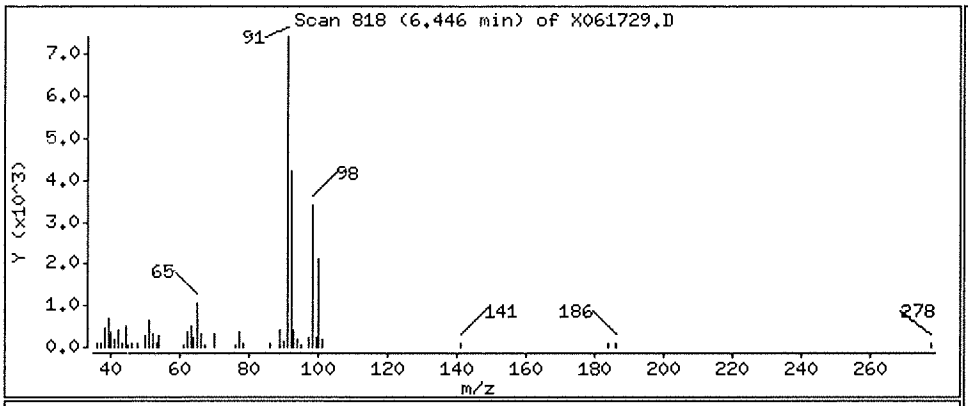
Operator: PC

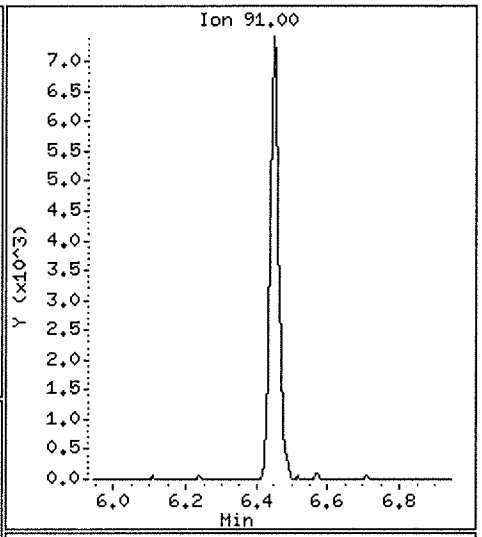
Column phase: DB624

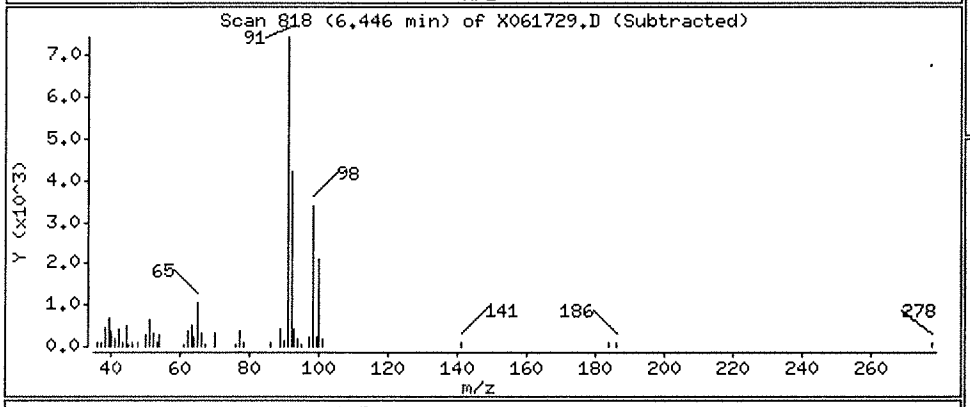
Column diameter: 0.18

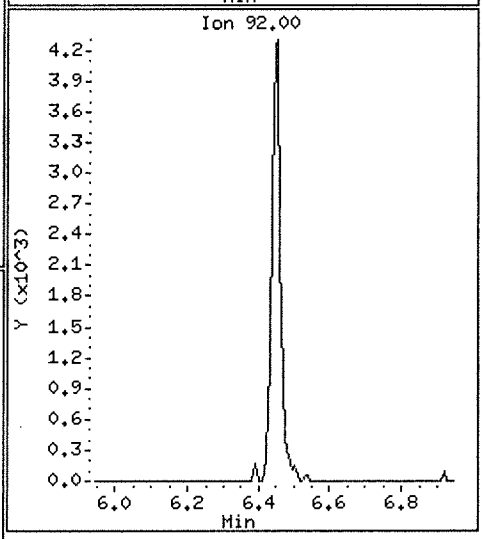
50 Toluene

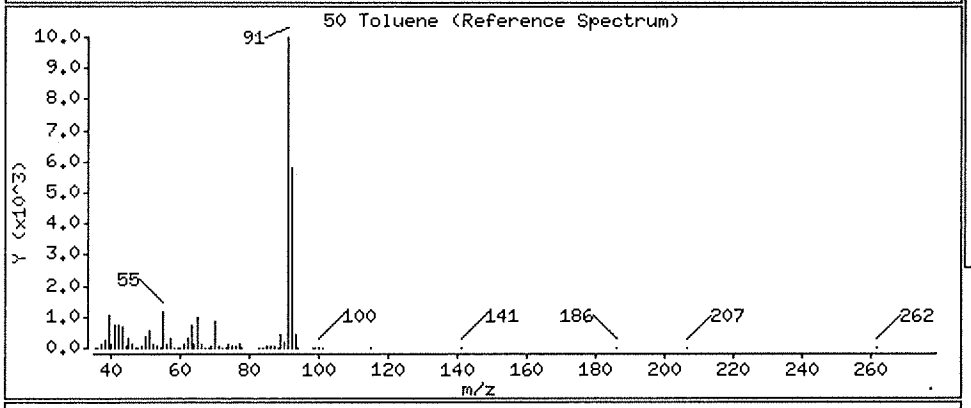
Concentration: 15.65 ug/l

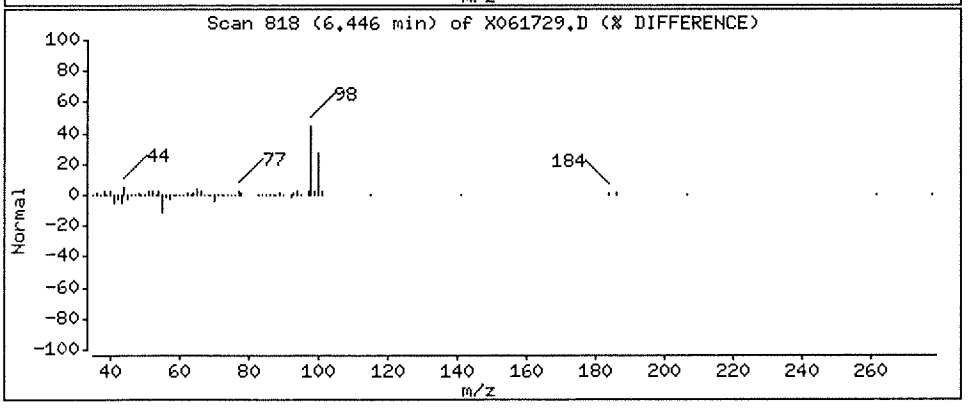












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Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

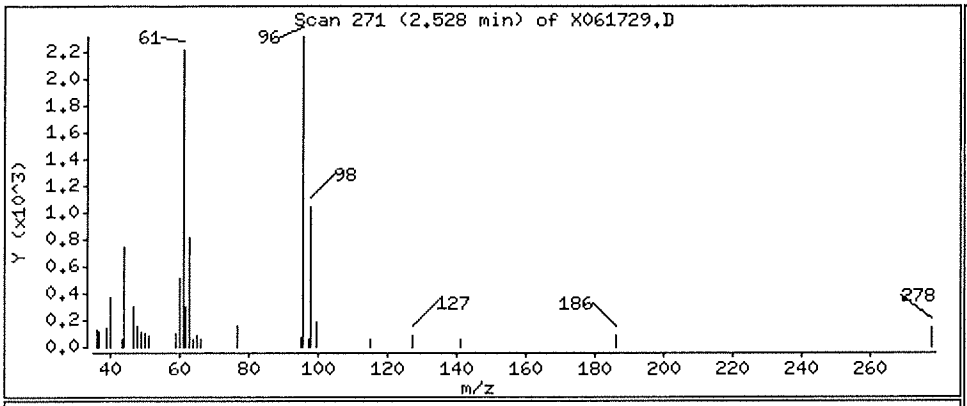
Operator: PC

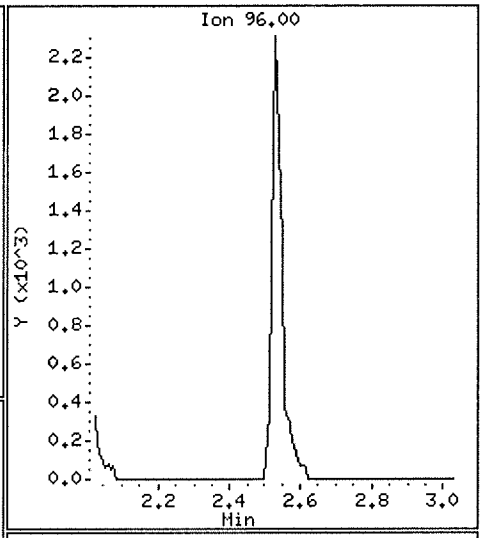
Column phase: DB624

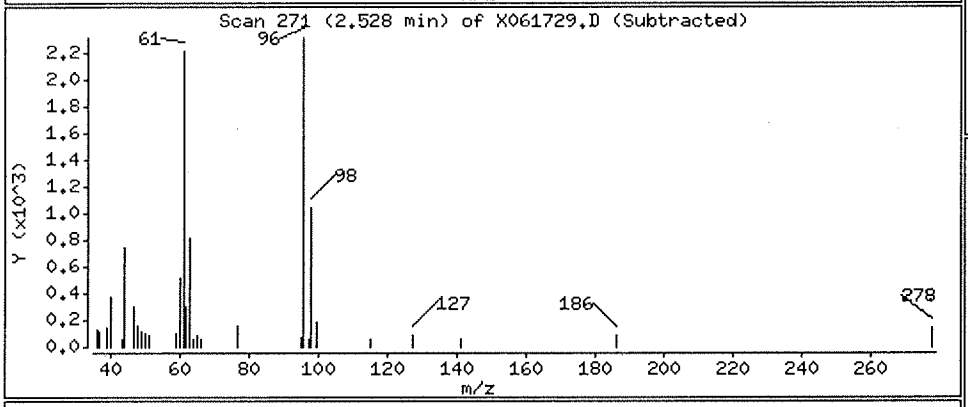
Column diameter: 0.18

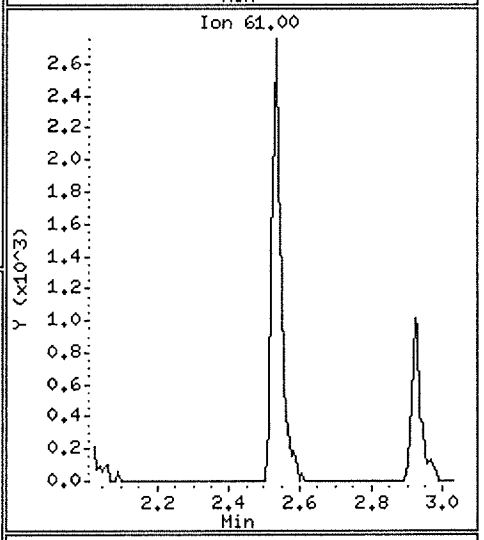
20 trans-1,2-Dichloroethene

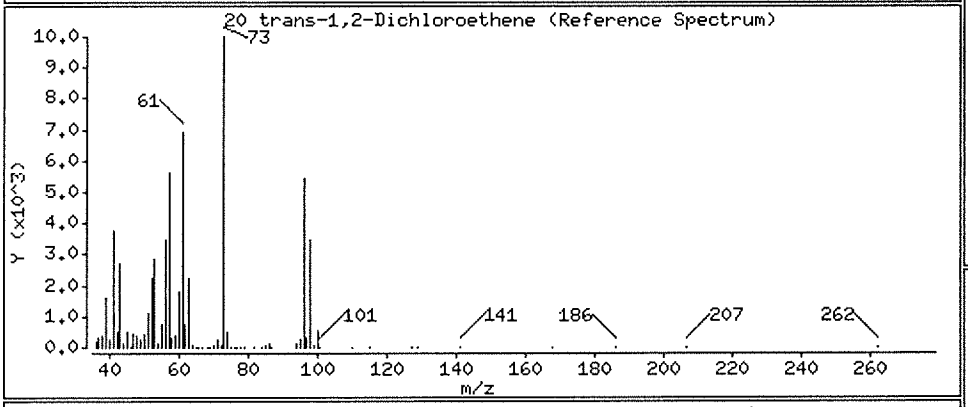
Concentration: 21.62 ug/l

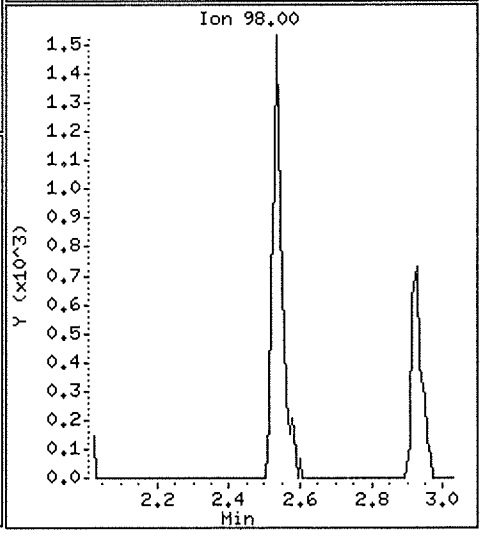


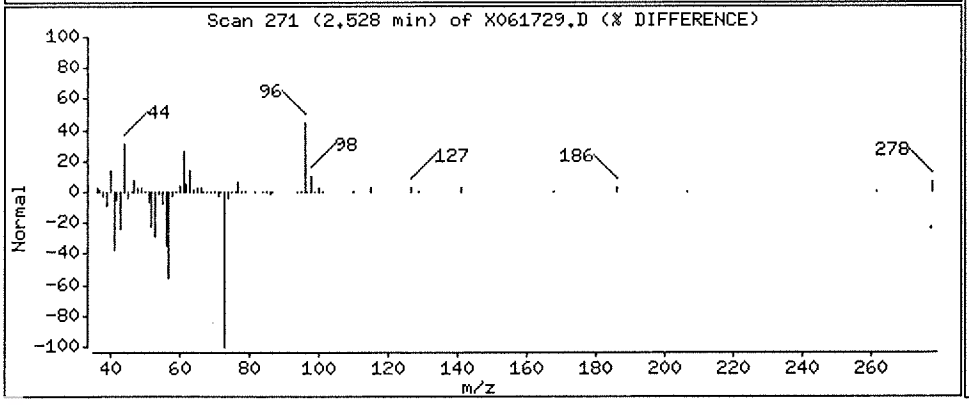












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Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

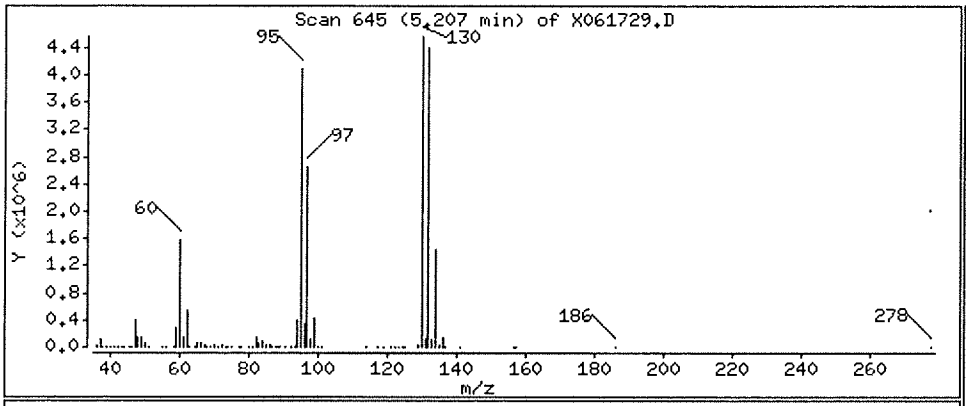
Operator: PC

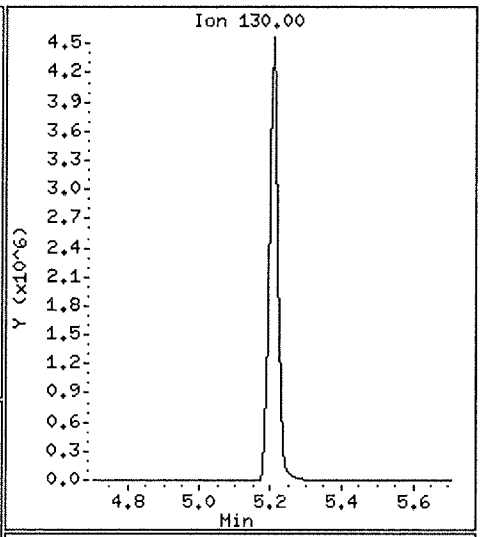
Column phase: DB624

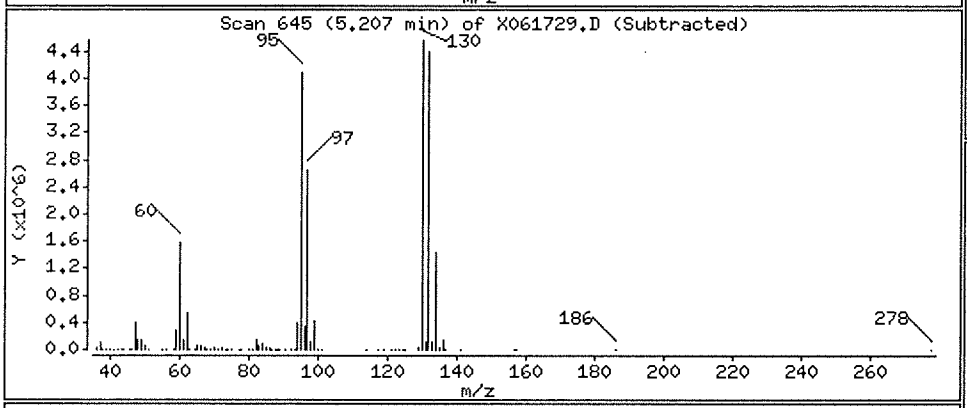
Column diameter: 0.18

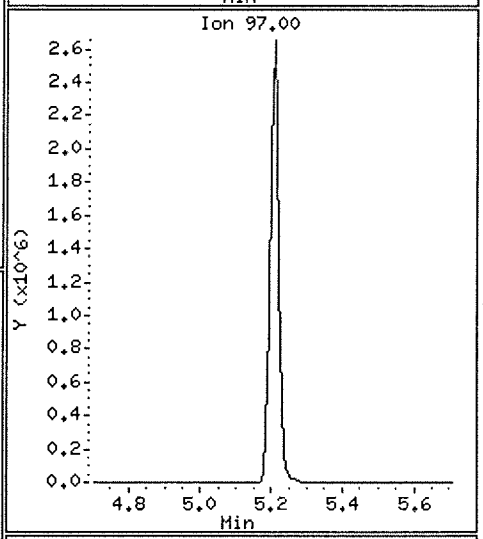
38 Trichloroethene

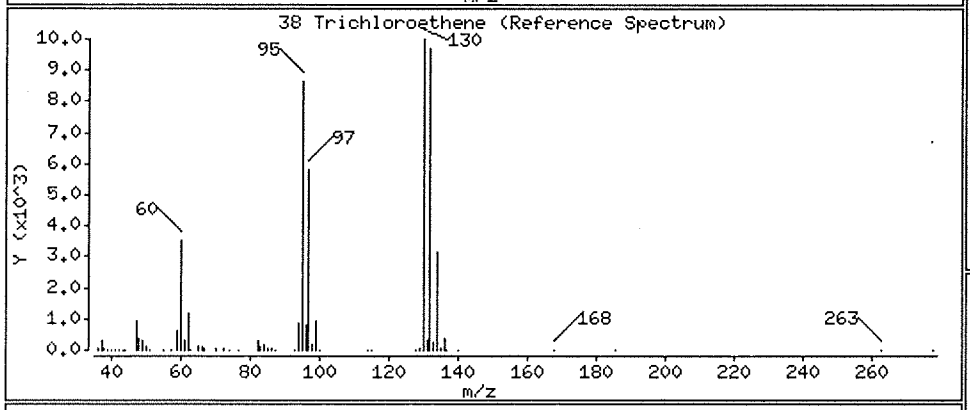
Concentration: 35732.37 ug/l

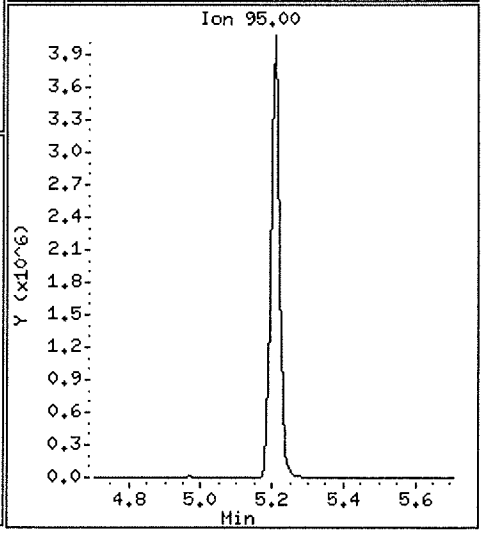


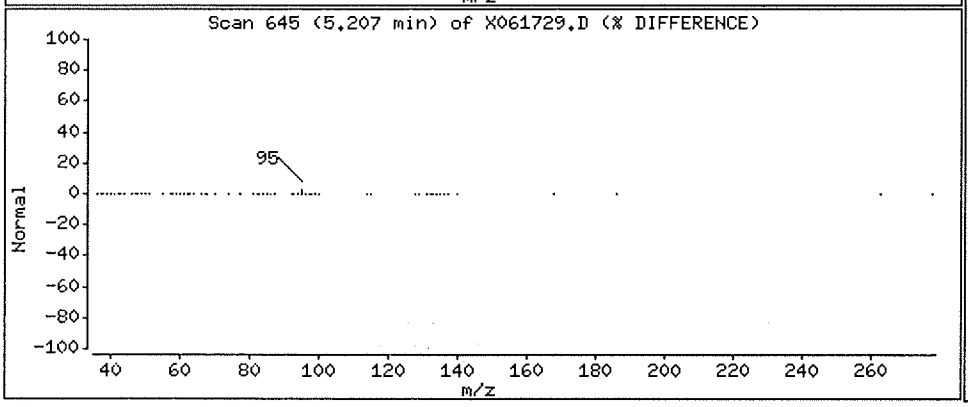












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Date : 17-JUN-2021 20:36

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

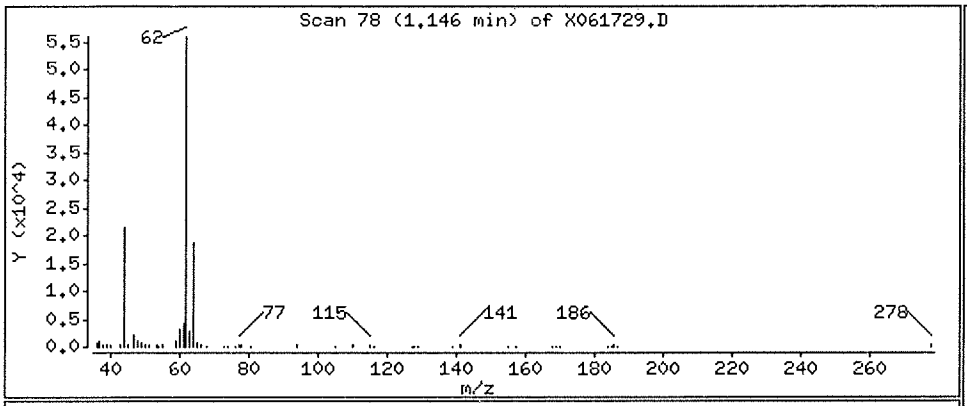
Operator: PC

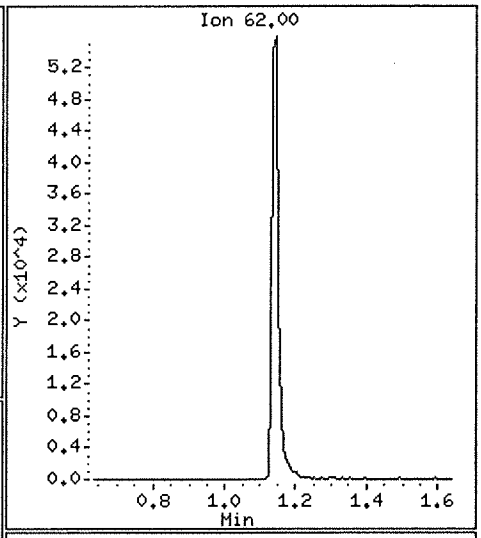
Column phase: DB624

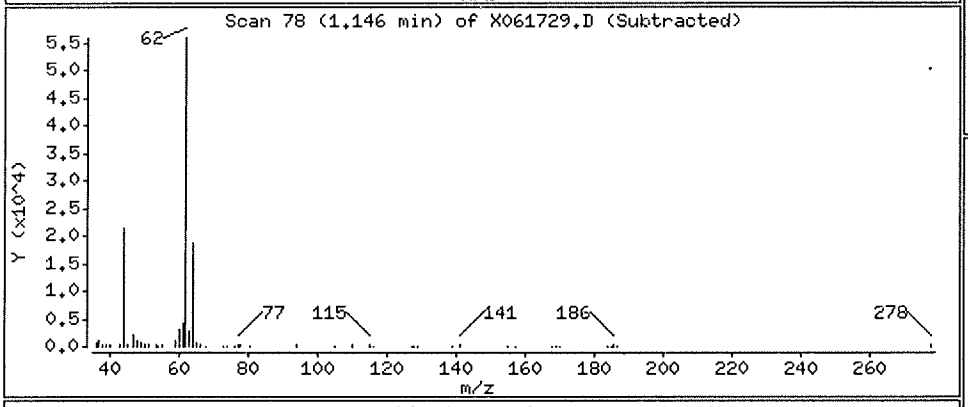
Column diameter: 0.18

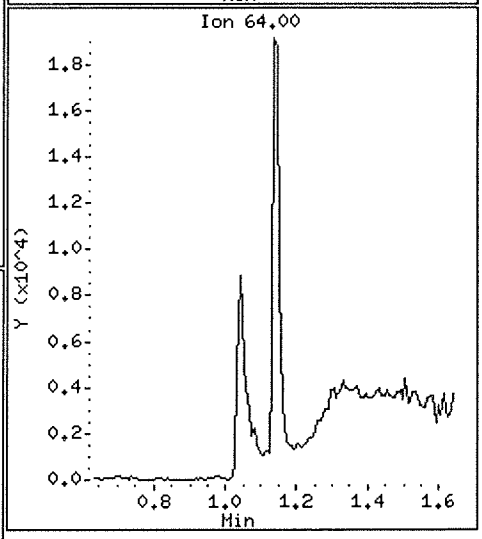
5 Vinyl Chloride

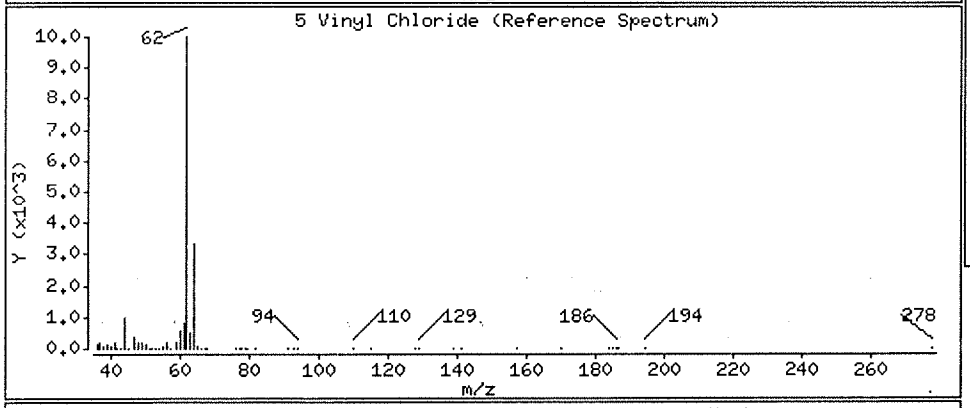
Concentration: 267.98 ug/l

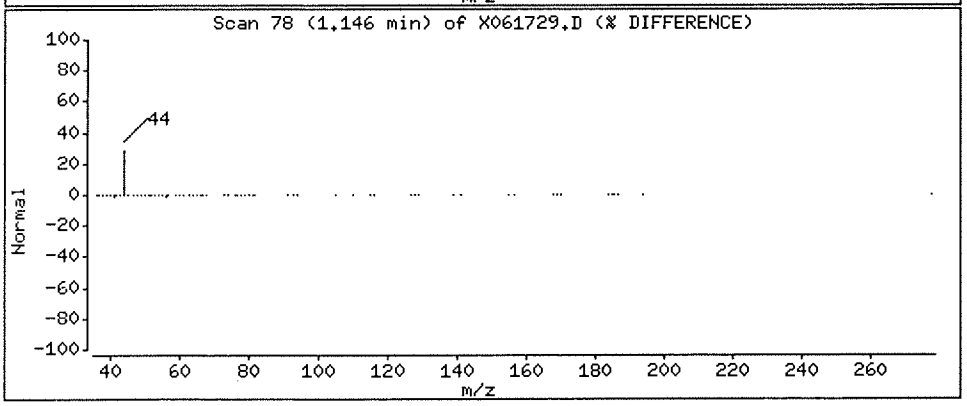












ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061730.D
Lab Smp Id: HS21060700-13 Client Smp ID: HS21060700-13
Inj Date : 17-JUN-2021 20:57
Operator : PC Inst ID: voa6.i
Smp Info : HS21060700-13;HS21060700-13;;;
Misc Info : HS18090001;WATER;0;250;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 14:53 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 29
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: bhate.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

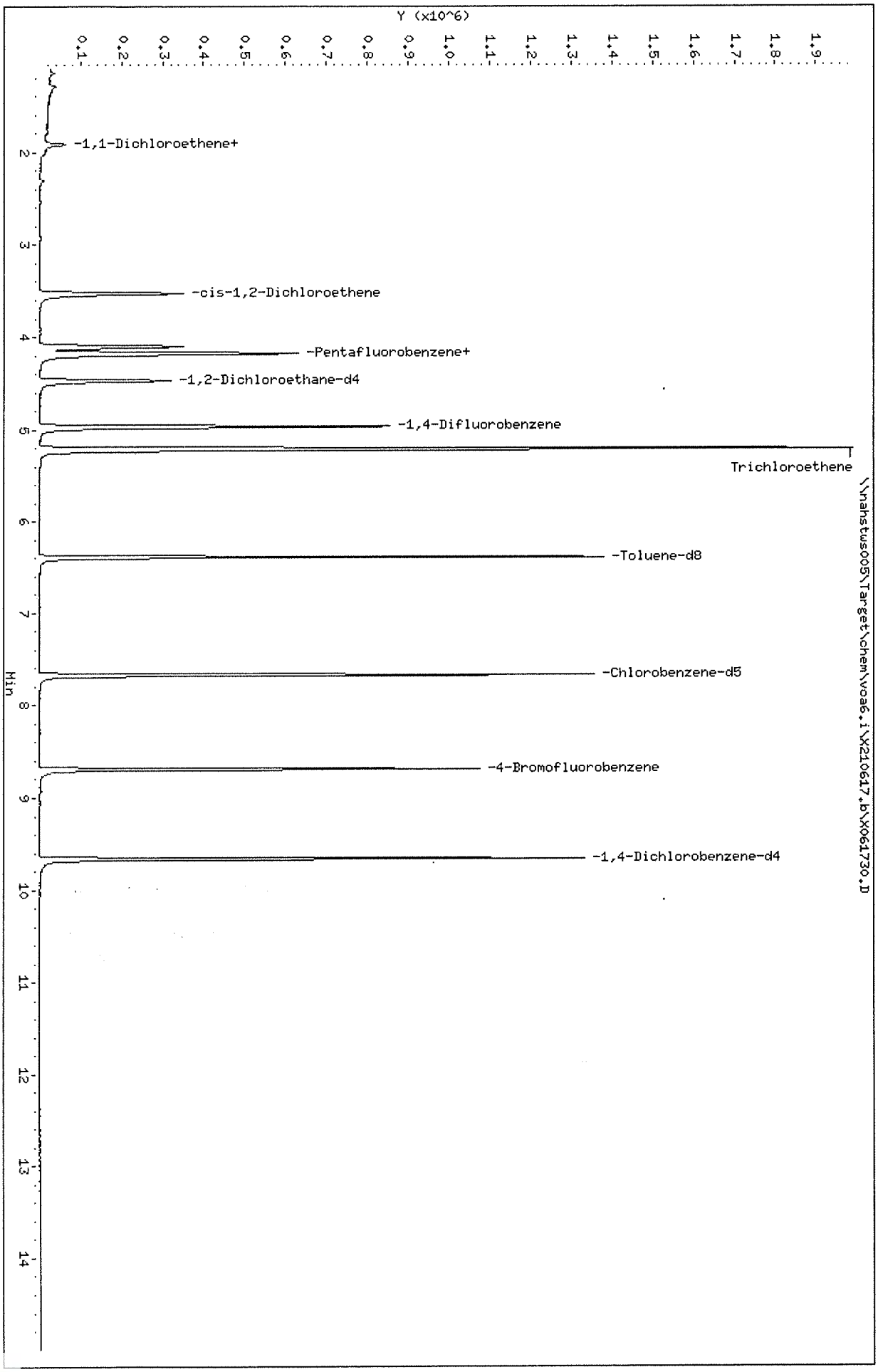
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	568416	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	778632	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	671562	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	342081	50.0000	
$ 30 Dibromofluoromethane	113	4.104	4.096	(0.981)	247237	44.1696	44.16
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	249948	45.9778	45.97
$ 48 Toluene-d8	98	6.389	6.388	(0.833)	871206	52.0803	52.08
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	289392	49.0823	49.08
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	7158	1.22254	305.63(a)
27 cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	201156	33.7636	8440.90
38 Trichloroethene	130	5.207	5.207	(1.049)	688913	128.912	32227.96
5 Vinyl Chloride	62	1.138	1.138	(0.272)	7442	1.10606	276.51(a)

QC Flag Legend

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

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061730.D
Date : 17-JUN-2021 20:57
Client ID: HS21060700-13
Sample Info: HS21060700-13;HS21060700-13;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061730.D

Date : 17-JUN-2021 20:57

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

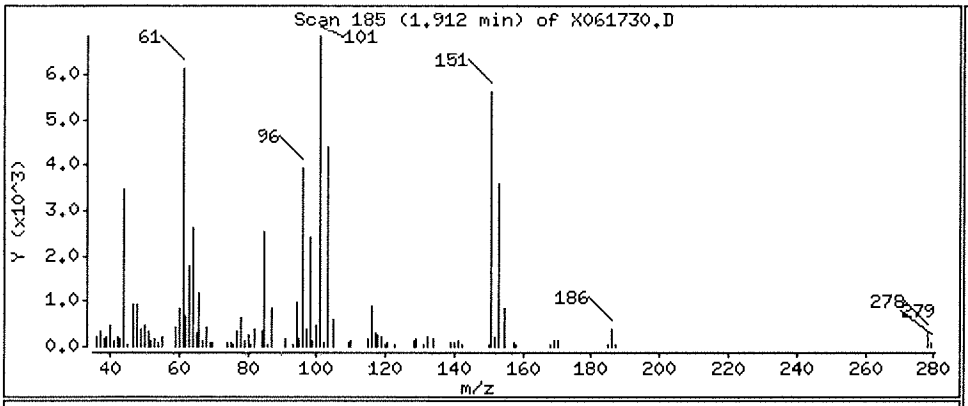
Operator: PC

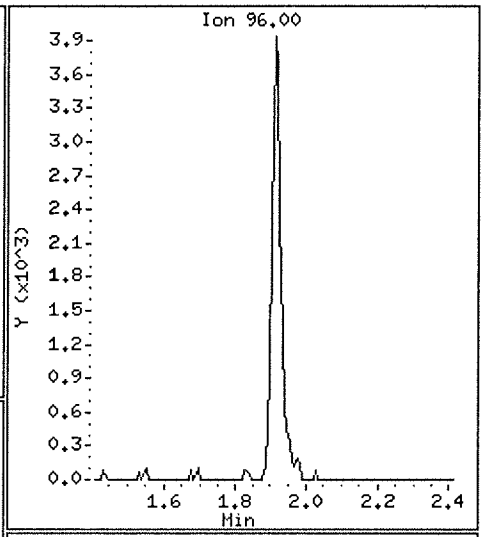
Column phase: DB624

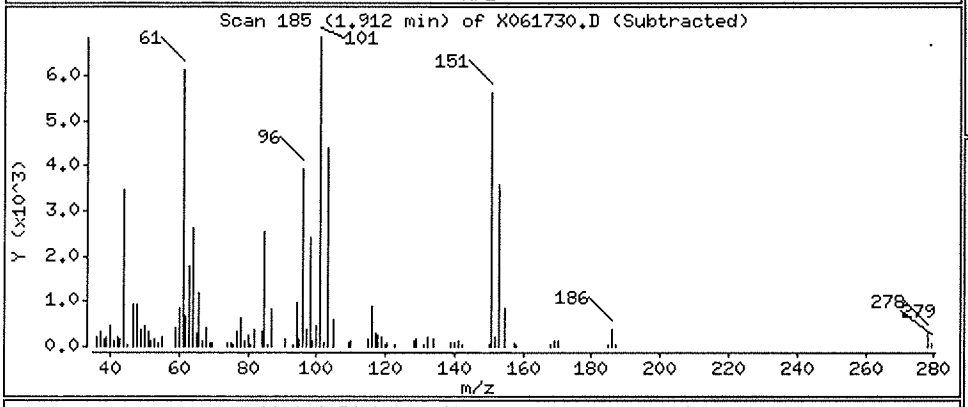
Column diameter: 0.18

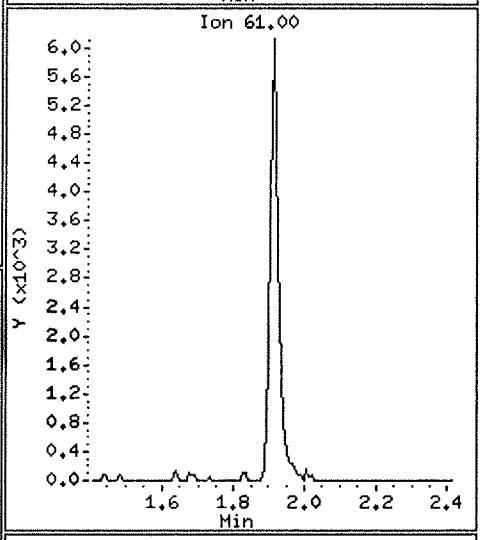
11 1,1-Dichloroethene

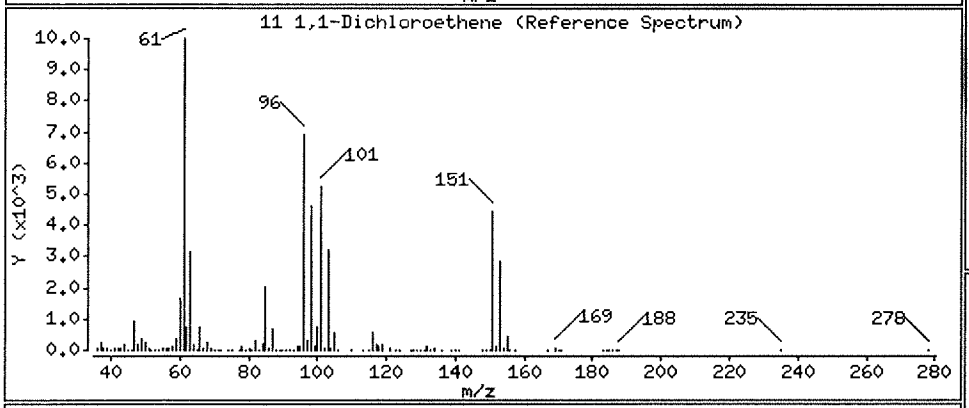
Concentration: 305.63 ug/l

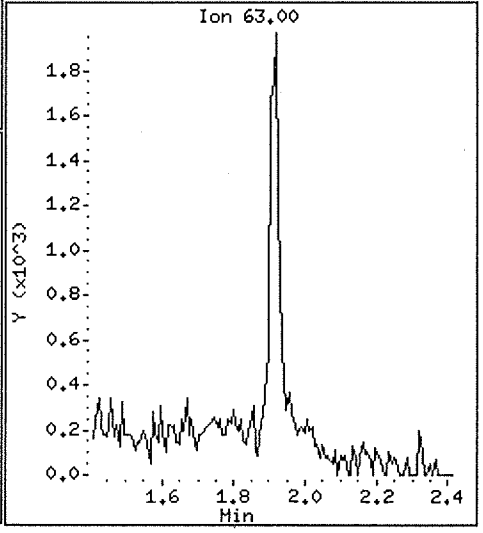


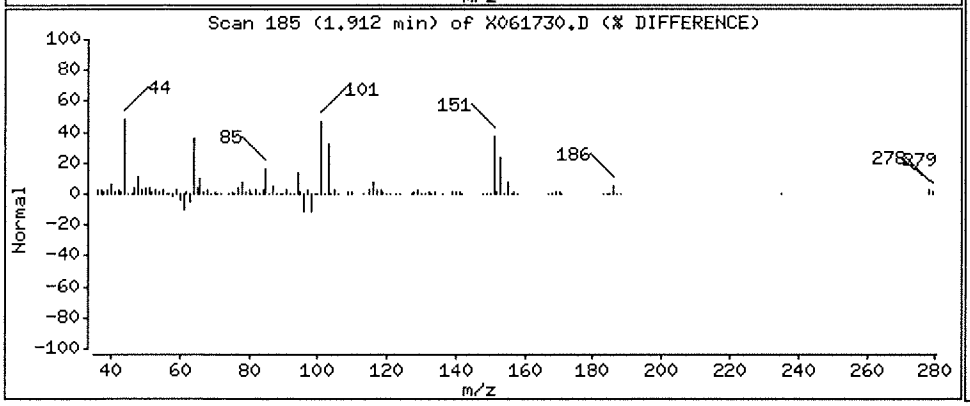












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061730.D Page 4

Date : 17-JUN-2021 20:57

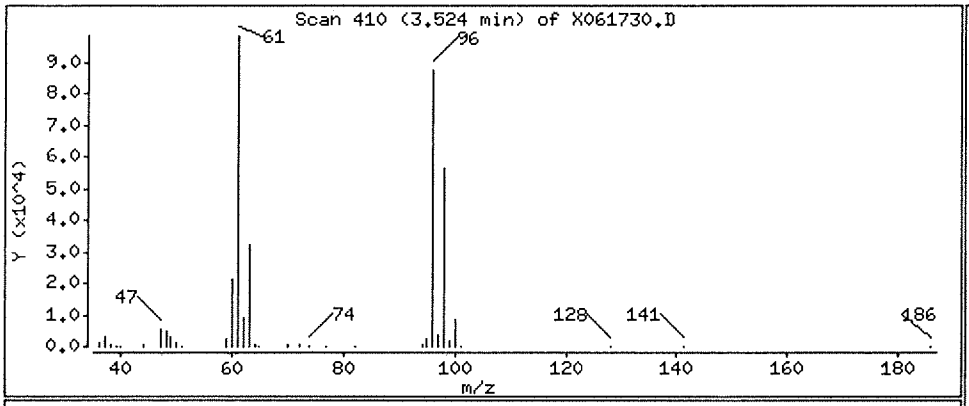
Client ID: HS21060700-13 Instrument: voa6.i

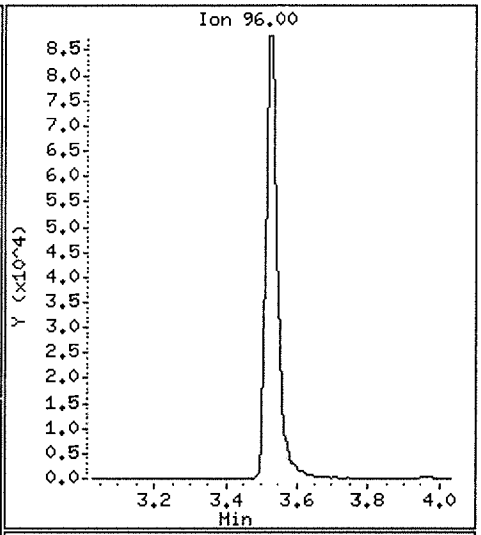
Sample Info: HS21060700-13;HS21060700-13;;;

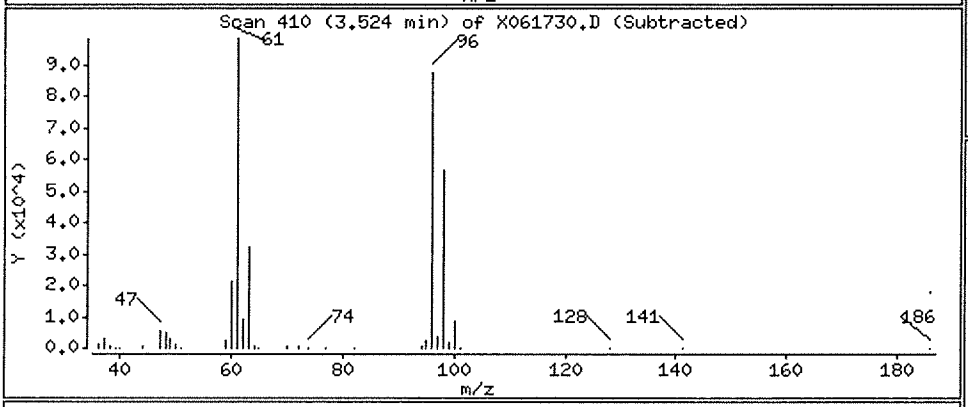
Purge Volume: 5.0 Operator: PC

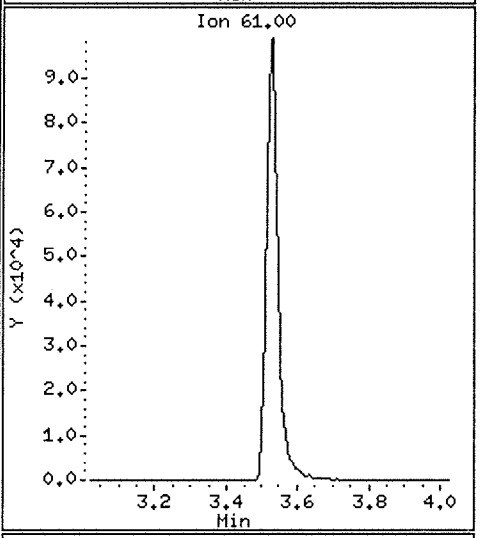
Column phase: DB624 Column diameter: 0.18

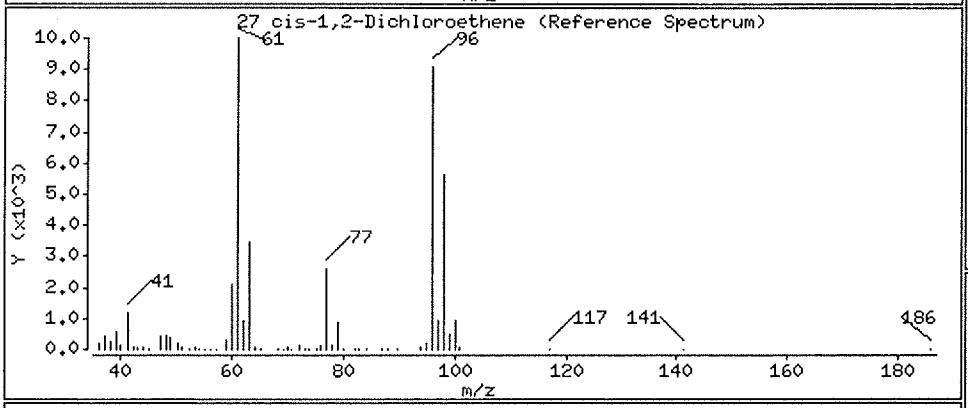
27 cis-1,2-Dichloroethene Concentration: 8440.90 ug/l

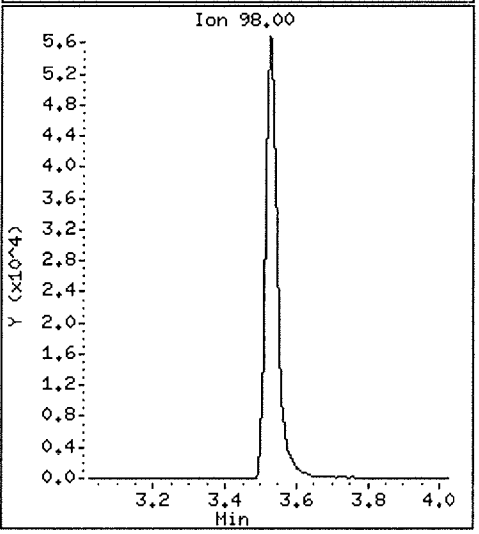


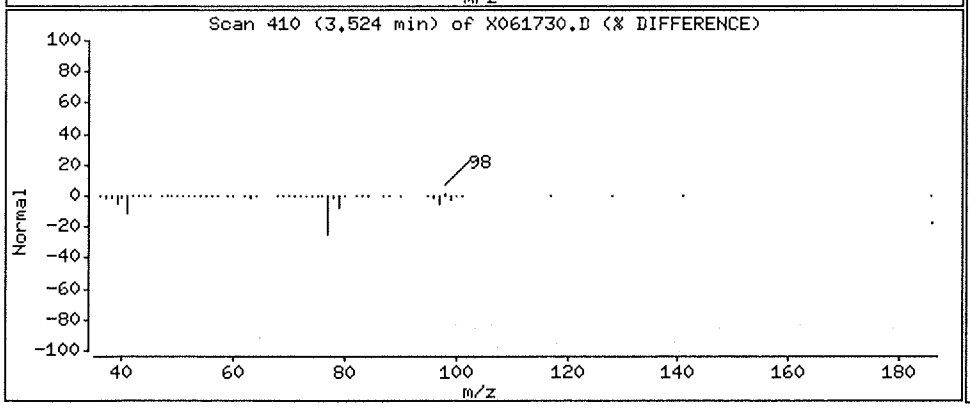












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Date : 17-JUN-2021 20:57

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

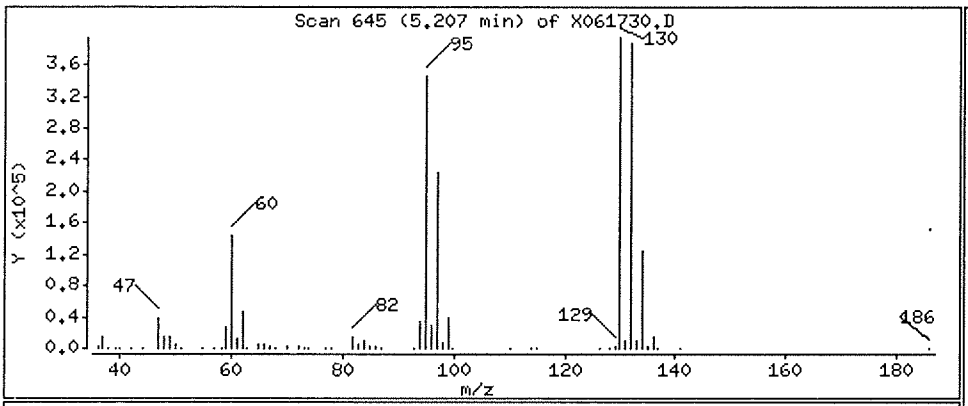
Operator: PC

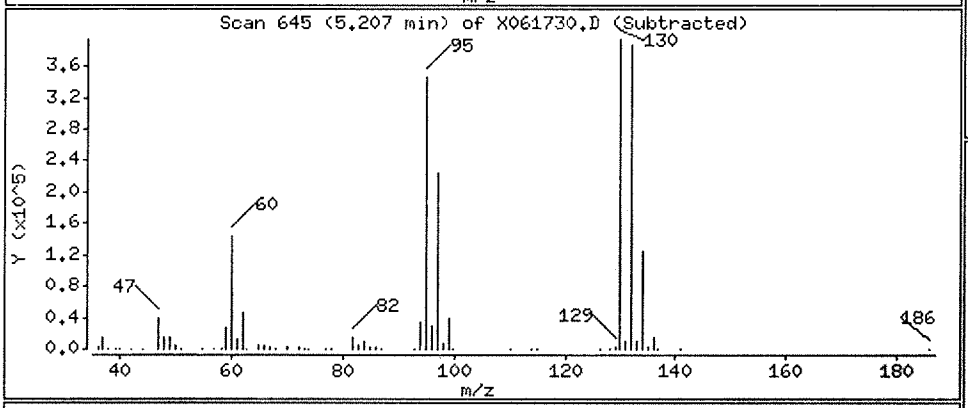
Column phase: DB624

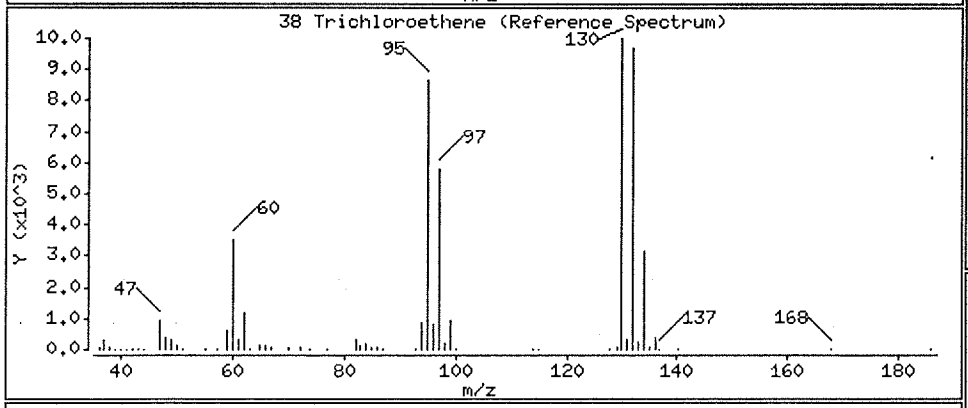
Column diameter: 0.18

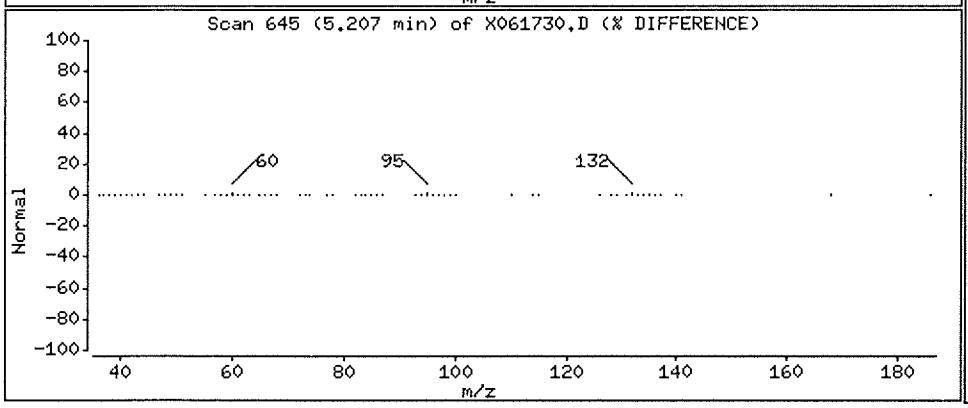
38 Trichloroethene

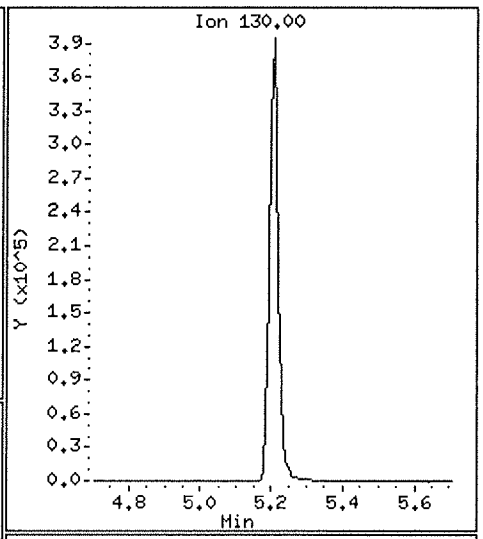
Concentration: 32227.96 ug/l

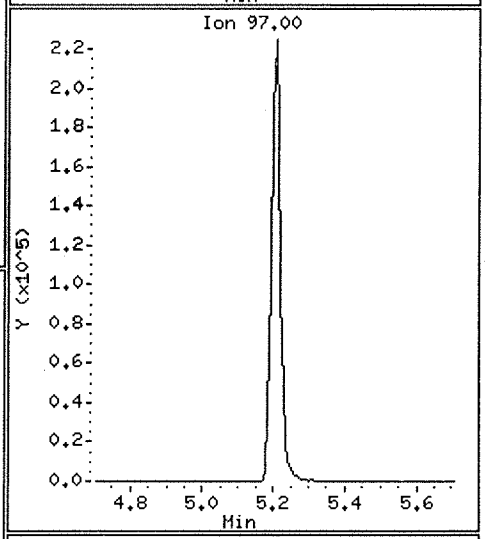


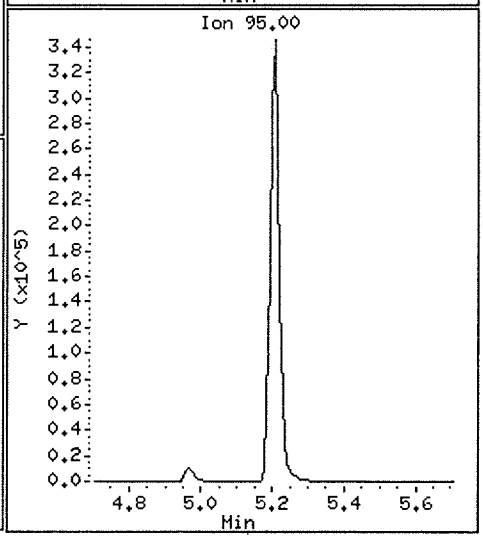












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Date : 17-JUN-2021 20:57

Client ID: HS21060700-13

Instrument: voa6.i

Sample Info: HS21060700-13;HS21060700-13;;;

Purge Volume: 5.0

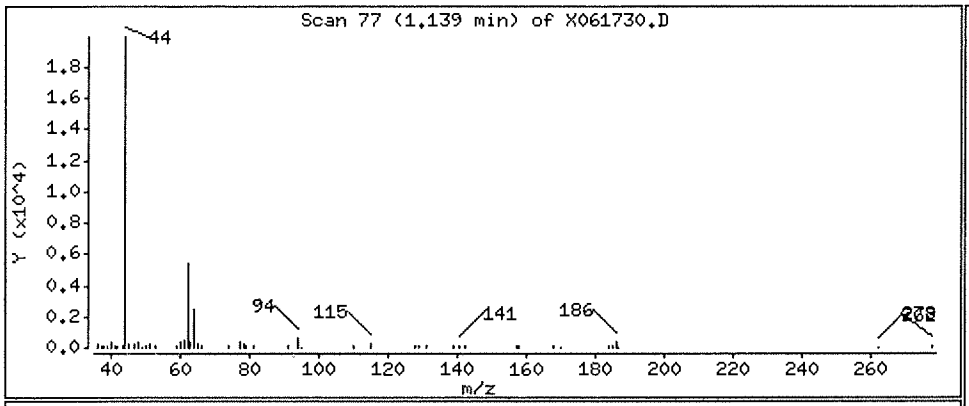
Operator: PC

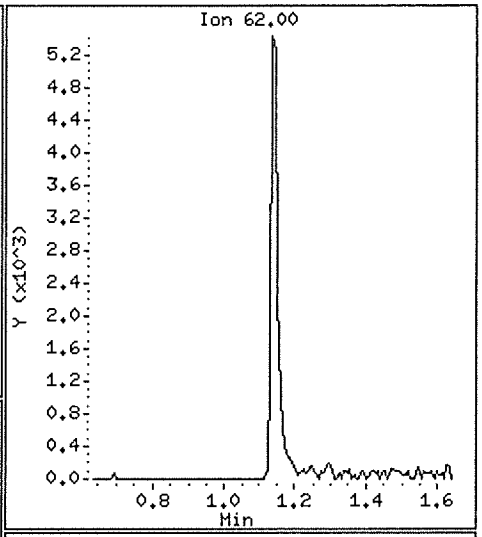
Column phase: DB624

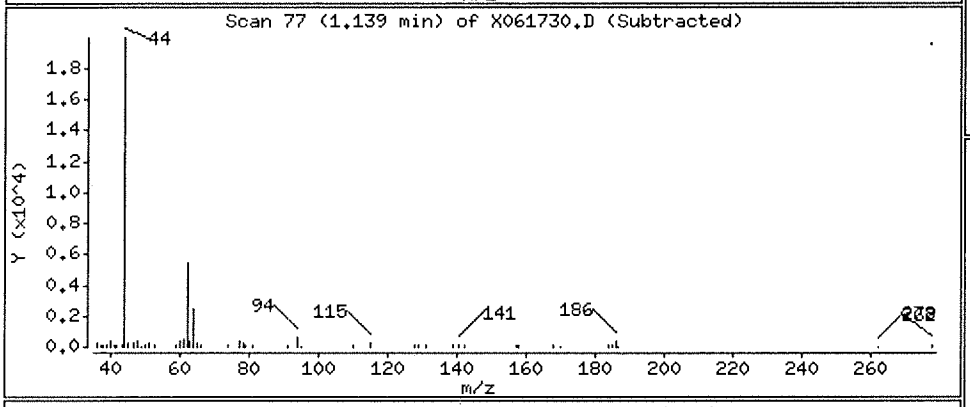
Column diameter: 0.18

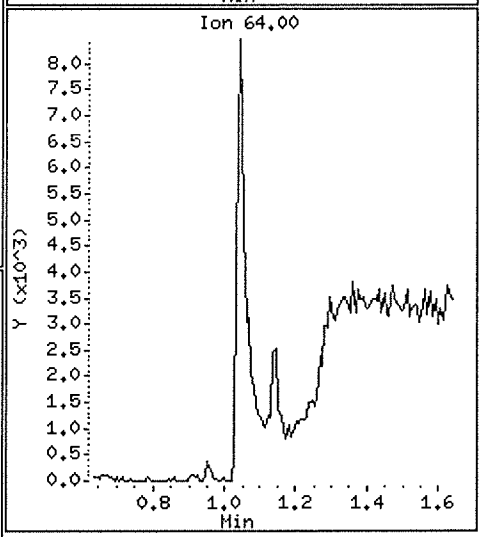
5 Vinyl Chloride

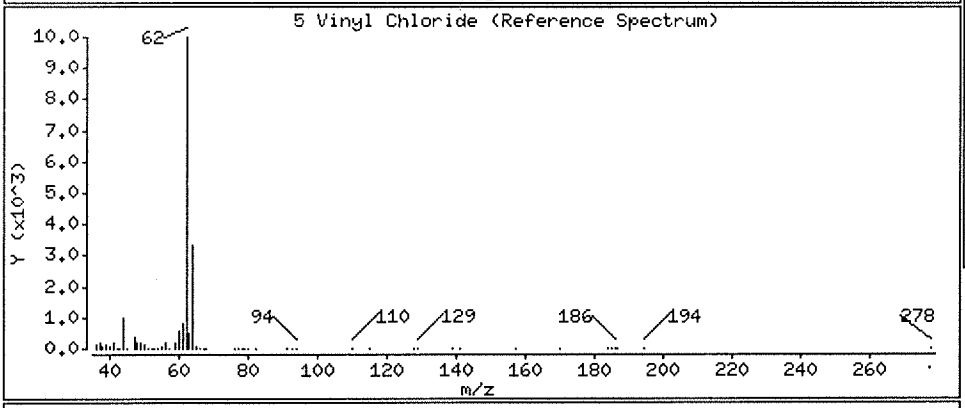
Concentration: 276.51 ug/l

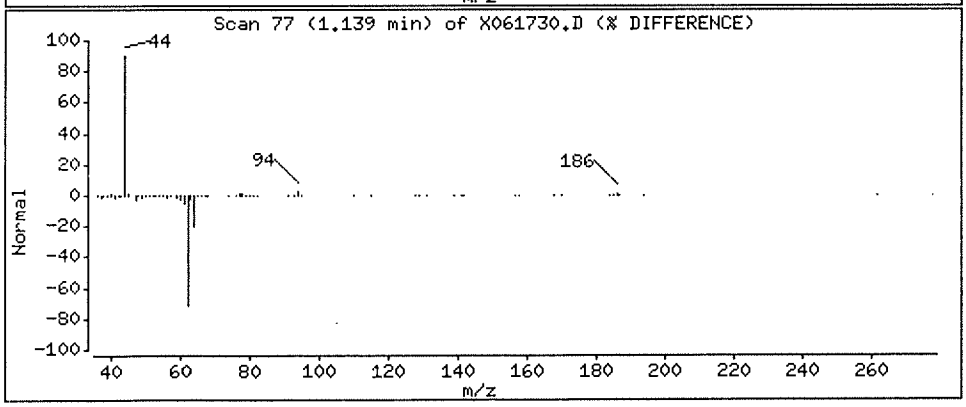












Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061731.D Page 1
Report Date: 26-Jul-2021 15:01

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X210617.b\X061731.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 17-JUN-2021 21:18
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X210617.b\8260W.m
Meth Date : 26-Jul-2021 15:01 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.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

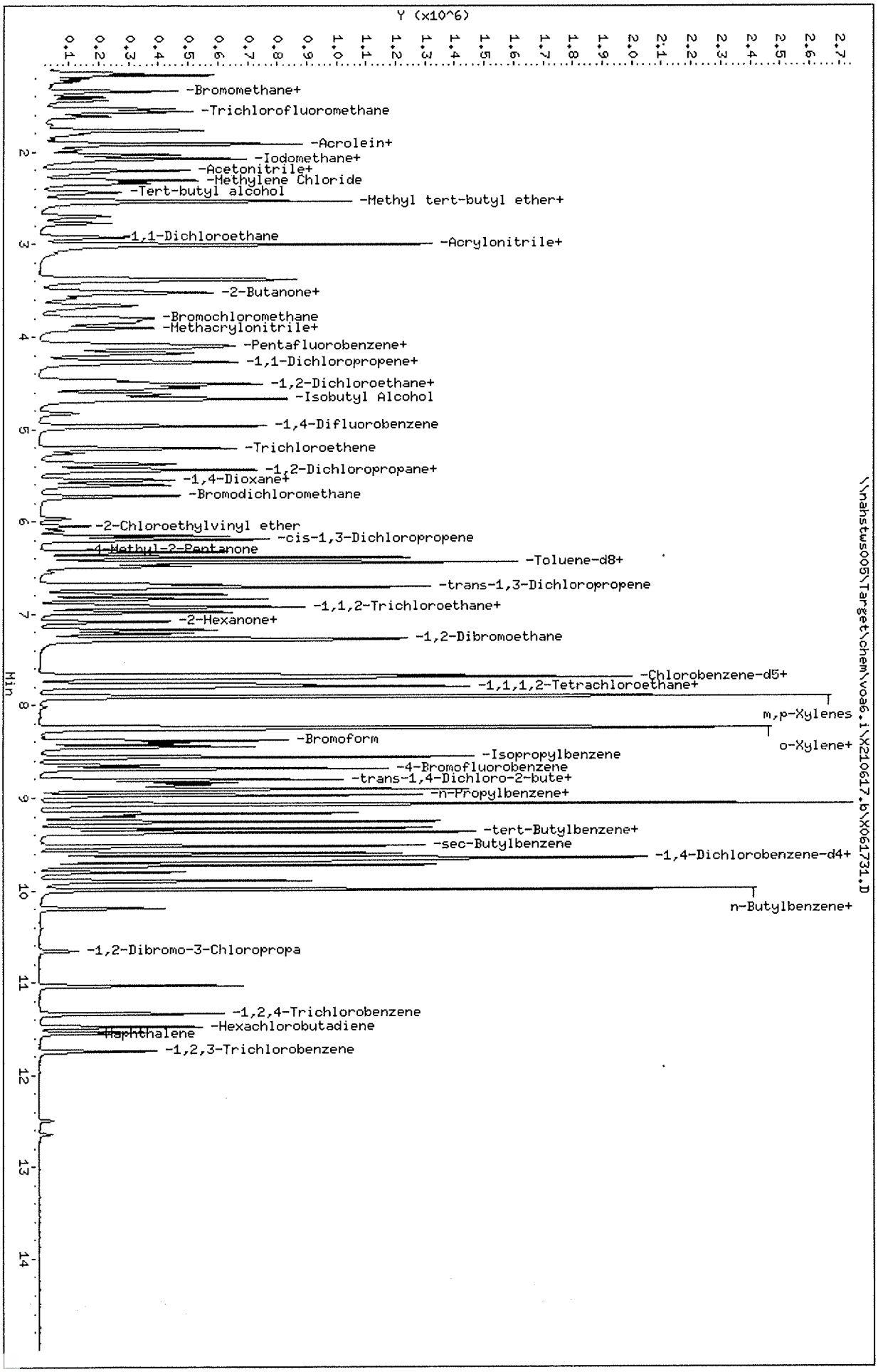
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.182	4.182	(1.000)	456160	50.0000	
* 36	1,4-Difluorobenzene	114	4.963	4.963	(1.000)	675802	50.0000	
* 47	Chlorobenzene-d5	117	7.671	7.671	(1.000)	657128	50.0000	
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	362787	50.0000	
$ 30	Dibromofluoromethane	113	4.096	4.096	(0.979)	227579	50.0000	50.68
$ 35	1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	227095	50.0000	52.14
$ 48	Toluene-d8	98	6.388	6.388	(0.833)	777202	50.0000	47.48
$ 69	4-Bromofluorobenzene	95	8.688	8.688	(1.133)	292775	50.0000	50.72
60	1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	230259	50.0000	47.38
31	1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	294818	50.0000	43.73
68	1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	260095	50.0000	51.94
53	1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	168459	50.0000	47.32
22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	316132	50.0000	43.83
11	1,1-Dichloroethene	96	1.912	1.912	(0.457)	190657	50.0000	40.57
32	1,1-Dichloropropene	75	4.283	4.283	(0.863)	233848	50.0000	45.18
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	115629	50.0000	52.64
71	1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	220766	50.0000	48.80(M)
90	1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	182048	50.0000	50.75
79	1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	702953	50.0000	42.48
89	1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	30589	50.0000	53.11
57	1,2-Dibromoethane	107	7.262	7.262	(0.947)	227351	50.0000	46.99
88	1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	440171	50.0000	44.73

Data File: \\nahstws005\Target\chem\voa6.i\X210617.b\X061731.D Page 2
Report Date: 26-Jul-2021 15:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	267976	50.0000	49.76
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	188859	50.0000	47.47
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	675715	50.0000	41.03
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	450165	50.0000	43.99
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	331607	50.0000	46.84
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	459338	50.0000	43.01
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	219201	50.0000	35.12
24	2-Butanone	43	3.581	3.581	(0.856)	131924	100.000	95.05
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	577671	50.0000	42.54
52	2-Hexanone	43	7.083	7.083	(0.923)	237066	100.000	97.11
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	673612	50.0000	41.65
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	666927	50.0000	39.75
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	352424	100.000	93.13
10	Acetone	43	1.976	1.976	(0.473)	112364	100.000	96.22
37	Benzene	78	4.512	4.512	(0.909)	723181	50.0000	46.58
74	Bromobenzene	156	8.802	8.802	(0.911)	281672	50.0000	46.79
29	Bromochloromethane	128	3.795	3.795	(0.908)	130831	50.0000	47.43
39	Bromodichloromethane	83	5.722	5.722	(1.153)	279101	50.0000	48.03
66	Bromoform	173	8.408	8.408	(1.096)	185547	50.0000	50.63
6	Bromomethane	94	1.339	1.339	(0.320)	200236	50.0000	42.52
19	Carbon Disulfide	76	2.069	2.069	(0.495)	849988	100.000	76.28
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	255329	50.0000	45.57
59	Chlorobenzene	112	7.692	7.692	(1.003)	587746	50.0000	42.96
7	Chloroethane	64	1.403	1.403	(0.336)	153259	50.0000	47.85
28	Chloroform	83	3.910	3.910	(0.935)	357181	50.0000	44.52
3	Chloromethane	50	1.074	1.074	(0.257)	193117	50.0000	46.67
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	216964	50.0000	45.37
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	331416	50.0000	48.41
55	Dibromochloromethane	129	7.176	7.176	(0.936)	263656	50.0000	48.74
44	Dibromomethane	93	5.550	5.550	(1.118)	146134	50.0000	48.88
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	192975	50.0000	46.03
61	Ethylbenzene	106	7.800	7.800	(1.017)	284310	50.0000	45.05
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	101164	50.0000	45.45
67	Isopropylbenzene	105	8.559	8.559	(1.116)	811410	50.0000	42.07
62	m,p-Xylenes	106	7.900	7.900	(1.030)	712512	100.000	86.60
17	Methylene Chloride	84	2.298	2.298	(0.550)	194407	50.0000	46.91
87	n-Butylbenzene	91	9.991	9.991	(1.034)	550397	50.0000	38.99
73	n-Propylbenzene	91	8.910	8.910	(0.922)	927142	50.0000	40.96
92	Naphthalene	128	11.539	11.539	(1.194)	261850	50.0000	50.50
63	o-Xylene	106	8.244	8.244	(1.075)	346890	50.0000	43.24
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	756093	50.0000	39.68
64	Styrene	104	8.258	8.258	(1.077)	607150	50.0000	45.29
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	569873	50.0000	40.36
56	Tetrachloroethene	164	6.926	6.926	(0.903)	176653	50.0000	43.66
50	Toluene	91	6.446	6.446	(0.840)	820706	50.0000	42.78
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	180695	50.0000	42.42
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	289382	50.0000	48.99
38	Trichloroethene	130	5.207	5.207	(1.049)	232563	50.0000	50.13
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	336495	50.0000	40.86
5	Vinyl Chloride	62	1.138	1.138	(0.272)	230955	50.0000	42.77

QC Flag Legend

M - Compound response manually integrated.



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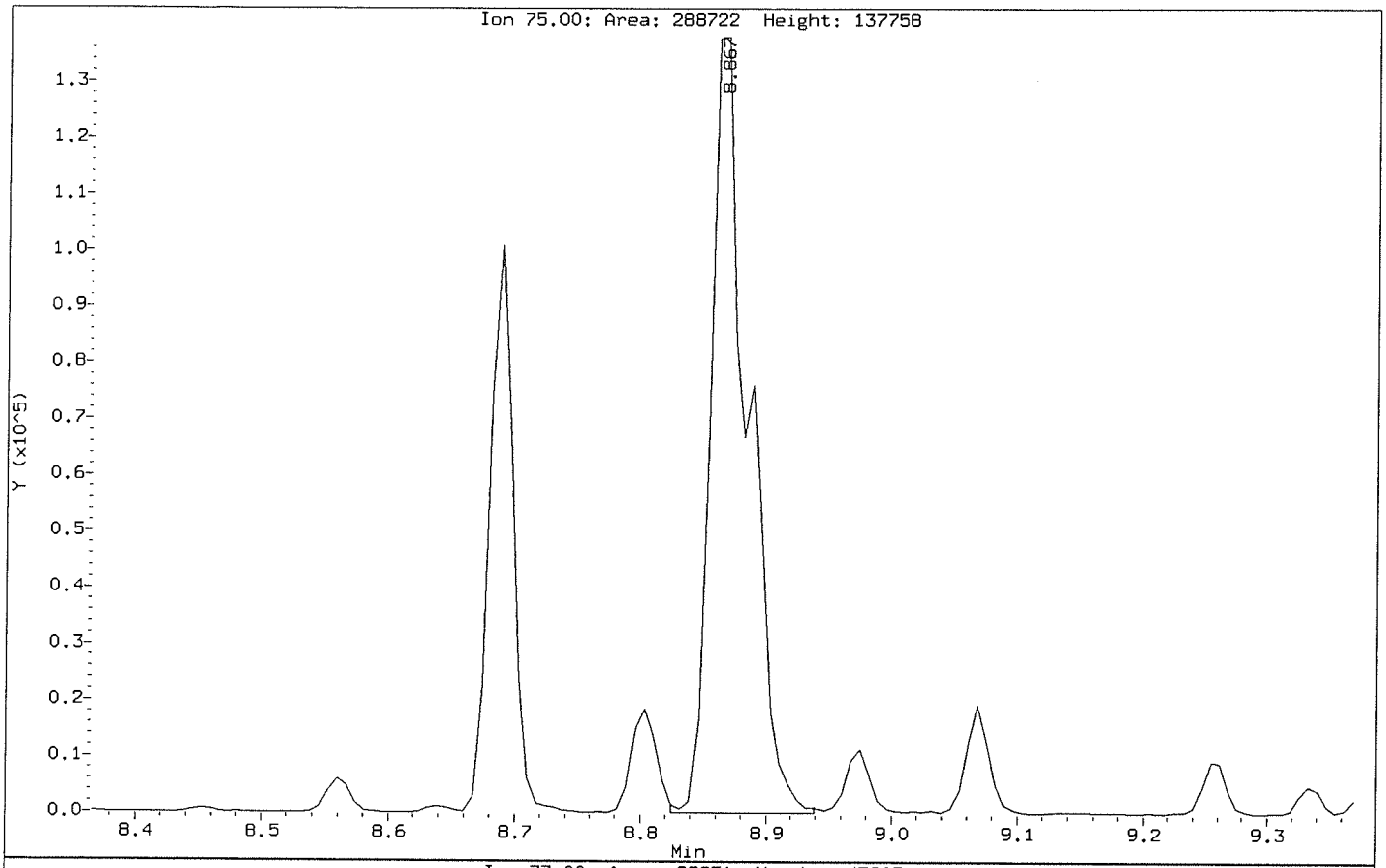
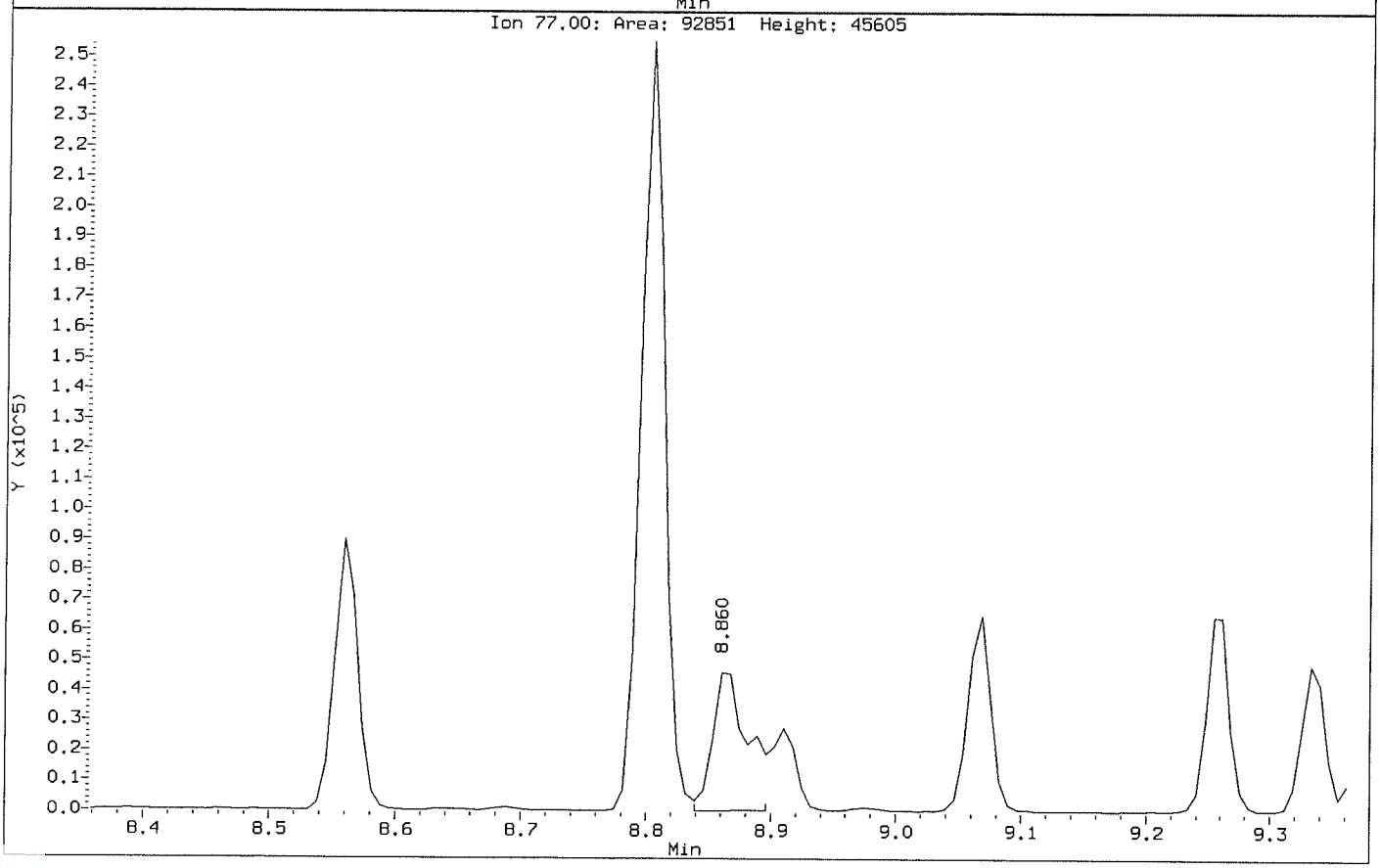
Date : 17-JUN-2021 21:18
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210617.b\Before\X061731.D
Injection Date: 17-JUN-2021 21:18
Instrument: voa6.i
Client Sample ID: CCV-END

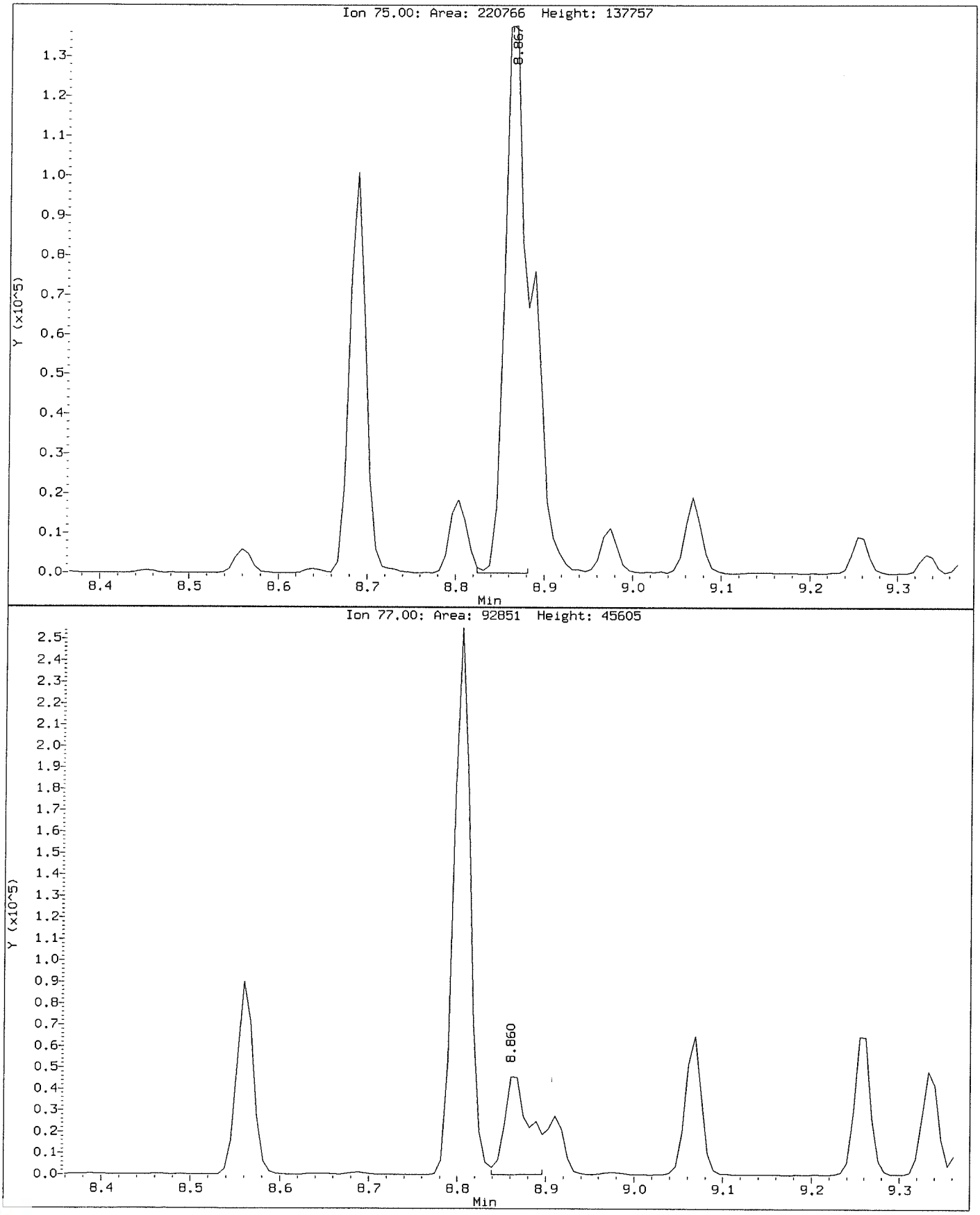
Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





Data File: \\NAHSTWS005\Target\chem\voa6.i\X210617.b\X061731.D
Injection Date: 17-JUN-2021 21:18
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



HS21060700 - ME - HG_W_DODICP_W_DOD

ALS WO# HS21060700

Form 11 - INTERNAL STANDARD ASSOCIATION

Client: Bhate Environmental Associates, Inc.

Project: LHAAP /ICT Wells

WorkOrder: HS21060700

Instrument:ICPMS05

Mass	Analyte	Assoc Int Standard 1	Assoc Int Standard 2	Mode
9	Beryllium	Lithium		Ar
11	Boron	Lithium		Ar
23	Sodium	Germanium		ArHe
24	Magnesium	Germanium		ArHe
27	Aluminum	Germanium		ArHe
39	Potassium	Germanium		ArHe
44	Calcium	Germanium		Ar
47	Titanium	Germanium		Ar
51	Vanadium	Germanium		ArHe
52	Chromium	Germanium		ArHe
55	Manganese	Germanium		ArHe
56	Iron	Germanium		ArHe
59	Cobalt	Germanium		ArHe
60	Nickel	Germanium		ArHe
63	Copper	Germanium		ArHe
66	Zinc	Germanium		ArHe
75	Arsenic	Germanium		ArHe
82	Selenium	Germanium		Ar
88	Strontium	Indium		Ar
95	Molybdenum	Indium		Ar
105	Palladium	Germanium		Ar
107	Silver	Indium		Ar
114	Cadmium	Indium		Ar
118	Tin	Indium		Ar
121	Antimony	Germanium		ArHe
137	Barium	Indium		Ar
205	Thallium	Bismuth		Ar
208	Lead	Bismuth		Ar

ALS Houston, US Date: 26-Jul-21

Form 11 - INTERNAL STANDARD ASSOCIATION

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Instrument:ICPMS06

Mass	Analyte	Assoc Int Standard 1	Assoc Int Standard 2	Mode
9	Beryllium	Lithium		Ar
11	Boron	Lithium		Ar
23	Sodium	Germanium		ArHe
24	Magnesium	Germanium		ArHe
27	Aluminum	Germanium		ArHe
39	Potassium	Germanium		ArHe
44	Calcium	Germanium		Ar
47	Titanium	Germanium		Ar
51	Vanadium	Germanium		ArHe
52	Chromium	Germanium		ArHe
55	Manganese	Germanium		ArHe
56	Iron	Germanium		ArHe
59	Cobalt	Germanium		ArHe
60	Nickel	Germanium		ArHe
63	Copper	Germanium		ArHe
66	Zinc	Germanium		ArHe
75	Arsenic	Germanium		ArHe
82	Selenium	Germanium		Ar
88	Strontium	Indium		Ar
95	Molybdenum	Indium		Ar
105	Palladium	Germanium		Ar
107	Silver	Indium		Ar
114	Cadmium	Indium		Ar
118	Tin	Indium		Ar
121	Antimony	Germanium		ArHe
137	Barium	Indium		Ar
205	Thallium	Bismuth		Ar
208	Lead	Bismuth		Ar

ALS Houston, US

Date: 26-Jul-21

FORM 12 - PREPARATION LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 18-Jun-2021 08:30 End Date: 18-Jun-2021 11:30

Batch ID: 167022
Prep Code: Hg_WPr
Method: SW7470A
Technician:

SampID	ClientID	Matrix	Init Wt	Init Vol	FinalVol (mL)	PrepFac
HS21060700-01	ICT2_061020	Groundwater		10	10	1
HS21060700-02	ICT4_061020	Groundwater		10	10	1
HS21060700-02MS				10	10	1
HS21060700-02MSD				10	10	1
HS21060700-03	ICT7_061020	Groundwater		10	10	1
HS21060700-04	ICT8_061020	Groundwater		10	10	1
HS21060700-05	ICT8_061020_a	Groundwater		10	10	1
HS21060700-06	EW01_061020	Groundwater		10	10	1
HS21060700-07	ICT11_061020	Groundwater		10	10	1
HS21060700-08	ICT11_061020_a	Groundwater		10	10	1
HS21060700-09	ICT12A_061020	Groundwater		10	10	1
HS21060700-10	ICT12B_061020	Groundwater		10	10	1
HS21060700-11	ICT12C_061020	Groundwater		10	10	1
HS21060700-12	ICT12D_061020	Groundwater		10	10	1
HS21060700-13	ICT12E_061020	Groundwater		10	10	1
HS21060700-14	ICT13A_061020	Groundwater		10	10	1
HS21060700-15	ICT13B_061020	Groundwater		10	10	1
HS21060700-16	ICT13C_061020	Groundwater		10	10	1
HS21060700-17	ICT13D_061020	Groundwater		10	10	1
HS21060700-18	ICT13E_061020	Groundwater		10	10	1
HS21060700-19	ICT13F_061020	Groundwater		10	10	1
HS21060700-20	ICT14A_061020	Groundwater		10	10	1
LCS-167022				10	10	1
MBLK-167022				10	10	1

ALS Houston, US

Date: 26-Jul-21

FORM 12 - PREPARATION LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 18-Jun-2021 08:30 End Date: 18-Jun-2021 11:30

Batch ID: 167023
Prep Code: Hg_WPr
Method: SW7470A
Technician:

SampID	ClientID	Matrix	Init Wt	Init Vol	FinalVol (mL)	PrepFac
HS21060495-07MS				10	10	1
HS21060495-07MSD				10	10	1
HS21060700-21	ICT14B_061020	Groundwater		10	10	1
HS21060700-22	ICT14C_061020	Groundwater		10	10	1
HS21060700-23	ICT14D_061020	Groundwater		10	10	1
HS21060700-24	ICT14E_061020	Groundwater		10	10	1
LCS-167023				10	10	1
MBLK-167023				10	10	1

ALS Houston, US Date: 26-Jul-21

FORM 12 - PREPARATION LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 16-Jun-2021 10:00 End Date: 16-Jun-2021 14:00

Batch ID: 166932
Prep Code: 3010A
Method: SW3010A
Technician:

SampID	ClientID	Matrix	Init Wt	Init Vol	FinalVol (mL)	PrepFac
HS21060700-12	ICT12D_061020	Groundwater		10	10	1
HS21060700-13	ICT12E_061020	Groundwater		10	10	1
HS21060700-14	ICT13A_061020	Groundwater		10	10	1
HS21060700-14MS				10	10	1
HS21060700-14MSD				10	10	1
HS21060700-14PDS				10	10	1
HS21060700-14SD				10	10	1
HS21060700-15	ICT13B_061020	Groundwater		10	10	1
HS21060700-16	ICT13C_061020	Groundwater		1	10	10
HS21060700-17	ICT13D_061020	Groundwater		10	10	1
HS21060700-18	ICT13E_061020	Groundwater		10	10	1
HS21060700-19	ICT13F_061020	Groundwater		10	10	1
HS21060700-20	ICT14A_061020	Groundwater		10	10	1
HS21060700-21	ICT14B_061020	Groundwater		10	10	1
HS21060700-22	ICT14C_061020	Groundwater		10	10	1
HS21060700-23	ICT14D_061020	Groundwater		10	10	1
HS21060700-24	ICT14E_061020	Groundwater		10	10	1
LCS-166932				10	10	1
MBLK-166932				10	10	1

ALS Houston, US Date: 26-Jul-21

FORM 12 - PREPARATION LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 16-Jun-2021 10:00 End Date: 16-Jun-2021 14:00

Batch ID: 166919
Prep Code: 3010A
Method: SW3010A
Technician:

SampID	ClientID	Matrix	Init Wt	Init Vol	FinalVol (mL)	PrepFac
HS21060700-01	ICT2_061020	Groundwater		10	10	1
HS21060700-02	ICT4_061020	Groundwater		10	10	1
HS21060700-02MS				10	10	1
HS21060700-02MSD				10	10	1
HS21060700-02PDS				10	10	1
HS21060700-02SD				10	10	1
HS21060700-03	ICT7_061020	Groundwater		10	10	1
HS21060700-04	ICT8_061020	Groundwater		10	10	1
HS21060700-05	ICT8_061020_a	Groundwater		10	10	1
HS21060700-06	EW01_061020	Groundwater		10	10	1
HS21060700-07	ICT11_061020	Groundwater		10	10	1
HS21060700-08	ICT11_061020_a	Groundwater		10	10	1
HS21060700-09	ICT12A_061020	Groundwater		10	10	1
HS21060700-10	ICT12B_061020	Groundwater		10	10	1
HS21060700-11	ICT12C_061020	Groundwater		10	10	1
LCS-166919				10	10	1
MBLK-166919				10	10	1

ALS Houston, US

Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 18-Jun-2021 End Date: 18-Jun-2021

Run ID:HG03_385824
Instrument:HG03
Method:SW7470A

Sample No.	D/F	Time	FileID	Analytes
ICV	1	18-Jun-2021 12:06	HG03_385824 Raw Data_6143407	HG
ICB	1	18-Jun-2021 12:08	_6143408	HG
CRA	1	18-Jun-2021 12:10	_6143409	HG
ICCV 1	1	18-Jun-2021 12:18	_6143410	HG
CCV 2	1	18-Jun-2021 13:11	_6143571	HG
CCB 1	1	18-Jun-2021 13:12	_6143572	HG
CCV 3	1	18-Jun-2021 13:37	_6143703	HG
CCB 2	1	18-Jun-2021 13:38	_6143704	HG
CCV 4	1	18-Jun-2021 14:01	_6143901	HG
CCB 3	1	18-Jun-2021 14:03	_6143902	HG
CCV 5	1	18-Jun-2021 14:23	_6143913	HG
CCB 4	1	18-Jun-2021 14:25	_6143914	HG
MBLK-167022	1	18-Jun-2021 14:57	_6143928	HG
LCS-167022	1	18-Jun-2021 15:02	_6143929	HG
ICT4_061020	1	18-Jun-2021 15:04	_6143930	HG
ICT4_061020MS	1	18-Jun-2021 15:06	_6143931	HG
ICT4_061020MSD	1	18-Jun-2021 15:07	_6143932	HG
ICT2_061020	1	18-Jun-2021 15:09	_6143933	HG
ICT7_061020	1	18-Jun-2021 15:11	_6143934	HG
ICT8_061020	1	18-Jun-2021 15:12	_6143935	HG
ICT8_061020_a	1	18-Jun-2021 15:14	_6143936	HG
CCV 6	1	18-Jun-2021 15:16	_6143937	HG
CCB 5	1	18-Jun-2021 15:18	_6143938	HG
EW01_061020	1	18-Jun-2021 15:20	_6144180	HG
ICT11_061020	1	18-Jun-2021 15:22	_6144181	HG
ICT11_061020_a	1	18-Jun-2021 15:24	_6144182	HG
ICT12A_061020	1	18-Jun-2021 15:25	_6144183	HG
ICT12B_061020	1	18-Jun-2021 15:27	_6144184	HG
ICT12C_061020	1	18-Jun-2021 15:29	_6144185	HG
ICT12D_061020	1	18-Jun-2021 15:30	_6144186	HG
ICT12E_061020	1	18-Jun-2021 15:32	_6144187	HG
ICT13A_061020	1	18-Jun-2021 15:34	_6144188	HG
ICT13B_061020	1	18-Jun-2021 15:35	_6144189	HG
CCV 7	1	18-Jun-2021 15:37	_6144190	HG
CCB 6	1	18-Jun-2021 15:39	_6144191	HG
ICT13C_061020	1	18-Jun-2021 15:42	_6144192	HG
ICT13D_061020	1	18-Jun-2021 15:44	_6144193	HG
ICT13E_061020	1	18-Jun-2021 15:46	_6144194	HG
ICT13F_061020	1	18-Jun-2021 15:47	_6144195	HG
ICT14A_061020	1	18-Jun-2021 15:49	_6144196	HG
MBLK-167023	1	18-Jun-2021 15:51	_6144197	HG
LCS-167023	1	18-Jun-2021 15:53	_6144198	HG
ZZZZZZMS	1	18-Jun-2021 15:56	_6144200	HG
ZZZZZZMSD	1	18-Jun-2021 15:58	_6144201	HG
CCV 8	1	18-Jun-2021 16:01	_6144264	HG
CCB 7	1	18-Jun-2021 16:03	_6144265	HG
ICT14B_061020	1	18-Jun-2021 16:25	_6144365	HG
CCV 9	1	18-Jun-2021 16:27	_6144366	HG
CCB 8	1	18-Jun-2021 16:29	_6144367	HG
ICT14C_061020	1	18-Jun-2021 16:33	_6144368	HG
ICT14D_061020	1	18-Jun-2021 16:34	_6144369	HG

ALS Houston, US Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 18-Jun-2021 End Date: 18-Jun-2021

Run ID:HG03_385824
Instrument:HG03
Method:SW7470A

Sample No.	D/F	Time	FileID	Analytes
ICT14E_061020	1	18-Jun-2021 16:36	_6144370	HG
CCV 10	1	18-Jun-2021 16:50	_6144400	HG
CCB 9	1	18-Jun-2021 16:53	_6144401	HG

ALS Houston, US

Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 21-Jun-2021 End Date: 21-Jun-2021

Run ID:ICPMS05_385946
Instrument:ICPMS05
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS05_385946_Tune	1	21-Jun-2021 00:00	ICPMS05_385946_Tune_1	
CAL BLK	1	21-Jun-2021 11:31	013CALB.d_6146455	ZN
2/10/200	1	21-Jun-2021 11:33	014CALS.d_6146456	ZN
5/25/500	1	21-Jun-2021 11:35	015CALS.d_6146457	ZN
10/50/1000	1	21-Jun-2021 11:37	016CALS.d_6146458	ZN
100/500/10K	1	21-Jun-2021 11:39	017CALS.d_6146459	ZN
200/1000/20K	1	21-Jun-2021 11:41	018CALS.d_6146460	ZN
ICV	1	21-Jun-2021 11:47	020_ICV.d_6146462	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	21-Jun-2021 11:49	021LCV2.d_6146463	ZN
LLICV5	1	21-Jun-2021 11:51	022LCV5.d_6146464	ZN
ICB	1	21-Jun-2021 11:53	023_ICB.d_6146465	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	21-Jun-2021 11:58	025ICSA.d_6146467	ZN
ICSAB	1	21-Jun-2021 12:00	026ICSB.d_6146468	ZN
CCV 1	1	21-Jun-2021 14:07	041_CCV.d_6147172	ZN
CCB 1	1	21-Jun-2021 14:10	042_CCB.d_6147173	ZN
CCB 2	1	21-Jun-2021 14:36	054_CCB.d_6147227	ZN
CCV 2	1	21-Jun-2021 14:38	055_CCV.d_6147228	ZN
ICT14A_061020	10	21-Jun-2021 14:47	059SMPL.d_6147235	ZN
CCV 3	1	21-Jun-2021 14:51	061_CCV.d_6147233	ZN
CCB 3	1	21-Jun-2021 14:53	062_CCB.d_6147234	ZN

ALS Houston, US Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 17-Jun-2021 End Date: 17-Jun-2021

Run ID:ICPMS06_385722
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS06_385722_Tune	1	17-Jun-2021 00:00	ICPMS06_385722_Tune_1	
CAL BLK	1	17-Jun-2021 10:18	011CALB.d_6140476	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	17-Jun-2021 10:20	012CALS.d_6140477	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	17-Jun-2021 10:22	013CALS.d_6140478	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	17-Jun-2021 10:24	014CALS.d_6140479	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	17-Jun-2021 10:26	015CALS.d_6140480	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	17-Jun-2021 10:28	016CALS.d_6140481	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICV	1	17-Jun-2021 10:32	018_ICV.d_6140483	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	17-Jun-2021 10:34	019_ICB.d_6140484	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	17-Jun-2021 10:36	020LCV2.d_6140485	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV5	1	17-Jun-2021 10:38	021LCV5.d_6140486	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	17-Jun-2021 10:51	023ICSA.d_6140488	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSAB	1	17-Jun-2021 10:54	024ICSB.d_6140489	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 1	1	17-Jun-2021 11:08	026_CCV.d_6140504	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 1	1	17-Jun-2021 11:10	027_CCB.d_6140505	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
MBLK-166919	1	17-Jun-2021 11:22	028SMPL.d_6140506	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LCS-166919	1	17-Jun-2021 11:24	029SMPL.d_6140507	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT4_061020	1	17-Jun-2021 11:26	030SMPL.d_6140508	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT4_061020SD	5	17-Jun-2021 11:28	031SMPL.d_6140509	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT4_061020MS	1	17-Jun-2021 11:30	032SMPL.d_6140510	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT4_061020MSD	1	17-Jun-2021 11:32	033SMPL.d_6140511	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT4_061020PDS	1	17-Jun-2021 11:34	034SMPL.d_6140512	AG AL AS BE CD CO CR CU FE K MN NA NI PB SB SE TL V
CCV 2	1	17-Jun-2021 11:46	038_CCV.d_6140516	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 2	1	17-Jun-2021 11:48	039_CCB.d_6140517	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT2_061020	1	17-Jun-2021 12:07	047SMPL.d_6140525	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 3	1	17-Jun-2021 12:13	050_CCV.d_6140789	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 3	1	17-Jun-2021 12:14	051_CCB.d_6140790	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT4_061020PDS	1	17-Jun-2021 12:19	052SMPL.d_6140791	BA CA MG ZN
CCV 4	1	17-Jun-2021 12:39	062_CCV.d_6140855	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 4	1	17-Jun-2021 12:41	063_CCB.d_6140856	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 5	1	17-Jun-2021 14:01	098_CCV.d_6141144	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 5	1	17-Jun-2021 14:03	099_CCB.d_6141145	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 6	1	17-Jun-2021 14:31	111_CCV.d_6141152	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US

Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 17-Jun-2021 End Date: 17-Jun-2021

Run ID:ICPMS06_385722
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
CCB 6	1	17-Jun-2021 14:33	112_CCB.d_6141153	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT7_061020	1	17-Jun-2021 14:39	115SMPL.d_6141374	AG AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT8_061020	1	17-Jun-2021 14:41	116SMPL.d_6141375	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT8_061020_a	1	17-Jun-2021 14:43	117SMPL.d_6141376	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
EW01_061020	1	17-Jun-2021 14:44	118SMPL.d_6141377	AG AL AS BE CA CD CO CR CU FE K MG NI PB SB SE TL V
ICT11_061020	1	17-Jun-2021 14:47	119SMPL.d_6141378	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT11_061020_a	1	17-Jun-2021 14:49	120SMPL.d_6141379	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT12A_061020	1	17-Jun-2021 14:51	121SMPL.d_6141380	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 7	1	17-Jun-2021 14:56	123_CCV.d_6141382	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 7	1	17-Jun-2021 14:58	124_CCB.d_6141383	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT12B_061020	1	17-Jun-2021 15:02	125SMPL.d_6141755	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT12C_061020	1	17-Jun-2021 15:04	126SMPL.d_6141756	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT7_061020	10	17-Jun-2021 15:31	128SMPL.d_6141758	AL
EW01_061020	10	17-Jun-2021 15:33	129SMPL.d_6141759	BA MN NA ZN
CCV 8	1	17-Jun-2021 15:44	135_CCV.d_6141760	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 8	1	17-Jun-2021 15:46	136_CCB.d_6141761	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US

Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 18-Jun-2021 End Date: 19-Jun-2021

Run ID:ICPMS06_385806
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS06_385806_Tune	1	18-Jun-2021 00:00	ICPMS06_385806_Tune_1	
CAL BLK	1	18-Jun-2021 10:38	009CALB.d_6143079	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	18-Jun-2021 10:40	010CALS.d_6143080	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	18-Jun-2021 10:42	011CALS.d_6143081	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	18-Jun-2021 10:44	012CALS.d_6143082	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	18-Jun-2021 10:46	013CALS.d_6143083	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	18-Jun-2021 10:47	014CALS.d_6143084	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICV	1	18-Jun-2021 10:51	016_ICV.d_6143086	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	18-Jun-2021 10:53	017_ICB.d_6143087	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	18-Jun-2021 10:55	018LCV2.d_6143088	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV5	1	18-Jun-2021 10:57	019LCV5.d_6143089	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	18-Jun-2021 11:06	021ICSA.d_6143091	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSAB	1	18-Jun-2021 11:08	022ICSB.d_6143092	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 1	1	18-Jun-2021 14:32	092_CCV.d_6145788	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 1	1	18-Jun-2021 14:34	093_CCB.d_6145789	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
MBLK-166932	1	18-Jun-2021 14:37	094SMPL.d_6145790	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LCS-166932	1	18-Jun-2021 14:39	095SMPL.d_6145791	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT12D_061020	1	18-Jun-2021 14:41	096SMPL.d_6145792	AG AL AS BA BE CA CD CO CR FE K MG MN NI PB SB SE TL V ZN
ICT12E_061020	1	18-Jun-2021 14:43	097SMPL.d_6145793	AG AL AS BA BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
ICT13A_061020	1	18-Jun-2021 14:45	098SMPL.d_6145794	AG AL AS BA BE CA CD CO CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13A_061020SD	5	18-Jun-2021 14:47	099SMPL.d_6145795	AG AL AS BA BE CA CD CO CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13A_061020MS	1	18-Jun-2021 14:49	100SMPL.d_6145796	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13A_061020MSD	1	18-Jun-2021 14:51	101SMPL.d_6145797	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13A_061020PDS	1	18-Jun-2021 14:53	102SMPL.d_6145798	AG AL AS BE CA CD CO FE K MG MN NA PB SE TL V ZN
CCV 2	1	18-Jun-2021 15:05	104_CCV.d_6145800	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 2	1	18-Jun-2021 15:07	105_CCB.d_6145801	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13B_061020	1	18-Jun-2021 15:09	106SMPL.d_6145802	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13C_061020	1	18-Jun-2021 15:10	107SMPL.d_6145803	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13D_061020	1	18-Jun-2021 15:12	108SMPL.d_6145804	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13E_061020	1	18-Jun-2021 15:14	109SMPL.d_6145805	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT13F_061020	1	18-Jun-2021 15:18	111SMPL.d_6145807	AG AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT14A_061020	1	18-Jun-2021 15:20	112SMPL.d_6145808	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V
ICT14B_061020	1	18-Jun-2021 15:22	113SMPL.d_6145809	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 18-Jun-2021 End Date: 19-Jun-2021

Run ID:ICPMS06_385806
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICT14C_061020	1	18-Jun-2021 15:24	114SMPL.d_6145810	AG AL AS BE CA CD CO CR CU FE K MG NI PB SB SE TL V ZN
CCV 3	1	18-Jun-2021 15:30	116_CCV.d_6145812	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 3	1	18-Jun-2021 15:32	117_CCB.d_6145813	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT14D_061020	1	18-Jun-2021 15:34	118SMPL.d_6145814	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICT14E_061020	1	18-Jun-2021 15:36	119SMPL.d_6145815	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 4	1	18-Jun-2021 15:54	128_CCV.d_6145824	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 4	1	18-Jun-2021 15:56	129_CCB.d_6145825	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 5	1	19-Jun-2021 00:02	279_CCV.d_6146147	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 5	1	19-Jun-2021 00:03	280_CCB.d_6146148	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLCCV2	1	19-Jun-2021 00:07	282LCV2.d_6146150	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLCCV5	1	19-Jun-2021 00:09	283LCV5.d_6146151	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	19-Jun-2021 00:11	284ICSA.d_6146152	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSAB	1	19-Jun-2021 00:13	285ICSB.d_6146153	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 21-Jun-2021 End Date: 21-Jun-2021

Run ID:ICPMS06_385965
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS06_385965_Tune	1	21-Jun-2021 00:00	ICPMS06_385965_Tune_1	
CAL BLK	1	21-Jun-2021 12:01	012CALB.d_6147049	AL BA CR CU MN NA
2/10/200	1	21-Jun-2021 12:03	013CALS.d_6147050	AL BA CR CU MN NA
5/25/500	1	21-Jun-2021 12:05	014CALS.d_6147051	AL BA CR CU MN NA
10/50/100	1	21-Jun-2021 12:07	015CALS.d_6147052	AL BA CR CU MN NA
100/500/10K	1	21-Jun-2021 12:09	016CALS.d_6147053	AL BA CR CU MN NA
200/1000/20K	1	21-Jun-2021 12:10	017CALS.d_6147054	AL BA CR CU MN NA
ICV	1	21-Jun-2021 12:14	019_ICV.d_6147056	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	21-Jun-2021 12:16	020_ICB.d_6147057	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	21-Jun-2021 12:18	021LCV2.d_6147058	AL BA CR CU MN NA
LLICV5	1	21-Jun-2021 12:20	022LCV5.d_6147059	AL BA CR CU MN NA
ICSA	1	21-Jun-2021 12:36	024ICSA.d_6147061	AL BA CR CU MN NA
ICSAB	1	21-Jun-2021 12:38	025ICSB.d_6147062	AL BA CR CU MN NA
CCV 1	1	21-Jun-2021 12:47	027_CCV.d_6147137	AL BA CR CU MN NA
CCB 1	1	21-Jun-2021 12:48	028_CCB.d_6147138	AL BA CR CU MN NA
ICT12D_061020	10	21-Jun-2021 12:57	032SMPL.d_6147142	CU NA
ICT12E_061020	10	21-Jun-2021 12:59	033SMPL.d_6147143	NA
ICT13F_061020	10	21-Jun-2021 13:01	034SMPL.d_6147132	AL
ICT14C_061020	10	21-Jun-2021 13:05	036SMPL.d_6147134	BA MN NA
CCV 2	1	21-Jun-2021 13:11	039_CCV.d_6147135	AL BA CR CU MN NA
CCB 2	1	21-Jun-2021 13:13	040_CCB.d_6147136	AL BA CR CU MN NA
CCV 3	1	21-Jun-2021 14:21	063_CCV.d_6147279	AL BA CR CU MN NA
CCB 3	1	21-Jun-2021 14:23	064_CCB.d_6147280	AL BA CR CU MN NA
ICT13A_061020	5	21-Jun-2021 14:50	071SMPL.d_6147281	CR
ICT13A_061020PDS	5	21-Jun-2021 14:54	073SMPL.d_6147283	CR
ICT13A_061020SD	25	21-Jun-2021 14:58	074SMPL.d_6147284	CR
CCV 4	1	21-Jun-2021 15:00	075_CCV.d_6147285	AL BA CR CU MN NA
CCB 4	1	21-Jun-2021 15:02	076_CCB.d_6147286	AL BA CR CU MN NA
CAL BLK	1	21-Jun-2021 15:37	086CALB.d_6148250	AL BA CR CU MN NA
2/10/200	1	21-Jun-2021 15:39	087CALS.d_6148251	AL BA CR CU MN NA
5/25/500	1	21-Jun-2021 15:41	088CALS.d_6148252	AL BA CR CU MN NA
10/50/100	1	21-Jun-2021 15:43	089CALS.d_6148253	AL BA CR CU MN NA
100/500/10K	1	21-Jun-2021 15:45	090CALS.d_6148254	AL BA CR CU MN NA
200/1000/20K	1	21-Jun-2021 15:47	091CALS.d_6148255	AL BA CR CU MN NA
ICV	1	21-Jun-2021 15:51	093_ICV.d_6148257	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICCB 5	1	21-Jun-2021 15:52	094_ICB.d_6148258	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICCV2	1	21-Jun-2021 15:54	095LCV2.d_6148259	AL BA CR CU MN NA
LLICCV5	1	21-Jun-2021 15:56	096LCV5.d_6148260	AL BA CR CU MN NA
CCV 5	1	21-Jun-2021 16:18	098_CCV.d_6148264	AL BA CR CU MN NA
CCB 6	1	21-Jun-2021 16:20	099_CCB.d_6148265	AL BA CR CU MN NA
CCV 6	1	21-Jun-2021 16:45	110_CCV.d_6148267	AL BA CR CU MN NA
CCB 7	1	21-Jun-2021 16:47	111_CCB.d_6148268	AL BA CR CU MN NA
CCV 7	1	21-Jun-2021 17:22	122_CCV.d_6148279	AL BA CR CU MN NA
CCB 8	1	21-Jun-2021 17:24	123_CCB.d_6148280	AL BA CR CU MN NA
CCV 8	1	21-Jun-2021 22:02	225_CCV.d_6148282	AL BA CR CU MN NA
CCB 9	1	21-Jun-2021 22:04	226_CCB.d_6148283	AL BA CR CU MN NA
LLCCV2	1	21-Jun-2021 22:08	228LCV2.d_6148285	AL BA CR CU MN NA
LLCCV5	1	21-Jun-2021 22:10	229LCV5.d_6148286	AL BA CR CU MN NA
ICSA	1	21-Jun-2021 22:12	230ICSA.d_6148287	AL BA CR CU MN NA

ALS Houston, US Date: 26-Jul-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700
Start Date: 21-Jun-2021 End Date: 21-Jun-2021

Run ID:ICPMS06_385965
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICSAB	1	21-Jun-2021 22:14	231ICSB.d_6148288	AL BA CR CU MN NA

ALS Houston, US Date: 26-Jul-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: HG03_385824
Instrument: HG03
Method: SW7470A

ICV	Date: 18-Jun-2021 12:06		Seq: 6143407	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.94	99	90-110	

ICCV1	Date: 18-Jun-2021 12:18		Seq: 6143410	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	5.02	100	90-110	

CCV2	Date: 18-Jun-2021 13:11		Seq: 6143571	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.93	99	90-110	

CCV3	Date: 18-Jun-2021 13:37		Seq: 6143703	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.9	98	90-110	

CCV4	Date: 18-Jun-2021 14:01		Seq: 6143901	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.87	97	90-110	

CCV5	Date: 18-Jun-2021 14:23		Seq: 6143913	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.9	98	90-110	

CCV6	Date: 18-Jun-2021 15:16		Seq: 6143937	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.87	97	90-110	

CCV7	Date: 18-Jun-2021 15:37		Seq: 6144190	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.87	97	90-110	

CCV8	Date: 18-Jun-2021 16:01		Seq: 6144264	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.97	99	90-110	

CCV9	Date: 18-Jun-2021 16:27		Seq: 6144366	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	4.99	100	90-110	

CCV10	Date: 18-Jun-2021 16:50		Seq: 6144400	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Mercury	5	5.09	102	90-110	

ALS Houston, US Date: 26-Jul-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS05_385946
Instrument: ICPMS05
Method: SW6020A

ICV	Date: 21-Jun-2021 11:47		Seq: 6146462	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Zinc	100	100.925	101	90-110	

CCV1	Date: 21-Jun-2021 14:07		Seq: 6147172	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Zinc	100	99.035	99	90-110	

CCV2	Date: 21-Jun-2021 14:38		Seq: 6147228	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Zinc	100	98.517	99	90-110	

CCV3	Date: 21-Jun-2021 14:51		Seq: 6147233	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Zinc	100	98.309	98	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

ICV	Date: 17-Jun-2021 10:32		Seq: 6140483	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Aluminum	100	98.718	99	90-110	
Antimony	100	95.447	95	90-110	
Arsenic	100	95.747	96	90-110	
Barium	100	100.013	100	90-110	
Beryllium	100	101.196	101	90-110	
Cadmium	100	101.016	101	90-110	
Calcium	10000	10076.477	101	90-110	
Chromium	100	95.837	96	90-110	
Cobalt	100	94.794	95	90-110	
Copper	100	95.35	95	90-110	
Iron	10000	9990.301	100	90-110	
Lead	100	100.862	101	90-110	
Magnesium	10000	10064.873	101	90-110	
Manganese	100	94.56	95	90-110	
Nickel	100	100.454	100	90-110	
Potassium	10000	9939.745	99	90-110	
Selenium	100	98.707	99	90-110	
Silver	100	102.158	102	90-110	
Sodium	10000	10042.244	100	90-110	
Thallium	100	101.648	102	90-110	
Vanadium	100	95.969	96	90-110	
Zinc	100	98.422	98	90-110	

CCV1	Date: 17-Jun-2021 11:08		Seq: 6140504	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Aluminum	100	98.506	99	90-110	
Antimony	100	95.014	95	90-110	
Arsenic	100	100.092	100	90-110	
Barium	100	98.207	98	90-110	
Beryllium	100	96.199	96	90-110	
Cadmium	100	101.153	101	90-110	
Calcium	10000	9860.953	99	90-110	
Chromium	100	98.069	98	90-110	
Cobalt	100	99.808	100	90-110	
Copper	100	97.776	98	90-110	
Iron	10000	10056.596	101	90-110	
Lead	100	101.088	101	90-110	
Magnesium	10000	9892.862	99	90-110	
Manganese	100	97.076	97	90-110	
Nickel	100	100.395	100	90-110	
Potassium	10000	9839.921	98	90-110	
Selenium	100	100.038	100	90-110	
Silver	100	102.67	103	90-110	
Sodium	10000	9886.575	99	90-110	
Thallium	100	100.098	100	90-110	
Vanadium	100	97.528	98	90-110	
Zinc	100	100.031	100	90-110	

CCV2	Date: 17-Jun-2021 11:46		Seq: 6140516	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Aluminum	100	97.641	98	90-110	
Antimony	100	95.582	96	90-110	
Arsenic	100	99.19	99	90-110	
Barium	100	97.904	98	90-110	
Beryllium	100	96.122	96	90-110	

ALS Houston, US Date: 26-Jul-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

CCV2	Date: 17-Jun-2021 11:46	Seq: 6140516	CCV	Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Cadmium	100	99.89	100	90-110	
Calcium	10000	9870.415	99	90-110	
Chromium	100	97.805	98	90-110	
Cobalt	100	97.217	97	90-110	
Copper	100	97.602	98	90-110	
Iron	10000	9955.277	100	90-110	
Lead	100	100.881	101	90-110	
Magnesium	10000	9823.16	98	90-110	
Manganese	100	96.409	96	90-110	
Nickel	100	101.007	101	90-110	
Potassium	10000	9756.081	98	90-110	
Selenium	100	98.186	98	90-110	
Silver	100	101.099	101	90-110	
Sodium	10000	9820.341	98	90-110	
Thallium	100	101.143	101	90-110	
Vanadium	100	96.839	97	90-110	
Zinc	100	100.912	101	90-110	

CCV3	Date: 17-Jun-2021 12:13	Seq: 6140789	CCV	Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	102.233	102	90-110	
Antimony	100	96.031	96	90-110	
Arsenic	100	101.214	101	90-110	
Barium	100	97.808	98	90-110	
Beryllium	100	100.241	100	90-110	
Cadmium	100	100.886	101	90-110	
Calcium	10000	9929.308	99	90-110	
Chromium	100	97.544	98	90-110	
Cobalt	100	96.621	97	90-110	
Copper	100	96.866	97	90-110	
Iron	10000	10035.875	100	90-110	
Lead	100	100.934	101	90-110	
Magnesium	10000	10094.065	101	90-110	
Manganese	100	96.202	96	90-110	
Nickel	100	100.575	101	90-110	
Potassium	10000	9828.436	98	90-110	
Selenium	100	101.585	102	90-110	
Silver	100	102.061	102	90-110	
Sodium	10000	10001.195	100	90-110	
Thallium	100	101.828	102	90-110	
Vanadium	100	97.879	98	90-110	
Zinc	100	100.143	100	90-110	

CCV4	Date: 17-Jun-2021 12:39	Seq: 6140855	CCV	Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	99.479	100	90-110	
Antimony	100	95.414	95	90-110	
Arsenic	100	99.534	100	90-110	
Barium	100	98.416	98	90-110	
Beryllium	100	98.223	98	90-110	
Cadmium	100	100.961	101	90-110	
Calcium	10000	9787.342	98	90-110	
Chromium	100	97.141	97	90-110	
Cobalt	100	94.549	95	90-110	
Copper	100	96.438	96	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

CCV4	Date: 17-Jun-2021 12:39		Seq: 6140855	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Iron	10000	9890.686	99	90-110	
Lead	100	101.895	102	90-110	
Magnesium	10000	9982.038	100	90-110	
Manganese	100	96.019	96	90-110	
Nickel	100	101.126	101	90-110	
Potassium	10000	9691.224	97	90-110	
Selenium	100	99.284	99	90-110	
Silver	100	101.448	101	90-110	
Sodium	10000	9899.679	99	90-110	
Thallium	100	101.733	102	90-110	
Vanadium	100	97.314	97	90-110	
Zinc	100	101.252	101	90-110	

CCV5	Date: 17-Jun-2021 14:01		Seq: 6141144	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Aluminum	100	113.537	114	90-110	S
Antimony	100	100.817	101	90-110	
Arsenic	100	102.45	102	90-110	
Barium	100	103.111	103	90-110	
Beryllium	100	105.371	105	90-110	
Cadmium	100	105.723	106	90-110	
Calcium	10000	10333.167	103	90-110	
Chromium	100	100.732	101	90-110	
Cobalt	100	100.28	100	90-110	
Copper	100	99.735	100	90-110	
Iron	10000	10378.419	104	90-110	
Lead	100	106.816	107	90-110	
Magnesium	10000	10430.931	104	90-110	
Manganese	100	99.422	99	90-110	
Nickel	100	105.076	105	90-110	
Potassium	10000	10168.656	102	90-110	
Selenium	100	101.896	102	90-110	
Silver	100	107.072	107	90-110	
Sodium	10000	10417.141	104	90-110	
Thallium	100	107.403	107	90-110	
Vanadium	100	100.764	101	90-110	
Zinc	100	105.141	105	90-110	

CCV6	Date: 17-Jun-2021 14:31		Seq: 6141152	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Aluminum	100	108.59	109	90-110	
Antimony	100	99.705	100	90-110	
Arsenic	100	100.482	100	90-110	
Barium	100	102.557	103	90-110	
Beryllium	100	104.418	104	90-110	
Cadmium	100	104.761	105	90-110	
Calcium	10000	9963.629	100	90-110	
Chromium	100	99.136	99	90-110	
Cobalt	100	101.447	101	90-110	
Copper	100	98.449	98	90-110	
Iron	10000	10226.518	102	90-110	
Lead	100	105.619	106	90-110	
Magnesium	10000	10064.466	101	90-110	
Manganese	100	97.347	97	90-110	
Nickel	100	104.038	104	90-110	

ALS Houston, US Date: 26-Jul-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

CCV6 Date: 17-Jun-2021 14:31 Seq: 6141152 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Potassium	10000	9872.849	99	90-110	
Selenium	100	99.407	99	90-110	
Silver	100	106.073	106	90-110	
Sodium	10000	10048.369	100	90-110	
Thallium	100	106.916	107	90-110	
Vanadium	100	99.768	100	90-110	
Zinc	100	102.928	103	90-110	

CCV7 Date: 17-Jun-2021 14:56 Seq: 6141382 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	109.641	110	90-110	
Antimony	100	100.795	101	90-110	
Arsenic	100	101.619	102	90-110	
Barium	100	101.692	102	90-110	
Beryllium	100	104.852	105	90-110	
Cadmium	100	103.045	103	90-110	
Calcium	10000	10104.222	101	90-110	
Chromium	100	99.808	100	90-110	
Cobalt	100	96.704	97	90-110	
Copper	100	100.434	100	90-110	
Iron	10000	10253.487	103	90-110	
Lead	100	105.746	106	90-110	
Magnesium	10000	10328.486	103	90-110	
Manganese	100	99.327	99	90-110	
Nickel	100	104.166	104	90-110	
Potassium	10000	9964.255	100	90-110	
Selenium	100	101.914	102	90-110	
Silver	100	104.886	105	90-110	
Sodium	10000	10235.283	102	90-110	
Thallium	100	108.479	108	90-110	
Vanadium	100	100.867	101	90-110	
Zinc	100	103.919	104	90-110	

CCV8 Date: 17-Jun-2021 15:44 Seq: 6141760 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	99.972	100	90-110	
Antimony	100	95.437	95	90-110	
Arsenic	100	97.144	97	90-110	
Barium	100	99.408	99	90-110	
Beryllium	100	101.296	101	90-110	
Cadmium	100	100.634	101	90-110	
Calcium	10000	9713.553	97	90-110	
Chromium	100	95.733	96	90-110	
Cobalt	100	92.496	93	90-110	
Copper	100	96.178	96	90-110	
Iron	10000	9853.04	99	90-110	
Lead	100	100.762	101	90-110	
Magnesium	10000	9705.076	97	90-110	
Manganese	100	94.4	94	90-110	
Nickel	100	100.312	100	90-110	
Potassium	10000	9536.435	95	90-110	
Selenium	100	96.69	97	90-110	
Silver	100	102.518	103	90-110	
Sodium	10000	9646.886	97	90-110	
Thallium	100	100.744	101	90-110	

ALS Houston, US Date: 26-Jul-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

CCV8 Date: 17-Jun-2021 15:44 Seq: 6141760 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Vanadium	100	95.679	96	90-110	
Zinc	100	100.353	100	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385806
Instrument: ICPMS06
Method: SW6020A

ICV | Date: 18-Jun-2021 10:51 | Seq: 6143086 | ICV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	98.313	98	90-110	
Antimony	100	101.046	101	90-110	
Arsenic	100	97.853	98	90-110	
Barium	100	101.517	102	90-110	
Beryllium	100	104.715	105	90-110	
Cadmium	100	100.765	101	90-110	
Calcium	10000	10265.401	103	90-110	
Chromium	100	97.444	97	90-110	
Cobalt	100	98.618	99	90-110	
Copper	100	100.318	100	90-110	
Iron	10000	10194.35	102	90-110	
Lead	100	101.344	101	90-110	
Magnesium	10000	10370.068	104	90-110	
Manganese	100	99.908	100	90-110	
Nickel	100	103.086	103	90-110	
Potassium	10000	10161.893	102	90-110	
Selenium	100	98.027	98	90-110	
Silver	100	101.697	102	90-110	
Sodium	10000	10135.361	101	90-110	
Thallium	100	103.97	104	90-110	
Vanadium	100	99.691	100	90-110	
Zinc	100	100.936	101	90-110	

CCV1 | Date: 18-Jun-2021 14:32 | Seq: 6145788 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.021	106	90-110	
Antimony	100	101.463	101	90-110	
Arsenic	100	94.574	95	90-110	
Barium	100	100.018	100	90-110	
Beryllium	100	96.588	97	90-110	
Cadmium	100	98.899	99	90-110	
Calcium	10000	9616.421	96	90-110	
Chromium	100	94.917	95	90-110	
Cobalt	100	96.665	97	90-110	
Copper	100	98.286	98	90-110	
Iron	10000	9919.187	99	90-110	
Lead	100	97.909	98	90-110	
Magnesium	10000	9982.812	100	90-110	
Manganese	100	96.789	97	90-110	
Nickel	100	100.716	101	90-110	
Potassium	10000	9728.162	97	90-110	
Selenium	100	93.043	93	90-110	
Silver	100	98.396	98	90-110	
Sodium	10000	9965.295	100	90-110	
Thallium	100	101.08	101	90-110	
Vanadium	100	98.144	98	90-110	
Zinc	100	98.565	99	90-110	

CCV2 | Date: 18-Jun-2021 15:05 | Seq: 6145800 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	102.447	102	90-110	
Antimony	100	102.871	103	90-110	
Arsenic	100	95.686	96	90-110	
Barium	100	100.53	101	90-110	
Beryllium	100	94.744	95	90-110	

ALS Houston, US Date: 26-Jul-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385806
Instrument: ICPMS06
Method: SW6020A

CCV2	Date: 18-Jun-2021 15:05	Seq: 6145800	CCV	Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Cadmium	100	99.492	100	90-110	
Calcium	10000	9511.187	95	90-110	
Chromium	100	95.523	96	90-110	
Cobalt	100	97.163	97	90-110	
Copper	100	98.463	99	90-110	
Iron	10000	9832.069	98	90-110	
Lead	100	100.686	101	90-110	
Magnesium	10000	9818	98	90-110	
Manganese	100	97.432	97	90-110	
Nickel	100	101.441	101	90-110	
Potassium	10000	9549.074	96	90-110	
Selenium	100	94.275	94	90-110	
Silver	100	99.947	100	90-110	
Sodium	10000	9825.322	98	90-110	
Thallium	100	103.495	103	90-110	
Vanadium	100	98.054	98	90-110	
Zinc	100	98.63	99	90-110	

CCV3	Date: 18-Jun-2021 15:30	Seq: 6145812	CCV	Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.453	103	90-110	
Antimony	100	101.373	101	90-110	
Arsenic	100	94.693	95	90-110	
Barium	100	100.138	100	90-110	
Beryllium	100	96.033	96	90-110	
Cadmium	100	98.011	98	90-110	
Calcium	10000	9423.134	94	90-110	
Chromium	100	94.696	95	90-110	
Cobalt	100	96.877	97	90-110	
Copper	100	99.124	99	90-110	
Iron	10000	9743.696	97	90-110	
Lead	100	100.475	100	90-110	
Magnesium	10000	9801.197	98	90-110	
Manganese	100	96.868	97	90-110	
Nickel	100	100.833	101	90-110	
Potassium	10000	9403.622	94	90-110	
Selenium	100	91.306	91	90-110	
Silver	100	98.407	98	90-110	
Sodium	10000	9688.597	97	90-110	
Thallium	100	103.605	104	90-110	
Vanadium	100	96.755	97	90-110	
Zinc	100	99.207	99	90-110	

CCV4	Date: 18-Jun-2021 15:54	Seq: 6145824	CCV	Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.27	106	90-110	
Antimony	100	102.114	102	90-110	
Arsenic	100	94.823	95	90-110	
Barium	100	99.386	99	90-110	
Beryllium	100	96.474	97	90-110	
Cadmium	100	97.461	98	90-110	
Calcium	10000	9530.538	95	90-110	
Chromium	100	95.07	95	90-110	
Cobalt	100	96.463	97	90-110	
Copper	100	98.488	99	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385806
Instrument: ICPMS06
Method: SW6020A

CCV4	Date: 18-Jun-2021 15:54	Seq: 6145824	CCV	Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Iron	10000	9847.804	99	90-110	
Lead	100	98.44	98	90-110	
Magnesium	10000	9742.161	97	90-110	
Manganese	100	96.508	97	90-110	
Nickel	100	100.683	101	90-110	
Potassium	10000	9461.191	95	90-110	
Selenium	100	93.063	93	90-110	
Silver	100	97.779	98	90-110	
Sodium	10000	9727.466	97	90-110	
Thallium	100	102.233	102	90-110	
Vanadium	100	96.664	97	90-110	
Zinc	100	99.907	100	90-110	

CCV5	Date: 19-Jun-2021 00:02	Seq: 6146147	CCV	Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.875	104	90-110	
Antimony	100	107.305	107	90-110	
Arsenic	100	99.267	99	90-110	
Barium	100	105.32	105	90-110	
Beryllium	100	101.601	102	90-110	
Cadmium	100	102.74	103	90-110	
Calcium	10000	10042.642	100	90-110	
Chromium	100	100.375	100	90-110	
Cobalt	100	100.899	101	90-110	
Copper	100	103.981	104	90-110	
Iron	10000	10249.755	102	90-110	
Lead	100	105.971	106	90-110	
Magnesium	10000	10529.995	105	90-110	
Manganese	100	101.81	102	90-110	
Nickel	100	105.328	105	90-110	
Potassium	10000	10176.153	102	90-110	
Selenium	100	98.441	98	90-110	
Silver	100	103.915	104	90-110	
Sodium	10000	10772.115	108	90-110	
Thallium	100	107.738	108	90-110	
Vanadium	100	102.594	103	90-110	
Zinc	100	103.143	103	90-110	

ALS Houston, US Date: 26-Jul-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385965
Instrument: ICPMS06
Method: SW6020A

ICV Date: 21-Jun-2021 12:14 Seq: 6147056 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	105.566	106	90-110	
Barium	100	95.743	96	90-110	
Chromium	100	97.78	98	90-110	
Copper	100	99.03	99	90-110	
Manganese	100	96.966	97	90-110	
Sodium	10000	9994.67	100	90-110	

CCV1 Date: 21-Jun-2021 12:47 Seq: 6147137 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	105.806	106	90-110	
Barium	100	92.805	93	90-110	
Chromium	100	93.591	94	90-110	
Copper	100	94.975	95	90-110	
Manganese	100	92.992	93	90-110	
Sodium	10000	9744.047	97	90-110	

CCV2 Date: 21-Jun-2021 13:11 Seq: 6147135 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	105.579	106	90-110	
Barium	100	94.179	94	90-110	
Chromium	100	95.498	96	90-110	
Copper	100	97.27	97	90-110	
Manganese	100	93.897	94	90-110	
Sodium	10000	9787.32	98	90-110	

CCV3 Date: 21-Jun-2021 14:21 Seq: 6147279 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	104.724	105	90-110	
Barium	100	94.878	95	90-110	
Chromium	100	96.143	96	90-110	
Copper	100	96.299	96	90-110	
Manganese	100	94.473	95	90-110	
Sodium	10000	9991.051	100	90-110	

CCV4 Date: 21-Jun-2021 15:00 Seq: 6147285 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	104.39	104	90-110	
Barium	100	95.566	96	90-110	
Chromium	100	96.035	96	90-110	
Copper	100	96.839	97	90-110	
Manganese	100	94.87	95	90-110	
Sodium	10000	9850.244	99	90-110	

ICV Date: 21-Jun-2021 15:51 Seq: 6148257 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.89	104	90-110	
Barium	100	100.698	101	90-110	
Chromium	100	96.66	97	90-110	
Copper	100	97.521	98	90-110	
Manganese	100	98.591	99	90-110	
Sodium	10000	9848.418	99	90-110	

CCV5 Date: 21-Jun-2021 16:18 Seq: 6148264 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	108.144	108	90-110	

ALS Houston, US Date: 26-Jul-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385965
Instrument: ICPMS06
Method: SW6020A

CCV5	Date: 21-Jun-2021 16:18		Seq: 6148264	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Barium	100	96.224	96	90-110	
Chromium	100	95.062	95	90-110	
Copper	100	95.794	96	90-110	
Manganese	100	96.532	97	90-110	
Sodium	10000	9923.757	99	90-110	

CCV6	Date: 21-Jun-2021 16:45		Seq: 6148267	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Aluminum	100	107.256	107	90-110	
Barium	100	95.1	95	90-110	
Chromium	100	93.119	93	90-110	
Copper	100	93.058	93	90-110	
Manganese	100	95.126	95	90-110	
Sodium	10000	9756.737	98	90-110	

CCV7	Date: 21-Jun-2021 17:22		Seq: 6148279	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Aluminum	100	106.674	107	90-110	
Barium	100	97.08	97	90-110	
Chromium	100	94.668	95	90-110	
Copper	100	94.789	95	90-110	
Manganese	100	96.133	96	90-110	
Sodium	10000	9786.523	98	90-110	

CCV8	Date: 21-Jun-2021 22:02		Seq: 6148282	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Aluminum	100	107.813	108	90-110	
Barium	100	97.55	98	90-110	
Chromium	100	91.986	92	90-110	
Copper	100	91.426	91	90-110	
Manganese	100	94.376	94	90-110	
Sodium	10000	10206.711	102	90-110	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: HG03_385824
Instrument: HG03
Method: SW7470A

ICB	Date: 18-Jun-2021 12:08		Seq: 6143408	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB1	Date: 18-Jun-2021 13:12		Seq: 6143572	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB2	Date: 18-Jun-2021 13:38		Seq: 6143704	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB3	Date: 18-Jun-2021 14:03		Seq: 6143902	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB4	Date: 18-Jun-2021 14:25		Seq: 6143914	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

MBLK-167022	Date: 18-Jun-2021 14:57		Seq: 6143928	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB5	Date: 18-Jun-2021 15:18		Seq: 6143938	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB6	Date: 18-Jun-2021 15:39		Seq: 6144191	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

MBLK-167023	Date: 18-Jun-2021 15:51		Seq: 6144197	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB7	Date: 18-Jun-2021 16:03		Seq: 6144265	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.057	0.03	0.2	J	

CCB8	Date: 18-Jun-2021 16:29		Seq: 6144367	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB9	Date: 18-Jun-2021 16:53		Seq: 6144401	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

ALS Houston, US Date: 26-Jul-21

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS05_385946
Instrument: ICPMS05
Method: SW6020A

ICB	Date: 21-Jun-2021 11:53		Seq: 6146465	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Zinc	5	2	5	U	

CCB1	Date: 21-Jun-2021 14:10		Seq: 6147173	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Zinc	4	2	4	U	

CCB2	Date: 21-Jun-2021 14:36		Seq: 6147227	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Zinc	4	2	4	U	

CCB3	Date: 21-Jun-2021 14:53		Seq: 6147234	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Zinc	4	2	4	U	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

ICB	Date: 17-Jun-2021 10:34		Seq: 6140484	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	5	0.4	5	U	
Arsenic	5	0.4	5	U	
Barium	5	1.9	5	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	5	0.4	5	U	
Cobalt	5	0.1	5	U	
Copper	5	1	5	U	
Iron	200	12	200	U	
Lead	5	0.6	5	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Potassium	200	18	200	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	5	2	5	U	

CCB1	Date: 17-Jun-2021 11:10		Seq: 6140505	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

MBLK-166919	Date: 17-Jun-2021 11:22		Seq: 6140506	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	3.756	1.8	10	J	
Antimony	5	0.4	5	U	
Arsenic	5	0.4	5	U	
Barium	5	1.9	5	U	
Beryllium	2	0.2	2	U	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

MBLK-166919 Date: 17-Jun-2021 11:22 Seq: 6140506 MBLK Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	5	0.4	5	U
Cobalt	5	0.1	5	U
Copper	5	1	5	U
Iron	200	12	200	U
Lead	5	0.6	5	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	5	0.6	5	U
Potassium	200	18	200	U
Selenium	5	1.1	5	U
Silver	5	0.2	5	U
Sodium	200	14	200	U
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	5	2	5	U

CCB2 Date: 17-Jun-2021 11:48 Seq: 6140517 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	200	14	200	U
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB3 Date: 17-Jun-2021 12:14 Seq: 6140790 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

CCB3	Date: 17-Jun-2021 12:14		Seq: 6140790	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	42.67	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB4	Date: 17-Jun-2021 12:41		Seq: 6140856	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	40.49	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB5	Date: 17-Jun-2021 14:03		Seq: 6141145	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

CCB5 Date: 17-Jun-2021 14:03 Seq: 6141145 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	15.86	14	200	J
Thallium	0.275	0.2	2	J
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB6 Date: 17-Jun-2021 14:33 Seq: 6141153 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	200	14	200	U
Thallium	0.233	0.2	2	J
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB7 Date: 17-Jun-2021 14:58 Seq: 6141383 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	16.65	14	200	J
Thallium	0.236	0.2	2	J

ALS Houston, US

Date: 26-Jul-21

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385722
Instrument: ICPMS06
Method: SW6020A

CCB7	Date: 17-Jun-2021 14:58		Seq: 6141383	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB8	Date: 17-Jun-2021 15:46		Seq: 6141761	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	0.286	0.2	2	J	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385806
Instrument: ICPMS06
Method: SW6020A

ICB | Date: 18-Jun-2021 10:53 | Seq: 6143087 | ICB | Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	5	0.4	5	U
Arsenic	5	0.4	5	U
Barium	5	1.9	5	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	5	0.4	5	U
Cobalt	5	0.1	5	U
Copper	5	1	5	U
Iron	200	12	200	U
Lead	5	0.6	5	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	5	0.6	5	U
Potassium	200	18	200	U
Selenium	5	1.1	5	U
Silver	5	0.2	5	U
Sodium	200	14	200	U
Thallium	0.219	0.2	2	J
Vanadium	5	0.6	5	U
Zinc	5	2	5	U

CCB1 | Date: 18-Jun-2021 14:34 | Seq: 6145789 | CCB | Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	36.96	14	200	J
Thallium	0.255	0.2	2	J
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

MBLK-166932 | Date: 18-Jun-2021 14:37 | Seq: 6145790 | MBLK | Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	5	0.4	5	U
Arsenic	5	0.4	5	U
Barium	5	1.9	5	U
Beryllium	2	0.2	2	U

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385806
Instrument: ICPMS06
Method: SW6020A

MBLK-166932 Date: 18-Jun-2021 14:37 Seq: 6145790 MBLK Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	5	0.4	5	U
Cobalt	5	0.1	5	U
Copper	5	1	5	U
Iron	200	12	200	U
Lead	5	0.6	5	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	5	0.6	5	U
Potassium	200	18	200	U
Selenium	5	1.1	5	U
Silver	5	0.2	5	U
Sodium	35.54	14	200	J
Thallium	2	0.2	2	U
Vanadium	5	0.6	5	U
Zinc	5	2	5	U

CCB2 Date: 18-Jun-2021 15:07 Seq: 6145801 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	25.09	14	200	J
Thallium	0.251	0.2	2	J
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB3 Date: 18-Jun-2021 15:32 Seq: 6145813 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385806
Instrument: ICPMS06
Method: SW6020A

CCB3 Date: 18-Jun-2021 15:32 Seq: 6145813 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	25	14	200	J
Thallium	0.256	0.2	2	J
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB4 Date: 18-Jun-2021 15:56 Seq: 6145825 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	22.09	14	200	J
Thallium	0.246	0.2	2	J
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

CCB5 Date: 19-Jun-2021 00:03 Seq: 6146148 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U

ALS Houston, US Date: 26-Jul-21

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385806
Instrument: ICPMS06
Method: SW6020A

CCB5 Date: 19-Jun-2021 00:03 Seq: 6146148 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	278.2	14	200	
Thallium	0.312	0.2	2	J
Vanadium	5	0.6	5	U
Zinc	4	2	4	U

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385965
Instrument: ICPMS06
Method: SW6020A

ICB	Date: 21-Jun-2021 12:16		Seq: 6147057	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	5	1.9	5	U	
Chromium	5	0.4	5	U	
Copper	5	1	5	U	
Manganese	5	0.7	5	U	
Sodium	200	14	200	U	

CCB1	Date: 21-Jun-2021 12:48		Seq: 6147138	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Chromium	4	0.4	4	U	
Copper	2	1	2	U	
Manganese	5	0.7	5	U	
Sodium	200	14	200	U	

CCB2	Date: 21-Jun-2021 13:13		Seq: 6147136	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Chromium	4	0.4	4	U	
Copper	2	1	2	U	
Manganese	5	0.7	5	U	
Sodium	200	14	200	U	

CCB3	Date: 21-Jun-2021 14:23		Seq: 6147280	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Chromium	4	0.4	4	U	
Copper	2	1	2	U	
Manganese	5	0.7	5	U	
Sodium	200	14	200	U	

CCB4	Date: 21-Jun-2021 15:02		Seq: 6147286	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Chromium	4	0.4	4	U	
Copper	2	1	2	U	
Manganese	5	0.7	5	U	
Sodium	200	14	200	U	

ICCB5	Date: 21-Jun-2021 15:52		Seq: 6148258	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	5	1.9	5	U	
Chromium	5	0.4	5	U	
Copper	5	1	5	U	
Manganese	5	0.7	5	U	
Sodium	-19.77	14	200	J	

CCB6	Date: 21-Jun-2021 16:20		Seq: 6148265	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS06_385965
Instrument: ICPMS06
Method: SW6020A

CCB6	Date: 21-Jun-2021 16:20		Seq: 6148265	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Chromium	4	0.4	4	U	
Copper	2	1	2	U	
Manganese	5	0.7	5	U	
Sodium	-22.68	14	200	J	

CCB7	Date: 21-Jun-2021 16:47		Seq: 6148268	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Chromium	4	0.4	4	U	
Copper	2	1	2	U	
Manganese	5	0.7	5	U	
Sodium	200	14	200	U	

CCB8	Date: 21-Jun-2021 17:24		Seq: 6148280	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Chromium	4	0.4	4	U	
Copper	2	1	2	U	
Manganese	5	0.7	5	U	
Sodium	-28.84	14	200	J	

CCB9	Date: 21-Jun-2021 22:04		Seq: 6148283	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Chromium	4	0.4	4	U	
Copper	2	1	2	U	
Manganese	5	0.7	5	U	
Sodium	343.1	14	200		

ALS Houston, US

Date: 26-Jul-21

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Run ID: ICPMS05_385946
Instrument: ICPMS05
Method: SW6020A

ICSA	Date: 21-Jun-2021 11:58	Seq: 6146467	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Zinc		1.375	0	

ICSAB	Date: 21-Jun-2021 12:00	Seq: 6146468	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Zinc	100	100.7	101	

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc. Run ID:ICPMS06_385722
Project: LHAAP /ICT Wells Instrument:ICPMS06
WorkOrder: HS21060700 Method:SW6020A

ICSA	Date: 17-Jun-2021 10:51	Seq: 6140488	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	100900	101	
Antimony		0.199	0	
Arsenic		0.128	0	
Barium		0.411	0	
Beryllium		-0.002	0	
Cadmium		1.914	0	
Calcium	100000	105900	106	
Chromium		2.172	0	
Cobalt		0.082	0	
Copper		0.249	0	
Iron	100000	106200	106	
Lead		0.087	0	
Magnesium	100000	106500	107	
Manganese		1.927	0	
Nickel		0.178	0	
Potassium	100000	106800	107	
Selenium		0.187	0	
Silver		0.313	0	
Sodium	100000	106200	106	
Thallium		0.007	0	
Vanadium		0.276	0	
Zinc		1.101	0	

ICSAB	Date: 17-Jun-2021 10:54	Seq: 6140489	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	101000	101	
Antimony	100	102.9	103	
Arsenic	100	110.3	110	
Barium	100	107.9	108	
Beryllium	100	108.2	108	
Cadmium	100	111	111	
Calcium	110000	116100	106	
Chromium	100	107.4	107	
Cobalt	100	104.2	104	
Copper	100	101.4	101	
Iron	110000	115400	105	
Lead	100	111.4	111	
Magnesium	110000	116300	106	
Manganese	100	105.6	106	
Nickel	100	105.5	105	
Potassium	110000	117100	106	
Selenium	100	112.4	112	
Silver	100	105.4	105	
Sodium	110000	116100	106	
Thallium	100	111.2	111	
Vanadium	100	108	108	
Zinc	100	109.8	110	

ALS Houston, US Date: 26-Jul-21

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc. Run ID:ICPMS06_385806
Project: LHAAP /ICT Wells Instrument:ICPMS06
WorkOrder: HS21060700 Method:SW6020A

ICSA	Date: 18-Jun-2021 11:06	Seq: 6143091	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	101900	102	
Antimony		0.115	0	
Arsenic		0.176	0	
Barium		0.484	0	
Beryllium		0.006	0	
Cadmium		1.854	0	
Calcium	100000	104100	104	
Chromium		2.114	0	
Cobalt		0.104	0	
Copper		0.234	0	
Iron	100000	102500	102	
Lead		0.089	0	
Magnesium	100000	104300	104	
Manganese		40.36	0	
Nickel		0.197	0	
Potassium	100000	104900	105	
Selenium		0.044	0	
Silver		0.285	0	
Sodium	100000	103500	103	
Thallium		0.005	0	
Vanadium		0.215	0	
Zinc		1.176	0	

ICSAB	Date: 18-Jun-2021 11:08	Seq: 6143092	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	105200	105	
Antimony	100	107.1	107	
Arsenic	100	109.7	110	
Barium	100	108.6	109	
Beryllium	100	108.4	108	
Cadmium	100	107.6	108	
Calcium	110000	116700	106	
Chromium	100	106.1	106	
Cobalt	100	104.7	105	
Copper	100	104.1	104	
Iron	110000	116500	106	
Lead	100	107.7	108	
Magnesium	110000	120500	110	
Manganese	100	108.6	109	
Nickel	100	106.5	107	
Potassium	110000	120600	110	
Selenium	100	112.7	113	
Silver	100	104.7	105	
Sodium	110000	117300	107	
Thallium	100	109.2	109	
Vanadium	100	108.3	108	
Zinc	100	106.8	107	

ICSA	Date: 19-Jun-2021 00:11	Seq: 6146152	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	94150	94.2	
Antimony		0.08	0	
Arsenic		0.142	0	
Barium		0.564	0	

ALS Houston, US Date: 26-Jul-21

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc. Run ID:ICPMS06_385806
Project: LHAAP /ICT Wells Instrument:ICPMS06
WorkOrder: HS21060700 Method:SW6020A

ICSA	Date: 19-Jun-2021 00:11	Seq: 6146152	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Beryllium		0.008	0	
Cadmium		1.586	0	
Calcium	100000	100100	100	
Chromium		2.061	0	
Cobalt		0.096	0	
Copper		0.21	0	
Iron	100000	101800	102	
Lead		0.089	0	
Magnesium	100000	100900	101	
Manganese		39.42	0	
Nickel		0.175	0	
Potassium	100000	100000	100.0	
Selenium		0.157	0	
Silver		0.272	0	
Sodium	100000	102300	102	
Thallium		0.014	0	
Vanadium		0.18	0	
Zinc		1.384	0	

ICSAB	Date: 19-Jun-2021 00:13	Seq: 6146153	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	96640	96.2	
Antimony	100	117.1	117	
Arsenic	100	108.5	109	
Barium	100	111.9	112	
Beryllium	100	105.2	105	
Cadmium	100	108.9	109	
Calcium	110000	113700	103	
Chromium	100	107.2	107	
Cobalt	100	105.9	106	
Copper	100	106.2	106	
Iron	110000	116600	106	
Lead	100	113.4	113	
Magnesium	110000	115800	105	
Manganese	100	109.4	109	
Nickel	100	107.8	108	
Potassium	110000	112800	103	
Selenium	100	108.2	108	
Silver	100	101.5	101	
Sodium	110000	118500	108	
Thallium	100	114.6	115	
Vanadium	100	108.4	108	
Zinc	100	111.2	111	

ALS Houston, US Date: 26-Jul-21

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc. Run ID:ICPMS06_385965
Project: LHAAP /ICT Wells Instrument:ICPMS06
WorkOrder: HS21060700 Method:SW6020A

ICSA	Date: 21-Jun-2021 12:36	Seq: 6147061	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	97630	97.6	
Barium		0.519	0	
Chromium		2.084	0	
Copper		0.319	0	
Manganese		39.43	0	
Sodium	100000	103000	103	

ICSAB	Date: 21-Jun-2021 12:38	Seq: 6147062	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	103300	103	
Barium	100	104.3	104	
Chromium	100	109.1	109	
Copper	100	103.8	104	
Manganese	100	107.9	108	
Sodium	110000	120200	109	

ICSA	Date: 21-Jun-2021 22:12	Seq: 6148287	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	14650	14.7	
Barium		0.369	0	
Chromium		0.323	0	
Copper		-0.039	0	
Manganese		5.832	0	
Sodium	100000	15800	15.8	

ICSAB	Date: 21-Jun-2021 22:14	Seq: 6148288	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	1374	1.37	
Barium	100	5.114	5.11	
Chromium	100	1.268	1.27	
Copper	100	1.296	1.30	
Manganese	100	1.372	1.37	
Sodium	110000	1719	1.56	

ALS Houston, US

Date: 26-Jul-21

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 18-Jun-2021 15:07
Date Extracted: 18-Jun-2021 11:30
Units: ug/L

Matrix Spike: HS21060700-02MS
Client Sample ID: ICT4_061020
Analysis Method: SW7470A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Mercury	0.2650	5.770	5.000	110	5.680	5.000	108	82-119	1.57	20

Matrix Spike: HS21060495-07MS
Client Sample ID:
Analysis Method: SW7470A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Mercury	0.2000	5.890	5.000	119	6.050	5.000	122	82-119	2.68	20

ALS Houston, US

Date: 26-Jul-21

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 17-Jun-2021 11:32
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Matrix Spike: HS21060700-02MS
Client Sample ID: ICT4_061020

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum	18.36	118.1	100.0	99.7	123.9	100.0	106	84-117	4.81	20
Antimony	0.6490	48.42	50.00	95.6	50.14	50.00	99.0	85-117	3.49	20
Arsenic	0.4890	49.71	50.00	98.4	52.09	50.00	103	84-116	4.67	20
Barium	99.57	156.6	50.00	114	164.8	50.00	130	86-114	5.09	20
Beryllium	2.000	50.85	50.00	102	52.22	50.00	104	83-121	2.66	20
Cadmium	2.000	51.03	50.00	102	53.59	50.00	107	87-115	4.90	20
Calcium	16110	22530	5000	128	23160	5000	141	87-118	2.76	20
Chromium	4.438	53.17	50.00	97.5	54.44	50.00	100	85-116	2.37	20
Cobalt	1.642	48.24	50.00	93.2	50.17	50.00	97.1	86-115	3.93	20
Copper	8.526	57.02	50.00	97.0	58.91	50.00	101	85-118	3.25	20
Iron	109.6	5060	5000	99.0	5204	5000	102	87-118	2.81	20
Lead	5.000	48.32	50.00	96.5	51.04	50.00	102	88-115	5.47	20
Magnesium	14840	20990	5000	123	21530	5000	134	83-118	2.55	20
Manganese	67.77	119.6	50.00	104	123.3	50.00	111	87-115	3.05	20
Nickel	21.57	72.74	50.00	102	75.81	50.00	108	85-117	4.14	20
Potassium	960.4	5995	5000	101	6190	5000	105	87-115	3.20	20
Selenium	5.000	49.26	50.00	98.5	52.54	50.00	105	80-120	6.45	20
Silver	5.000	51.89	50.00	104	54.53	50.00	109	85-116	4.95	20
Sodium	136900	152400	5000	312	157700	5000	418	85-117	3.41	20
Thallium	0.8600	48.94	50.00	96.2	52.00	50.00	102	82-116	6.07	20
Vanadium	1.578	51.38	50.00	99.6	53.10	50.00	103	86-115	3.28	20
Zinc	273.5	337.9	50.00	129	351.5	50.00	156	83-119	3.95	20

ALS Houston, US Date: 26-Jul-21

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 18-Jun-2021 14:51
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Matrix Spike: HS21060700-14MS
Client Sample ID: ICT13A_061020
Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum	302.1	412.2	100.0	110	382.6	100.0	80.5	84-117	7.44	20
Antimony	0.4800	49.46	50.00	98.0	49.34	50.00	97.7	85-117	0.249	20
Arsenic	4.766	48.90	50.00	88.3	49.34	50.00	89.2	84-116	0.904	20
Barium	143.3	190.5	50.00	94.5	193.0	50.00	99.5	86-114	1.30	20
Beryllium	2.000	46.14	50.00	91.9	46.79	50.00	93.2	83-121	1.39	20
Cadmium	2.000	46.89	50.00	93.7	47.70	50.00	95.3	87-115	1.71	20
Calcium	2740	7268	5000	90.6	7226	5000	89.7	87-118	0.583	20
Chromium	148.2	227.0	50.00	158	190.3	50.00	84.2	85-116	17.6	20
Cobalt	5.760	51.55	50.00	91.6	51.34	50.00	91.2	86-115	0.408	20
Copper	84.63	131.6	50.00	93.9	130.8	50.00	92.4	85-118	0.562	20
Iron	15890	20480	5000	91.9	20360	5000	89.5	87-118	0.587	20
Lead	3.233	46.82	50.00	87.2	47.61	50.00	88.7	88-115	1.66	20
Magnesium	1860	6389	5000	90.6	6396	5000	90.7	83-118	0.0986	20
Manganese	71.12	116.2	50.00	90.2	116.0	50.00	89.8	87-115	0.159	20
Nickel	128.0	175.5	50.00	94.9	175.1	50.00	94.1	85-117	0.224	20
Potassium	373.4	4950	5000	91.5	4962	5000	91.8	87-115	0.238	20
Selenium	5.000	44.94	50.00	88.7	45.48	50.00	89.8	80-120	1.20	20
Silver	5.000	45.24	50.00	90.5	45.61	50.00	91.2	85-116	0.830	20
Sodium	28370	32890	5000	90.4	32830	5000	89.1	85-117	0.201	20
Thallium	2.000	44.83	50.00	89.7	45.94	50.00	91.9	82-116	2.45	20
Vanadium	11.33	57.21	50.00	91.8	57.22	50.00	91.8	86-115	0.0105	20
Zinc	477.8	523.3	50.00	91.0	521.8	50.00	87.9	83-119	0.295	20

ALS Houston, US Date: 26-Jul-21

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 17-Jun-2021 11:34
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Lab Sample ID: HS21060700-02PDS
Client Sample ID: ICT4_061020
Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Aluminum	18.36	128.9	100	111	80-120
Antimony	0.649	107.9	100	107	80-120
Arsenic	0.489	113.8	100	113	80-120
Beryllium	0	109.4	100	109	80-120
Cadmium	0	116.1	100	116	80-120
Chromium	4.438	114.4	100	110	80-120
Cobalt	1.642	113.4	100	112	80-120
Copper	8.526	117.7	100	109	80-120
Iron	109.6	11300	10000	112	80-120
Lead	0	114.5	100	114	80-120
Manganese	67.77	182.6	100	115	80-120
Nickel	21.57	134.9	100	113	80-120
Potassium	960.4	12110	10000	112	80-120
Selenium	0	113	100	113	80-120
Silver	0	113.6	100	114	80-120
Sodium	136900	154900	10000	180	80-120
Thallium	0.86	114.1	100	113	80-120
Vanadium	1.578	113.6	100	112	80-120
Barium	99.57	181.7	100	82	80-120
Calcium	16110	24670	10000	86	80-120
Magnesium	14840	23250	10000	84	80-120
Zinc	273.5	355.1	100	82	80-120

ALS Houston, US

Date: 26-Jul-21

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 18-Jun-2021 14:53
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Lab Sample ID: HS21060700-14PDS
Client Sample ID: ICT13A_061020

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Aluminum	302.1	387.6	100	86	80-120
Arsenic	4.766	118.9	100	114	80-120
Beryllium	0	114.6	100	114	80-120
Cadmium	0	119.2	100	119	80-120
Calcium	2740	14000	10000	113	80-120
Cobalt	5.76	122.3	100	117	80-120
Iron	15890	27410	10000	115	80-120
Lead	3.233	114.5	100	111	80-120
Magnesium	1860	13580	10000	117	80-120
Manganese	71.12	185.1	100	114	80-120
Potassium	373.4	11800	10000	114	80-120
Selenium	0	114.9	100	114	80-120
Silver	0	115.8	100	116	80-120
Sodium	28370	39710	10000	113	80-120
Thallium	0	113.1	100	113	80-120
Vanadium	11.33	129.2	100	118	80-120
Zinc	477.8	595.9	100	118	80-120

ALS Houston, US Date: 26-Jul-21

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 21-Jun-2021 14:54
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Lab Sample ID: HS21060700-14PDS
Client Sample ID: ICT13A_061020

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Chromium	139.4	585.8	500	89	80-120

ALS Houston, US

Date: 26-Jul-21

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 18-Jun-2021 15:02
Date Extracted: 18-Jun-2021 11:30
Units: ug/L

Lab Sample ID: LCS-167022 — Analysis Method: SW7470A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Mercury	5	4.92	98	82-119

Lab Sample ID: LCS-167023 — Analysis Method: SW7470A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Mercury	5	5.16	103	82-119

ALS Houston, US

Date: 26-Jul-21

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 17-Jun-2021 11:24
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Lab Sample ID: LCS-166919
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Aluminum	100	102.6	103	84-117
Antimony	50	46.56	93	85-117
Arsenic	50	46.96	94	84-116
Barium	50	48.77	98	86-114
Beryllium	50	49.18	98	83-121
Cadmium	50	50.38	101	87-115
Calcium	5000	4870	97	87-118
Chromium	50	47.29	95	85-116
Cobalt	50	45.97	92	86-115
Copper	50	48.16	96	85-118
Iron	5000	4854	97	87-118
Lead	50	47.75	96	88-115
Magnesium	5000	4919	98	83-118
Manganese	50	46.37	93	87-115
Nickel	50	50.28	101	85-117
Potassium	5000	4870	97	87-115
Selenium	50	49.58	99	80-120
Silver	50	53.07	106	85-116
Sodium	5000	4769	95	85-117
Thallium	50	48.05	96	82-116
Vanadium	50	47.16	94	86-115
Zinc	50	51.2	102	83-119

ALS Houston, US

Date: 26-Jul-21

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 18-Jun-2021 14:39
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Lab Sample ID: LCS-166932
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Aluminum	100	99.21	99	84-117
Antimony	50	49.62	99	85-117
Arsenic	50	44.76	90	84-116
Barium	50	48.92	98	86-114
Beryllium	50	46.31	93	83-121
Cadmium	50	49.66	99	87-115
Calcium	5000	4691	94	87-118
Chromium	50	46.12	92	85-116
Cobalt	50	46.96	94	86-115
Copper	50	48.98	98	85-118
Iron	5000	4666	93	87-118
Lead	50	46.77	94	88-115
Magnesium	5000	4862	97	83-118
Manganese	50	46.28	93	87-115
Nickel	50	49.74	100	85-117
Potassium	5000	4728	95	87-115
Selenium	50	47.2	94	80-120
Silver	50	48.17	96	85-116
Sodium	5000	4828	97	85-117
Thallium	50	49.18	98	82-116
Vanadium	50	47.45	95	86-115
Zinc	50	49.98	100	83-119

ALS Houston, US

Date: 26-Jul-21

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 17-Jun-2021 11:28
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Lab Sample ID: HS21060700-02SD
Client Sample ID:ICT4_061020

Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Aluminum	18.36		21.44	J	17	
Antimony	0.649	J	0	U	0	
Arsenic	0.489	J	0	U	0	
Barium	99.57		99.1		0	
Beryllium	0	U	0	U	0	
Cadmium	0	U	0	U	0	
Calcium	16110		16600		3	
Chromium	4.438	J	4.684	J	6	
Cobalt	1.642	J	1.705	J	4	
Copper	8.526		11.53	J	35	
Iron	109.6	J	116.6	J	6	
Lead	0	U	0	U	0	
Magnesium	14840		15310		3	
Manganese	67.77		68.51		1	
Nickel	21.57		22.6	J	5	
Potassium	960.4		972.3	J	1	
Selenium	0	U	0	U	0	
Silver	0	U	0	U	0	
Sodium	136900		138500		1	
Thallium	0.86	J	0	U	0	
Vanadium	1.578	J	6.426	J	307	
Zinc	273.5		278.9		2	

ALS Houston, US Date: 26-Jul-21

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 18-Jun-2021 14:47
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Lab Sample ID: HS21060700-14SD
Client Sample ID:ICT13A_061020

Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Aluminum	302.1		268.7		11	E
Antimony	0.48	J	0	U	0	
Arsenic	4.766	J	4.709	J	1	
Barium	143.3		146.5		2	
Beryllium	0	U	0	U	0	
Cadmium	0	U	0	U	0	
Calcium	2740		2783		2	
Cobalt	5.76		6.092	J	6	
Copper	84.63		89.34		6	
Iron	15890		16840		6	
Lead	3.233	J	3.336	J	3	
Magnesium	1860		1934		4	
Manganese	71.12		74.05		4	
Nickel	128		136.6		7	
Potassium	373.4		350	J	6	
Selenium	0	U	0	U	0	
Silver	0	U	0	U	0	
Sodium	28370		29570		4	
Thallium	0	U	0	U	0	
Vanadium	11.33		11.84	J	5	
Zinc	477.8		487.3		2	

ALS Houston, US

Date: 26-Jul-21

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP /ICT Wells
WorkOrder: HS21060700

Date Analyzed: 21-Jun-2021 14:58
Date Extracted: 16-Jun-2021 14:00
Units: ug/L

Lab Sample ID: HS21060700-14SD
Client Sample ID:ICT13A_061020

Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Chromium	139.4		137.3		1	

Report Generated By Teledyne Leeman QuickTrace

Analyst: ALSHS.NoUser

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\06182021AW.wszf

Creation Date: 6/18/2021 11:37:59 AM

Comment:

Results

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
Calibration Blank					STD	06/18/21 11:53:43 am	0.000	-13	138.54	2.28	
	Replicates	-38.0	7.6	-12.3	-11.3						
Standard #1 (0.2 ppb)					STD	06/18/21 11:55:25 am	0.200	883	5.26	8.12	
	Replicates	835.9	854.0	902.9	937.9						
Standard #2 (0.5 ppb)					STD	06/18/21 11:57:06 am	0.500	2140	2.04	-3.17	
	Replicates	2075.4	2153.8	2158.4	2171.4						
Standard #3 (2.0 ppb)					STD	06/18/21 11:58:49 am	2.000	8612	2.21	-16.66	
	Replicates	8346.8	8613.7	8697.9	8788.6						
Standard #4 (5.0 ppb)					STD	06/18/21 12:00:31 pm	5.000	21496	0.86	-57.31	
	Replicates	21233.6	21523.1	21560.2	21668.5						
Standard #5 (10.0 ppb)					STD	06/18/21 12:02:13 pm	10.000	44026	1.55	117.25	
	Replicates	43038.1	44125.3	44380.0	44559.0						

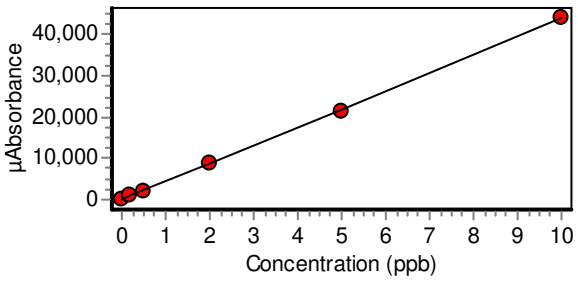
Calibration

Equation: Abs = 4353.851x + -23.422

R2: 0.99978

SEE: 287.0738

Flags:



ICCV					UNK	06/18/21 12:05:08 pm	4.490	19679	4.08		
	Replicates	18761.9	19380.2	19920.2	20653.2						
ICV					UNK	06/18/21 12:06:49 pm	4.940	21640	0.69		
	Replicates	21435.8	21636.8	21695.4	21790.8						
ICB					UNK	06/18/21 12:08:31 pm	-0.006	-39	91.79		
	Replicates	-64.2	-49.3	-10.1	-31.9						
CRA					UNK	06/18/21 12:10:12 pm	0.195	839	2.22		
	Replicates	821.9	828.5	841.1	864.8						
ICCV					UNK	06/18/21 12:18:54 pm	5.020	21983	2.53		
	Replicates	21214.0	21960.2	22274.2	22483.8						
MBLK-167024					UNK	06/18/21 12:49:49 pm	0.002	-5	324.10		
	Replicates	-13.6	-13.5	-27.9	35.0						
MBLKT1-167024					UNK	06/18/21 12:51:31 pm	0.022	82	14.83		s
	Replicates	76.1	65.7	97.4	90.3						

Sample Name				Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
MBLKT2-167024				UNK	06/18/21 12:54:35 pm	0.018	65	11.64		s
Replicates	53.7	65.3	65.7	76.1						
MBLKT3-167024				UNK	06/18/21 12:56:17 pm	0.021	79	31.86		s
Replicates	77.4	70.5	49.1	119.5						
LCS-167024				UNK	06/18/21 12:59:19 pm	5.490	24054	1.10		
Replicates	23671.0	24121.7	24144.3	24280.8						
HS21060873-01				UNK	06/18/21 01:01:01 pm	0.022	84	16.21		s
Replicates	83.9	89.0	62.2	99.6						
HS21060873-01MS				UNK	06/18/21 01:04:16 pm	5.340	23380	0.09		
Replicates	23376.7	23389.3	23353.3	23401.9						
HS21060873-01MSD				UNK	06/18/21 01:05:59 pm	5.260	23053	0.23		
Replicates	23016.3	23054.8	23012.3	23127.9						
HS21060777-01				UNK	06/18/21 01:07:40 pm	0.048	196	8.61		s
Replicates	212.6	170.5	199.1	202.5						
HS21060803-01				UNK	06/18/21 01:09:21 pm	0.022	81	28.99		s
Replicates	79.4	102.5	43.3	100.5						
CCV				UNK	06/18/21 01:11:04 pm	4.930	21605	1.88		
Replicates	21007.3	21694.4	21824.4	21892.8						
CCB				UNK	06/18/21 01:12:47 pm	0.000	-15	147.95		
Replicates	-46.2	-10.3	11.7	-13.6						
HS21060803-02				UNK	06/18/21 01:19:05 pm	0.021	78	14.96		s
Replicates	90.3	67.7	64.6	89.1						
HS21060803-03				UNK	06/18/21 01:20:47 pm	0.031	122	15.77		s
Replicates	149.6	107.6	129.3	103.1						
HS21060807-01				UNK	06/18/21 01:22:28 pm	0.021	81	7.98		s
Replicates	73.5	90.4	76.1	82.4						
HS21060840-01				UNK	06/18/21 01:24:10 pm	0.007	18	66.45		
Replicates	22.3	43.7	12.2	-6.5						
HS21060896-01				UNK	06/18/21 01:25:52 pm	0.066	277	7.93		s
Replicates	269.4	295.9	295.7	248.2						
HS21060903-01				UNK	06/18/21 01:27:34 pm	0.016	57	10.20		s
Replicates	50.6	51.0	65.5	59.5						
MBLKT4-167024				UNK	06/18/21 01:30:14 pm	0.001	-8	102.90		
Replicates	-7.3	-11.9	-13.0	-1.4						
MBLKT5-167024				UNK	06/18/21 01:31:57 pm	0.007	16	137.25		
Replicates	62.3	-34.8	25.3	10.3						
HS21060877-01				UNK	06/18/21 01:33:39 pm	0.011	34	46.76		
Replicates	19.1	52.9	53.6	11.1						

Sample Name		Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
HS21060878-01		UNK	06/18/21 01:35:22 pm	0.006	11	103.18		
	Replicates 4.0 9.9 44.5 -15.5							
CCV		UNK	06/18/21 01:37:05 pm	4.900	21447	1.08		
	Replicates 21101.9 21541.5 21533.9 21609.5							
CCB		UNK	06/18/21 01:38:48 pm	0.005	8	29.34		
	Replicates 11.3 5.0 13.9 0.2							
HS21060894-01		UNK	06/18/21 01:42:38 pm	0.001	-8	388.74		
	Replicates 7.3 -37.3 -11.9 10.7							
HS21060896-02		UNK	06/18/21 01:44:19 pm	0.017	62	11.46		s
	Replicates 56.0 60.8 74.8 57.1							
HS21060906-01		UNK	06/18/21 01:46:00 pm	0.003	-2	71.13		
	Replicates -7.2 7.8 -9.7 -0.7							
HS21060923-01		UNK	06/18/21 01:47:41 pm	0.011	33	16.67		
	Replicates 25.6 36.5 27.5 42.0							
HS21060935-01		UNK	06/18/21 01:49:23 pm	0.005	10	76.74		
	Replicates -8.9 4.1 33.4 9.5							
HS21060960-01		UNK	06/18/21 01:51:05 pm	0.006	11	85.12		
	Replicates -1.3 -6.9 40.1 12.6							
MBLK-167026		UNK	06/18/21 01:52:47 pm	0.005	7	97.17		
	Replicates 18.2 5.4 -20.3 24.5							
LCS-167026		UNK	06/18/21 01:56:17 pm	4.860	21293	2.86		
	Replicates 20689.1 21018.3 21356.4 22109.9							
HS21060786-01		UNK	06/18/21 01:57:59 pm	0.026	99	30.49		s
	Replicates 63.5 141.0 112.5 80.4							
HS21060786-01MS		UNK	06/18/21 01:59:41 pm	5.510	24143	0.69		
	Replicates 23896.8 24187.7 24238.7 24248.4							
CCV		UNK	06/18/21 02:01:24 pm	4.870	21314	2.11		
	Replicates 20675.3 21336.2 21554.2 21690.7							
CCB		UNK	06/18/21 02:03:07 pm	-0.002	-22	110.75		
	Replicates -22.0 -33.5 -9.6 -24.4							
HS21060786-01MSD		UNK	06/18/21 02:06:55 pm	5.650	24749	0.51		
	Replicates 24564.1 24851.5 24776.1 24802.5							
HS21060857-01		UNK	06/18/21 02:08:37 pm	0.003	-1	74.56		
	Replicates -5.8 -1.3 -8.4 13.1							
HS21060940-01		UNK	06/18/21 02:10:19 pm	-0.005	-36	118.63		
	Replicates -49.9 -64.2 -20.6 -7.3							
HS21060948-05		UNK	06/18/21 02:12:00 pm	0.031	122	14.19		s
	Replicates 110.1 109.2 150.3 119.6							

Sample Name		Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
HS21060973-01		UNK	06/18/21 02:13:41 pm	0.020	72	23.10		s
Replicates	67.7	47.4	78.1	94.6				
HS21060976-01		UNK	06/18/21 02:15:23 pm	0.218	943	2.49		
Replicates	920.1	975.2	945.9	931.5				
HS21060976-02		UNK	06/18/21 02:17:04 pm	0.036	145	21.67		s
Replicates	132.6	149.0	191.0	109.2				
HS21060976-04		UNK	06/18/21 02:18:46 pm	0.216	934	2.03		
Replicates	954.0	908.7	932.7	942.4				
HS21060976-06		UNK	06/18/21 02:20:28 pm	0.011	34	32.43		
Replicates	18.0	23.7	42.5	50.2				
HS21060976-07		UNK	06/18/21 02:22:10 pm	0.007	17	62.46		
Replicates	-5.3	7.8	29.0	35.5				
CCV		UNK	06/18/21 02:23:53 pm	4.900	21470	1.89		
Replicates	20881.5	21532.1	21685.9	21779.1				
CCB		UNK	06/18/21 02:25:36 pm	0.000	-13	132.03		
Replicates	-10.6	-15.5	-9.5	-17.5				
HS21060976-09		UNK	06/18/21 02:49:01 pm	0.035	138	14.53		s
Replicates	106.9	155.2	137.4	151.5				
MBLK-167022		UNK	06/18/21 02:57:23 pm	-0.002	-23	259.89		
Replicates	-47.5	-37.0	-21.1	11.8				
LCS-167022		UNK	06/18/21 03:02:43 pm	4.920	21521	1.79		
Replicates	20949.2	21629.6	21781.3	21723.2				
HS21060700-02		UNK	06/18/21 03:04:25 pm	0.265	1146	1.57		
Replicates	1119.2	1157.5	1156.9	1151.4				
HS21060700-02MS		UNK	06/18/21 03:06:07 pm	5.770	25256	1.62		
Replicates	24650.5	25376.0	25448.6	25548.0				
HS21060700-02MSD		UNK	06/18/21 03:07:48 pm	5.680	24886	1.21		
Replicates	24446.0	24969.0	25010.2	25120.7				
HS21060700-01		UNK	06/18/21 03:09:30 pm	0.105	446	7.46		s
Replicates	416.4	419.3	486.5	463.3				
HS21060700-03		UNK	06/18/21 03:11:11 pm	0.065	269	8.12		s
Replicates	275.8	264.0	241.4	296.4				
HS21060700-04		UNK	06/18/21 03:12:53 pm	0.137	587	5.88		s
Replicates	549.7	570.0	631.0	598.7				
HS21060700-05		UNK	06/18/21 03:14:34 pm	0.172	740	3.31		
Replicates	706.6	741.5	746.1	766.7				
CCV		UNK	06/18/21 03:16:17 pm	4.870	21324	2.78		
Replicates	20475.8	21360.2	21676.4	21783.4				

Sample Name		Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
CCB		UNK	06/18/21 03:18:01 pm	0.002	-3	219.64		
Replicates	-7.3	-31.1	2.1	23.6				
HS21060700-06		UNK	06/18/21 03:20:37 pm	0.101	430	4.23		
Replicates	451.3	426.6	406.2	435.0				
HS21060700-07		UNK	06/18/21 03:22:19 pm	0.151	647	3.73		
Replicates	620.0	633.2	671.6	664.2				
HS21060700-08		UNK	06/18/21 03:24:01 pm	0.245	1062	14.89		s
Replicates	858.8	1020.5	1137.9	1229.6				
HS21060700-09		UNK	06/18/21 03:25:43 pm	-0.003	-25	353.10		
Replicates	-61.1	-54.7	-1.6	18.8				
HS21060700-10		UNK	06/18/21 03:27:26 pm	0.026	101	5.84		s
Replicates	92.3	105.3	99.3	107.1				
HS21060700-11		UNK	06/18/21 03:29:08 pm	0.006	13	67.15		
Replicates	-6.3	1.7	26.4	28.4				
HS21060700-12		UNK	06/18/21 03:30:50 pm	0.336	1459	4.78		
Replicates	1371.8	1438.7	1489.2	1536.2				
HS21060700-13		UNK	06/18/21 03:32:32 pm	0.015	52	26.77		s
Replicates	71.9	30.3	47.3	56.9				
HS21060700-14		UNK	06/18/21 03:34:13 pm	0.127	543	4.01		
Replicates	509.5	556.5	549.0	555.3				
HS21060700-15		UNK	06/18/21 03:35:55 pm	0.073	308	8.47		s
Replicates	289.3	305.2	347.7	290.7				
CCV		UNK	06/18/21 03:37:38 pm	4.870	21304	1.55		
Replicates	20818.8	21377.4	21520.2	21500.4				
CCB		UNK	06/18/21 03:39:21 pm	0.003	-2	218.85		
Replicates	-21.5	-16.8	31.9	-3.4				
HS21060700-16		UNK	06/18/21 03:42:51 pm	0.049	202	11.55		s
Replicates	209.4	165.2	217.6	216.5				
HS21060700-17		UNK	06/18/21 03:44:32 pm	0.022	82	35.19		s
Replicates	45.2	79.4	127.2	78.1				
HS21060700-18		UNK	06/18/21 03:46:14 pm	0.174	750	3.14		
Replicates	737.8	731.4	745.3	784.7				
HS21060700-19		UNK	06/18/21 03:47:56 pm	0.567	2469	5.24		s
Replicates	2310.1	2435.8	2510.7	2619.5				
HS21060700-20		UNK	06/18/21 03:49:38 pm	0.032	127	12.85		s
Replicates	135.2	104.6	123.1	147.1				
MBLK-167023		UNK	06/18/21 03:51:21 pm	0.022	81	19.39		s
Replicates	70.1	62.1	101.5	92.0				

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
LCS-167023					UNK	06/18/21 03:53:03 pm	5.160	22576	0.64		
	Replicates	22363.3	22604.7	22657.5	22679.2						
HS21060495-07					UNK	06/18/21 03:54:46 pm	-0.038	-179	29.24		
	Replicates	-125.4	-163.2	-187.2	-241.0						
HS21060495-07MS					UNK	06/18/21 03:56:27 pm	5.890	25778	0.36		
	Replicates	25652.9	25759.9	25843.4	25857.1						
HS21060495-07MSD					UNK	06/18/21 03:58:09 pm	6.050	26513	0.32		
	Replicates	26394.2	26517.5	26548.3	26592.0						
HS21060495-01					UNK	06/18/21 03:59:51 pm	0.379	1648	7.66		s
	Replicates	1813.7	1675.9	1578.5	1523.5						
CCV					UNK	06/18/21 04:01:34 pm	4.970	21750	0.68		
	Replicates	21540.8	21773.7	21799.1	21886.8						
CCB					UNK	06/18/21 04:03:17 pm	0.057	235	57.44		s
	Replicates	408.9	284.3	167.7	80.0						
HS21060495-02					UNK	06/18/21 04:09:58 pm	0.079	333	18.44		s
	Replicates	424.4	330.9	291.2	286.5						
HS21060495-03					UNK	06/18/21 04:11:40 pm	0.125	535	2.29		
	Replicates	545.6	544.2	532.5	518.5						
HS21060495-04					UNK	06/18/21 04:13:22 pm	0.028	110	18.44		s
	Replicates	111.8	111.3	136.6	80.9						
HS21060495-05					UNK	06/18/21 04:15:04 pm	0.136	584	2.36		
	Replicates	604.5	581.4	573.5	576.2						
HS21060495-06					UNK	06/18/21 04:16:46 pm	0.121	517	5.95		s
	Replicates	515.4	557.6	480.3	516.2						
HS21060632-05					UNK	06/18/21 04:18:28 pm	0.060	249	2.49		
	Replicates	255.6	251.7	247.2	240.4						
HS21060632-06					UNK	06/18/21 04:20:10 pm	0.051	212	7.70		s
	Replicates	197.0	236.7	203.6	211.9						
HS21060632-07					UNK	06/18/21 04:21:53 pm	0.092	389	1.38		
	Replicates	386.6	392.7	394.1	382.1						
HS21060632-09					UNK	06/18/21 04:23:35 pm	0.024	93	8.92		s
	Replicates	85.9	90.2	89.4	107.2						
HS21060700-21					UNK	06/18/21 04:25:17 pm	0.104	443	2.48		
	Replicates	436.7	452.6	429.9	452.1						
CCV					UNK	06/18/21 04:27:00 pm	4.990	21830	0.86		
	Replicates	21592.7	21786.1	21907.3	22035.0						
CCB					UNK	06/18/21 04:29:59 pm	-0.003	-25	156.05		
	Replicates	-20.9	-24.0	-50.5	-6.0						

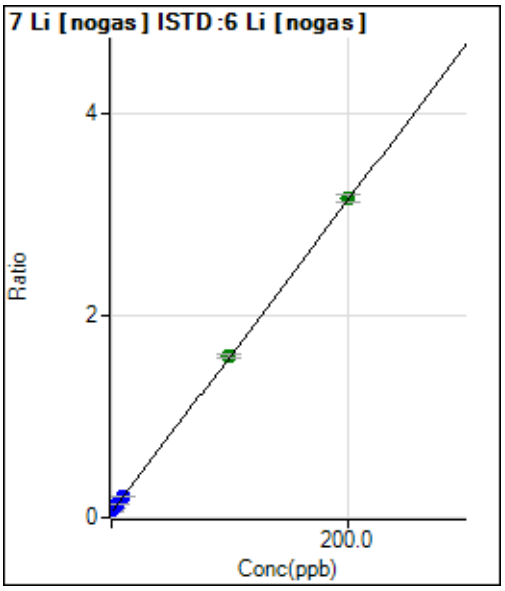
Sample Name		Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
HS21060700-22		UNK	06/18/21 04:33:00 pm	0.034	136	16.41		s
Replicates	125.8	107.7	164.7	144.2				
HS21060700-23		UNK	06/18/21 04:34:42 pm	0.075	315	2.58		
Replicates	322.4	321.7	309.1	306.0				
HS21060700-24		UNK	06/18/21 04:36:24 pm	0.053	218	8.87		s
Replicates	193.7	227.5	210.5	241.0				
HS21060908-02		UNK	06/18/21 04:38:06 pm	0.021	80	30.97		s
Replicates	108.6	87.7	85.9	39.7				
HS21060908-03		UNK	06/18/21 04:39:48 pm	0.011	37	26.38		
Replicates	40.8	52.6	32.2	21.3				
HS21060908-04		UNK	06/18/21 04:41:30 pm	0.049	199	9.26		s
Replicates	173.7	221.4	203.0	197.2				
HS21060908-06		UNK	06/18/21 04:43:12 pm	0.026	102	8.77		s
Replicates	111.6	91.6	95.2	109.9				
HS21060908-08		UNK	06/18/21 04:44:55 pm	0.019	68	27.12		s
Replicates	42.4	69.3	96.6	65.4				
CCV		UNK	06/18/21 04:50:08 pm	5.090	22301	5.20		s
Replicates	20655.6	22335.1	22986.9	23227.2				
CCB		UNK	06/18/21 04:53:05 pm	0.004	4	99.82		
Replicates	-8.5	-8.1	3.9	28.7				

Calibration for 020_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\062121A.b\
Analysis File: 062121A.batch.bin
DA Date-Time: 6/21/2021 7:23:21 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	013CALB.d	CAL BLK	6/21/2021 11:31:18 AM
2	014CALS.d	2/10/200	6/21/2021 11:33:21 AM
3	015CALS.d	5/25/500	6/21/2021 11:35:23 AM
4	016CALS.d	10/50/1000	6/21/2021 11:37:27 AM
5	017CALS.d	100/500/10K	6/21/2021 11:39:31 AM
6	018CALS.d	200/1000/20K	6/21/2021 11:41:31 AM
7			

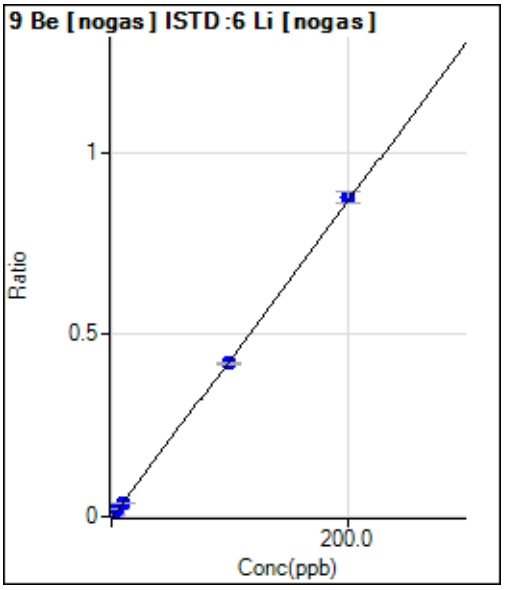
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70837.24	0.0670	P	2.5	
2	☐	2.000	1.758	100939.19	0.0942	P	1.6	-12.1
3	☐	5.000	4.669	147559.66	0.1391	P	3.3	-6.6
4	☐	10.000	9.130	221235.15	0.2080	P	0.1	-8.7
5	☐	100.000	99.261	1631057.89	1.5999	A	1.6	-0.7
6	☐	200.000	200.424	3053648.60	3.1621	A	2.8	0.2
7	☐	1.000						

y = 0.0154 * x + 0.0670
R = 1.0000
DL = 0.3262 ppb
BEC = 4.34 ppb

Weight: <None>
Min Conc: <None>

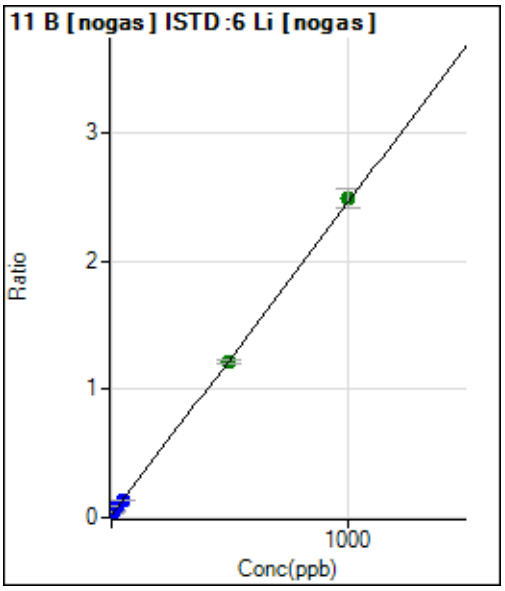


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	105.00	0.0001	P	54.2	
2	☐	2.000	1.784	8425.22	0.0079	P	1.3	-10.8
3	☐	5.000	4.527	20988.15	0.0198	P	1.8	-9.5
4	☐	10.000	8.988	41674.78	0.0392	P	2.1	-10.1
5	☐	100.000	96.786	429197.07	0.4210	P	0.6	-3.2
6	☐	200.000	201.672	846884.78	0.8771	P	3.3	0.8
7	☐	1.000						

y = 0.0043 * x + 1.0027E-004
R = 0.9998
DL = 0.03748 ppb
BEC = 0.02306 ppb

Weight: <None>
Min Conc: <None>

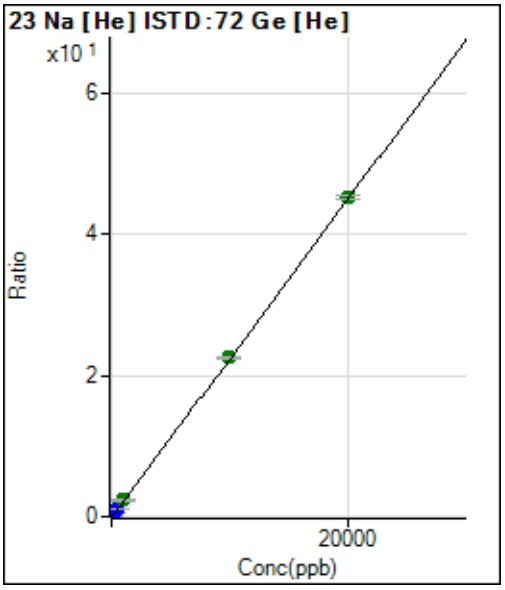
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33993.62	0.0322	P	1.9	
2	☐	10.000	8.139	55728.53	0.0520	P	3.0	-18.6
3	☐	25.000	21.534	89783.98	0.0846	P	3.4	-13.9
4	☐	50.000	43.425	146755.49	0.1380	P	1.0	-13.1
5	☐	500.000	483.001	1232741.78	1.2092	A	2.7	-3.4
6	☐	1000.000	1008.933	2404164.08	2.4910	A	5.5	0.9
7	☐	5.000						

y = 0.0024 * x + 0.0322
R = 0.9998
DL = 0.751 ppb
BEC = 13.2 ppb

Weight: <None>
Min Conc: <None>

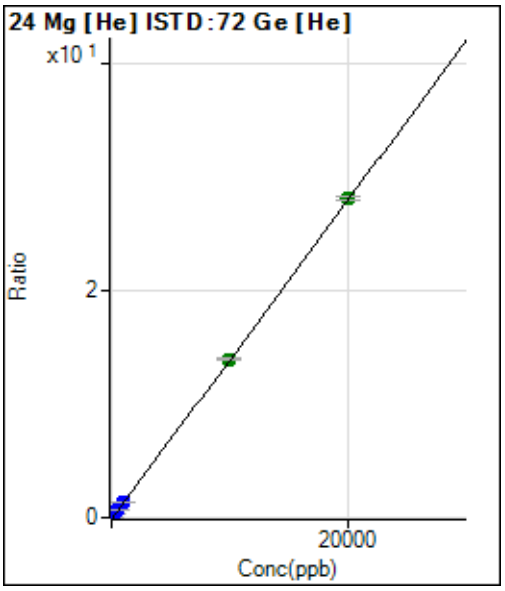


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35626.87	0.0521	P	1.2	
2	☐	200.000	195.819	337515.29	0.4939	P	1.4	-2.1
3	☐	500.000	491.141	792496.11	1.1603	P	0.8	-1.8
4	☐	1000.000	1011.865	1591242.94	2.3353	A	3.3	1.2
5	☐	10000.00	9946.148	15422313.10	22.4954	A	0.9	-0.5
6	☐	20000.00	20026.59	30060084.55	45.2418	A	1.2	0.1
7	☐	100.000						

y = 0.0023 * x + 0.0521
R = 1.0000
DL = 0.8168 ppb
BEC = 23.07 ppb

Weight: <None>
Min Conc: <None>

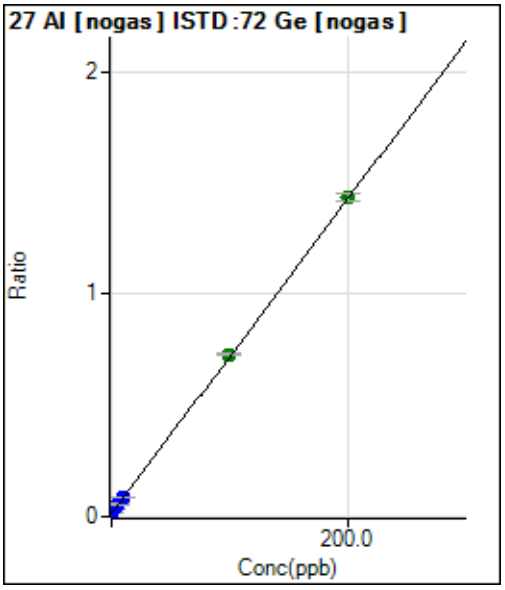
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2403.52	0.0035	P	5.0	
2	☐	200.000	200.361	194366.54	0.2844	P	1.3	0.2
3	☐	500.000	497.695	478980.99	0.7013	P	1.8	-0.5
4	☐	1000.000	997.529	955438.22	1.4021	P	1.6	-0.2
5	☐	10000.00	9941.725	9559023.81	13.9426	A	0.9	-0.6
6	☐	20000.00	20029.31	18661779.30	28.0863	A	0.8	0.1
7	☐	100.000						

y = 0.0014 * x + 0.0035
R = 1.0000
DL = 0.3753 ppb
BEC = 2.505 ppb

Weight: <None>
Min Conc: <None>

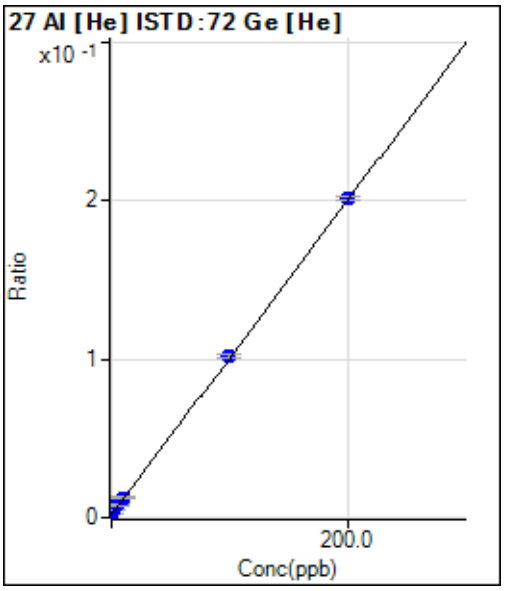


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38569.31	0.0206	P	2.0	
2	☐	2.000	1.913	65111.53	0.0341	P	2.6	-4.3
3	☐	5.000	4.995	104223.66	0.0559	P	2.8	-0.1
4	☐	10.000	9.559	165055.60	0.0882	P	0.5	-4.4
5	☐	100.000	100.141	1365558.89	0.7294	A	1.9	0.1
6	☐	200.000	199.952	2609164.54	1.4359	A	2.6	0.0
7	☐	1.000						

y = 0.0071 * x + 0.0206
R = 1.0000
DL = 0.1766 ppb
BEC = 2.904 ppb

Weight: <None>
Min Conc: <None>

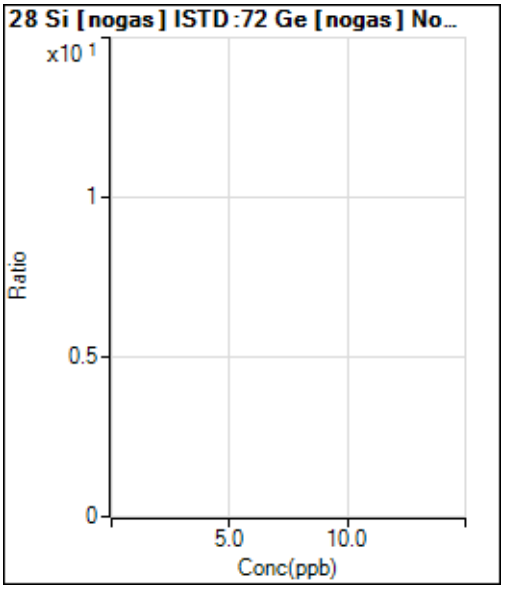
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1883.46	0.0028	P	3.3	
2	☐	2.000	2.314	3450.37	0.0050	P	7.4	15.7
3	☐	5.000	5.216	5414.20	0.0079	P	10.8	4.3
4	☐	10.000	10.028	8658.78	0.0127	P	6.6	0.3
5	☐	100.000	99.728	69774.19	0.1018	P	2.2	-0.3
6	☐	200.000	200.126	133867.03	0.2015	P	1.3	0.1
7	☐	1.000						

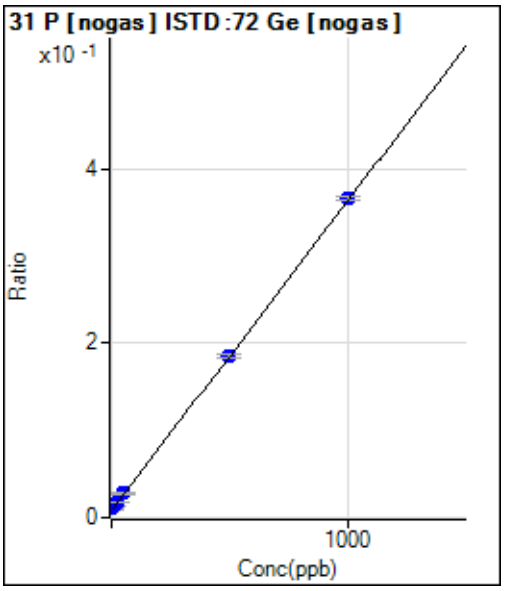
y = 9.9299E-004 * x + 0.0028
R = 1.0000
DL = 0.2783 ppb
BEC = 2.771 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

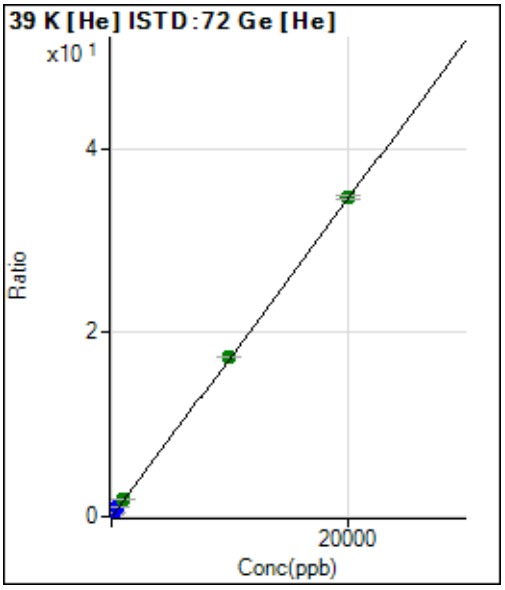
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18789.56	0.0100	P	2.0	
2	☐	10.000	8.867	25130.29	0.0132	P	4.1	-11.3
3	☐	25.000	23.978	34545.15	0.0185	P	0.7	-4.1
4	☐	50.000	49.791	51820.99	0.0277	P	1.0	-0.4
5	☐	500.000	494.544	347520.44	0.1856	P	1.6	-1.1
6	☐	1000.000	1002.775	665276.24	0.3661	P	1.4	0.3
7	☐	5.000						

y = 3.5509E-004 * x + 0.0100
R = 1.0000
DL = 1.66 ppb
BEC = 28.2 ppb

Weight: <None>
Min Conc: <None>

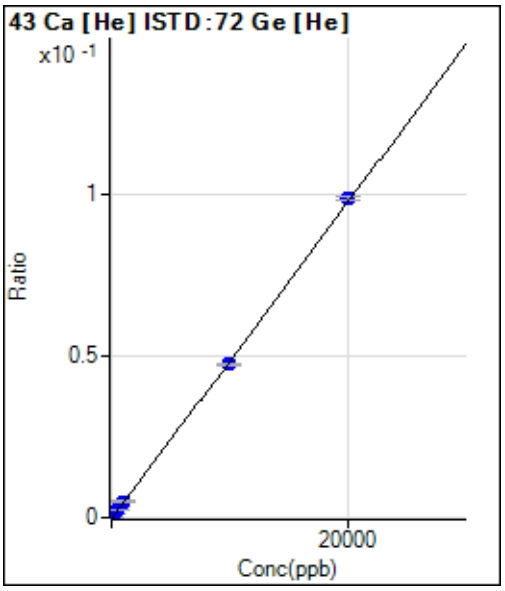


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	92656.92	0.1354	P	0.8	
2	☐	200.000	194.400	322217.12	0.4715	P	1.5	-2.8
3	☐	500.000	486.420	666952.96	0.9765	P	1.4	-2.7
4	☐	1000.000	1013.516	1286528.55	1.8880	A	3.0	1.4
5	☐	10000.00	9962.620	11903760.24	17.3629	A	0.8	-0.4
6	☐	20000.00	20018.40	23090097.15	34.7516	A	1.3	0.1
7	☐	100.000						

y = 0.0017 * x + 0.1354
R = 1.0000
DL = 1.882 ppb
BEC = 78.29 ppb

Weight: <None>
Min Conc: <None>

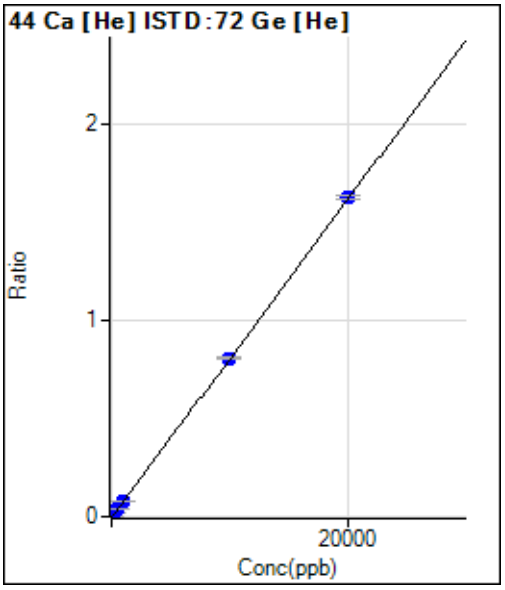
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	31.6	
2	☐	200.000	205.185	723.37	0.0011	P	15.9	2.6
3	☐	500.000	478.231	1636.77	0.0024	P	8.5	-4.4
4	☐	1000.000	1020.719	3443.71	0.0051	P	9.6	2.1
5	☐	10000.00	9676.277	32545.19	0.0475	P	1.1	-3.2
6	☐	20000.00	20161.31	65674.99	0.0988	P	1.3	0.8
7	☐	100.000						

y = 4.9000E-006 * x + 5.3580E-005
R = 0.9998
DL = 10.36 ppb
BEC = 10.93 ppb

Weight: <None>
Min Conc: <None>

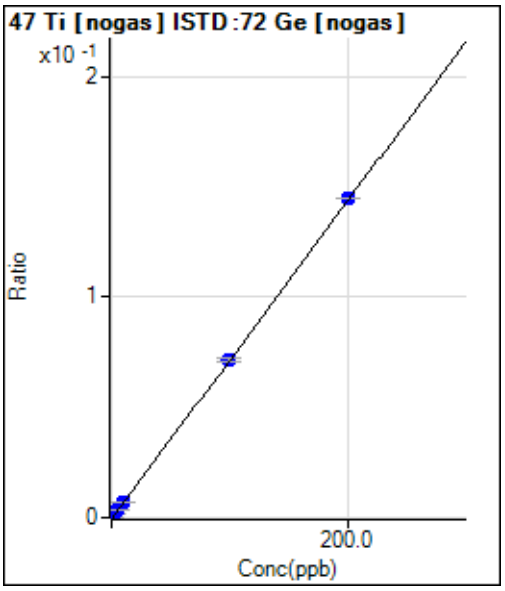


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1653.44	0.0024	P	6.6	
2	☐	200.000	196.345	12551.06	0.0184	P	3.8	-1.8
3	☐	500.000	491.658	28932.45	0.0424	P	2.2	-1.7
4	☐	1000.000	988.615	56378.48	0.0827	P	1.4	-1.1
5	☐	10000.00	9932.725	554913.60	0.8094	P	1.0	-0.7
6	☐	20000.00	20034.45	1083116.83	1.6301	P	1.0	0.2
7	☐	100.000						

y = 8.1246E-005 * x + 0.0024
R = 1.0000
DL = 5.884 ppb
BEC = 29.74 ppb

Weight: <None>
Min Conc: <None>

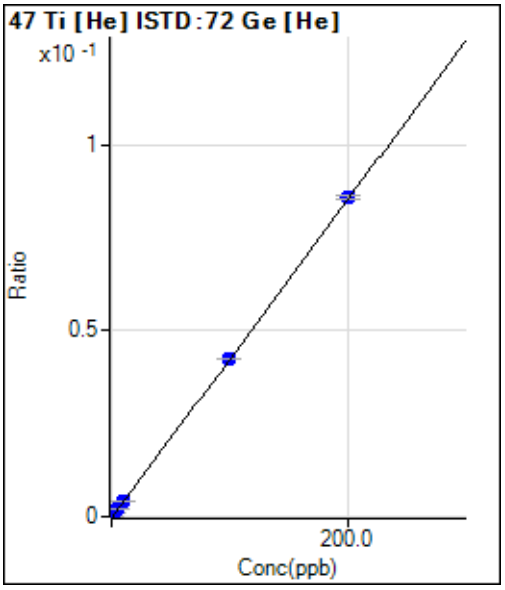
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	23.7	
2	☐	2.000	1.813	2646.90	0.0014	P	9.2	-9.3
3	☐	5.000	4.966	6821.37	0.0037	P	6.0	-0.7
4	☐	10.000	9.818	13395.02	0.0072	P	2.2	-1.8
5	☐	100.000	98.952	133725.05	0.0714	P	1.4	-1.0
6	☐	200.000	200.536	262913.13	0.1447	P	0.3	0.3
7	☐	1.000						

y = 7.2102E-004 * x + 7.9882E-005
R = 1.0000
DL = 0.07874 ppb
BEC = 0.1108 ppb

Weight: <None>
Min Conc: <None>

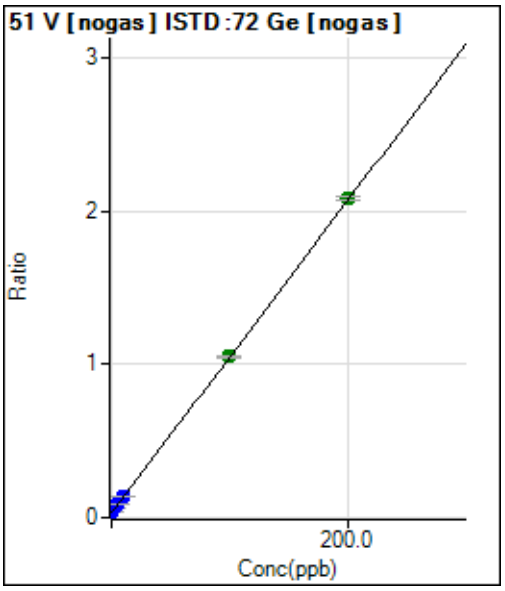


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	94.6	
2	☐	2.000	1.936	593.36	0.0009	P	8.4	-3.2
3	☐	5.000	4.933	1470.08	0.0022	P	5.7	-1.3
4	☐	10.000	9.685	2853.60	0.0042	P	10.0	-3.2
5	☐	100.000	99.045	29116.32	0.0425	P	0.6	-1.0
6	☐	200.000	200.495	57097.29	0.0859	P	0.8	0.2
7	☐	1.000						

y = 4.2838E-004 * x + 3.8988E-005
R = 1.0000
DL = 0.2584 ppb
BEC = 0.09101 ppb

Weight: <None>
Min Conc: <None>

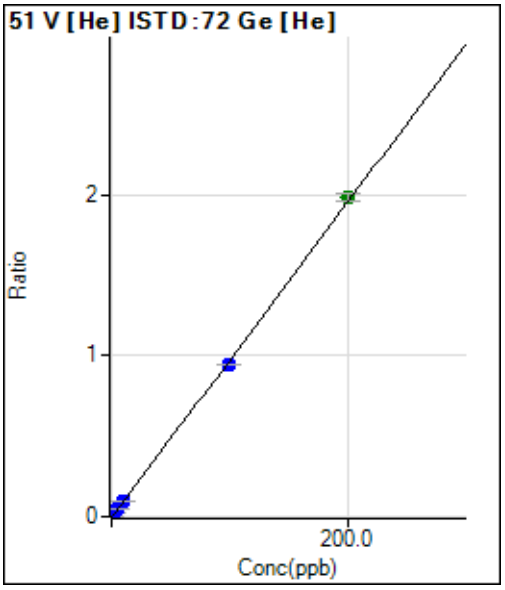
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76168.75	0.0406	P	1.4	
2	☐	2.000	1.856	113650.87	0.0595	P	1.5	-7.2
3	☐	5.000	4.621	163510.62	0.0877	P	1.2	-7.6
4	☐	10.000	9.219	251795.24	0.1346	P	1.0	-7.8
5	☐	100.000	99.341	1972127.53	1.0533	A	1.1	-0.7
6	☐	200.000	200.380	3786107.34	2.0834	A	1.3	0.2
7	☐	1.000						

y = 0.0102 * x + 0.0406
R = 1.0000
DL = 0.1681 ppb
BEC = 3.982 ppb

Weight: <None>
Min Conc: <None>

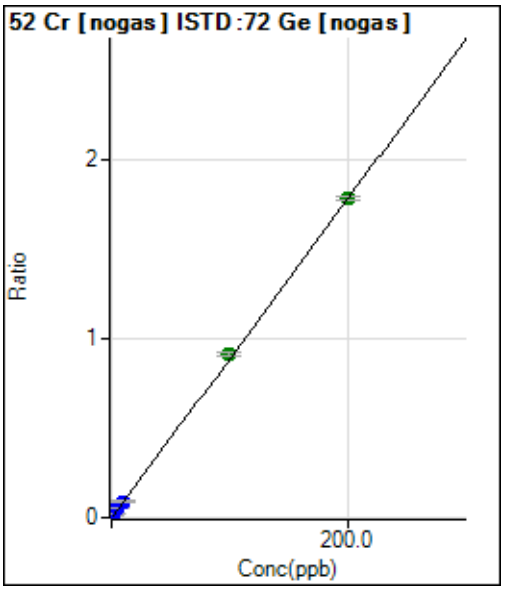


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2690.21	0.0039	P	6.1	
2	☐	2.000	1.870	15210.67	0.0223	P	0.3	-6.5
3	☐	5.000	4.722	34283.65	0.0502	P	2.5	-5.6
4	☐	10.000	9.544	66406.34	0.0975	P	1.5	-4.6
5	☐	100.000	96.110	648381.61	0.9457	P	0.5	-3.9
6	☐	200.000	201.976	1317611.93	1.9831	A	2.1	1.0
7	☐	1.000						

y = 0.0098 * x + 0.0039
R = 0.9997
DL = 0.07343 ppb
BEC = 0.4012 ppb

Weight: <None>
Min Conc: <None>

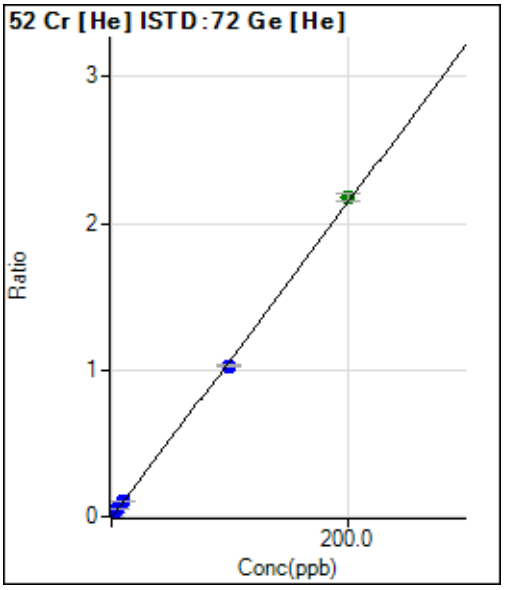
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12901.34	0.0069	P	3.3	
2	☐	2.000	1.875	45141.71	0.0236	P	0.7	-6.3
3	☐	5.000	4.736	91765.53	0.0492	P	1.0	-5.3
4	☐	10.000	9.428	170564.05	0.0912	P	1.0	-5.7
5	☐	100.000	101.470	1711210.44	0.9140	A	1.9	1.5
6	☐	200.000	199.302	3250582.03	1.7887	A	1.0	-0.3
7	☐	1.000						

y = 0.0089 * x + 0.0069
R = 1.0000
DL = 0.07596 ppb
BEC = 0.7691 ppb

Weight: <None>
Min Conc: <None>

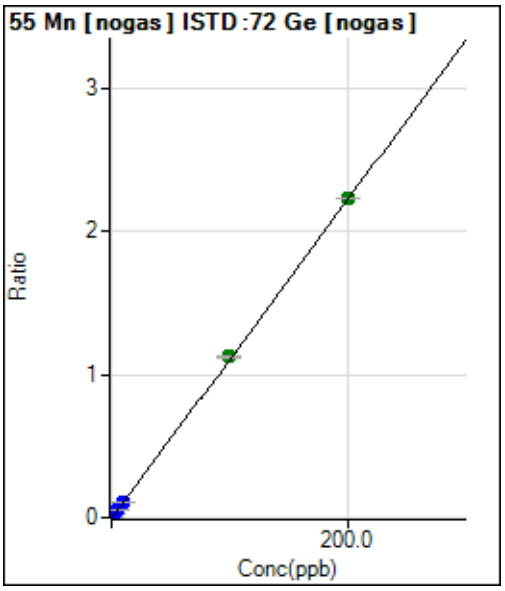


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1846.79	0.0027	P	5.0	
2	☐	2.000	1.884	15686.82	0.0230	P	2.7	-5.8
3	☐	5.000	4.804	37113.83	0.0543	P	1.8	-3.9
4	☐	10.000	9.702	72905.90	0.1070	P	1.6	-3.0
5	☐	100.000	95.287	704091.61	1.0270	P	0.7	-4.7
6	☐	200.000	202.378	1447242.32	2.1781	A	1.9	1.2
7	☐	1.000						

y = 0.0107 * x + 0.0027
R = 0.9996
DL = 0.0379 ppb
BEC = 0.251 ppb

Weight: <None>
Min Conc: <None>

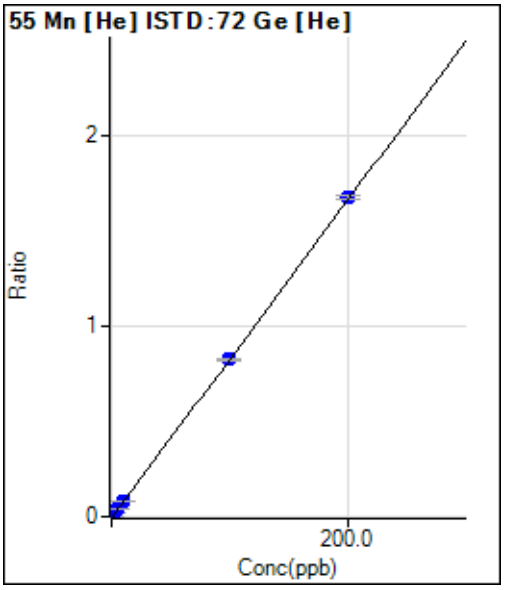
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7444.93	0.0040	P	4.5	
2	☐	2.000	1.825	46431.75	0.0243	P	3.2	-8.8
3	☐	5.000	4.807	107348.70	0.0576	P	2.0	-3.9
4	☐	10.000	9.747	210812.31	0.1127	P	1.4	-2.5
5	☐	100.000	100.521	2106874.24	1.1251	A	1.7	0.5
6	☐	200.000	199.759	4056170.46	2.2320	A	0.4	-0.1
7	☐	1.000						

y = 0.0112 * x + 0.0040
R = 1.0000
DL = 0.04848 ppb
BEC = 0.3558 ppb

Weight: <None>
Min Conc: <None>

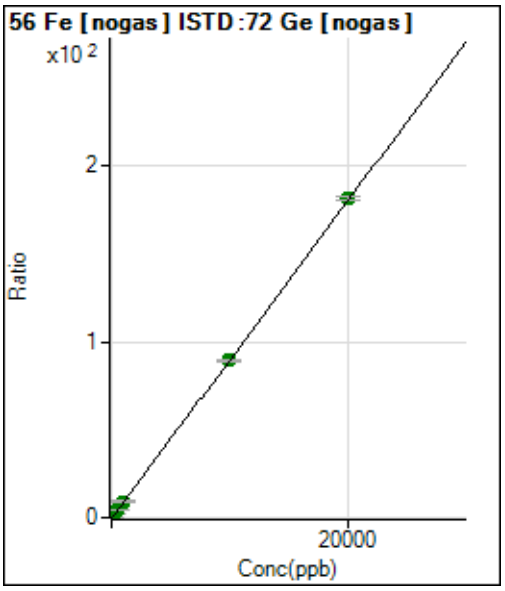


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	716.69	0.0010	P	6.6	
2	☐	2.000	1.938	11753.91	0.0172	P	2.0	-3.1
3	☐	5.000	4.869	28428.67	0.0416	P	2.5	-2.6
4	☐	10.000	9.903	56944.18	0.0836	P	1.9	-1.0
5	☐	100.000	98.655	564336.52	0.8232	P	1.5	-1.3
6	☐	200.000	200.681	1111921.18	1.6734	P	1.3	0.3
7	☐	1.000						

y = 0.0083 * x + 0.0010
R = 1.0000
DL = 0.02487 ppb
BEC = 0.1256 ppb

Weight: <None>
Min Conc: <None>

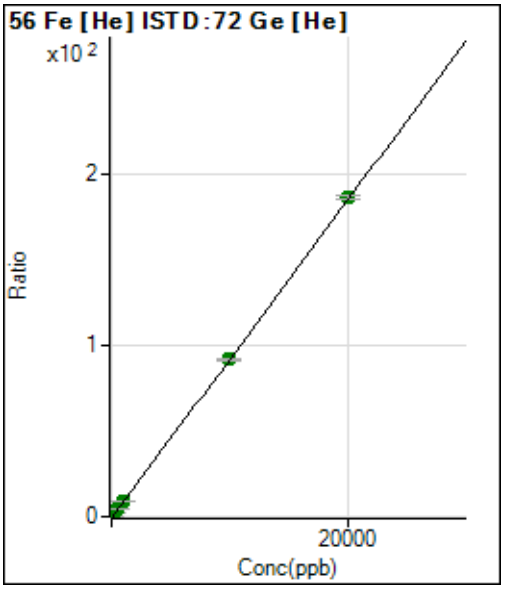
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	668519.36	0.3563	P	0.8	
2	☐	200.000	197.933	4100308.17	2.1473	A	2.2	-1.0
3	☐	500.000	495.140	9016834.45	4.8366	A	1.6	-1.0
4	☐	1000.000	983.509	17317073.49	9.2557	A	1.5	-1.6
5	☐	10000.00	9877.378	168004707.5	89.7338	A	1.1	-1.2
6	☐	20000.00	20062.27	330544855.0	181.893	A	1.2	0.3
7	☐	100.000						

y = 0.0090 * x + 0.3563
R = 1.0000
DL = 0.9389 ppb
BEC = 39.37 ppb

Weight: <None>
Min Conc: <None>

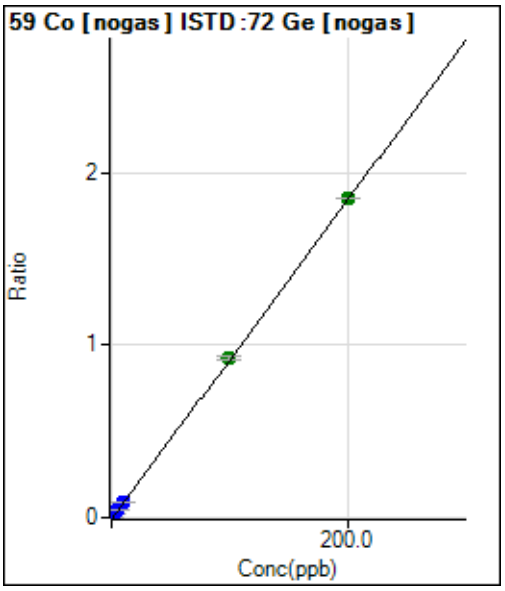


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	51428.27	0.0751	P	4.5	
2	☐	200.000	212.648	1402871.49	2.0530	A	2.1	6.3
3	☐	500.000	510.986	3297495.05	4.8280	A	1.0	2.2
4	☐	1000.000	1006.745	6432041.57	9.4392	A	2.5	0.7
5	☐	10000.00	9866.824	62970415.73	91.8492	A	0.7	-1.3
6	☐	20000.00	20065.85	124056361.4	186.713	A	1.5	0.3
7	☐	100.000						

y = 0.0093 * x + 0.0751
R = 1.0000
DL = 1.087 ppb
BEC = 8.079 ppb

Weight: <None>
Min Conc: <None>

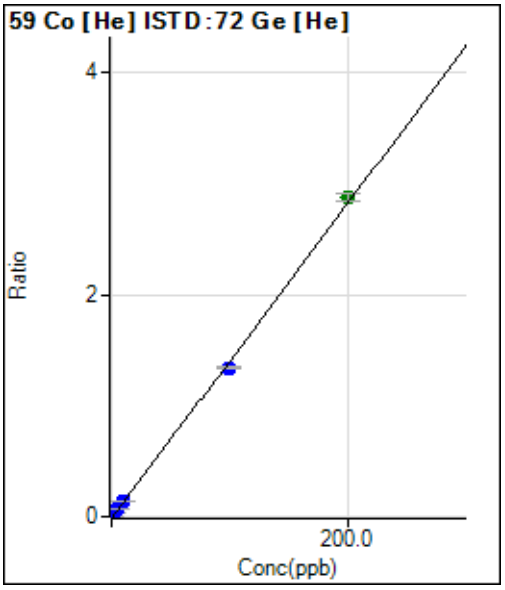
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	366.68	0.0002	P	31.9	
2	☐	2.000	1.900	34014.84	0.0178	P	1.0	-5.0
3	☐	5.000	4.760	82637.65	0.0443	P	2.2	-4.8
4	☐	10.000	9.603	166955.78	0.0892	P	1.7	-4.0
5	☐	100.000	100.024	1736703.52	0.9276	A	2.0	0.0
6	☐	200.000	200.015	3370560.05	1.8547	A	0.5	0.0
7	☐	1.000						

y = 0.0093 * x + 1.9584E-004
R = 1.0000
DL = 0.02023 ppb
BEC = 0.02112 ppb

Weight: <None>
Min Conc: <None>

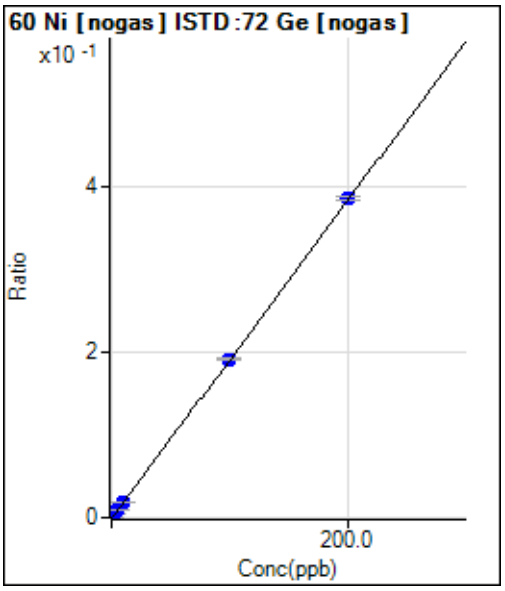


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0003	P	19.6	
2	☐	2.000	1.907	18646.35	0.0273	P	2.9	-4.7
3	☐	5.000	4.784	46488.58	0.0681	P	1.5	-4.3
4	☐	10.000	9.579	92697.78	0.1360	P	1.7	-4.2
5	☐	100.000	94.408	917487.33	1.3383	P	1.5	-5.6
6	☐	200.000	202.823	1910096.59	2.8749	A	1.9	1.4
7	☐	1.000						

y = 0.0142 * x + 2.6284E-004
R = 0.9995
DL = 0.01092 ppb
BEC = 0.01854 ppb

Weight: <None>
Min Conc: <None>

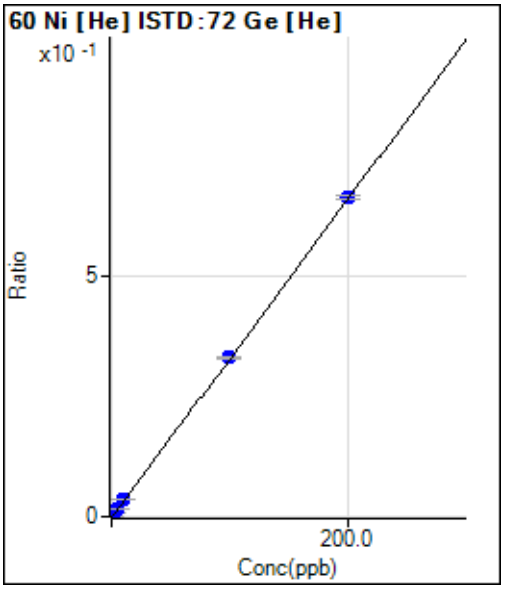
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1056.72	0.0006	P	10.5	
2	☐	2.000	1.773	7591.67	0.0040	P	1.8	-11.4
3	☐	5.000	4.808	18315.97	0.0098	P	3.5	-3.8
4	☐	10.000	9.857	36563.15	0.0195	P	1.0	-1.4
5	☐	100.000	99.326	359070.65	0.1918	P	2.0	-0.7
6	☐	200.000	200.351	702024.81	0.3863	P	1.1	0.2
7	☐	1.000						

y = 0.0019 * x + 5.6268E-004
R = 1.0000
DL = 0.09183 ppb
BEC = 0.2922 ppb

Weight: <None>
Min Conc: <None>

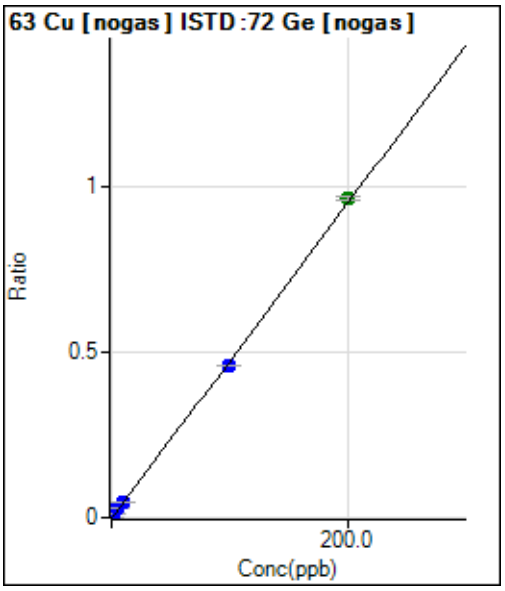


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	520.02	0.0008	P	10.3	
2	☐	2.000	1.835	4667.34	0.0068	P	4.9	-8.3
3	☐	5.000	4.814	11397.02	0.0167	P	2.4	-3.7
4	☐	10.000	10.321	23792.24	0.0349	P	1.3	3.2
5	☐	100.000	99.516	226261.71	0.3301	P	2.2	-0.5
6	☐	200.000	200.232	440728.91	0.6633	P	1.4	0.1
7	☐	1.000						

y = 0.0033 * x + 7.5984E-004
R = 1.0000
DL = 0.07124 ppb
BEC = 0.2296 ppb

Weight: <None>
Min Conc: <None>

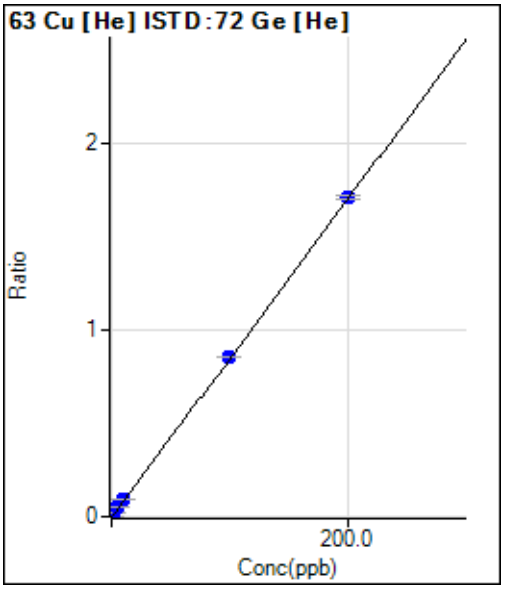
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4210.53	0.0022	P	3.6	
2	☐	2.000	1.902	21589.60	0.0113	P	1.0	-4.9
3	☐	5.000	5.095	49426.55	0.0265	P	1.2	1.9
4	☐	10.000	9.725	90862.80	0.0486	P	0.7	-2.8
5	☐	100.000	96.017	860439.70	0.4596	P	0.9	-4.0
6	☐	200.000	202.004	1752535.91	0.9644	A	1.0	1.0
7	☐	1.000						

y = 0.0048 * x + 0.0022
R = 0.9997
DL = 0.05027 ppb
BEC = 0.4712 ppb

Weight: <None>
Min Conc: <None>

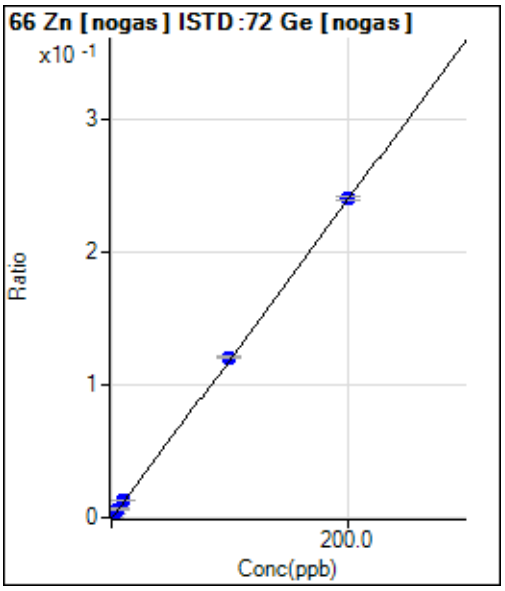


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2376.86	0.0035	P	6.7	
2	☐	2.000	1.943	13728.61	0.0201	P	2.8	-2.9
3	☐	5.000	5.218	32859.63	0.0481	P	1.9	4.4
4	☐	10.000	10.110	61291.91	0.0900	P	2.4	1.1
5	☐	100.000	99.768	587479.17	0.8569	P	1.0	-0.2
6	☐	200.000	200.106	1139664.05	1.7152	P	0.9	0.1
7	☐	1.000						

y = 0.0086 * x + 0.0035
R = 1.0000
DL = 0.08155 ppb
BEC = 0.406 ppb

Weight: <None>
Min Conc: <None>

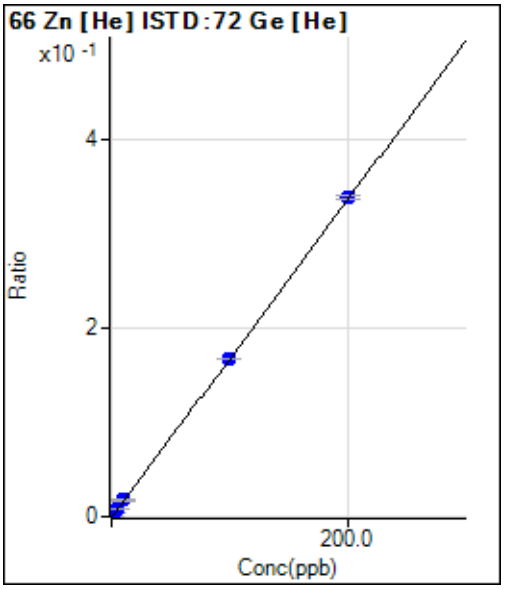
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	813.37	0.0004	P	9.0	
2	☐	2.000	2.476	6511.26	0.0034	P	9.0	23.8
3	☐	5.000	5.008	12014.09	0.0064	P	2.8	0.2
4	☐	10.000	10.117	23532.02	0.0126	P	3.2	1.2
5	☐	100.000	99.922	225394.95	0.1204	P	1.2	-0.1
6	☐	200.000	200.028	437168.17	0.2406	P	0.9	0.0
7	☐	1.000						

y = 0.0012 * x + 4.3353E-004
R = 1.0000
DL = 0.09762 ppb
BEC = 0.3611 ppb

Weight: <None>
Min Conc: <None>

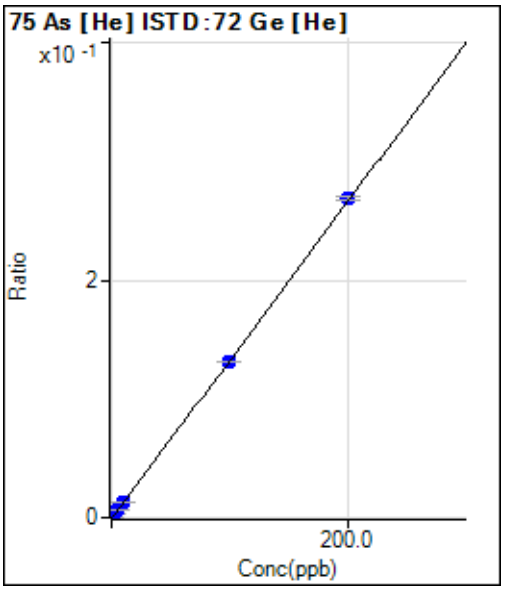


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.68	0.0007	P	20.8	
2	☐	2.000	2.418	3240.34	0.0047	P	8.4	20.9
3	☐	5.000	4.981	6197.81	0.0091	P	1.9	-0.4
4	☐	10.000	9.908	11857.31	0.0174	P	6.0	-0.9
5	☐	100.000	99.134	115369.72	0.1683	P	0.5	-0.9
6	☐	200.000	200.434	225621.56	0.3396	P	0.7	0.2
7	☐	1.000						

y = 0.0017 * x + 6.5222E-004
R = 1.0000
DL = 0.2405 ppb
BEC = 0.3857 ppb

Weight: <None>
Min Conc: <None>

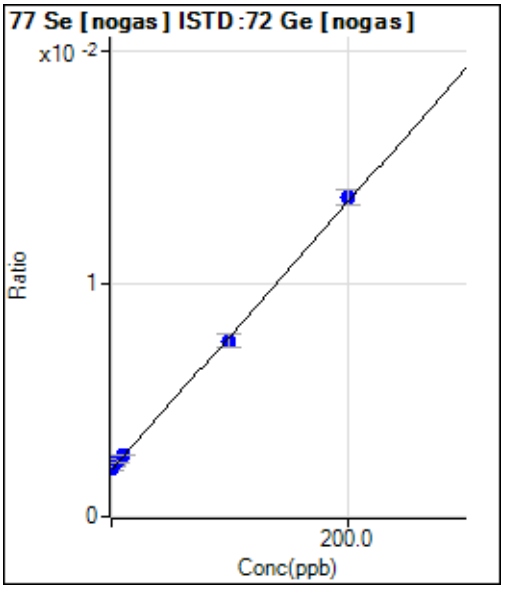
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	212.22	0.0003	P	21.8	
2	☐	2.000	1.833	1887.89	0.0028	P	3.8	-8.3
3	☐	5.000	4.910	4699.51	0.0069	P	2.2	-1.8
4	☐	10.000	9.537	8907.77	0.0131	P	0.6	-4.6
5	☐	100.000	97.965	90085.99	0.1314	P	0.9	-2.0
6	☐	200.000	201.045	178954.14	0.2693	P	1.4	0.5
7	☐	1.000						

y = 0.0013 * x + 3.0998E-004
R = 0.9999
DL = 0.1516 ppb
BEC = 0.2316 ppb

Weight: <None>
Min Conc: <None>

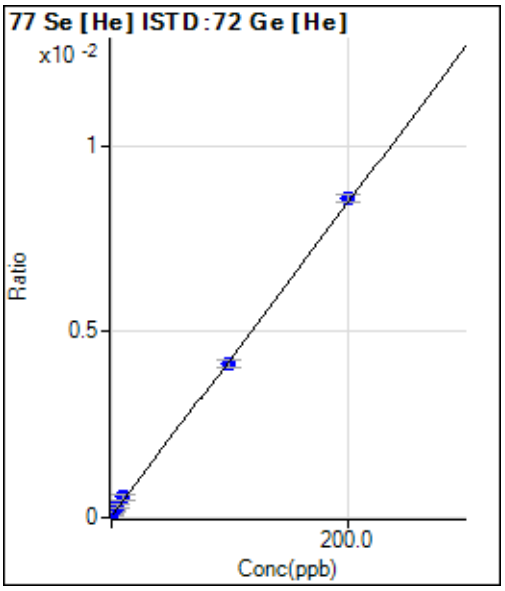


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3900.50	0.0021	P	8.2	
2	☐	2.000	2.045	4193.89	0.0022	P	6.4	2.3
3	☐	5.000	5.099	4420.60	0.0024	P	6.1	2.0
4	☐	10.000	9.135	4870.74	0.0026	P	0.2	-8.7
5	☐	100.000	95.118	14119.00	0.0075	P	7.6	-4.9
6	☐	200.000	202.481	24897.39	0.0137	P	4.6	1.2
7	☐	1.000						

y = 5.7405E-005 * x + 0.0021
R = 0.9996
DL = 8.856 ppb
BEC = 36.21 ppb

Weight: <None>
Min Conc: <None>

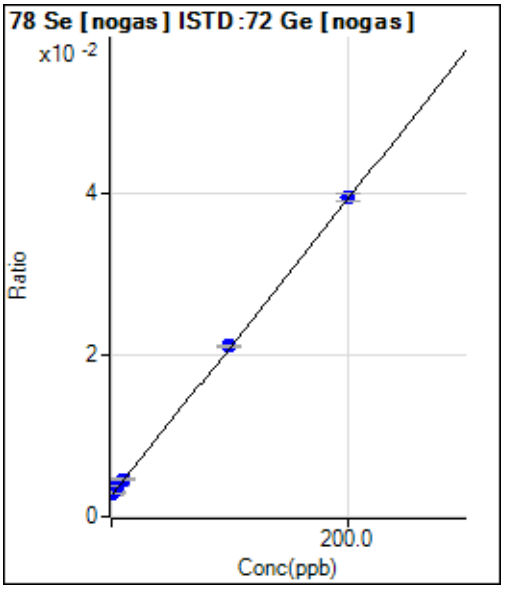
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	27.4	
2	☐	2.000	2.551	130.00	0.0002	P	28.2	27.6
3	☐	5.000	5.445	213.34	0.0003	P	27.4	8.9
4	☐	10.000	11.134	376.68	0.0006	P	23.1	11.3
5	☐	100.000	96.124	2833.61	0.0041	P	5.2	-3.9
6	☐	200.000	201.865	5707.64	0.0086	P	2.1	0.9
7	☐	1.000						

y = 4.2144E-005 * x + 8.2862E-005
R = 0.9997
DL = 1.614 ppb
BEC = 1.966 ppb

Weight: <None>
Min Conc: <None>

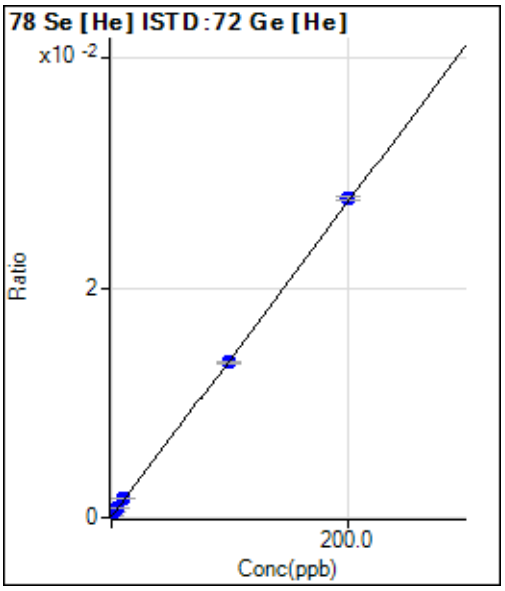


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5290.85	0.0028	P	5.9	
2	☐	2.000	0.995	5734.32	0.0030	P	5.9	-50.2
3	☐	5.000	4.996	6964.79	0.0037	P	1.6	-0.1
4	☐	10.000	9.700	8602.17	0.0046	P	5.8	-3.0
5	☐	100.000	99.646	39516.62	0.0211	P	1.4	-0.4
6	☐	200.000	200.202	71891.80	0.0396	P	1.9	0.1
7	☐	1.000						

y = 1.8353E-004 * x + 0.0028
R = 1.0000
DL = 2.709 ppb
BEC = 15.36 ppb

Weight: <None>
Min Conc: <None>

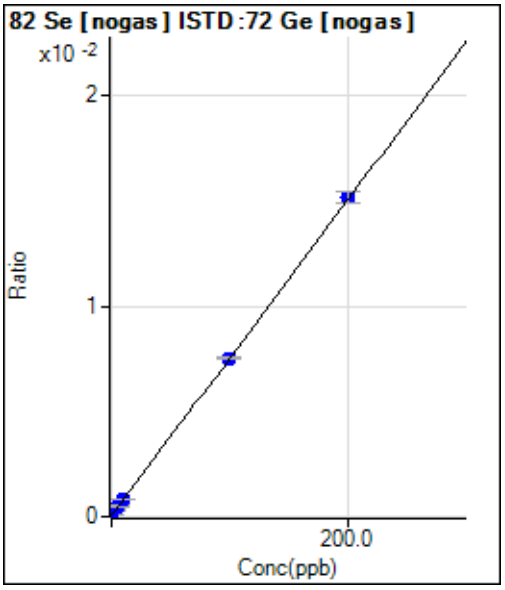
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0002	P	6.4	
2	☐	2.000	2.104	353.34	0.0005	P	4.3	5.2
3	☐	5.000	4.096	539.34	0.0008	P	2.5	-18.1
4	☐	10.000	10.067	1095.37	0.0016	P	1.3	0.7
5	☐	100.000	96.925	9255.03	0.0135	P	1.4	-3.1
6	☐	200.000	201.556	18489.37	0.0278	P	1.8	0.8
7	☐	1.000						

y = 1.3692E-004 * x + 2.2893E-004
R = 0.9998
DL = 0.3219 ppb
BEC = 1.672 ppb

Weight: <None>
Min Conc: <None>

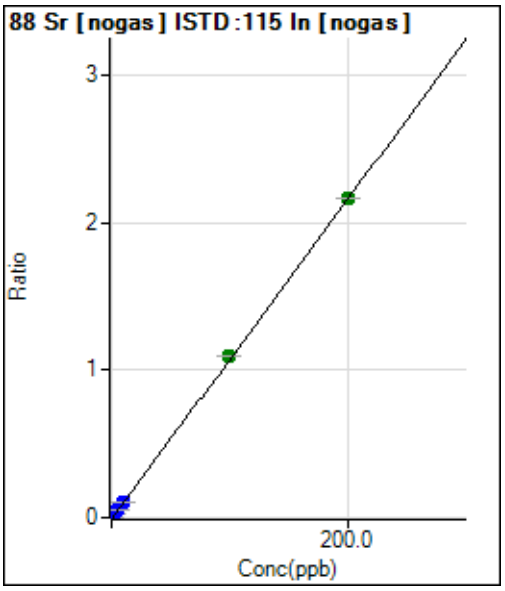


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0001	P	3.2	
2	☐	2.000	2.793	633.36	0.0003	P	7.5	39.6
3	☐	5.000	4.766	893.37	0.0005	P	27.3	-4.7
4	☐	10.000	9.629	1580.10	0.0008	P	4.0	-3.7
5	☐	100.000	98.833	14102.37	0.0075	P	1.4	-1.2
6	☐	200.000	200.600	27547.90	0.0152	P	4.1	0.3
7	☐	1.000						

y = 7.4969E-005 * x + 1.2254E-004
R = 1.0000
DL = 0.1582 ppb
BEC = 1.635 ppb

Weight: <None>
Min Conc: <None>

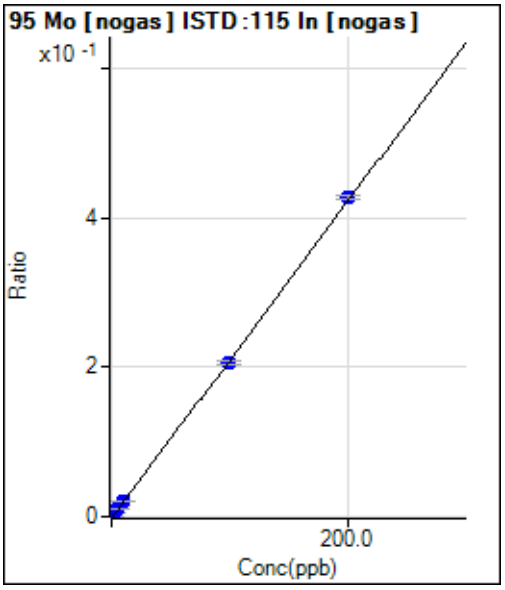
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1236.73	0.0006	P	12.2	
2	☐	2.000	1.866	45841.83	0.0208	P	1.2	-6.7
3	☐	5.000	4.674	112059.55	0.0513	P	2.0	-6.5
4	☐	10.000	9.307	224664.61	0.1015	P	1.7	-6.9
5	☐	100.000	100.965	2355140.02	1.0960	A	0.8	1.0
6	☐	200.000	199.562	4585691.39	2.1657	A	0.4	-0.2
7	☐	1.000						

y = 0.0108 * x + 5.5253E-004
R = 1.0000
DL = 0.01865 ppb
BEC = 0.05093 ppb

Weight: <None>
Min Conc: <None>

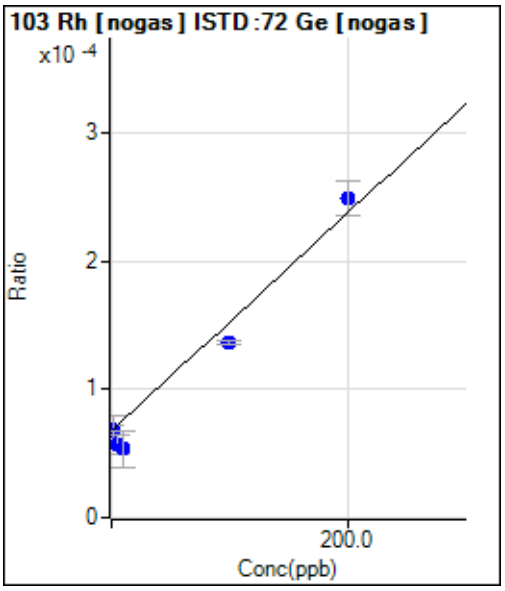


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	303.34	0.0001	P	25.5	
2	☐	2.000	1.836	8882.35	0.0040	P	3.6	-8.2
3	☐	5.000	4.711	22140.59	0.0101	P	2.4	-5.8
4	☐	10.000	9.399	44415.30	0.0201	P	2.8	-6.0
5	☐	100.000	97.051	442631.95	0.2060	P	1.7	-2.9
6	☐	200.000	201.513	905410.48	0.4276	P	1.1	0.8
7	☐	1.000						

y = 0.0021 * x + 1.3532E-004
R = 0.9999
DL = 0.04879 ppb
BEC = 0.06379 ppb

Weight: <None>
Min Conc: <None>

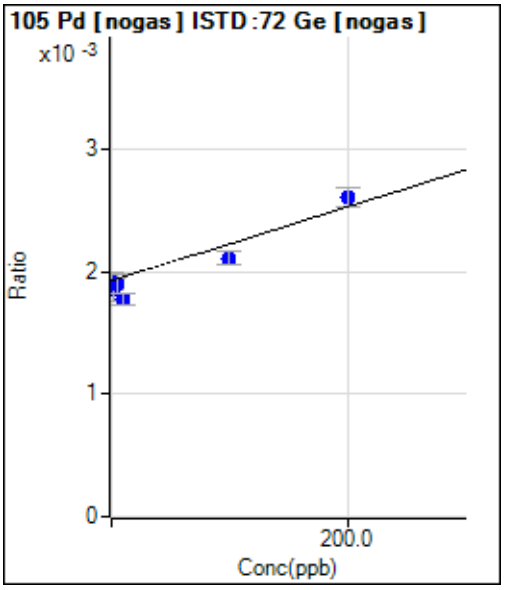
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	6.6	
2	☐	2.000	-1.071	130.00	0.0001	P	34.8	-153.6
3	☐	5.000	-14.024	106.67	0.0001	P	24.5	-380.5
4	☐	10.000	-18.467	100.00	0.0001	P	52.2	-284.7
5	☐	100.000	79.771	256.68	0.0001	P	2.0	-20.2
6	☐	200.000	212.044	453.35	0.0002	P	10.8	6.0
7	☐	1.000						

y = 8.5049E-007 * x + 6.9241E-005
R = 0.9892
DL = 16.05 ppb
BEC = 81.41 ppb

Weight: <None>
Min Conc: <None>

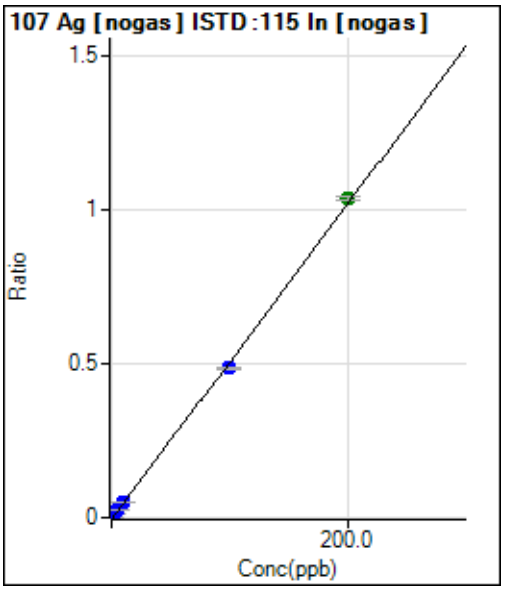


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3627.11	0.0019	P	7.1	
2	☐	2.000	-24.176	3557.08	0.0019	P	9.7	-1308.8
3	☐	5.000	-8.232	3557.09	0.0019	P	8.1	-264.6
4	☐	10.000	-51.278	3327.03	0.0018	P	4.9	-612.8
5	☐	100.000	58.886	3953.84	0.0021	P	5.1	-41.1
6	☐	200.000	224.213	4750.71	0.0026	P	6.0	12.1
7	☐	1.000						

y = 3.0334E-006 * x + 0.0019
R = 0.9654
DL = 135.6 ppb
BEC = 637.5 ppb

Weight: <None>
Min Conc: <None>

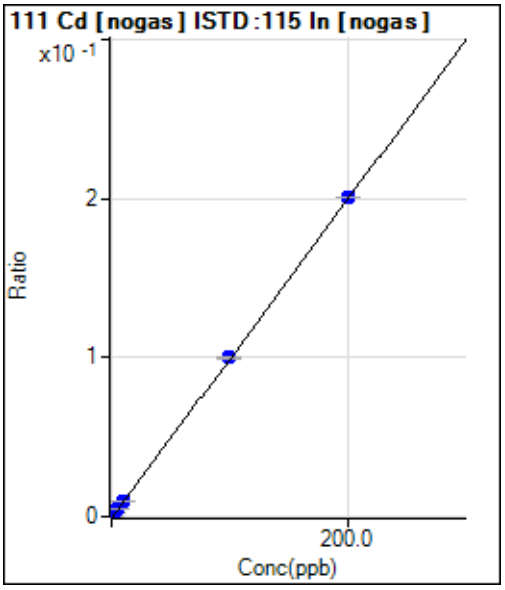
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	243.34	0.0001	P	18.5	
2	☐	2.000	1.934	22057.28	0.0100	P	2.6	-3.3
3	☐	5.000	4.771	53594.31	0.0245	P	1.8	-4.6
4	☐	10.000	9.410	106772.42	0.0482	P	1.0	-5.9
5	☐	100.000	95.024	1044803.92	0.4862	P	1.2	-5.0
6	☐	200.000	202.524	2193995.12	1.0362	A	0.8	1.3
7	☐	1.000						

y = 0.0051 * x + 1.0870E-004
R = 0.9996
DL = 0.0118 ppb
BEC = 0.02125 ppb

Weight: <None>
Min Conc: <None>

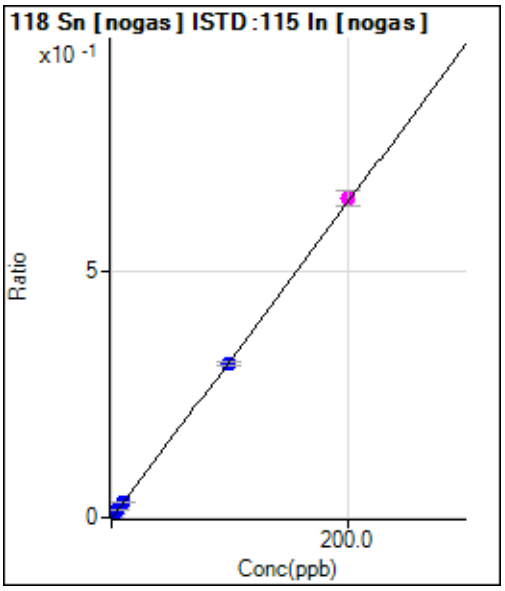


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	11.6	
2	☐	2.000	1.911	4273.92	0.0019	P	9.4	-4.4
3	☐	5.000	4.880	10750.14	0.0049	P	2.8	-2.4
4	☐	10.000	9.899	22024.00	0.0100	P	1.5	-1.0
5	☐	100.000	99.525	214569.14	0.0999	P	1.8	-0.5
6	☐	200.000	200.246	425395.70	0.2009	P	0.6	0.1
7	☐	1.000						

y = 0.0010 * x + 2.0835E-005
R = 1.0000
DL = 0.007235 ppb
BEC = 0.02077 ppb

Weight: <None>
Min Conc: <None>

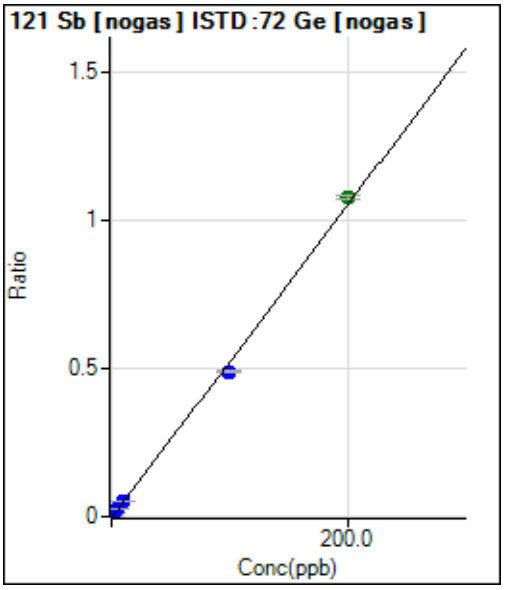
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2100.17	0.0009	P	8.2	
2	☐	2.000	1.812	14933.30	0.0068	P	5.2	-9.4
3	☐	5.000	4.658	34841.45	0.0159	P	2.8	-6.8
4	☐	10.000	9.358	68774.18	0.0311	P	1.8	-6.4
5	☐	100.000	96.993	673264.39	0.3133	P	1.6	-3.0
6	☐	200.000	201.546	1376646.96	0.6501	M	5.0	0.8
7	☐	1.000						

y = 0.0032 * x + 9.3758E-004
R = 0.9998
DL = 0.07129 ppb
BEC = 0.2911 ppb

Weight: <None>
Min Conc: <None>

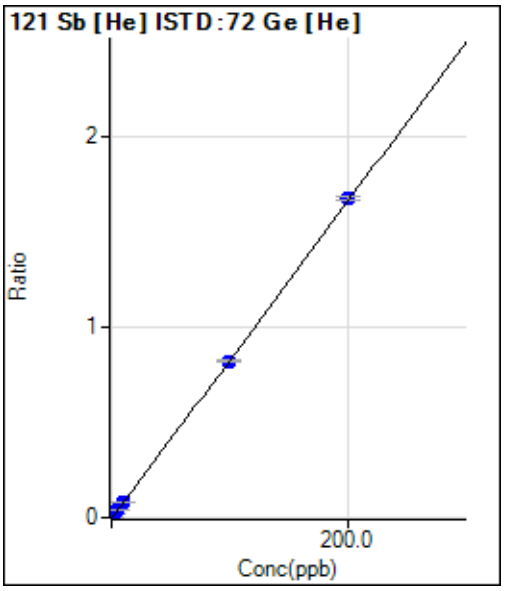


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1580.10	0.0008	P	4.3	
2	☐	2.000	1.785	19624.56	0.0103	P	8.8	-10.7
3	☐	5.000	4.573	46658.92	0.0250	P	3.0	-8.5
4	☐	10.000	9.207	92700.25	0.0495	P	1.2	-7.9
5	☐	100.000	92.465	917281.37	0.4899	P	0.9	-7.5
6	☐	200.000	203.820	1960646.74	1.0789	A	1.0	1.9
7	☐	1.000						

y = 0.0053 * x + 8.4197E-004
R = 0.9990
DL = 0.02031 ppb
BEC = 0.1592 ppb

Weight: <None>
Min Conc: <None>

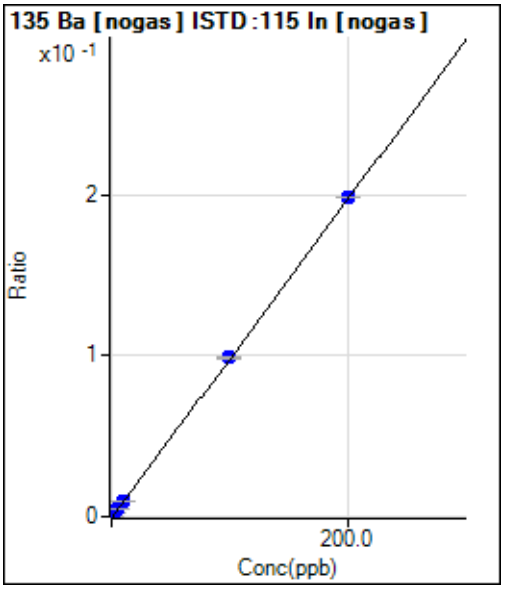
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	963.38	0.0014	P	4.5	
2	☐	2.000	1.936	11997.66	0.0176	P	2.3	-3.2
3	☐	5.000	4.856	28623.72	0.0419	P	0.9	-2.9
4	☐	10.000	9.712	56146.46	0.0824	P	2.4	-2.9
5	☐	100.000	98.305	563005.25	0.8212	P	1.5	-1.7
6	☐	200.000	200.866	1114038.55	1.6766	P	0.6	0.4
7	☐	1.000						

y = 0.0083 * x + 0.0014
R = 1.0000
DL = 0.02278 ppb
BEC = 0.1688 ppb

Weight: <None>
Min Conc: <None>

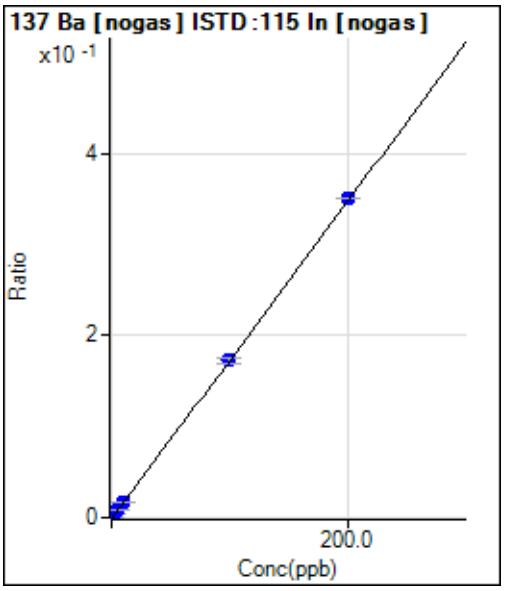


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	220.01	0.0001	P	21.0	
2	☐	2.000	1.977	4537.32	0.0021	P	4.8	-1.2
3	☐	5.000	4.851	10730.14	0.0049	P	4.3	-3.0
4	☐	10.000	9.662	21420.13	0.0097	P	2.1	-3.4
5	☐	100.000	99.496	212174.84	0.0987	P	1.9	-0.5
6	☐	200.000	200.273	420657.22	0.1987	P	0.3	0.1
7	☐	1.000						

y = 9.9149E-004 * x + 9.8292E-005
R = 1.0000
DL = 0.06235 ppb
BEC = 0.09914 ppb

Weight: <None>
Min Conc: <None>

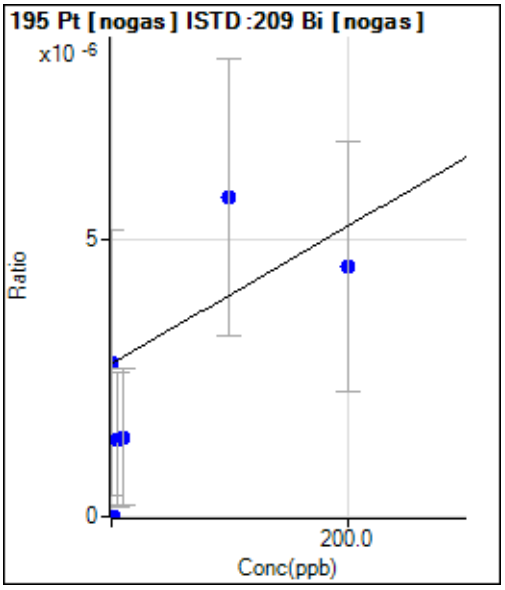
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	393.34	0.0002	P	11.5	
2	☐	2.000	1.849	7508.44	0.0034	P	0.3	-7.5
3	☐	5.000	4.812	18753.72	0.0086	P	2.0	-3.8
4	☐	10.000	9.740	38025.20	0.0172	P	1.8	-2.6
5	☐	100.000	98.535	370062.52	0.1722	P	2.6	-1.5
6	☐	200.000	200.752	742641.08	0.3507	P	0.3	0.4
7	☐	1.000						

y = 0.0017 * x + 1.7590E-004
R = 1.0000
DL = 0.03477 ppb
BEC = 0.1007 ppb

Weight: <None>
Min Conc: <None>

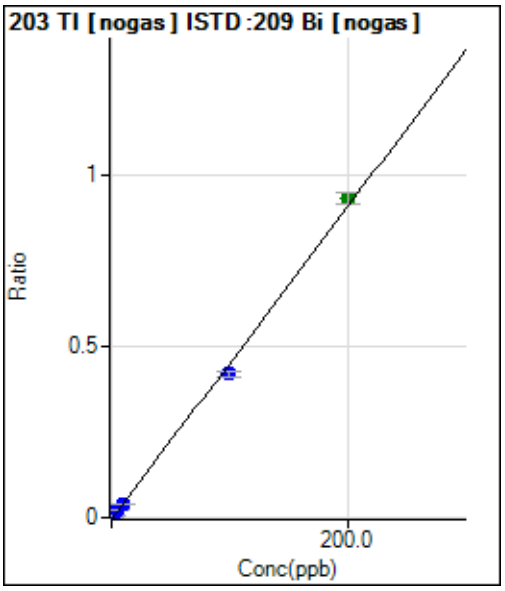


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.	
2	☐	2.000	-224.405	0.00	0.0000	P		-11320.
3	☐	5.000	-111.294	3.33	0.0000	P	173.	-2325.9
4	☐	10.000	-108.964	3.33	0.0000	P	173.	-1189.6
5	☐	100.000	240.827	13.33	0.0000	P	86.6	140.8
6	☐	200.000	140.706	10.00	0.0000	P	99.6	-29.6
7	☐	1.000						

y = 1.2385E-008 * x + 2.7792E-006
R = 0.7512
DL = 1166 ppb
BEC = 224.4 ppb

Weight: <None>
Min Conc: <None>

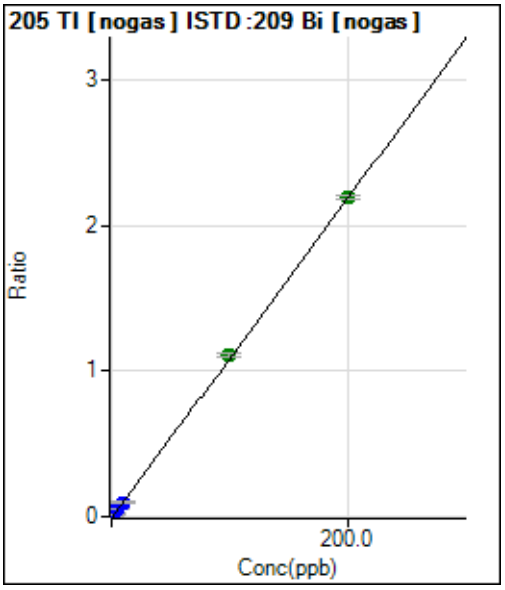
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0001	P	11.3	
2	☐	2.000	1.709	19134.74	0.0080	P	9.0	-14.5
3	☐	5.000	4.441	49056.78	0.0205	P	4.9	-11.2
4	☐	10.000	8.799	96119.40	0.0404	P	2.4	-12.0
5	☐	100.000	91.717	968567.61	0.4200	P	3.4	-8.3
6	☐	200.000	204.218	2094178.67	0.9351	A	4.0	2.1
7	☐	1.000						

y = 0.0046 * x + 1.3334E-004
R = 0.9988
DL = 0.009907 ppb
BEC = 0.02912 ppb

Weight: <None>
Min Conc: <None>

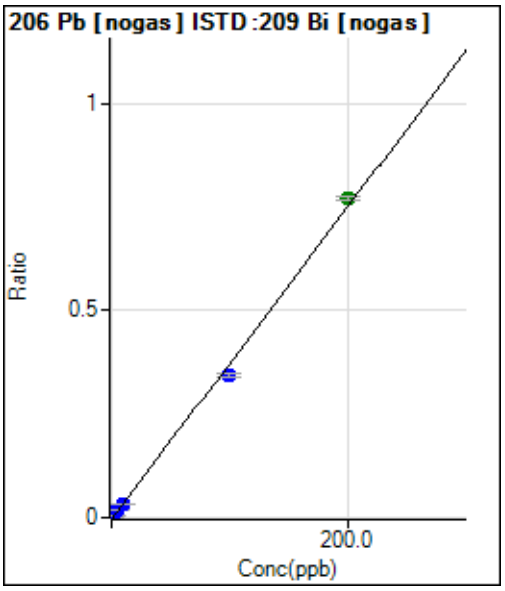


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.02	0.0003	P	5.4	
2	☐	2.000	1.762	47248.07	0.0196	P	4.7	-11.9
3	☐	5.000	4.429	117392.86	0.0490	P	2.5	-11.4
4	☐	10.000	8.844	231855.40	0.0975	P	4.0	-11.6
5	☐	100.000	101.019	2562108.19	1.1110	A	2.3	1.0
6	☐	200.000	199.565	4916660.87	2.1945	A	1.7	-0.2
7	☐	1.000						

y = 0.0110 * x + 2.6484E-004
R = 1.0000
DL = 0.003924 ppb
BEC = 0.02409 ppb

Weight: <None>
Min Conc: <None>

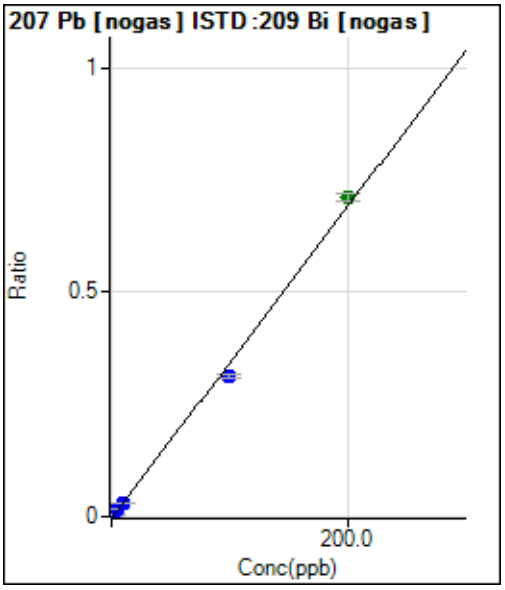
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	403.35	0.0002	P	35.8	
2	☐	2.000	1.723	16054.73	0.0067	P	4.3	-13.9
3	☐	5.000	4.415	40359.82	0.0168	P	4.4	-11.7
4	☐	10.000	8.943	80687.52	0.0339	P	1.5	-10.6
5	☐	100.000	91.222	794376.92	0.3445	P	2.3	-8.8
6	☐	200.000	204.459	1729374.35	0.7718	A	1.6	2.2
7	☐	1.000						

y = 0.0038 * x + 1.6978E-004
R = 0.9987
DL = 0.04826 ppb
BEC = 0.04498 ppb

Weight: <None>
Min Conc: <None>

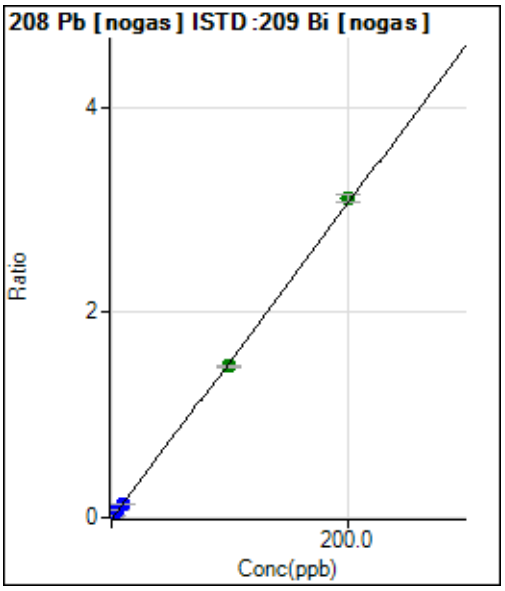


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	386.68	0.0002	P	26.8	
2	☐	2.000	1.703	14616.73	0.0061	P	3.4	-14.8
3	☐	5.000	4.402	37015.39	0.0154	P	2.9	-12.0
4	☐	10.000	8.852	73450.55	0.0309	P	1.9	-11.5
5	☐	100.000	90.518	724796.66	0.3143	P	2.7	-9.5
6	☐	200.000	204.816	1592851.28	0.7110	A	2.0	2.4
7	☐	1.000						

y = 0.0035 * x + 1.6243E-004
R = 0.9985
DL = 0.03757 ppb
BEC = 0.0468 ppb

Weight: <None>
Min Conc: <None>

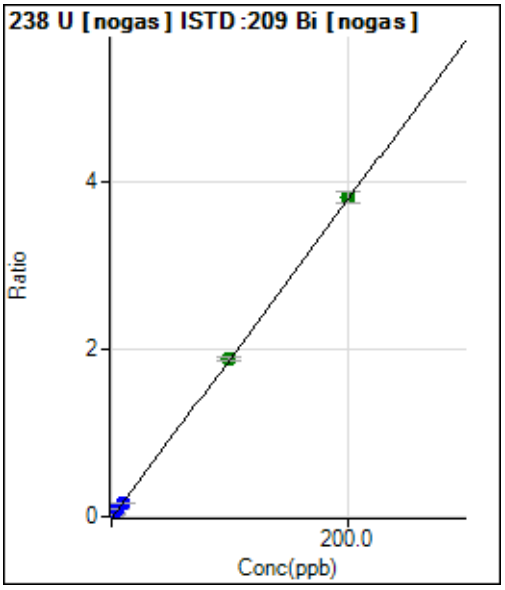
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1713.40	0.0007	P	15.3	
2	☐	2.000	1.722	65572.19	0.0273	P	4.7	-13.9
3	☐	5.000	4.415	164770.23	0.0687	P	2.6	-11.7
4	☐	10.000	8.954	329796.66	0.1387	P	2.1	-10.5
5	☐	100.000	95.660	3400192.29	1.4743	A	2.0	-4.3
6	☐	200.000	202.240	6981533.48	3.1162	A	1.9	1.1
7	☐	1.000						

y = 0.0154 * x + 7.2059E-004
R = 0.9997
DL = 0.02148 ppb
BEC = 0.04678 ppb

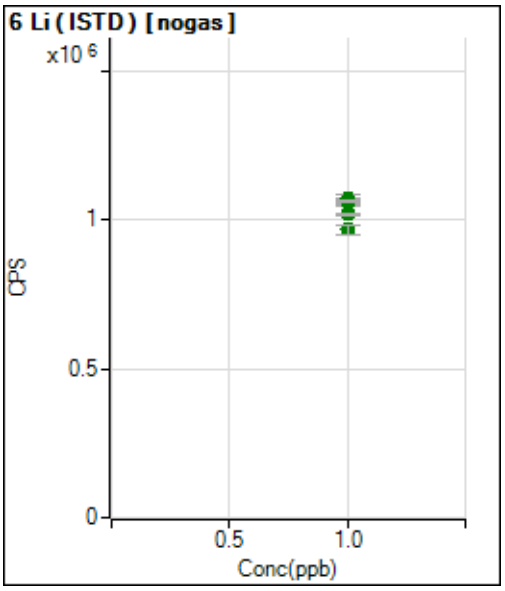
Weight: <None>
Min Conc: <None>



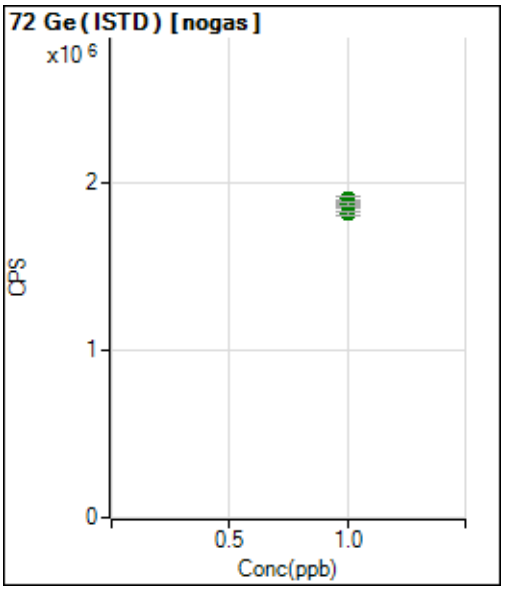
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	693.36	0.0003	P	7.0	
2	☐	2.000	1.754	80833.31	0.0336	P	5.0	-12.3
3	☐	5.000	4.342	198394.36	0.0828	P	3.8	-13.2
4	☐	10.000	8.921	403680.60	0.1697	P	1.9	-10.8
5	☐	100.000	98.990	4337272.54	1.8805	A	1.5	-1.0
6	☐	200.000	200.578	8533942.37	3.8101	A	3.2	0.3
7	☐	1.000						

y = 0.0190 * x + 2.9188E-004
R = 1.0000
DL = 0.003208 ppb
BEC = 0.01537 ppb

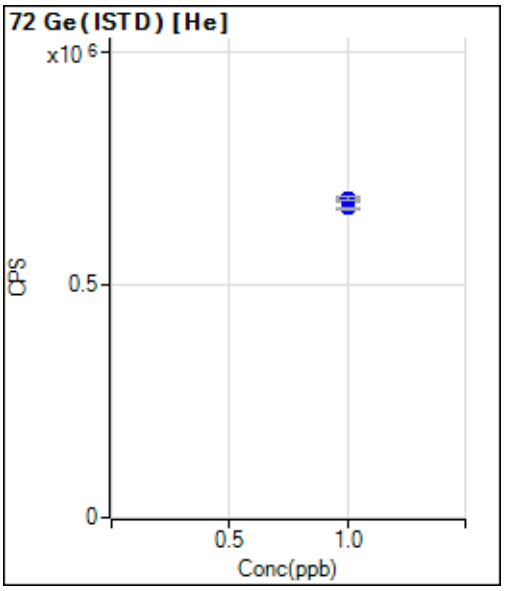
Weight: <None>
Min Conc: <None>



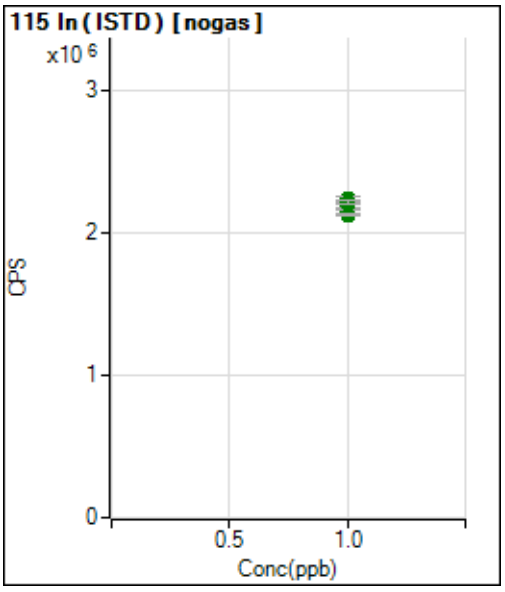
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1057328.41		A	2.7	
2	☐	1.000		1072130.55		A	2.0	
3	☐	1.000		1060905.07		A	1.2	
4	☐	1.000		1063533.15		A	0.6	
5	☐	1.000		1019577.16		A	0.8	
6	☐	1.000		966348.20		A	3.6	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1876584.97		A	1.1	
2	☐	1.000		1909868.57		A	1.7	
3	☐	1.000		1864558.31		A	1.5	
4	☐	1.000		1871101.69		A	0.8	
5	☐	1.000		1872434.04		A	1.3	
6	☐	1.000		1817344.45		A	0.7	
7	☐	1.000						

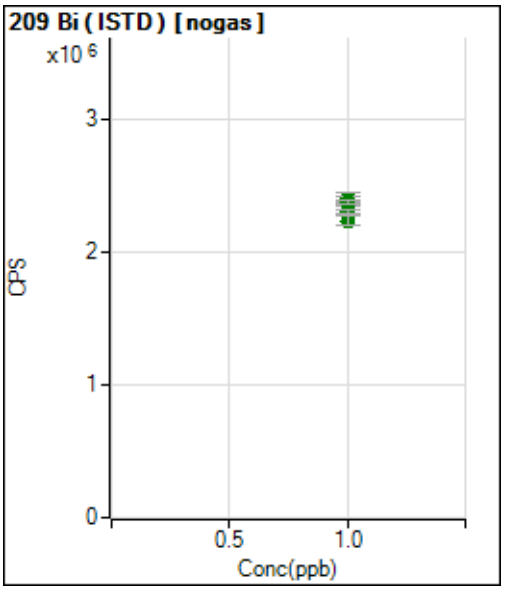


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		684461.63		P	0.5	
2	☐	1.000		683365.54		P	0.6	
3	☐	1.000		683022.85		P	0.7	
4	☐	1.000		681475.30		P	0.9	
5	☐	1.000		685609.47		P	0.8	
6	☐	1.000		664469.29		P	0.7	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2238444.32		A	1.3	
2	☐	1.000		2204819.34		A	0.9	
3	☐	1.000		2186189.53		A	1.1	
4	☐	1.000		2213064.21		A	1.0	
5	☐	1.000		2148947.81		A	1.1	
6	☐	1.000		2117377.90		A	0.6	
7	☐	1.000						

Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2377273.19		A	2.0	
2	☐	1.000		2408383.61		A	3.2	
3	☐	1.000		2398055.69		A	1.8	
4	☐	1.000		2378918.98		A	1.8	
5	☐	1.000		2306752.26		A	1.7	
6	☐	1.000		2241122.36		A	2.7	
7	☐	1.000						

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	013CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:31:18-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	105	49.06
B	11	1	nogas	33994	0.00
Al	27	1	nogas	38569	0.00
P	31	1	nogas	18790	0.01
Ti	47	1	nogas	150	16.02
Ni	60	1	nogas	1057	1.09
Cu	63	1	nogas	4211	0.06
Zn	66	1	nogas	813	1.07
Se	77	1	nogas	3900	0.21
Se	82	1	nogas	230	1.89
Sr	88	1	nogas	1237	0.98
Mo	95	1	nogas	303	8.72
Ag	107	1	nogas	243	7.62
Cd	111	1	nogas	47	26.51
Sn	118	1	nogas	2100	0.45
Sb	121	1	nogas	1580	0.29
Ba	137	1	nogas	393	2.61
Tl	205	1	nogas	630	1.15
Pb	208	1	nogas	1713	0.92
Li	7	1	nogas	70837	0.00
Na	23	2	He	35627	0.00
Mg	24	2	He	2404	0.20
Al	27	2	He	1883	0.18
K	39	2	He	92657	0.00
Ca	43	2	He	37	85.89
Ca	44	2	He	1653	0.37
V	51	2	He	2690	0.21
Cr	52	2	He	1847	0.27
Mn	55	2	He	717	0.92
Fe	56	2	He	51428	0.01
Co	59	2	He	180	11.13
Ni	60	2	He	520	1.96
Cu	63	2	He	2377	0.27
Zn	66	2	He	447	4.74
As	75	2	He	212	10.37
Sb	121	2	He	963	0.51
Se	78	2	He	157	3.85

Calibration Blank Report

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	nogas	1876585	1.14
In	115	1	nogas	2238444	1.31

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	nogas	1057328	2.67
Bi	209	1	nogas	2377273	1.95
Ge	72	2	He	684462	0.47

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	014CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:33:21-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	8425	0.04
B	11	1	nogas	55729	0.00
Al	27	1	nogas	65112	0.00
P	31	1	nogas	25130	0.01
Ti	47	1	nogas	2647	0.29
Ni	60	1	nogas	7592	0.01
Cu	63	1	nogas	21590	0.01
Zn	66	1	nogas	6511	0.16
Se	77	1	nogas	4194	0.15
Se	82	1	nogas	633	0.94
Sr	88	1	nogas	45842	0.00
Mo	95	1	nogas	8882	0.03
Ag	107	1	nogas	22057	0.02
Cd	111	1	nogas	4274	0.23
Sn	118	1	nogas	14933	0.03
Sb	121	1	nogas	19625	0.04
Ba	137	1	nogas	7508	0.02
Tl	205	1	nogas	47248	0.00
Pb	208	1	nogas	65572	0.00
Na	23	2	He	337515	0.00
Mg	24	2	He	194367	0.00
Al	27	2	He	3450	0.21
K	39	2	He	322217	0.00
Ca	43	2	He	723	2.15
Ca	44	2	He	12551	0.03
V	51	2	He	15211	0.00
Cr	52	2	He	15687	0.02
Mn	55	2	He	11754	0.01
Fe	56	2	He	1402871	0.00
Co	59	2	He	18646	0.01
Ni	60	2	He	4667	0.10
Cu	63	2	He	13729	0.02
Zn	66	2	He	3240	0.27
As	75	2	He	1888	0.18
Sb	121	2	He	11998	0.02
Se	78	2	He	353	1.33

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1909869	1.66	1876585	101.77	70	120	
In	115	1	nogas	2204819	0.88	2238444	98.50	70	120	
Li	6	1	nogas	1072131	1.99	1057328	101.40	70	120	
Bi	209	1	nogas	2408384	3.20	2377273	101.31	70	120	
Ge	72	2	He	683366	0.56	684462	99.84	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	015CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:35:23-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	20988	0.01
B	11	1	nogas	89784	0.00
Al	27	1	nogas	104224	0.00
P	31	1	nogas	34545	0.00
Ti	47	1	nogas	6821	0.07
Ni	60	1	nogas	18316	0.03
Cu	63	1	nogas	49427	0.00
Zn	66	1	nogas	12014	0.01
Se	77	1	nogas	4421	0.13
Se	82	1	nogas	893	2.94
Sr	88	1	nogas	112060	0.00
Mo	95	1	nogas	22141	0.01
Ag	107	1	nogas	53594	0.00
Cd	111	1	nogas	10750	0.03
Sn	118	1	nogas	34841	0.00
Sb	121	1	nogas	46659	0.00
Ba	137	1	nogas	18754	0.01
Tl	205	1	nogas	117393	0.00
Pb	208	1	nogas	164770	0.00
Na	23	2	He	792496	0.00
Mg	24	2	He	478981	0.00
Al	27	2	He	5414	0.19
K	39	2	He	666953	0.00
Ca	43	2	He	1637	0.50
Ca	44	2	He	28932	0.01
V	51	2	He	34284	0.01
Cr	52	2	He	37114	0.00
Mn	55	2	He	28429	0.01
Fe	56	2	He	3297495	0.00
Co	59	2	He	46489	0.00
Ni	60	2	He	11397	0.02
Cu	63	2	He	32860	0.01
Zn	66	2	He	6198	0.03
As	75	2	He	4700	0.06
Sb	121	2	He	28624	0.00
Se	78	2	He	539	0.35

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1864558	1.51	1876585	99.36	70	120	
In	115	1	nogas	2186190	1.10	2238444	97.67	70	120	
Li	6	1	nogas	1060905	1.22	1057328	100.34	70	120	
Bi	209	1	nogas	2398056	1.82	2377273	100.87	70	120	
Ge	72	2	He	683023	0.73	684462	99.79	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/1000
Data File Name	016CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:37:27-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	41675	0.01
B	11	1	nogas	146755	0.00
Al	27	1	nogas	165056	0.00
P	31	1	nogas	51821	0.00
Ti	47	1	nogas	13395	0.02
Ni	60	1	nogas	36563	0.00
Cu	63	1	nogas	90863	0.00
Zn	66	1	nogas	23532	0.01
Se	77	1	nogas	4871	0.02
Se	82	1	nogas	1580	0.28
Sr	88	1	nogas	224665	0.00
Mo	95	1	nogas	44415	0.01
Ag	107	1	nogas	106772	0.00
Cd	111	1	nogas	22024	0.01
Sn	118	1	nogas	68774	0.00
Sb	121	1	nogas	92700	0.00
Ba	137	1	nogas	38025	0.00
Tl	205	1	nogas	231855	0.00
Pb	208	1	nogas	329797	0.00
Na	23	2	He	1591243	0.00
Mg	24	2	He	955438	0.00
Al	27	2	He	8659	0.07
K	39	2	He	1286529	0.00
Ca	43	2	He	3444	0.26
Ca	44	2	He	56378	0.00
V	51	2	He	66406	0.00
Cr	52	2	He	72906	0.00
Mn	55	2	He	56944	0.00
Fe	56	2	He	6432042	0.00
Co	59	2	He	92698	0.00
Ni	60	2	He	23792	0.01
Cu	63	2	He	61292	0.00
Zn	66	2	He	11857	0.04
As	75	2	He	8908	0.00
Sb	121	2	He	56146	0.00
Se	78	2	He	1095	0.17

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1871102	0.81	1876585	99.71	70	120	
In	115	1	nogas	2213064	1.01	2238444	98.87	70	120	
Li	6	1	nogas	1063533	0.64	1057328	100.59	70	120	
Bi	209	1	nogas	2378919	1.78	2377273	100.07	70	120	
Ge	72	2	He	681475	0.90	684462	99.56	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	017CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:39:31-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	429197	0.00
B	11	1	nogas	1232742	0.00
Al	27	1	nogas	1365559	0.00
P	31	1	nogas	347520	0.00
Ti	47	1	nogas	133725	0.00
Ni	60	1	nogas	359071	0.00
Cu	63	1	nogas	860440	0.00
Zn	66	1	nogas	225395	0.00
Se	77	1	nogas	14119	0.06
Se	82	1	nogas	14102	0.01
Sr	88	1	nogas	2355140	0.00
Mo	95	1	nogas	442632	0.00
Ag	107	1	nogas	1044804	0.00
Cd	111	1	nogas	214569	0.00
Sn	118	1	nogas	673264	0.00
Sb	121	1	nogas	917281	0.00
Ba	137	1	nogas	370063	0.00
Tl	205	1	nogas	2562108	0.00
Pb	208	1	nogas	3400192	0.00
Na	23	2	He	15422313	0.00
Mg	24	2	He	9559024	0.00
Al	27	2	He	69774	0.00
K	39	2	He	11903760	0.00
Ca	43	2	He	32545	0.01
Ca	44	2	He	554914	0.00
V	51	2	He	648382	0.00
Cr	52	2	He	704092	0.00
Mn	55	2	He	564337	0.00
Fe	56	2	He	62970416	0.00
Co	59	2	He	917487	0.00
Ni	60	2	He	226262	0.00
Cu	63	2	He	587479	0.00
Zn	66	2	He	115370	0.00
As	75	2	He	90086	0.00
Sb	121	2	He	563005	0.00
Se	78	2	He	9255	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1872434	1.35	1876585	99.78	70	120	
In	115	1	nogas	2148948	1.09	2238444	96.00	70	120	
Li	6	1	nogas	1019577	0.80	1057328	96.43	70	120	
Bi	209	1	nogas	2306752	1.67	2377273	97.03	70	120	
Ge	72	2	He	685609	0.82	684462	100.17	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	018CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:41:31-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	846885	0.00
B	11	1	nogas	2404164	0.00
Al	27	1	nogas	2609165	0.00
P	31	1	nogas	665276	0.00
Ti	47	1	nogas	262913	0.00
Ni	60	1	nogas	702025	0.00
Cu	63	1	nogas	1752536	0.00
Zn	66	1	nogas	437168	0.00
Se	77	1	nogas	24897	0.02
Se	82	1	nogas	27548	0.01
Sr	88	1	nogas	4585691	0.00
Mo	95	1	nogas	905410	0.00
Ag	107	1	nogas	2193995	0.00
Cd	111	1	nogas	425396	0.00
Sn	118	1	nogas	1376647	0.00
Sb	121	1	nogas	1960647	0.00
Ba	137	1	nogas	742641	0.00
Tl	205	1	nogas	4916661	0.00
Pb	208	1	nogas	6981533	0.00
Na	23	2	He	30060085	0.00
Mg	24	2	He	18661779	0.00
Al	27	2	He	133867	0.00
K	39	2	He	23090097	0.00
Ca	43	2	He	65675	0.00
Ca	44	2	He	1083117	0.00
V	51	2	He	1317612	0.00
Cr	52	2	He	1447242	0.00
Mn	55	2	He	1111921	0.00
Fe	56	2	He	124056361	0.00
Co	59	2	He	1910097	0.00
Ni	60	2	He	440729	0.00
Cu	63	2	He	1139664	0.00
Zn	66	2	He	225622	0.00
As	75	2	He	178954	0.00
Sb	121	2	He	1114039	0.00
Se	78	2	He	18489	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1817344	0.72	1876585	96.84	70	120	
In	115	1	nogas	2117378	0.65	2238444	94.59	70	120	
Li	6	1	nogas	966348	3.55	1057328	91.40	70	120	
Bi	209	1	nogas	2241122	2.70	2377273	94.27	70	120	
Ge	72	2	He	664469	0.72	684462	97.08	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	020_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:47:10-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	98.967	2.583	426933	0.87	100	99.0	90	110	
B	11	1	nogas	502.975	5.076	1247272	3.13	500	100.6	90	110	
Al	27	1	nogas	102.249	2.410	1373830	3.42	100	102.2	90	110	
P	31	1	nogas	492.118	0.979	340949	0.35	500	98.4	90	110	
Ti	47	1	nogas	100.381	1.142	133712	1.23	100	100.4	90	110	
Ni	60	1	nogas	102.615	0.762	365672	1.86	100	102.6	90	110	
Cu	63	1	nogas	97.103	0.299	857697	1.51	100	97.1	90	110	
Zn	66	1	nogas	100.987	0.786	224531	1.42	100	101.0	90	110	
Se	77	1	nogas	82.571	6.099	12581	3.56	100	82.6	90	110	ICV Main CR1 Failed
Se	82	1	nogas	102.146	0.869	14359	1.97	100	102.1	90	110	
Sr	88	1	nogas	101.490	1.448	2351838	0.44	100	101.5	90	110	
Mo	95	1	nogas	95.418	2.846	432322	1.59	100	95.4	90	110	
Ag	107	1	nogas	96.386	2.448	1052796	1.20	100	96.4	90	110	
Cd	111	1	nogas	101.277	2.497	216914	1.24	100	101.3	90	110	
Sn	118	1	nogas	98.806	2.856	681283	1.60	100	98.8	90	110	
Sb	121	1	nogas	96.422	0.453	942797	1.64	100	96.4	90	110	
Ba	137	1	nogas	100.600	3.060	375339	1.80	100	100.6	90	110	
Tl	205	1	nogas	101.606	3.837	2563422	1.90	100	101.6	90	110	
Pb	208	1	nogas	97.365	2.276	3443289	1.07	100	97.4	90	110	
U	238	1	nogas	94.152	1.143	4104598	0.84	100	94.2	90	110	
Li	7	1	nogas	100.754	2.812	1609626	0.93	100	100.8	90	110	
Ba	135	1	nogas	101.418	2.178	214860	0.97	100	101.4	90	110	
Tl	203	1	nogas	94.118	3.276	988886	1.49	100	94.1	90	110	
Na	23	2	He	10403.916	1.423	15761690	0.22	10000	104.0	90	110	
Mg	24	2	He	10612.268	0.872	9970460	0.33	10000	106.1	90	110	
Al	27	2	He	101.952	2.662	69661	1.97	100	102.0	90	110	
K	39	2	He	10393.279	0.889	12131002	0.65	10000	103.9	90	110	
Ca	43	2	He	10892.307	1.138	35791	0.35	10000	108.9	90	110	
Ca	44	2	He	10639.069	1.252	580684	0.63	10000	106.4	90	110	
V	51	2	He	97.962	0.700	645719	0.51	100	98.0	90	110	
Cr	52	2	He	97.433	0.391	703487	0.96	100	97.4	90	110	
Mn	55	2	He	100.289	1.258	560582	0.14	100	100.3	90	110	
Fe	56	2	He	10505.715	0.614	65515737	0.78	10000	105.1	90	110	
Co	59	2	He	96.693	0.941	918265	0.29	100	96.7	90	110	
Ni	60	2	He	102.046	0.825	226727	0.73	100	102.0	90	110	
Cu	63	2	He	100.883	1.008	580457	0.48	100	100.9	90	110	
Zn	66	2	He	100.925	0.619	114766	0.85	100	100.9	90	110	
As	75	2	He	98.140	1.548	88182	0.63	100	98.1	90	110	
Sb	121	2	He	102.218	0.911	572044	0.59	100	102.2	90	110	
Se	78	2	He	99.135	2.066	9246	1.42	100	99.1	90	110	
Ti	47	2	He	99.989	2.606	28719	1.82	100	100.0	90	110	
Pd	105	1	nogas	109.337	27.569	4181	3.85	100	109.3	90	110	
Pt	195	1	nogas	125.321	280.996	10	100.00	100	125.3	90	110	ICV Main CR1 Failed

QC ISTD Table

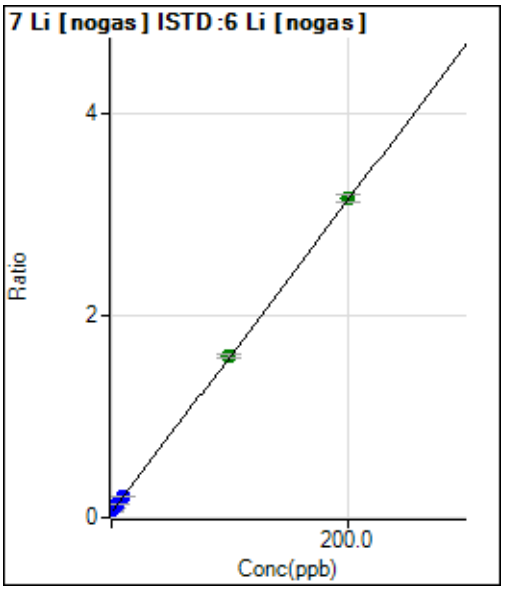
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1845491	1.21	1876585	98.34	70	120	
In	115	1	nogas	2135035	1.26	2238444	95.38	70	120	
Li	6	1	nogas	992130	1.83	1057328	93.83	70	120	
Bi	209	1	nogas	2295188	1.95	2377273	96.55	70	120	
Ge	72	2	He	669979	1.21	684462	97.88	70	120	

Calibration for 020_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\062121A.b\
Analysis File: 062121A.batch.bin
DA Date-Time: 6/21/2021 7:23:21 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	013CALB.d	CAL BLK	6/21/2021 11:31:18 AM
2	014CALS.d	2/10/200	6/21/2021 11:33:21 AM
3	015CALS.d	5/25/500	6/21/2021 11:35:23 AM
4	016CALS.d	10/50/1000	6/21/2021 11:37:27 AM
5	017CALS.d	100/500/10K	6/21/2021 11:39:31 AM
6	018CALS.d	200/1000/20K	6/21/2021 11:41:31 AM
7			

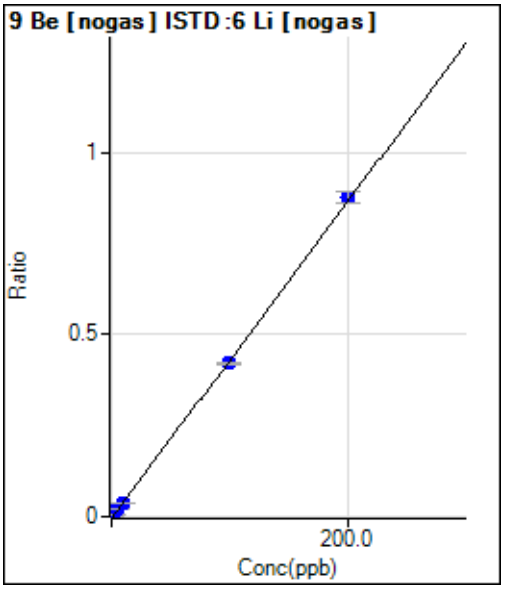
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70837.24	0.0670	P	2.5	
2	☐	2.000	1.758	100939.19	0.0942	P	1.6	-12.1
3	☐	5.000	4.669	147559.66	0.1391	P	3.3	-6.6
4	☐	10.000	9.130	221235.15	0.2080	P	0.1	-8.7
5	☐	100.000	99.261	1631057.89	1.5999	A	1.6	-0.7
6	☐	200.000	200.424	3053648.60	3.1621	A	2.8	0.2
7	☐	1.000						

y = 0.0154 * x + 0.0670
R = 1.0000
DL = 0.3262 ppb
BEC = 4.34 ppb

Weight: <None>
Min Conc: <None>

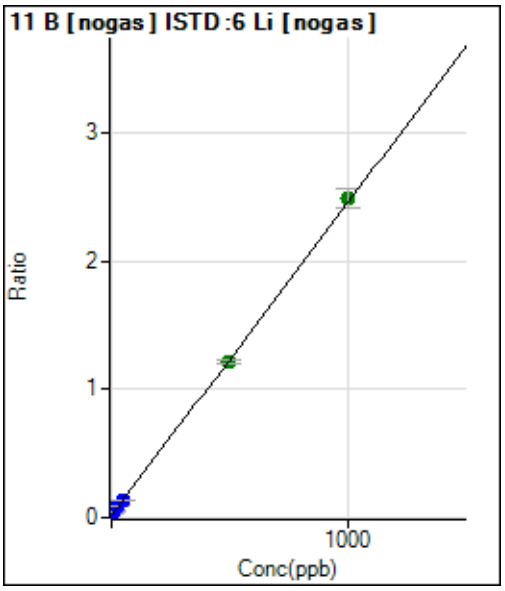


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	105.00	0.0001	P	54.2	
2	☐	2.000	1.784	8425.22	0.0079	P	1.3	-10.8
3	☐	5.000	4.527	20988.15	0.0198	P	1.8	-9.5
4	☐	10.000	8.988	41674.78	0.0392	P	2.1	-10.1
5	☐	100.000	96.786	429197.07	0.4210	P	0.6	-3.2
6	☐	200.000	201.672	846884.78	0.8771	P	3.3	0.8
7	☐	1.000						

y = 0.0043 * x + 1.0027E-004
R = 0.9998
DL = 0.03748 ppb
BEC = 0.02306 ppb

Weight: <None>
Min Conc: <None>

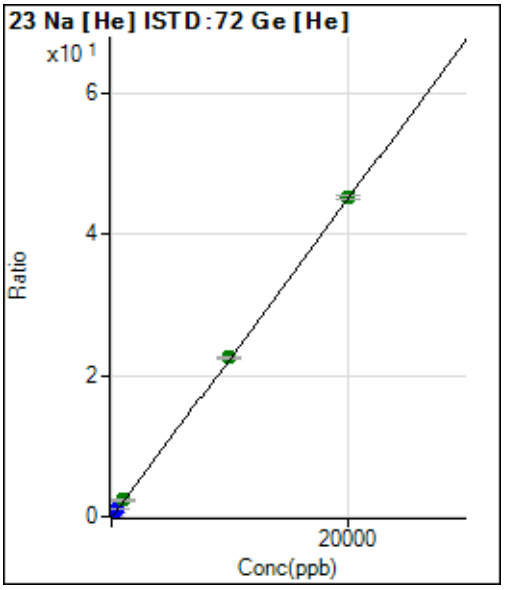
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33993.62	0.0322	P	1.9	
2	☐	10.000	8.139	55728.53	0.0520	P	3.0	-18.6
3	☐	25.000	21.534	89783.98	0.0846	P	3.4	-13.9
4	☐	50.000	43.425	146755.49	0.1380	P	1.0	-13.1
5	☐	500.000	483.001	1232741.78	1.2092	A	2.7	-3.4
6	☐	1000.000	1008.933	2404164.08	2.4910	A	5.5	0.9
7	☐	5.000						

y = 0.0024 * x + 0.0322
R = 0.9998
DL = 0.751 ppb
BEC = 13.2 ppb

Weight: <None>
Min Conc: <None>

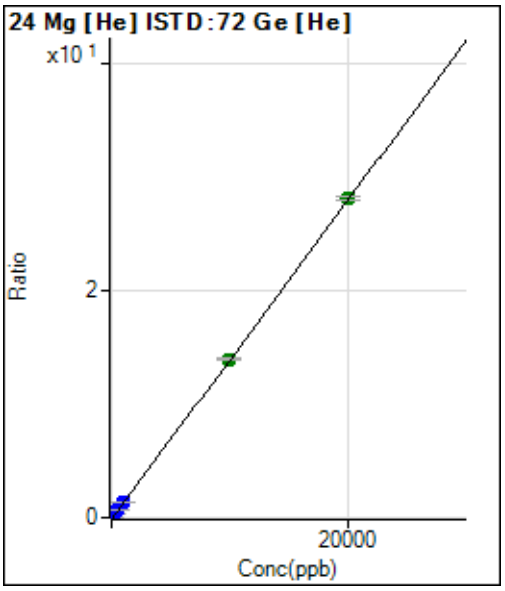


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35626.87	0.0521	P	1.2	
2	☐	200.000	195.819	337515.29	0.4939	P	1.4	-2.1
3	☐	500.000	491.141	792496.11	1.1603	P	0.8	-1.8
4	☐	1000.000	1011.865	1591242.94	2.3353	A	3.3	1.2
5	☐	10000.00	9946.148	15422313.10	22.4954	A	0.9	-0.5
6	☐	20000.00	20026.59	30060084.55	45.2418	A	1.2	0.1
7	☐	100.000						

y = 0.0023 * x + 0.0521
R = 1.0000
DL = 0.8168 ppb
BEC = 23.07 ppb

Weight: <None>
Min Conc: <None>

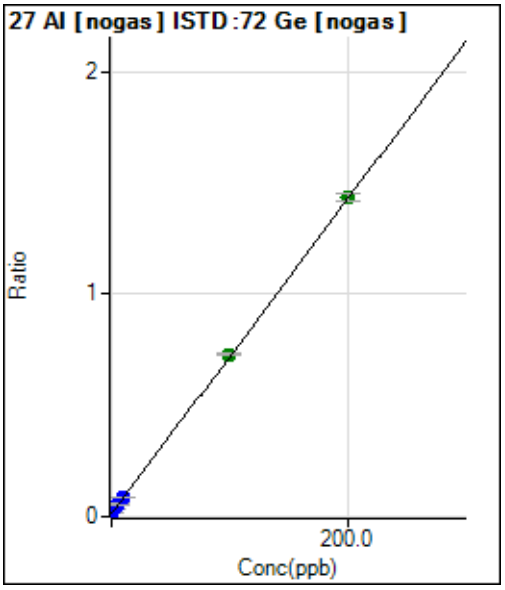
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2403.52	0.0035	P	5.0	
2	☐	200.000	200.361	194366.54	0.2844	P	1.3	0.2
3	☐	500.000	497.695	478980.99	0.7013	P	1.8	-0.5
4	☐	1000.000	997.529	955438.22	1.4021	P	1.6	-0.2
5	☐	10000.00	9941.725	9559023.81	13.9426	A	0.9	-0.6
6	☐	20000.00	20029.31	18661779.30	28.0863	A	0.8	0.1
7	☐	100.000						

y = 0.0014 * x + 0.0035
R = 1.0000
DL = 0.3753 ppb
BEC = 2.505 ppb

Weight: <None>
Min Conc: <None>

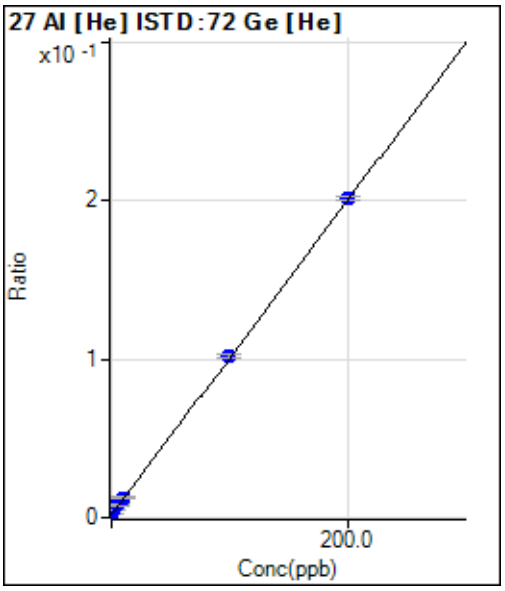


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38569.31	0.0206	P	2.0	
2	☐	2.000	1.913	65111.53	0.0341	P	2.6	-4.3
3	☐	5.000	4.995	104223.66	0.0559	P	2.8	-0.1
4	☐	10.000	9.559	165055.60	0.0882	P	0.5	-4.4
5	☐	100.000	100.141	1365558.89	0.7294	A	1.9	0.1
6	☐	200.000	199.952	2609164.54	1.4359	A	2.6	0.0
7	☐	1.000						

y = 0.0071 * x + 0.0206
R = 1.0000
DL = 0.1766 ppb
BEC = 2.904 ppb

Weight: <None>
Min Conc: <None>

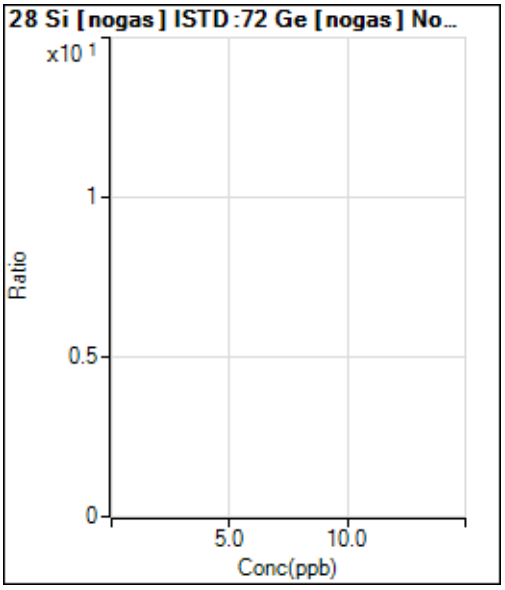
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1883.46	0.0028	P	3.3	
2	☐	2.000	2.314	3450.37	0.0050	P	7.4	15.7
3	☐	5.000	5.216	5414.20	0.0079	P	10.8	4.3
4	☐	10.000	10.028	8658.78	0.0127	P	6.6	0.3
5	☐	100.000	99.728	69774.19	0.1018	P	2.2	-0.3
6	☐	200.000	200.126	133867.03	0.2015	P	1.3	0.1
7	☐	1.000						

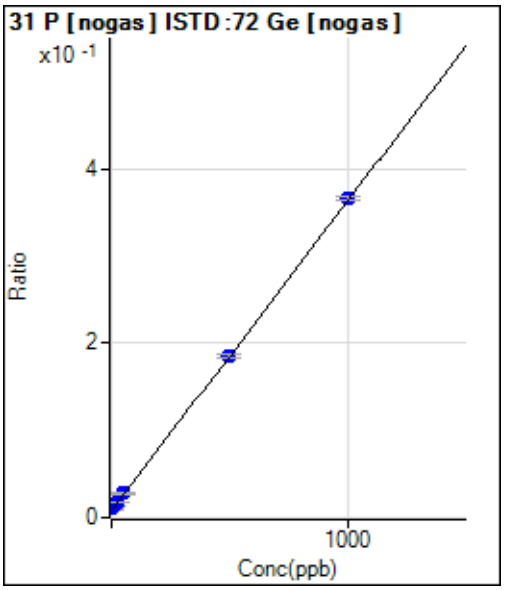
y = 9.9299E-004 * x + 0.0028
R = 1.0000
DL = 0.2783 ppb
BEC = 2.771 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

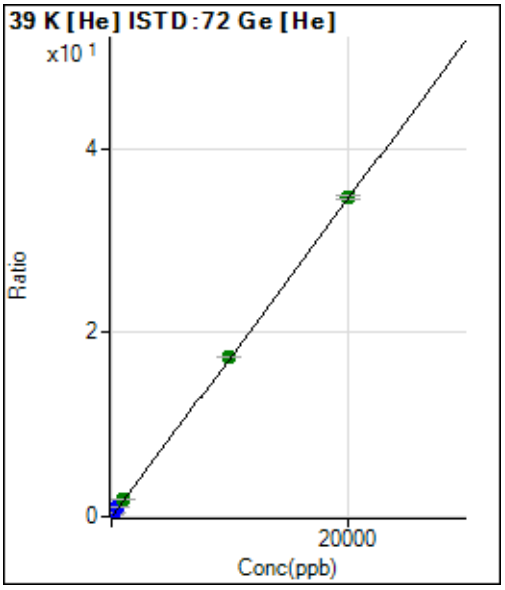
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18789.56	0.0100	P	2.0	
2	☐	10.000	8.867	25130.29	0.0132	P	4.1	-11.3
3	☐	25.000	23.978	34545.15	0.0185	P	0.7	-4.1
4	☐	50.000	49.791	51820.99	0.0277	P	1.0	-0.4
5	☐	500.000	494.544	347520.44	0.1856	P	1.6	-1.1
6	☐	1000.000	1002.775	665276.24	0.3661	P	1.4	0.3
7	☐	5.000						

y = 3.5509E-004 * x + 0.0100
R = 1.0000
DL = 1.66 ppb
BEC = 28.2 ppb

Weight: <None>
Min Conc: <None>

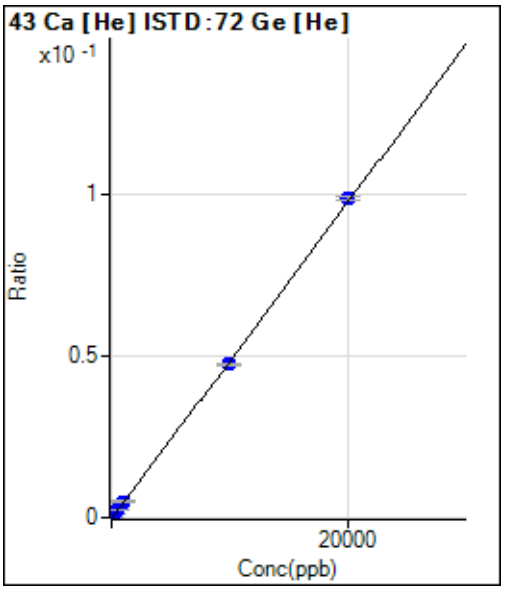


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	92656.92	0.1354	P	0.8	
2	☐	200.000	194.400	322217.12	0.4715	P	1.5	-2.8
3	☐	500.000	486.420	666952.96	0.9765	P	1.4	-2.7
4	☐	1000.000	1013.516	1286528.55	1.8880	A	3.0	1.4
5	☐	10000.00	9962.620	11903760.24	17.3629	A	0.8	-0.4
6	☐	20000.00	20018.40	23090097.15	34.7516	A	1.3	0.1
7	☐	100.000						

y = 0.0017 * x + 0.1354
R = 1.0000
DL = 1.882 ppb
BEC = 78.29 ppb

Weight: <None>
Min Conc: <None>

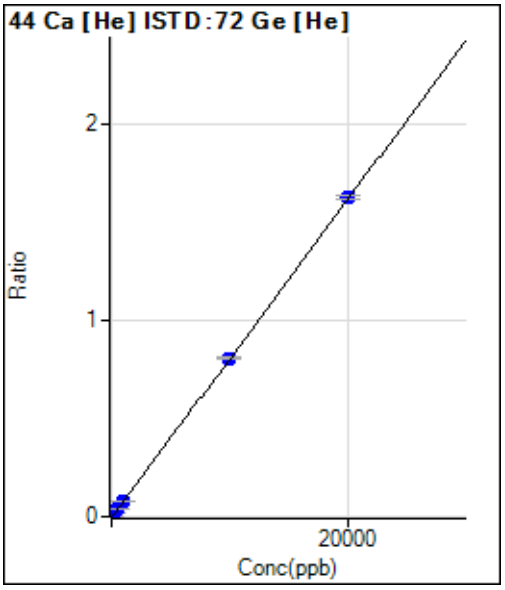
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	31.6	
2	☐	200.000	205.185	723.37	0.0011	P	15.9	2.6
3	☐	500.000	478.231	1636.77	0.0024	P	8.5	-4.4
4	☐	1000.000	1020.719	3443.71	0.0051	P	9.6	2.1
5	☐	10000.00	9676.277	32545.19	0.0475	P	1.1	-3.2
6	☐	20000.00	20161.31	65674.99	0.0988	P	1.3	0.8
7	☐	100.000						

y = 4.9000E-006 * x + 5.3580E-005
R = 0.9998
DL = 10.36 ppb
BEC = 10.93 ppb

Weight: <None>
Min Conc: <None>

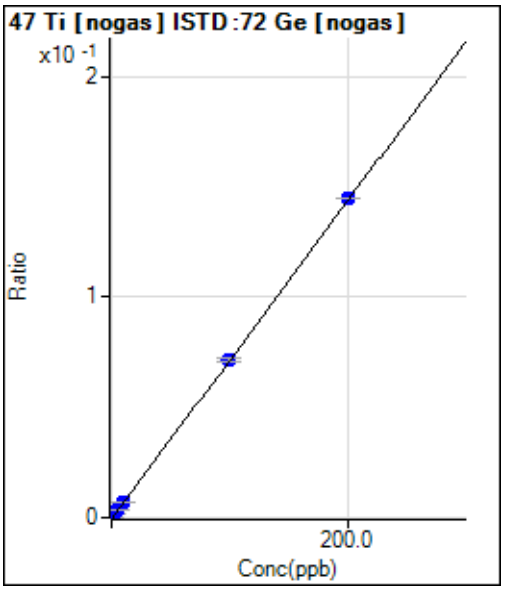


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1653.44	0.0024	P	6.6	
2	☐	200.000	196.345	12551.06	0.0184	P	3.8	-1.8
3	☐	500.000	491.658	28932.45	0.0424	P	2.2	-1.7
4	☐	1000.000	988.615	56378.48	0.0827	P	1.4	-1.1
5	☐	10000.00	9932.725	554913.60	0.8094	P	1.0	-0.7
6	☐	20000.00	20034.45	1083116.83	1.6301	P	1.0	0.2
7	☐	100.000						

y = 8.1246E-005 * x + 0.0024
R = 1.0000
DL = 5.884 ppb
BEC = 29.74 ppb

Weight: <None>
Min Conc: <None>

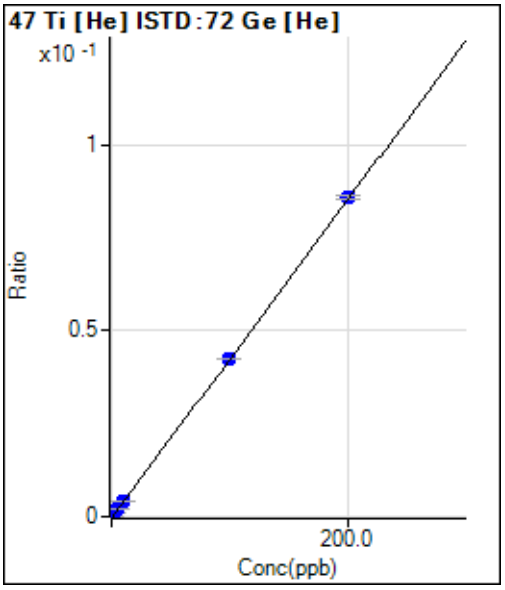
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	23.7	
2	☐	2.000	1.813	2646.90	0.0014	P	9.2	-9.3
3	☐	5.000	4.966	6821.37	0.0037	P	6.0	-0.7
4	☐	10.000	9.818	13395.02	0.0072	P	2.2	-1.8
5	☐	100.000	98.952	133725.05	0.0714	P	1.4	-1.0
6	☐	200.000	200.536	262913.13	0.1447	P	0.3	0.3
7	☐	1.000						

y = 7.2102E-004 * x + 7.9882E-005
R = 1.0000
DL = 0.07874 ppb
BEC = 0.1108 ppb

Weight: <None>
Min Conc: <None>

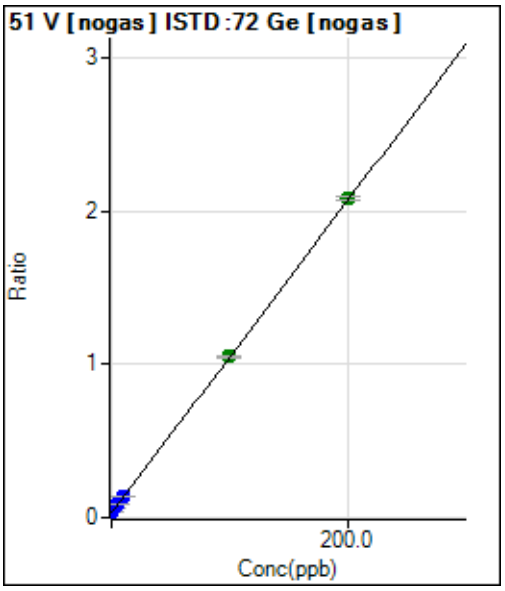


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	94.6	
2	☐	2.000	1.936	593.36	0.0009	P	8.4	-3.2
3	☐	5.000	4.933	1470.08	0.0022	P	5.7	-1.3
4	☐	10.000	9.685	2853.60	0.0042	P	10.0	-3.2
5	☐	100.000	99.045	29116.32	0.0425	P	0.6	-1.0
6	☐	200.000	200.495	57097.29	0.0859	P	0.8	0.2
7	☐	1.000						

y = 4.2838E-004 * x + 3.8988E-005
R = 1.0000
DL = 0.2584 ppb
BEC = 0.09101 ppb

Weight: <None>
Min Conc: <None>

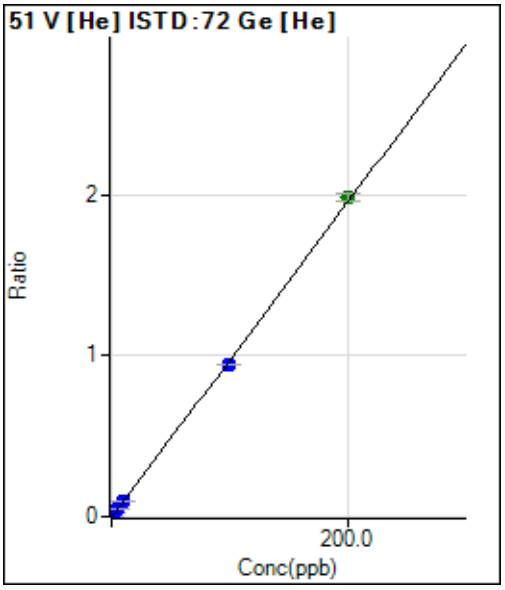
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76168.75	0.0406	P	1.4	
2	☐	2.000	1.856	113650.87	0.0595	P	1.5	-7.2
3	☐	5.000	4.621	163510.62	0.0877	P	1.2	-7.6
4	☐	10.000	9.219	251795.24	0.1346	P	1.0	-7.8
5	☐	100.000	99.341	1972127.53	1.0533	A	1.1	-0.7
6	☐	200.000	200.380	3786107.34	2.0834	A	1.3	0.2
7	☐	1.000						

y = 0.0102 * x + 0.0406
R = 1.0000
DL = 0.1681 ppb
BEC = 3.982 ppb

Weight: <None>
Min Conc: <None>

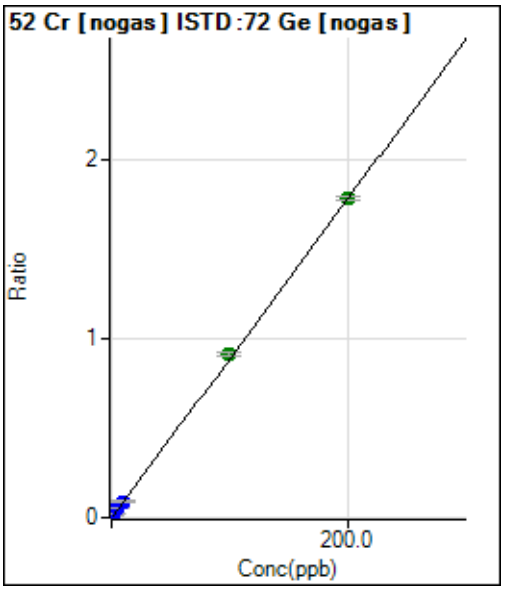


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2690.21	0.0039	P	6.1	
2	☐	2.000	1.870	15210.67	0.0223	P	0.3	-6.5
3	☐	5.000	4.722	34283.65	0.0502	P	2.5	-5.6
4	☐	10.000	9.544	66406.34	0.0975	P	1.5	-4.6
5	☐	100.000	96.110	648381.61	0.9457	P	0.5	-3.9
6	☐	200.000	201.976	1317611.93	1.9831	A	2.1	1.0
7	☐	1.000						

y = 0.0098 * x + 0.0039
R = 0.9997
DL = 0.07343 ppb
BEC = 0.4012 ppb

Weight: <None>
Min Conc: <None>

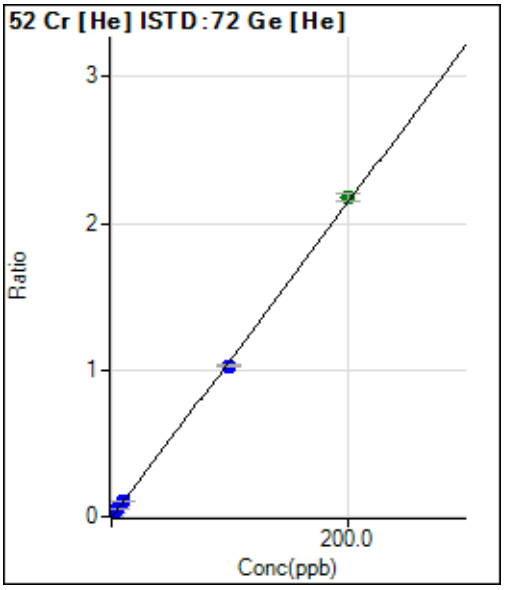
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12901.34	0.0069	P	3.3	
2	☐	2.000	1.875	45141.71	0.0236	P	0.7	-6.3
3	☐	5.000	4.736	91765.53	0.0492	P	1.0	-5.3
4	☐	10.000	9.428	170564.05	0.0912	P	1.0	-5.7
5	☐	100.000	101.470	1711210.44	0.9140	A	1.9	1.5
6	☐	200.000	199.302	3250582.03	1.7887	A	1.0	-0.3
7	☐	1.000						

y = 0.0089 * x + 0.0069
R = 1.0000
DL = 0.07596 ppb
BEC = 0.7691 ppb

Weight: <None>
Min Conc: <None>

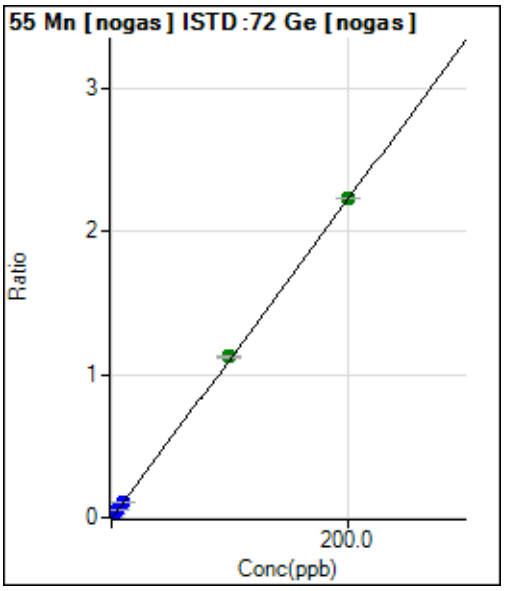


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1846.79	0.0027	P	5.0	
2	☐	2.000	1.884	15686.82	0.0230	P	2.7	-5.8
3	☐	5.000	4.804	37113.83	0.0543	P	1.8	-3.9
4	☐	10.000	9.702	72905.90	0.1070	P	1.6	-3.0
5	☐	100.000	95.287	704091.61	1.0270	P	0.7	-4.7
6	☐	200.000	202.378	1447242.32	2.1781	A	1.9	1.2
7	☐	1.000						

y = 0.0107 * x + 0.0027
R = 0.9996
DL = 0.0379 ppb
BEC = 0.251 ppb

Weight: <None>
Min Conc: <None>

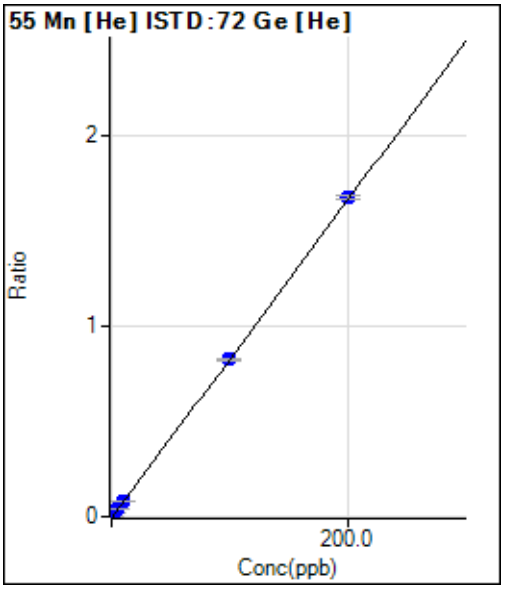
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7444.93	0.0040	P	4.5	
2	☐	2.000	1.825	46431.75	0.0243	P	3.2	-8.8
3	☐	5.000	4.807	107348.70	0.0576	P	2.0	-3.9
4	☐	10.000	9.747	210812.31	0.1127	P	1.4	-2.5
5	☐	100.000	100.521	2106874.24	1.1251	A	1.7	0.5
6	☐	200.000	199.759	4056170.46	2.2320	A	0.4	-0.1
7	☐	1.000						

y = 0.0112 * x + 0.0040
R = 1.0000
DL = 0.04848 ppb
BEC = 0.3558 ppb

Weight: <None>
Min Conc: <None>

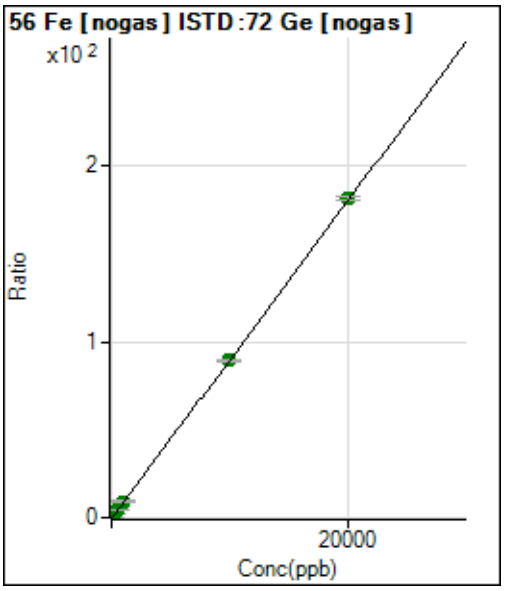


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	716.69	0.0010	P	6.6	
2	☐	2.000	1.938	11753.91	0.0172	P	2.0	-3.1
3	☐	5.000	4.869	28428.67	0.0416	P	2.5	-2.6
4	☐	10.000	9.903	56944.18	0.0836	P	1.9	-1.0
5	☐	100.000	98.655	564336.52	0.8232	P	1.5	-1.3
6	☐	200.000	200.681	1111921.18	1.6734	P	1.3	0.3
7	☐	1.000						

y = 0.0083 * x + 0.0010
R = 1.0000
DL = 0.02487 ppb
BEC = 0.1256 ppb

Weight: <None>
Min Conc: <None>

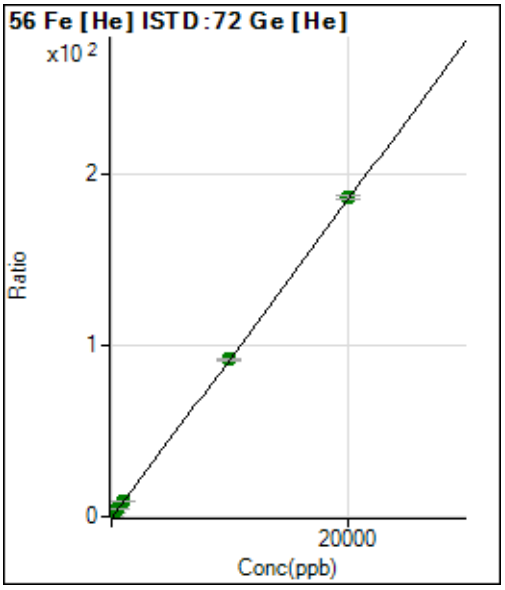
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	668519.36	0.3563	P	0.8	
2	☐	200.000	197.933	4100308.17	2.1473	A	2.2	-1.0
3	☐	500.000	495.140	9016834.45	4.8366	A	1.6	-1.0
4	☐	1000.000	983.509	17317073.49	9.2557	A	1.5	-1.6
5	☐	10000.00	9877.378	168004707.5	89.7338	A	1.1	-1.2
6	☐	20000.00	20062.27	330544855.0	181.893	A	1.2	0.3
7	☐	100.000						

y = 0.0090 * x + 0.3563
R = 1.0000
DL = 0.9389 ppb
BEC = 39.37 ppb

Weight: <None>
Min Conc: <None>

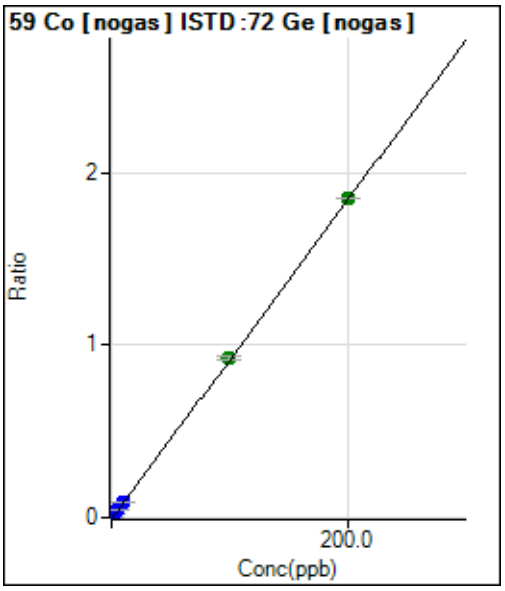


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	51428.27	0.0751	P	4.5	
2	☐	200.000	212.648	1402871.49	2.0530	A	2.1	6.3
3	☐	500.000	510.986	3297495.05	4.8280	A	1.0	2.2
4	☐	1000.000	1006.745	6432041.57	9.4392	A	2.5	0.7
5	☐	10000.00	9866.824	62970415.73	91.8492	A	0.7	-1.3
6	☐	20000.00	20065.85	124056361.4	186.713	A	1.5	0.3
7	☐	100.000						

y = 0.0093 * x + 0.0751
R = 1.0000
DL = 1.087 ppb
BEC = 8.079 ppb

Weight: <None>
Min Conc: <None>

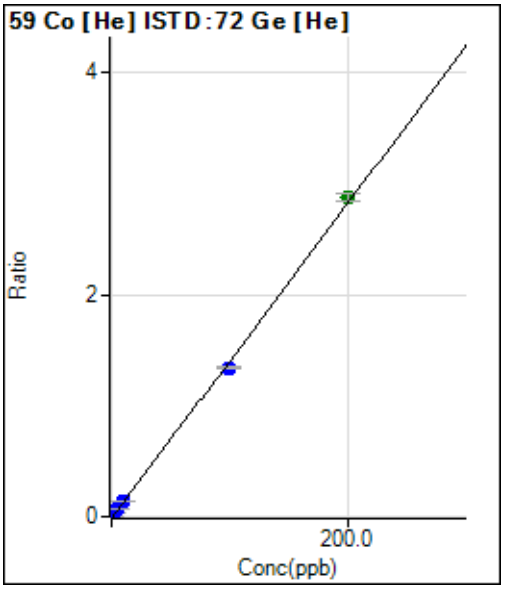
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	366.68	0.0002	P	31.9	
2	☐	2.000	1.900	34014.84	0.0178	P	1.0	-5.0
3	☐	5.000	4.760	82637.65	0.0443	P	2.2	-4.8
4	☐	10.000	9.603	166955.78	0.0892	P	1.7	-4.0
5	☐	100.000	100.024	1736703.52	0.9276	A	2.0	0.0
6	☐	200.000	200.015	3370560.05	1.8547	A	0.5	0.0
7	☐	1.000						

y = 0.0093 * x + 1.9584E-004
R = 1.0000
DL = 0.02023 ppb
BEC = 0.02112 ppb

Weight: <None>
Min Conc: <None>

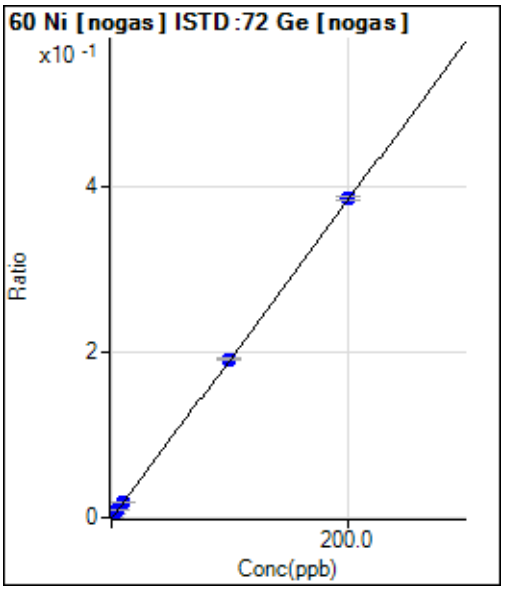


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0003	P	19.6	
2	☐	2.000	1.907	18646.35	0.0273	P	2.9	-4.7
3	☐	5.000	4.784	46488.58	0.0681	P	1.5	-4.3
4	☐	10.000	9.579	92697.78	0.1360	P	1.7	-4.2
5	☐	100.000	94.408	917487.33	1.3383	P	1.5	-5.6
6	☐	200.000	202.823	1910096.59	2.8749	A	1.9	1.4
7	☐	1.000						

y = 0.0142 * x + 2.6284E-004
R = 0.9995
DL = 0.01092 ppb
BEC = 0.01854 ppb

Weight: <None>
Min Conc: <None>

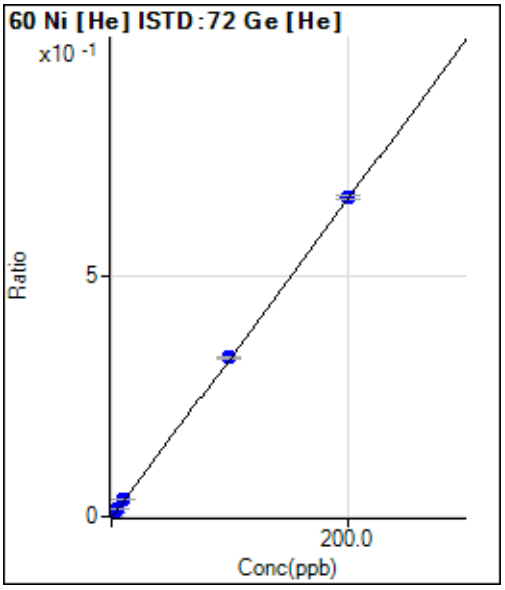
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1056.72	0.0006	P	10.5	
2	☐	2.000	1.773	7591.67	0.0040	P	1.8	-11.4
3	☐	5.000	4.808	18315.97	0.0098	P	3.5	-3.8
4	☐	10.000	9.857	36563.15	0.0195	P	1.0	-1.4
5	☐	100.000	99.326	359070.65	0.1918	P	2.0	-0.7
6	☐	200.000	200.351	702024.81	0.3863	P	1.1	0.2
7	☐	1.000						

y = 0.0019 * x + 5.6268E-004
R = 1.0000
DL = 0.09183 ppb
BEC = 0.2922 ppb

Weight: <None>
Min Conc: <None>

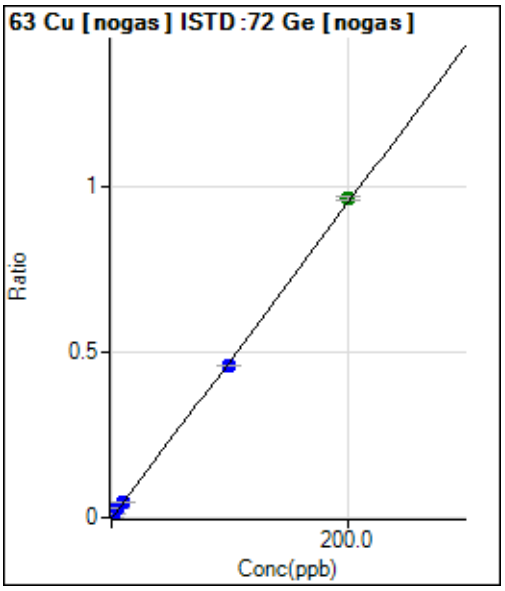


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	520.02	0.0008	P	10.3	
2	☐	2.000	1.835	4667.34	0.0068	P	4.9	-8.3
3	☐	5.000	4.814	11397.02	0.0167	P	2.4	-3.7
4	☐	10.000	10.321	23792.24	0.0349	P	1.3	3.2
5	☐	100.000	99.516	226261.71	0.3301	P	2.2	-0.5
6	☐	200.000	200.232	440728.91	0.6633	P	1.4	0.1
7	☐	1.000						

y = 0.0033 * x + 7.5984E-004
R = 1.0000
DL = 0.07124 ppb
BEC = 0.2296 ppb

Weight: <None>
Min Conc: <None>

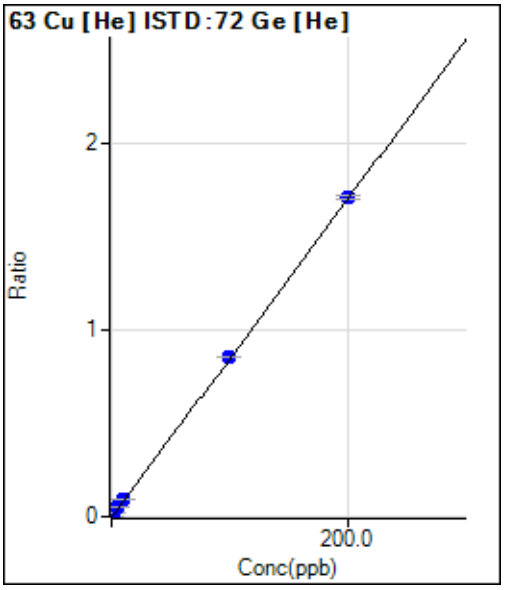
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4210.53	0.0022	P	3.6	
2	☐	2.000	1.902	21589.60	0.0113	P	1.0	-4.9
3	☐	5.000	5.095	49426.55	0.0265	P	1.2	1.9
4	☐	10.000	9.725	90862.80	0.0486	P	0.7	-2.8
5	☐	100.000	96.017	860439.70	0.4596	P	0.9	-4.0
6	☐	200.000	202.004	1752535.91	0.9644	A	1.0	1.0
7	☐	1.000						

y = 0.0048 * x + 0.0022
R = 0.9997
DL = 0.05027 ppb
BEC = 0.4712 ppb

Weight: <None>
Min Conc: <None>

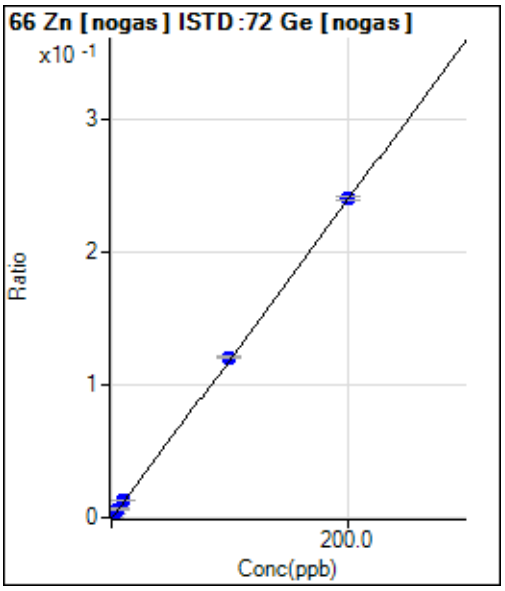


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2376.86	0.0035	P	6.7	
2	☐	2.000	1.943	13728.61	0.0201	P	2.8	-2.9
3	☐	5.000	5.218	32859.63	0.0481	P	1.9	4.4
4	☐	10.000	10.110	61291.91	0.0900	P	2.4	1.1
5	☐	100.000	99.768	587479.17	0.8569	P	1.0	-0.2
6	☐	200.000	200.106	1139664.05	1.7152	P	0.9	0.1
7	☐	1.000						

y = 0.0086 * x + 0.0035
R = 1.0000
DL = 0.08155 ppb
BEC = 0.406 ppb

Weight: <None>
Min Conc: <None>

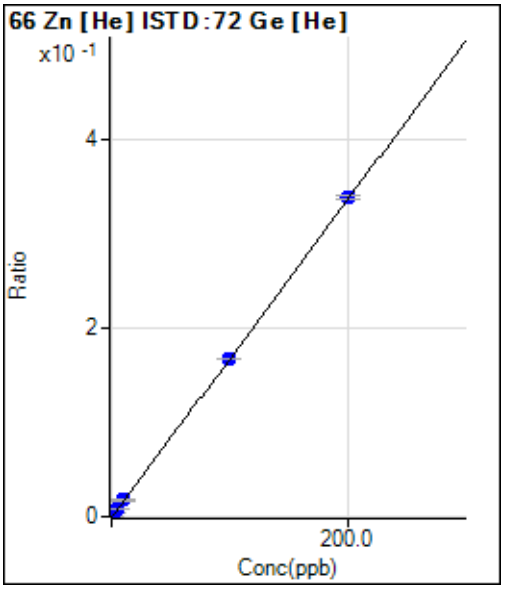
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	813.37	0.0004	P	9.0	
2	☐	2.000	2.476	6511.26	0.0034	P	9.0	23.8
3	☐	5.000	5.008	12014.09	0.0064	P	2.8	0.2
4	☐	10.000	10.117	23532.02	0.0126	P	3.2	1.2
5	☐	100.000	99.922	225394.95	0.1204	P	1.2	-0.1
6	☐	200.000	200.028	437168.17	0.2406	P	0.9	0.0
7	☐	1.000						

y = 0.0012 * x + 4.3353E-004
R = 1.0000
DL = 0.09762 ppb
BEC = 0.3611 ppb

Weight: <None>
Min Conc: <None>

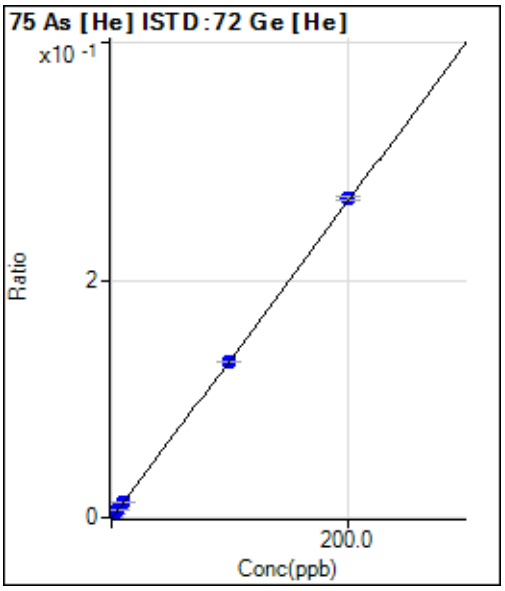


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.68	0.0007	P	20.8	
2	☐	2.000	2.418	3240.34	0.0047	P	8.4	20.9
3	☐	5.000	4.981	6197.81	0.0091	P	1.9	-0.4
4	☐	10.000	9.908	11857.31	0.0174	P	6.0	-0.9
5	☐	100.000	99.134	115369.72	0.1683	P	0.5	-0.9
6	☐	200.000	200.434	225621.56	0.3396	P	0.7	0.2
7	☐	1.000						

y = 0.0017 * x + 6.5222E-004
R = 1.0000
DL = 0.2405 ppb
BEC = 0.3857 ppb

Weight: <None>
Min Conc: <None>

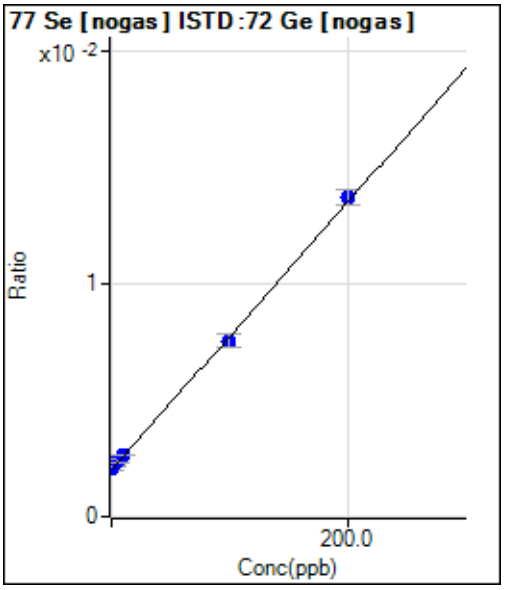
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	212.22	0.0003	P	21.8	
2	☐	2.000	1.833	1887.89	0.0028	P	3.8	-8.3
3	☐	5.000	4.910	4699.51	0.0069	P	2.2	-1.8
4	☐	10.000	9.537	8907.77	0.0131	P	0.6	-4.6
5	☐	100.000	97.965	90085.99	0.1314	P	0.9	-2.0
6	☐	200.000	201.045	178954.14	0.2693	P	1.4	0.5
7	☐	1.000						

y = 0.0013 * x + 3.0998E-004
R = 0.9999
DL = 0.1516 ppb
BEC = 0.2316 ppb

Weight: <None>
Min Conc: <None>

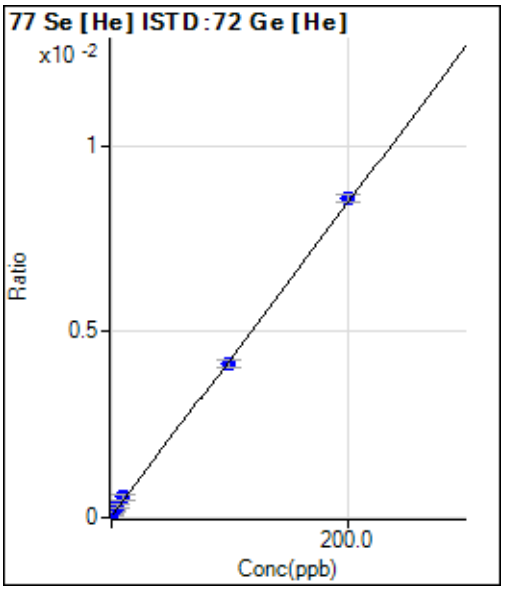


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3900.50	0.0021	P	8.2	
2	☐	2.000	2.045	4193.89	0.0022	P	6.4	2.3
3	☐	5.000	5.099	4420.60	0.0024	P	6.1	2.0
4	☐	10.000	9.135	4870.74	0.0026	P	0.2	-8.7
5	☐	100.000	95.118	14119.00	0.0075	P	7.6	-4.9
6	☐	200.000	202.481	24897.39	0.0137	P	4.6	1.2
7	☐	1.000						

y = 5.7405E-005 * x + 0.0021
R = 0.9996
DL = 8.856 ppb
BEC = 36.21 ppb

Weight: <None>
Min Conc: <None>

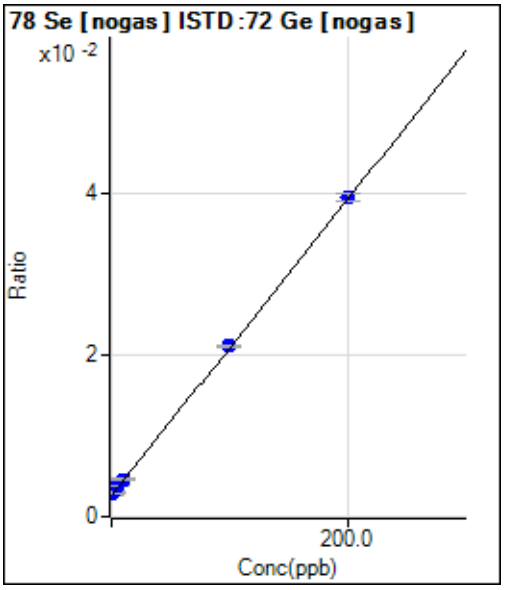
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	27.4	
2	☐	2.000	2.551	130.00	0.0002	P	28.2	27.6
3	☐	5.000	5.445	213.34	0.0003	P	27.4	8.9
4	☐	10.000	11.134	376.68	0.0006	P	23.1	11.3
5	☐	100.000	96.124	2833.61	0.0041	P	5.2	-3.9
6	☐	200.000	201.865	5707.64	0.0086	P	2.1	0.9
7	☐	1.000						

y = 4.2144E-005 * x + 8.2862E-005
R = 0.9997
DL = 1.614 ppb
BEC = 1.966 ppb

Weight: <None>
Min Conc: <None>

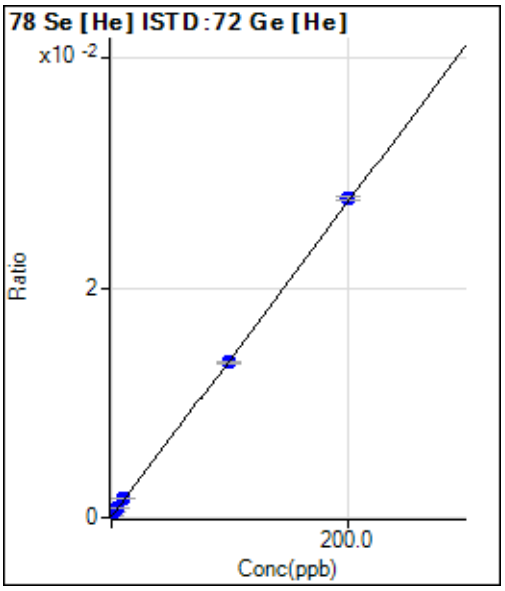


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5290.85	0.0028	P	5.9	
2	☐	2.000	0.995	5734.32	0.0030	P	5.9	-50.2
3	☐	5.000	4.996	6964.79	0.0037	P	1.6	-0.1
4	☐	10.000	9.700	8602.17	0.0046	P	5.8	-3.0
5	☐	100.000	99.646	39516.62	0.0211	P	1.4	-0.4
6	☐	200.000	200.202	71891.80	0.0396	P	1.9	0.1
7	☐	1.000						

y = 1.8353E-004 * x + 0.0028
R = 1.0000
DL = 2.709 ppb
BEC = 15.36 ppb

Weight: <None>
Min Conc: <None>

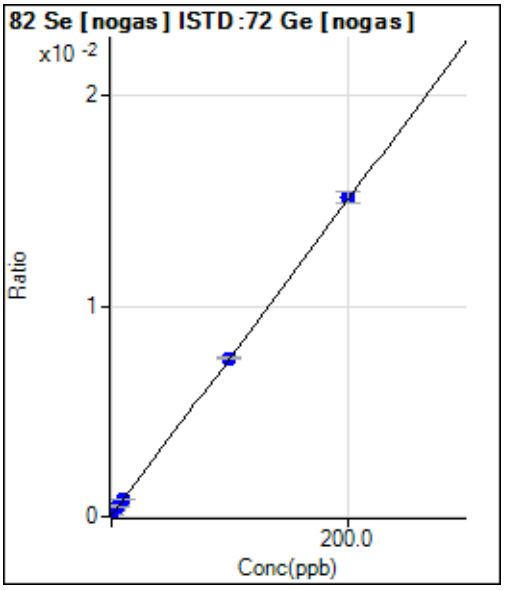
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0002	P	6.4	
2	☐	2.000	2.104	353.34	0.0005	P	4.3	5.2
3	☐	5.000	4.096	539.34	0.0008	P	2.5	-18.1
4	☐	10.000	10.067	1095.37	0.0016	P	1.3	0.7
5	☐	100.000	96.925	9255.03	0.0135	P	1.4	-3.1
6	☐	200.000	201.556	18489.37	0.0278	P	1.8	0.8
7	☐	1.000						

y = 1.3692E-004 * x + 2.2893E-004
R = 0.9998
DL = 0.3219 ppb
BEC = 1.672 ppb

Weight: <None>
Min Conc: <None>

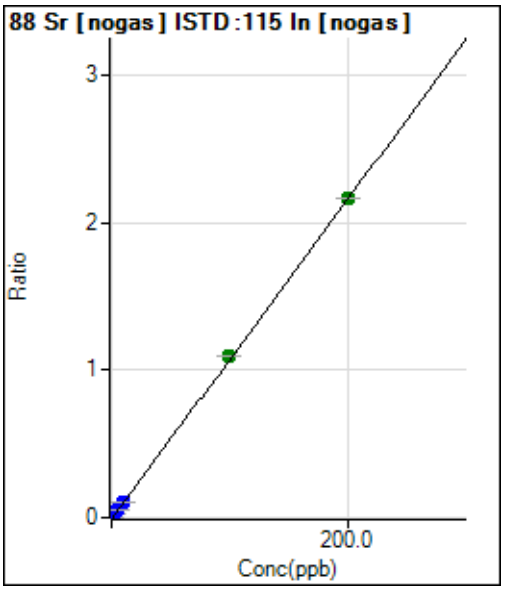


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0001	P	3.2	
2	☐	2.000	2.793	633.36	0.0003	P	7.5	39.6
3	☐	5.000	4.766	893.37	0.0005	P	27.3	-4.7
4	☐	10.000	9.629	1580.10	0.0008	P	4.0	-3.7
5	☐	100.000	98.833	14102.37	0.0075	P	1.4	-1.2
6	☐	200.000	200.600	27547.90	0.0152	P	4.1	0.3
7	☐	1.000						

y = 7.4969E-005 * x + 1.2254E-004
R = 1.0000
DL = 0.1582 ppb
BEC = 1.635 ppb

Weight: <None>
Min Conc: <None>

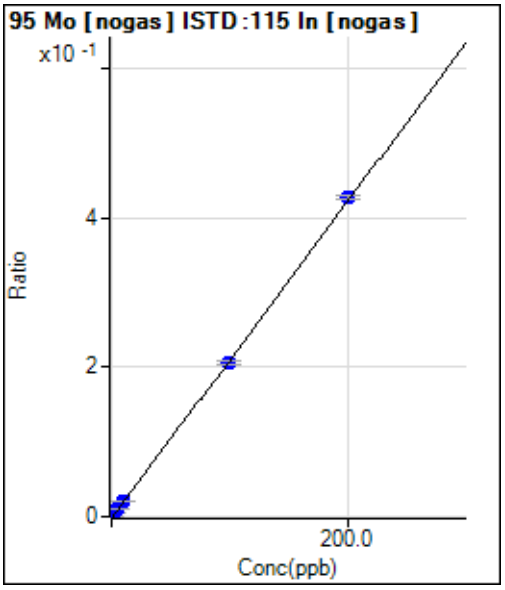
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1236.73	0.0006	P	12.2	
2	☐	2.000	1.866	45841.83	0.0208	P	1.2	-6.7
3	☐	5.000	4.674	112059.55	0.0513	P	2.0	-6.5
4	☐	10.000	9.307	224664.61	0.1015	P	1.7	-6.9
5	☐	100.000	100.965	2355140.02	1.0960	A	0.8	1.0
6	☐	200.000	199.562	4585691.39	2.1657	A	0.4	-0.2
7	☐	1.000						

y = 0.0108 * x + 5.5253E-004
R = 1.0000
DL = 0.01865 ppb
BEC = 0.05093 ppb

Weight: <None>
Min Conc: <None>

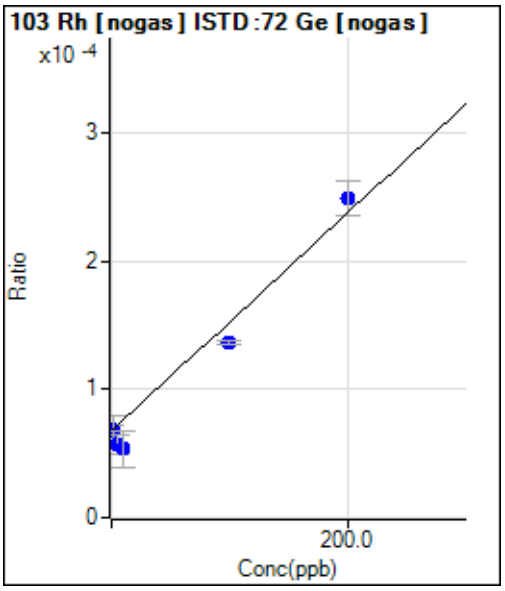


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	303.34	0.0001	P	25.5	
2	☐	2.000	1.836	8882.35	0.0040	P	3.6	-8.2
3	☐	5.000	4.711	22140.59	0.0101	P	2.4	-5.8
4	☐	10.000	9.399	44415.30	0.0201	P	2.8	-6.0
5	☐	100.000	97.051	442631.95	0.2060	P	1.7	-2.9
6	☐	200.000	201.513	905410.48	0.4276	P	1.1	0.8
7	☐	1.000						

y = 0.0021 * x + 1.3532E-004
R = 0.9999
DL = 0.04879 ppb
BEC = 0.06379 ppb

Weight: <None>
Min Conc: <None>

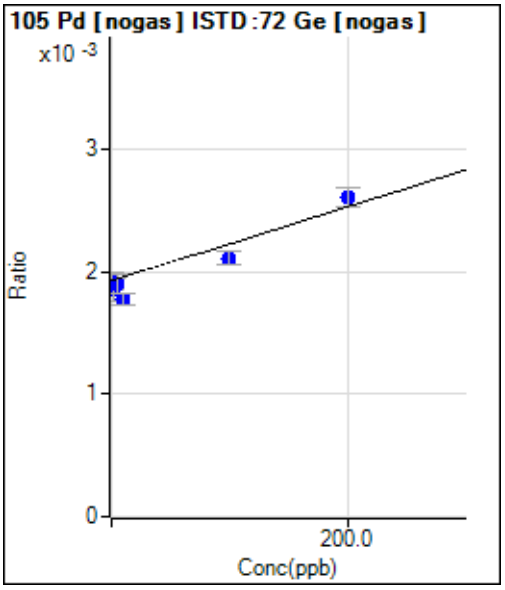
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	6.6	
2	☐	2.000	-1.071	130.00	0.0001	P	34.8	-153.6
3	☐	5.000	-14.024	106.67	0.0001	P	24.5	-380.5
4	☐	10.000	-18.467	100.00	0.0001	P	52.2	-284.7
5	☐	100.000	79.771	256.68	0.0001	P	2.0	-20.2
6	☐	200.000	212.044	453.35	0.0002	P	10.8	6.0
7	☐	1.000						

y = 8.5049E-007 * x + 6.9241E-005
R = 0.9892
DL = 16.05 ppb
BEC = 81.41 ppb

Weight: <None>
Min Conc: <None>

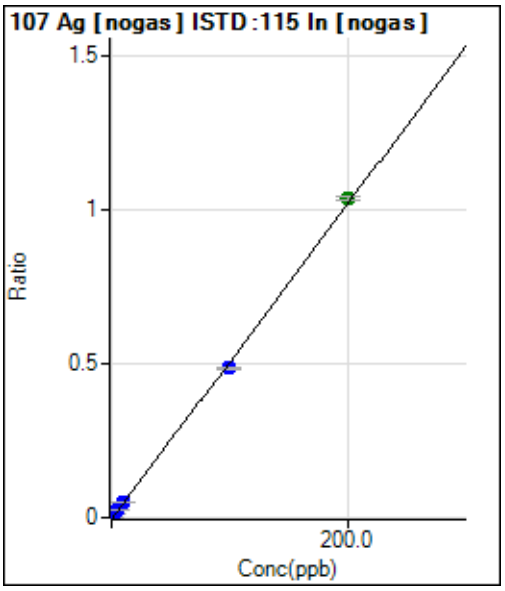


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3627.11	0.0019	P	7.1	
2	☐	2.000	-24.176	3557.08	0.0019	P	9.7	-1308.8
3	☐	5.000	-8.232	3557.09	0.0019	P	8.1	-264.6
4	☐	10.000	-51.278	3327.03	0.0018	P	4.9	-612.8
5	☐	100.000	58.886	3953.84	0.0021	P	5.1	-41.1
6	☐	200.000	224.213	4750.71	0.0026	P	6.0	12.1
7	☐	1.000						

y = 3.0334E-006 * x + 0.0019
R = 0.9654
DL = 135.6 ppb
BEC = 637.5 ppb

Weight: <None>
Min Conc: <None>

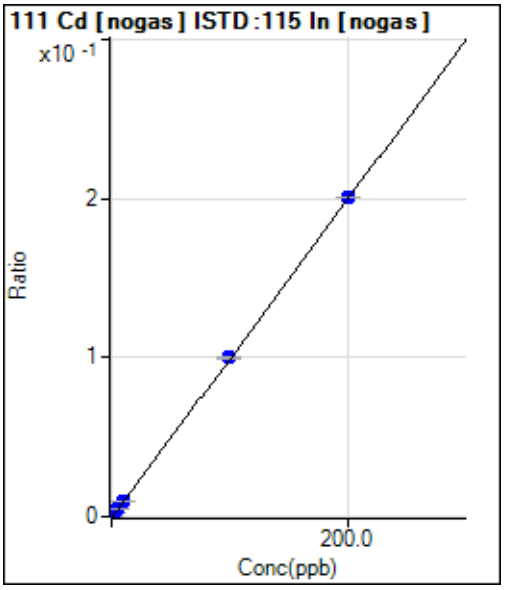
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	243.34	0.0001	P	18.5	
2	☐	2.000	1.934	22057.28	0.0100	P	2.6	-3.3
3	☐	5.000	4.771	53594.31	0.0245	P	1.8	-4.6
4	☐	10.000	9.410	106772.42	0.0482	P	1.0	-5.9
5	☐	100.000	95.024	1044803.92	0.4862	P	1.2	-5.0
6	☐	200.000	202.524	2193995.12	1.0362	A	0.8	1.3
7	☐	1.000						

y = 0.0051 * x + 1.0870E-004
R = 0.9996
DL = 0.0118 ppb
BEC = 0.02125 ppb

Weight: <None>
Min Conc: <None>

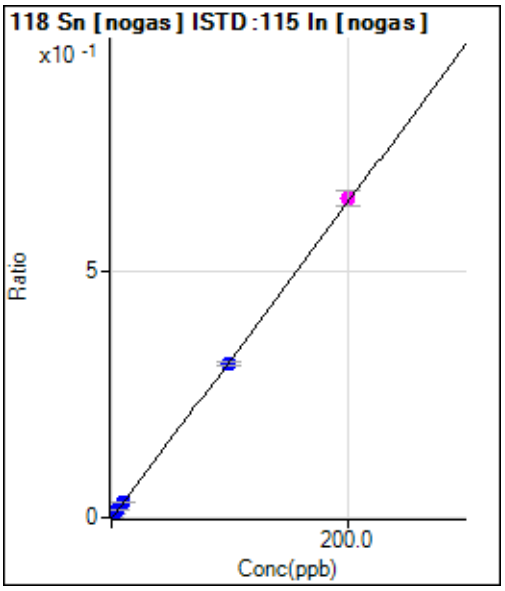


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	11.6	
2	☐	2.000	1.911	4273.92	0.0019	P	9.4	-4.4
3	☐	5.000	4.880	10750.14	0.0049	P	2.8	-2.4
4	☐	10.000	9.899	22024.00	0.0100	P	1.5	-1.0
5	☐	100.000	99.525	214569.14	0.0999	P	1.8	-0.5
6	☐	200.000	200.246	425395.70	0.2009	P	0.6	0.1
7	☐	1.000						

y = 0.0010 * x + 2.0835E-005
R = 1.0000
DL = 0.007235 ppb
BEC = 0.02077 ppb

Weight: <None>
Min Conc: <None>

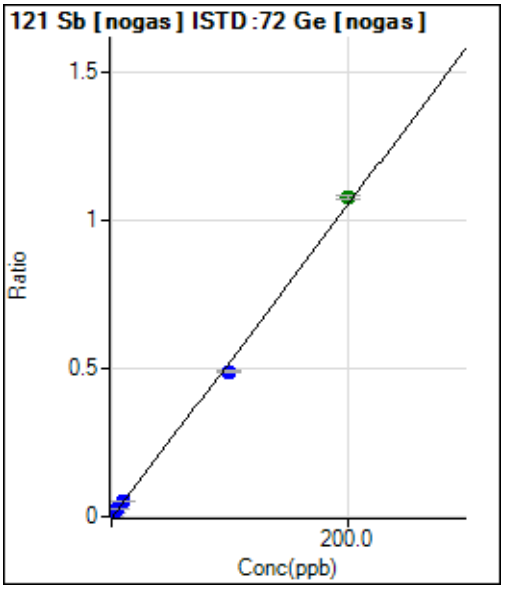
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2100.17	0.0009	P	8.2	
2	☐	2.000	1.812	14933.30	0.0068	P	5.2	-9.4
3	☐	5.000	4.658	34841.45	0.0159	P	2.8	-6.8
4	☐	10.000	9.358	68774.18	0.0311	P	1.8	-6.4
5	☐	100.000	96.993	673264.39	0.3133	P	1.6	-3.0
6	☐	200.000	201.546	1376646.96	0.6501	M	5.0	0.8
7	☐	1.000						

y = 0.0032 * x + 9.3758E-004
R = 0.9998
DL = 0.07129 ppb
BEC = 0.2911 ppb

Weight: <None>
Min Conc: <None>

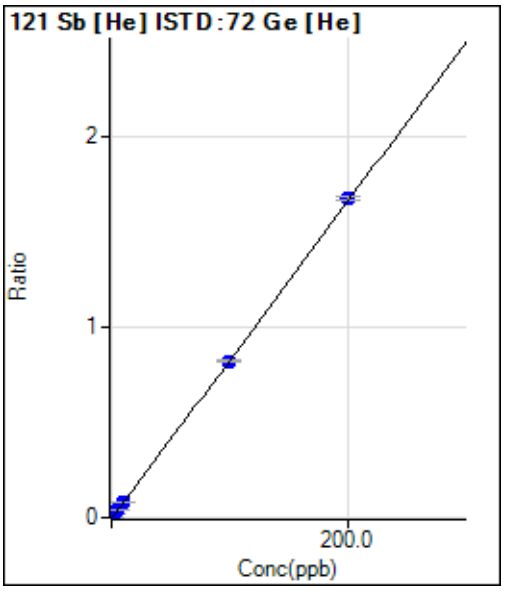


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1580.10	0.0008	P	4.3	
2	☐	2.000	1.785	19624.56	0.0103	P	8.8	-10.7
3	☐	5.000	4.573	46658.92	0.0250	P	3.0	-8.5
4	☐	10.000	9.207	92700.25	0.0495	P	1.2	-7.9
5	☐	100.000	92.465	917281.37	0.4899	P	0.9	-7.5
6	☐	200.000	203.820	1960646.74	1.0789	A	1.0	1.9
7	☐	1.000						

y = 0.0053 * x + 8.4197E-004
R = 0.9990
DL = 0.02031 ppb
BEC = 0.1592 ppb

Weight: <None>
Min Conc: <None>

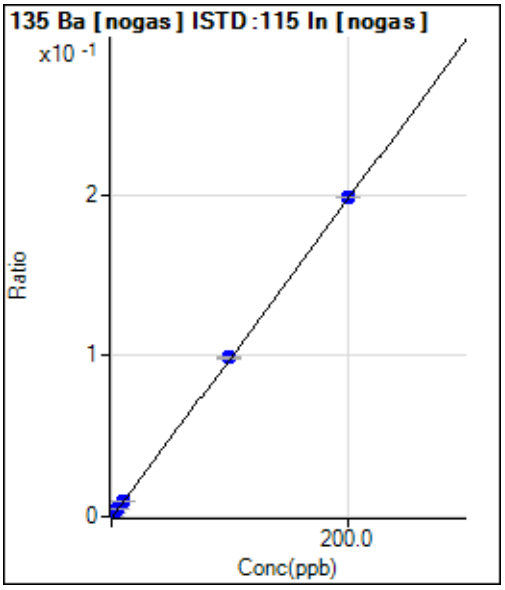
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	963.38	0.0014	P	4.5	
2	☐	2.000	1.936	11997.66	0.0176	P	2.3	-3.2
3	☐	5.000	4.856	28623.72	0.0419	P	0.9	-2.9
4	☐	10.000	9.712	56146.46	0.0824	P	2.4	-2.9
5	☐	100.000	98.305	563005.25	0.8212	P	1.5	-1.7
6	☐	200.000	200.866	1114038.55	1.6766	P	0.6	0.4
7	☐	1.000						

y = 0.0083 * x + 0.0014
R = 1.0000
DL = 0.02278 ppb
BEC = 0.1688 ppb

Weight: <None>
Min Conc: <None>

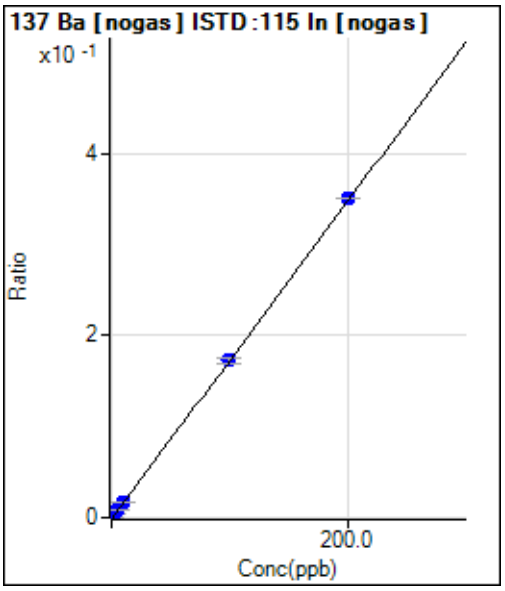


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	220.01	0.0001	P	21.0	
2	☐	2.000	1.977	4537.32	0.0021	P	4.8	-1.2
3	☐	5.000	4.851	10730.14	0.0049	P	4.3	-3.0
4	☐	10.000	9.662	21420.13	0.0097	P	2.1	-3.4
5	☐	100.000	99.496	212174.84	0.0987	P	1.9	-0.5
6	☐	200.000	200.273	420657.22	0.1987	P	0.3	0.1
7	☐	1.000						

y = 9.9149E-004 * x + 9.8292E-005
R = 1.0000
DL = 0.06235 ppb
BEC = 0.09914 ppb

Weight: <None>
Min Conc: <None>

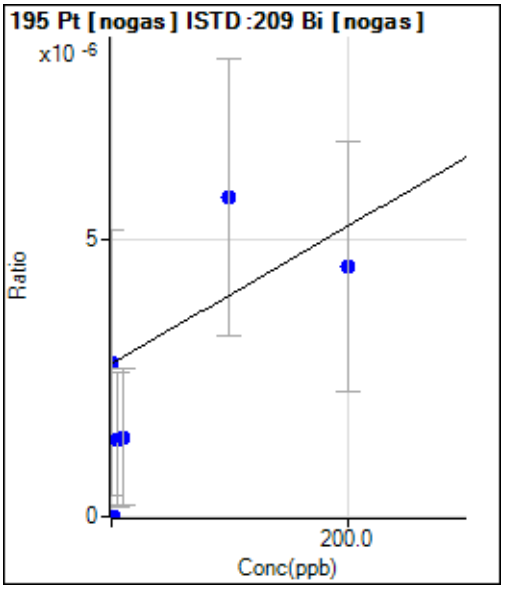
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	393.34	0.0002	P	11.5	
2	☐	2.000	1.849	7508.44	0.0034	P	0.3	-7.5
3	☐	5.000	4.812	18753.72	0.0086	P	2.0	-3.8
4	☐	10.000	9.740	38025.20	0.0172	P	1.8	-2.6
5	☐	100.000	98.535	370062.52	0.1722	P	2.6	-1.5
6	☐	200.000	200.752	742641.08	0.3507	P	0.3	0.4
7	☐	1.000						

y = 0.0017 * x + 1.7590E-004
R = 1.0000
DL = 0.03477 ppb
BEC = 0.1007 ppb

Weight: <None>
Min Conc: <None>

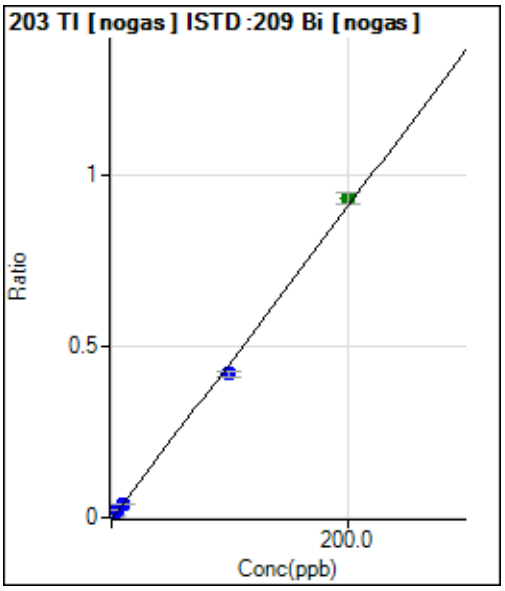


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.	
2	☐	2.000	-224.405	0.00	0.0000	P		-11320.
3	☐	5.000	-111.294	3.33	0.0000	P	173.	-2325.9
4	☐	10.000	-108.964	3.33	0.0000	P	173.	-1189.6
5	☐	100.000	240.827	13.33	0.0000	P	86.6	140.8
6	☐	200.000	140.706	10.00	0.0000	P	99.6	-29.6
7	☐	1.000						

y = 1.2385E-008 * x + 2.7792E-006
R = 0.7512
DL = 1166 ppb
BEC = 224.4 ppb

Weight: <None>
Min Conc: <None>

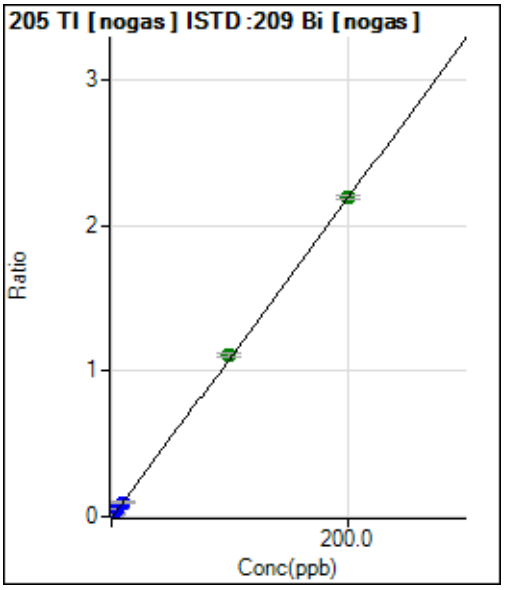
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0001	P	11.3	
2	☐	2.000	1.709	19134.74	0.0080	P	9.0	-14.5
3	☐	5.000	4.441	49056.78	0.0205	P	4.9	-11.2
4	☐	10.000	8.799	96119.40	0.0404	P	2.4	-12.0
5	☐	100.000	91.717	968567.61	0.4200	P	3.4	-8.3
6	☐	200.000	204.218	2094178.67	0.9351	A	4.0	2.1
7	☐	1.000						

y = 0.0046 * x + 1.3334E-004
R = 0.9988
DL = 0.009907 ppb
BEC = 0.02912 ppb

Weight: <None>
Min Conc: <None>

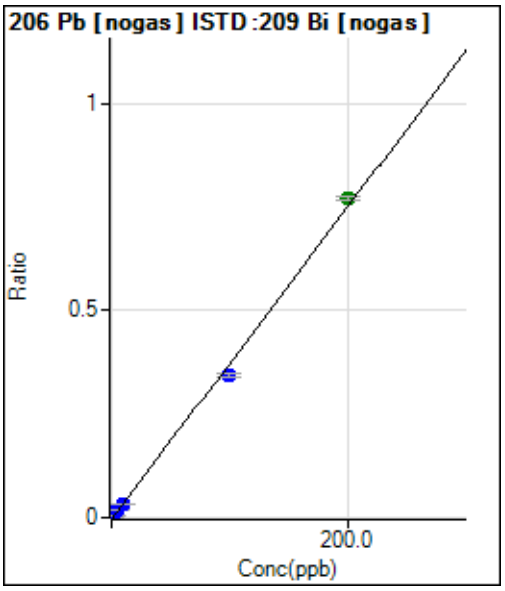


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.02	0.0003	P	5.4	
2	☐	2.000	1.762	47248.07	0.0196	P	4.7	-11.9
3	☐	5.000	4.429	117392.86	0.0490	P	2.5	-11.4
4	☐	10.000	8.844	231855.40	0.0975	P	4.0	-11.6
5	☐	100.000	101.019	2562108.19	1.1110	A	2.3	1.0
6	☐	200.000	199.565	4916660.87	2.1945	A	1.7	-0.2
7	☐	1.000						

y = 0.0110 * x + 2.6484E-004
R = 1.0000
DL = 0.003924 ppb
BEC = 0.02409 ppb

Weight: <None>
Min Conc: <None>

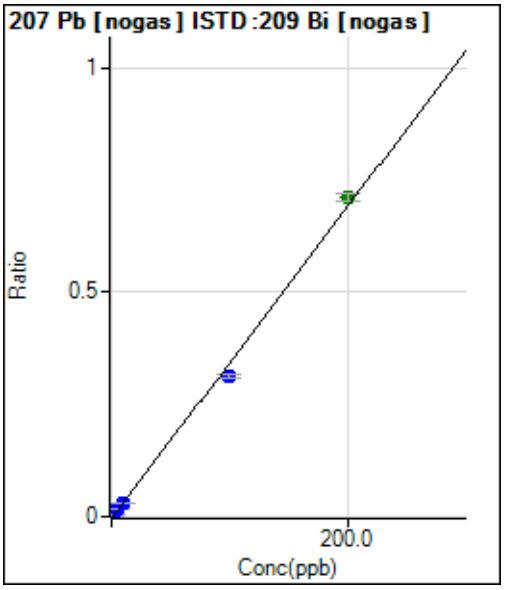
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	403.35	0.0002	P	35.8	
2	☐	2.000	1.723	16054.73	0.0067	P	4.3	-13.9
3	☐	5.000	4.415	40359.82	0.0168	P	4.4	-11.7
4	☐	10.000	8.943	80687.52	0.0339	P	1.5	-10.6
5	☐	100.000	91.222	794376.92	0.3445	P	2.3	-8.8
6	☐	200.000	204.459	1729374.35	0.7718	A	1.6	2.2
7	☐	1.000						

y = 0.0038 * x + 1.6978E-004
R = 0.9987
DL = 0.04826 ppb
BEC = 0.04498 ppb

Weight: <None>
Min Conc: <None>

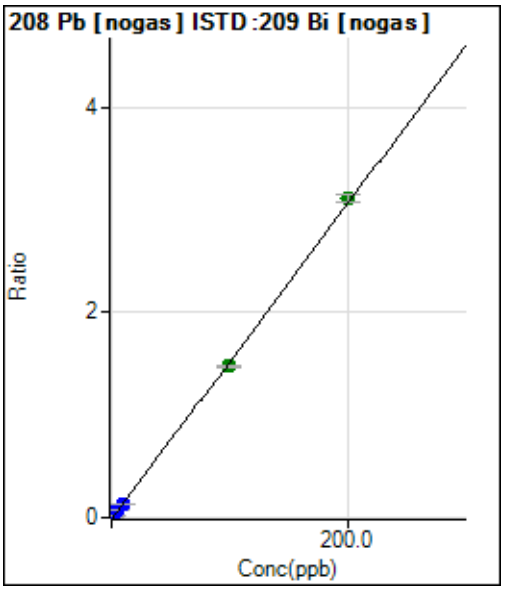


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	386.68	0.0002	P	26.8	
2	☐	2.000	1.703	14616.73	0.0061	P	3.4	-14.8
3	☐	5.000	4.402	37015.39	0.0154	P	2.9	-12.0
4	☐	10.000	8.852	73450.55	0.0309	P	1.9	-11.5
5	☐	100.000	90.518	724796.66	0.3143	P	2.7	-9.5
6	☐	200.000	204.816	1592851.28	0.7110	A	2.0	2.4
7	☐	1.000						

y = 0.0035 * x + 1.6243E-004
R = 0.9985
DL = 0.03757 ppb
BEC = 0.0468 ppb

Weight: <None>
Min Conc: <None>

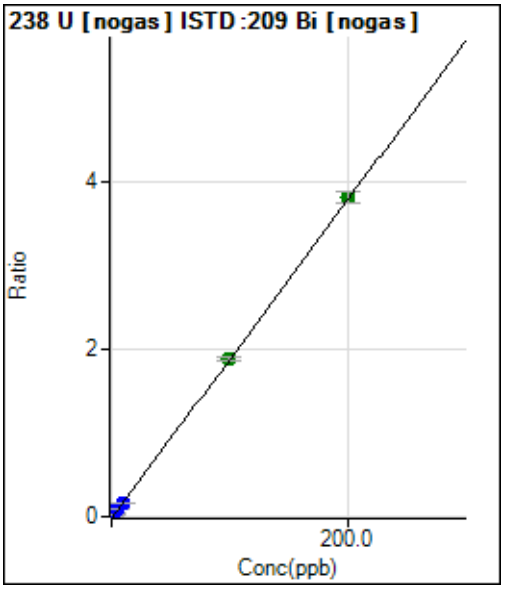
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1713.40	0.0007	P	15.3	
2	☐	2.000	1.722	65572.19	0.0273	P	4.7	-13.9
3	☐	5.000	4.415	164770.23	0.0687	P	2.6	-11.7
4	☐	10.000	8.954	329796.66	0.1387	P	2.1	-10.5
5	☐	100.000	95.660	3400192.29	1.4743	A	2.0	-4.3
6	☐	200.000	202.240	6981533.48	3.1162	A	1.9	1.1
7	☐	1.000						

y = 0.0154 * x + 7.2059E-004
R = 0.9997
DL = 0.02148 ppb
BEC = 0.04678 ppb

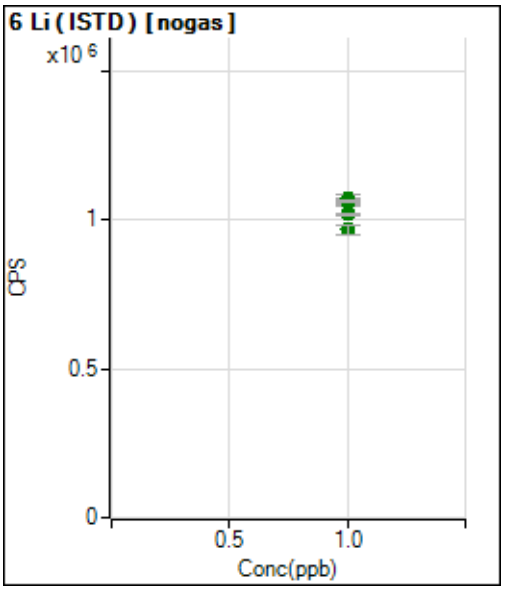
Weight: <None>
Min Conc: <None>



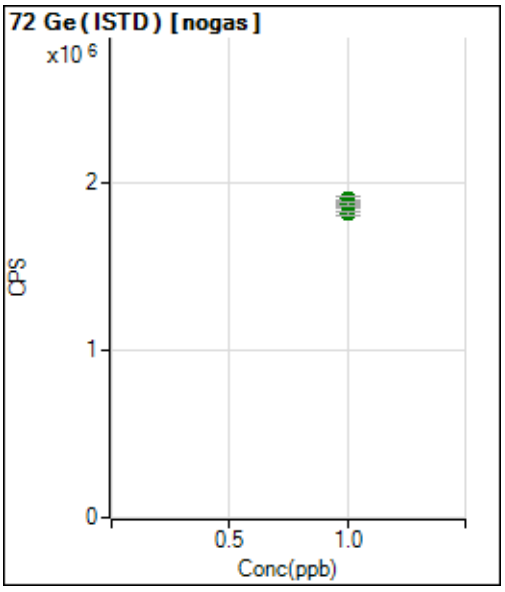
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	693.36	0.0003	P	7.0	
2	☐	2.000	1.754	80833.31	0.0336	P	5.0	-12.3
3	☐	5.000	4.342	198394.36	0.0828	P	3.8	-13.2
4	☐	10.000	8.921	403680.60	0.1697	P	1.9	-10.8
5	☐	100.000	98.990	4337272.54	1.8805	A	1.5	-1.0
6	☐	200.000	200.578	8533942.37	3.8101	A	3.2	0.3
7	☐	1.000						

y = 0.0190 * x + 2.9188E-004
R = 1.0000
DL = 0.003208 ppb
BEC = 0.01537 ppb

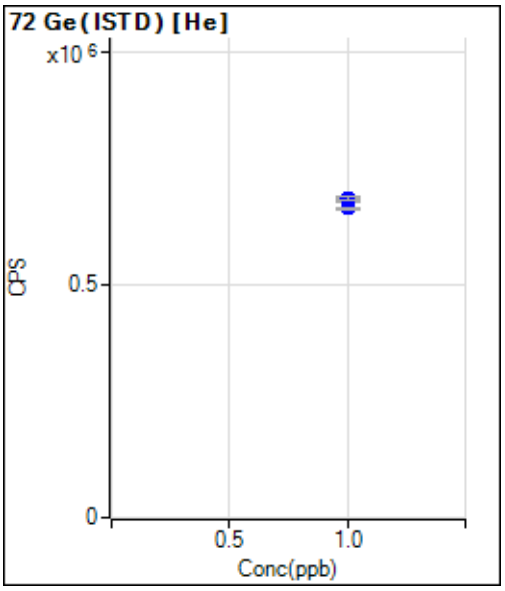
Weight: <None>
Min Conc: <None>



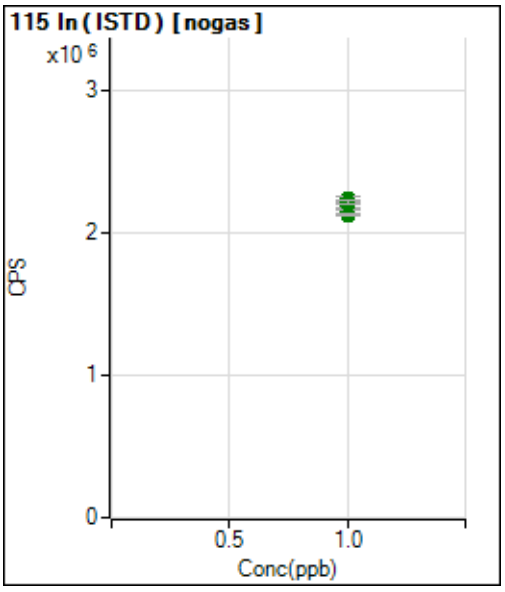
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1057328.41		A	2.7	
2	☐	1.000		1072130.55		A	2.0	
3	☐	1.000		1060905.07		A	1.2	
4	☐	1.000		1063533.15		A	0.6	
5	☐	1.000		1019577.16		A	0.8	
6	☐	1.000		966348.20		A	3.6	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1876584.97		A	1.1	
2	☐	1.000		1909868.57		A	1.7	
3	☐	1.000		1864558.31		A	1.5	
4	☐	1.000		1871101.69		A	0.8	
5	☐	1.000		1872434.04		A	1.3	
6	☐	1.000		1817344.45		A	0.7	
7	☐	1.000						

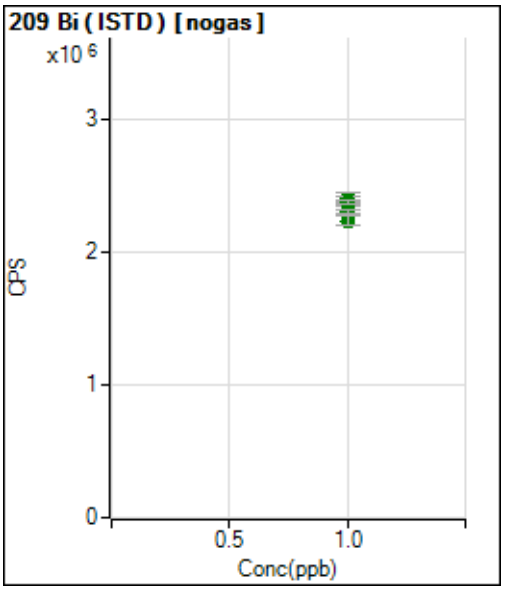


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		684461.63		P	0.5	
2	☐	1.000		683365.54		P	0.6	
3	☐	1.000		683022.85		P	0.7	
4	☐	1.000		681475.30		P	0.9	
5	☐	1.000		685609.47		P	0.8	
6	☐	1.000		664469.29		P	0.7	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2238444.32		A	1.3	
2	☐	1.000		2204819.34		A	0.9	
3	☐	1.000		2186189.53		A	1.1	
4	☐	1.000		2213064.21		A	1.0	
5	☐	1.000		2148947.81		A	1.1	
6	☐	1.000		2117377.90		A	0.6	
7	☐	1.000						

Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2377273.19		A	2.0	
2	☐	1.000		2408383.61		A	3.2	
3	☐	1.000		2398055.69		A	1.8	
4	☐	1.000		2378918.98		A	1.8	
5	☐	1.000		2306752.26		A	1.7	
6	☐	1.000		2241122.36		A	2.7	
7	☐	1.000						

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV2
Data File Name	021LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:49:11-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	1.793	3.965	8103	3.68	2	89.6	70	120	
B	11	1	nogas	25.268	10.408	96180	6.50	10	252.7	70	120	NewName Main CR1 Failed
Al	27	1	nogas	2.109	5.684	64998	1.41	2	105.4	70	120	
P	31	1	nogas	10.581	13.837	25224	2.65	10	105.8	70	120	
Ti	47	1	nogas	2.184	5.064	3034	7.04	2	109.2	70	120	
Ni	60	1	nogas	1.854	4.961	7568	2.15	2	92.7	70	120	
Cu	63	1	nogas	1.940	4.384	21039	2.21	2	97.0	70	120	
Zn	66	1	nogas	2.525	9.411	6348	8.03	2	126.3	70	120	NewName Main CR1 Failed
Se	77	1	nogas	-7.982	-20.874	2967	3.94	2	-399.1	70	120	NewName Main CR1 Failed
Se	82	1	nogas	2.817	26.117	610	14.57	2	140.8	70	120	NewName Main CR1 Failed
Sr	88	1	nogas	1.933	2.721	46387	2.30	2	96.7	70	120	
Mo	95	1	nogas	2.571	7.785	12038	6.24	2	128.6	70	120	NewName Main CR1 Failed
Ag	107	1	nogas	1.901	4.387	21186	3.07	2	95.1	70	120	
Cd	111	1	nogas	2.009	7.766	4391	8.58	2	100.5	70	120	
Sn	118	1	nogas	2.564	4.565	19815	2.92	2	128.2	70	120	NewName Main CR1 Failed
Sb	121	1	nogas	2.279	4.835	23616	3.15	2	113.9	70	120	
Ba	137	1	nogas	1.955	4.260	7735	3.69	2	97.7	70	120	
Tl	205	1	nogas	2.024	4.206	53240	4.75	2	101.2	70	120	
Pb	208	1	nogas	1.851	0.799	69109	0.93	2	92.6	70	120	
Pb	206	1	nogas	1.801	2.213	16462	1.22	2	90.0	70	120	
Pb	207	1	nogas	1.775	1.483	14944	2.60	2	88.7	70	120	
U	238	1	nogas	1.807	2.489	81815	1.33	2	90.4	70	120	
Li	7	1	nogas	2.031	1.920	100968	0.94	2	101.6	70	120	
Ba	135	1	nogas	2.038	3.345	4567	4.60	2	101.9	70	120	
Tl	203	1	nogas	2.061	5.245	22629	6.26	2	103.1	70	120	
Na	23	2	He	198.747	0.829	337544	0.24	200	99.4	70	120	
Mg	24	2	He	198.685	0.920	190243	1.40	200	99.3	70	120	
Al	27	2	He	2.192	5.332	3324	1.96	2	109.6	70	120	
K	39	2	He	201.663	1.084	326470	0.83	200	100.8	70	120	
Ca	43	2	He	193.976	22.966	677	21.23	200	97.0	70	120	
Ca	44	2	He	200.428	1.762	12611	1.46	200	100.2	70	120	
V	51	2	He	1.767	3.029	14327	2.02	2	88.3	70	120	
Cr	52	2	He	1.961	1.946	16037	1.84	2	98.1	70	120	
Mn	55	2	He	1.980	1.831	11834	2.24	2	99.0	70	120	
Fe	56	2	He	207.908	1.948	1354784	1.58	200	104.0	70	120	
Co	59	2	He	1.905	2.626	18386	3.05	2	95.2	70	120	
Ni	60	2	He	1.810	9.866	4551	8.80	2	90.5	70	120	
Cu	63	2	He	1.938	7.349	13519	5.75	2	96.9	70	120	
Zn	66	2	He	2.646	5.802	3457	4.71	2	132.3	70	120	NewName Main CR1 Failed
As	75	2	He	1.998	4.276	2012	3.77	2	99.9	70	120	
Se	77	2	He	0.855	216.159	80	64.95	2	42.7	70	120	NewName Main CR1 Failed
Sb	121	2	He	2.313	2.915	13959	3.17	2	115.6	70	120	
Se	78	2	He	2.509	14.441	386	8.34	2	125.5	70	120	NewName Main CR1 Failed
Ti	47	2	He	2.286	6.786	687	6.06	2	114.3	70	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1832370	2.19	1876585	97.64	70	120	
In	115	1	nogas	2155192	1.47	2238444	96.28	70	120	
Li	6	1	nogas	1026196	0.42	1057328	97.06	70	120	
Bi	209	1	nogas	2363706	1.16	2377273	99.43	70	120	
Ge	72	2	He	674400	0.52	684462	98.53	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV5
Data File Name	022LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:51:13-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	4.575	2.566	20656	0.78	5	91.5	70	130	
B	11	1	nogas	27.525	4.252	102510	0.43	25	110.1	70	130	
Al	27	1	nogas	5.010	0.942	103558	0.45	5	100.2	70	130	
P	31	1	nogas	24.332	5.493	34488	2.81	25	97.3	70	130	
Ti	47	1	nogas	4.776	4.567	6515	5.04	5	95.5	70	130	
Ni	60	1	nogas	4.760	2.177	17986	2.62	5	95.2	70	130	
Cu	63	1	nogas	4.988	1.361	48076	1.65	5	99.8	70	130	
Zn	66	1	nogas	4.766	5.367	11377	4.45	5	95.3	70	130	
Se	77	1	nogas	-4.740	-25.922	3340	4.16	5	-94.8	70	130	NewName Main CR1 Failed
Se	82	1	nogas	5.872	16.695	1040	12.61	5	117.4	70	130	
Sr	88	1	nogas	4.721	2.018	112652	1.31	5	94.4	70	130	
Mo	95	1	nogas	4.956	1.300	23169	2.05	5	99.1	70	130	
Ag	107	1	nogas	4.668	3.226	52187	2.31	5	93.4	70	130	
Cd	111	1	nogas	4.821	3.918	10567	3.56	5	96.4	70	130	
Sn	118	1	nogas	4.919	1.587	36515	1.34	5	98.4	70	130	
Sb	121	1	nogas	4.714	1.700	47648	1.25	5	94.3	70	130	
Ba	137	1	nogas	4.690	1.387	18203	0.87	5	93.8	70	130	
Tl	205	1	nogas	4.419	4.897	114960	1.89	5	88.4	70	130	
Pb	208	1	nogas	4.491	4.226	164538	0.44	5	89.8	70	130	
U	238	1	nogas	4.451	4.106	199671	0.59	5	89.0	70	130	
Li	7	1	nogas	4.752	6.408	145019	0.88	5	95.0	70	130	
Na	23	2	He	486.882	1.336	785162	0.77	500	97.4	70	130	
Mg	24	2	He	493.592	0.696	474622	0.12	500	98.7	70	130	
Al	27	2	He	5.244	18.268	5431	11.95	5	104.9	70	130	
K	39	2	He	484.636	0.632	664215	0.05	500	96.9	70	130	
Ca	43	2	He	459.837	11.447	1573	10.66	500	92.0	70	130	
Ca	44	2	He	490.315	1.364	28833	1.77	500	98.1	70	130	
V	51	2	He	4.602	0.590	33456	0.45	5	92.0	70	130	
Cr	52	2	He	4.652	4.895	35958	4.45	5	93.0	70	130	
Mn	55	2	He	4.744	2.558	27691	2.99	5	94.9	70	130	
Fe	56	2	He	498.348	1.562	3214053	0.97	500	99.7	70	130	
Co	59	2	He	4.745	0.913	46064	0.54	5	94.9	70	130	
Ni	60	2	He	4.850	2.882	11470	2.88	5	97.0	70	130	
Cu	63	2	He	5.089	5.433	32068	4.48	5	101.8	70	130	
Zn	66	2	He	4.664	10.564	5824	9.31	5	93.3	70	130	
As	75	2	He	4.939	2.705	4721	2.01	5	98.8	70	130	
Sb	121	2	He	4.970	1.472	29241	1.39	5	99.4	70	130	
Se	78	2	He	4.842	8.613	609	6.57	5	96.8	70	130	
Ti	47	2	He	5.279	12.814	1570	12.79	5	105.6	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1848779	0.56	1876585	98.52	70	120	
In	115	1	nogas	2175897	0.88	2238444	97.21	70	120	
Li	6	1	nogas	1033558	3.06	1057328	97.75	70	120	
Bi	209	1	nogas	2356234	3.74	2377273	99.11	70	120	
Ge	72	2	He	682369	0.58	684462	99.69	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	023_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:53:16-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	-0.018	-6.4	25	20.0	1	
B	11	1	nogas	2.583	21.8	39910	3.4	10	
Al	27	1	nogas	-0.986	-7.3	25007	2.4	5	
P	31	1	nogas	2.055	20.8	19794	0.5	10	
Ti	47	1	nogas	0.028	134.8	183	25.8	2.5	
Ni	60	1	nogas	-0.219	-9.4	260	29.0	2.5	
Cu	63	1	nogas	-0.036	-40.6	3820	4.8	1	
Zn	66	1	nogas	0.104	10.2	1030	3.5	2.5	
Se	77	1	nogas	-7.986	-14.9	2987	5.7	2.5	
Se	82	1	nogas	0.302	231.7	267	34.8	1	
Sr	88	1	nogas	-0.022	-11.4	683	7.5	2.5	
Mo	95	1	nogas	0.129	9.0	890	4.9	2.5	
Ag	107	1	nogas	-0.006	-20.4	173	8.8	2.5	
Cd	111	1	nogas	-0.018	-14.8	7	86.6	1	
Sn	118	1	nogas	0.123	15.4	2914	4.6	5	
Sb	121	1	nogas	0.121	23.6	2734	10.3	2.5	
Ba	137	1	nogas	0.023	58.5	470	11.8	2.5	
Tl	205	1	nogas	0.004	221.5	743	36.9	1	
Pb	208	1	nogas	-0.001	-1061.8	1680	16.3	2.5	
U	238	1	nogas	-0.008	-23.1	310	30.8	2.5	
Na	23	2	He	0.519	68.1	35613	2.2	100	
Mg	24	2	He	-1.307	-4.7	1123	5.8	100	
Al	27	2	He	-0.509	-61.5	1503	14.3	5	
K	39	2	He	0.651	291.0	91324	2.1	100	
Ca	43	2	He	16.532	66.6	90	40.1	100	
Ca	44	2	He	-6.060	-42.9	1287	10.6	100	
V	51	2	He	-0.101	-29.7	1968	10.5	2.5	
Cr	52	2	He	-0.002	-840.3	1793	6.5	2.5	
Mn	55	2	He	-0.023	-36.4	573	8.8	2.5	
Fe	56	2	He	-0.855	-16.3	44955	1.4	100	
Co	59	2	He	-0.013	-7.7	50	20.0	2.5	
Ni	60	2	He	-0.150	-16.8	177	32.2	2.5	
Cu	63	2	He	-0.059	-35.2	1983	6.1	1	
Zn	66	2	He	0.133	60.2	587	14.7	2.5	
As	75	2	He	-0.005	-1623.8	203	32.9	2.5	
Sb	121	2	He	0.119	32.6	1603	13.4	2.5	
Se	78	2	He	0.067	141.5	159	5.8	1	
Ti	47	2	He	-0.021	-161.3	20	50.0	2.5	

Initial Calibration Blank (ICB) Report

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1842686	1.53	1876585	98.19	70	120	
In	115	1	nogas	2182145	1.25	2238444	97.48	70	120	
Li	6	1	nogas	1037870	0.17	1057328	98.16	70	120	
Bi	209	1	nogas	2358763	2.37	2377273	99.22	70	120	
Ge	72	2	He	669088	0.77	684462	97.75	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	025ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T11:58:11-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	-0.017	-19.9	25	52.9	0	ICSA Main CR1 Failed
B	11	1	nogas	0.238	77.5	29703	1.7	0	ICSA Main CR1 Failed
Al	27	1	nogas	89740.196	1.3	1079020997	0.9	0	
P	31	1	nogas	96646.833	1.5	58308477	0.3	0	
Ti	47	1	nogas	2090.571	1.2	2560483	0.2	0	
Ni	60	1	nogas	0.518	3.4	2650	1.0	0	ICSA Main CR1 Failed
Cu	63	1	nogas	0.655	1.9	9109	1.6	0	ICSA Main CR1 Failed
Zn	66	1	nogas	2.205	4.7	5231	3.0	0	ICSA Main CR1 Failed
Se	77	1	nogas	12.542	39.5	4751	9.0	0	
Se	82	1	nogas	0.823	77.9	313	26.8	0	ICSA Main CR1 Failed
Sr	88	1	nogas	1.086	1.7	23773	0.6	0	ICSA Main CR1 Failed
Mo	95	1	nogas	2123.188	0.6	8681720	0.9	0	
Ag	107	1	nogas	0.292	9.5	3084	7.7	0	ICSA Main CR1 Failed
Cd	111	1	nogas	1.180	6.0	2324	6.7	0	ICSA Main CR1 Failed
Sn	118	1	nogas	0.151	20.4	2744	8.2	0	ICSA Main CR1 Failed
Sb	121	1	nogas	0.112	16.9	2434	6.8	0	ICSA Main CR1 Failed
Ba	137	1	nogas	0.435	10.3	1803	7.3	0	ICSA Main CR1 Failed
Tl	205	1	nogas	-0.014	-10.3	233	13.8	0	ICSA Main CR1 Failed
Pb	208	1	nogas	0.123	9.8	5347	6.7	0	ICSA Main CR1 Failed
Na	23	2	He	100667.571	0.8	139964901	1.0	0	
Mg	24	2	He	100662.138	1.1	86943225	0.8	0	
Al	27	2	He	96025.259	1.1	58739641	0.9	0	
K	39	2	He	101747.953	0.9	108465012	0.2	0	
Ca	43	2	He	98470.105	0.8	297263	0.7	0	
Ca	44	2	He	103699.124	1.0	5191308	0.1	0	
V	51	2	He	-0.047	-28.9	2139	3.0	0	ICSA Main CR1 Failed
Cr	52	2	He	1.947	2.7	14553	2.4	0	ICSA Main CR1 Failed
Mn	55	2	He	1.814	4.2	9960	4.0	0	ICSA Main CR1 Failed
Fe	56	2	He	99340.437	1.3	569225218	0.9	0	
Co	59	2	He	0.072	15.9	790	12.2	0	ICSA Main CR1 Failed
Ni	60	2	He	0.058	37.8	587	6.9	0	ICSA Main CR1 Failed
Cu	63	2	He	0.423	14.9	4367	7.0	0	ICSA Main CR1 Failed
Zn	66	2	He	1.375	9.5	1833	6.6	0	ICSA Main CR1 Failed
As	75	2	He	0.091	88.1	267	25.8	0	ICSA Main CR1 Failed
Sb	121	2	He	0.078	20.7	1267	6.7	0	ICSA Main CR1 Failed
Se	78	2	He	0.248	96.4	162	12.9	0	ICSA Main CR1 Failed
Ti	47	2	He	1997.669	1.0	527187	0.9	0	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1698757	1.20	1876585	90.52	70	120	
In	115	1	nogas	1927668	1.16	2238444	86.12	70	120	
Li	6	1	nogas	907159	0.37	1057328	85.80	70	120	
Bi	209	1	nogas	2050329	0.81	2377273	86.25	70	120	
Ge	72	2	He	616034	0.93	684462	90.00	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	026ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:00:13-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	102.168	0.950	382867	1.08	100	102.2	80	120	
B	11	1	nogas	517.314	2.781	1113812	2.15	100	517.3	80	120	
Al	27	1	nogas	91749.913	1.728	1086412704	1.53	100	91749.9	80	120	ICSB Main CR1 Failed
Ti	47	1	nogas	2238.120	1.669	2699562	1.41	100	2238.1	80	120	ICSB Main CR1 Failed
Ni	60	1	nogas	97.713	0.600	315668	1.19	100	97.7	80	120	
Cu	63	1	nogas	94.170	0.878	754080	1.14	100	94.2	80	120	
Zn	66	1	nogas	102.678	0.628	206925	0.85	100	102.7	80	120	
Se	77	1	nogas	125.465	4.837	15524	3.13	100	125.5	80	120	
Se	82	1	nogas	104.983	4.918	13368	4.20	100	105.0	80	120	
Sr	88	1	nogas	107.040	0.743	2238041	0.67	100	107.0	80	120	
Mo	95	1	nogas	2235.004	1.047	9132290	0.98	100	2235.0	80	120	
Ag	107	1	nogas	91.105	0.325	897981	0.32	100	91.1	80	120	
Cd	111	1	nogas	100.609	0.875	194450	0.86	100	100.6	80	120	
Sn	118	1	nogas	101.281	0.520	630154	0.48	100	101.3	80	120	
Sb	121	1	nogas	96.501	0.805	855281	1.16	100	96.5	80	120	
Ba	137	1	nogas	102.156	1.298	343946	1.20	100	102.2	80	120	
Tl	205	1	nogas	102.944	1.739	2287769	1.21	100	102.9	80	120	
Pb	208	1	nogas	99.853	2.705	3109414	1.26	100	99.9	80	120	
U	238	1	nogas	105.762	2.070	4059688	0.56	100	105.8	80	120	
Na	23	2	He	109907.678	0.460	151075351	0.39	100	109907.7	80	120	
Mg	24	2	He	110775.119	0.505	94595102	0.51	100	110775.1	80	120	
Al	27	2	He	96142.685	1.083	58143672	0.25	100	96142.7	80	120	
K	39	2	He	111787.538	0.520	117811585	0.33	100	111787.5	80	120	
Ca	43	2	He	109224.561	0.481	325990	0.44	100	109224.6	80	120	
Ca	44	2	He	115550.565	1.323	5719042	1.21	100	115550.6	80	120	
V	51	2	He	97.933	0.384	586845	0.47	100	97.9	80	120	
Cr	52	2	He	97.901	0.425	642584	0.81	100	97.9	80	120	
Mn	55	2	He	101.116	0.756	513852	1.14	100	101.1	80	120	
Fe	56	2	He	110017.518	0.683	623308524	1.46	100	110017.5	80	120	
Co	59	2	He	95.081	0.925	820953	1.78	100	95.1	80	120	
Ni	60	2	He	97.674	1.021	197316	1.69	100	97.7	80	120	
Cu	63	2	He	97.570	0.395	510443	0.86	100	97.6	80	120	
Zn	66	2	He	100.733	1.381	104140	2.00	100	100.7	80	120	
As	75	2	He	102.610	1.173	83811	0.72	100	102.6	80	120	
Sb	121	2	He	103.016	0.972	524089	0.68	100	103.0	80	120	
Se	78	2	He	107.191	1.468	9078	0.76	100	107.2	80	120	
Ti	47	2	He	2129.157	0.894	555514	0.59	100	2129.2	80	120	ICSB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1672868	0.71	1876585	89.14	70	120	
In	115	1	nogas	1926221	0.10	2238444	86.05	70	120	
Li	6	1	nogas	861639	1.39	1057328	81.49	70	120	
Bi	209	1	nogas	2021028	1.51	2377273	85.01	70	120	
Ge	72	2	He	609050	0.85	684462	88.98	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:07:59-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	95.896	0.842	436372	0.64	100	95.9	90	110	
B	11	1	nogas	473.604	1.925	1241285	2.50	500	94.7	90	110	
Al	27	1	nogas	112.511	1.988	1564910	0.89	100	112.5	90	110	CCV Main CR1-2 Failed
P	31	1	nogas	501.940	1.703	360618	1.02	500	100.4	90	110	
Ti	47	1	nogas	100.465	1.715	138912	0.62	100	100.5	90	110	
Ni	60	1	nogas	99.627	2.476	368505	1.49	100	99.6	90	110	
Cu	63	1	nogas	96.448	2.337	884261	1.46	100	96.4	90	110	
Zn	66	1	nogas	99.428	2.350	229464	1.25	100	99.4	90	110	
Se	77	1	nogas	118.387	3.492	17005	3.50	100	118.4	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	99.465	4.485	14516	3.34	100	99.5	90	110	
Sr	88	1	nogas	100.445	1.940	2435851	1.50	100	100.4	90	110	
Mo	95	1	nogas	94.906	1.438	450059	1.06	100	94.9	90	110	
Ag	107	1	nogas	93.580	1.412	1069795	0.98	100	93.6	90	110	
Cd	111	1	nogas	98.188	0.513	220108	0.40	100	98.2	90	110	
Sn	118	1	nogas	96.292	0.634	694997	0.61	100	96.3	90	110	
Sb	121	1	nogas	94.592	1.592	960054	0.94	100	94.6	90	110	
Ba	137	1	nogas	97.744	1.317	381716	1.09	100	97.7	90	110	
Tl	205	1	nogas	98.596	3.103	2590624	2.01	100	98.6	90	110	
Pb	208	1	nogas	94.086	3.748	3464250	2.49	100	94.1	90	110	
U	238	1	nogas	94.550	2.782	4291342	1.48	100	94.5	90	110	
Li	7	1	nogas	100.472	2.284	1693214	1.40	100	100.5	90	110	
Ba	135	1	nogas	97.314	1.181	215782	1.12	100	97.3	90	110	
Tl	203	1	nogas	89.457	3.073	978798	1.86	100	89.5	90	110	CCV Main CR1-2 Failed
Na	23	2	He	10128.800	0.236	15900865	1.05	10000	101.3	90	110	
Mg	24	2	He	10281.136	1.169	10007613	0.41	10000	102.8	90	110	
Al	27	2	He	109.308	1.460	77247	0.79	100	109.3	90	110	
K	39	2	He	10121.527	0.577	12242627	0.82	10000	101.2	90	110	
Ca	43	2	He	9928.288	2.351	33801	1.43	10000	99.3	90	110	
Ca	44	2	He	9963.881	1.330	563546	0.55	10000	99.6	90	110	
V	51	2	He	95.201	0.406	650242	0.81	100	95.2	90	110	
Cr	52	2	He	94.554	0.816	707369	1.03	100	94.6	90	110	
Mn	55	2	He	97.327	0.500	563698	0.44	100	97.3	90	110	
Fe	56	2	He	9870.128	2.187	63771976	1.89	10000	98.7	90	110	
Co	59	2	He	93.999	0.754	924929	1.15	100	94.0	90	110	
Ni	60	2	He	99.448	0.960	228934	0.52	100	99.4	90	110	
Cu	63	2	He	99.426	0.727	592745	0.20	100	99.4	90	110	
Zn	66	2	He	99.035	0.187	116688	0.95	100	99.0	90	110	
As	75	2	He	95.300	0.883	88732	0.95	100	95.3	90	110	
Sb	121	2	He	97.234	1.010	563823	0.81	100	97.2	90	110	
Se	78	2	He	97.904	2.257	9463	1.91	100	97.9	90	110	
Ti	47	2	He	97.653	3.520	29060	2.91	100	97.7	90	110	
Pd	105	1	nogas	39.422	20.340	3934	1.03	100	39.4	90	110	CCV Main CR1-2 Failed
Pt	195	1	nogas	-110.455	-178.685	3	173.21	100	-110.5	90	110	CCV Main CR1-2 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1915834	1.13	1876585	102.09	70	120	
In	115	1	nogas	2234172	0.44	2238444	99.81	70	120	
Li	6	1	nogas	1046240	0.81	1057328	98.95	70	120	
Bi	209	1	nogas	2389754	1.36	2377273	100.52	70	120	
Ge	72	2	He	694128	0.91	684462	101.41	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:10:00-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	-0.005	-132.1	90	34.7	1	
B	11	1	nogas	5.068	58.3	49889	13.7	10	
Al	27	1	nogas	-1.170	-2.1	24266	1.2	5	
P	31	1	nogas	-0.633	-59.6	19350	0.8	10	
Ti	47	1	nogas	0.174	33.0	407	20.9	2.5	
Ni	60	1	nogas	-0.229	-4.0	240	15.0	2.5	
Cu	63	1	nogas	-0.221	-6.5	2360	6.4	2	
Zn	66	1	nogas	0.076	36.6	1037	7.1	2.5	
Se	77	1	nogas	9.583	53.9	5194	10.7	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.704	32.1	347	10.1	2	
Sr	88	1	nogas	-0.014	-83.1	937	31.6	2.5	
Mo	95	1	nogas	0.665	13.6	3564	13.0	2.5	
Ag	107	1	nogas	0.010	15.4	363	5.7	2.5	
Cd	111	1	nogas	0.009	164.9	70	51.5	1	
Sn	118	1	nogas	0.669	22.8	7138	17.0	5	
Sb	121	1	nogas	0.891	5.9	10987	5.7	2.5	
Ba	137	1	nogas	-0.035	-86.1	267	46.9	2.5	
Tl	205	1	nogas	0.314	61.1	8960	59.0	1	
Pb	208	1	nogas	0.050	55.5	3567	30.6	2.5	
U	238	1	nogas	0.033	89.8	2227	63.6	2.5	
Na	23	2	He	2.878	27.5	41091	3.3	100	
Mg	24	2	He	-0.821	-17.4	1657	8.9	100	
Al	27	2	He	-0.863	-11.1	1330	5.3	5	
K	39	2	He	-0.056	-1439.5	94945	1.5	100	
Ca	43	2	He	-1.230	-364.0	33	45.8	100	
Ca	44	2	He	-3.663	-20.5	1487	2.5	100	
V	51	2	He	0.228	6.7	4325	2.5	2.5	
Cr	52	2	He	0.051	45.0	2277	8.0	2.5	
Mn	55	2	He	-0.011	-27.6	673	2.3	2.5	
Fe	56	2	He	2.467	17.4	68835	3.6	100	
Co	59	2	He	-0.004	-68.6	147	17.2	2.5	
Ni	60	2	He	-0.187	-9.3	100	40.0	2.5	
Cu	63	2	He	-0.216	-10.4	1143	11.9	2	
Zn	66	2	He	-0.026	-331.4	427	24.4	2.5	
As	75	2	He	0.162	13.2	370	5.0	2.5	
Sb	121	2	He	0.720	1.8	5204	1.6	2.5	
Se	78	2	He	0.257	62.3	185	8.0	2	
Ti	47	2	He	0.031	270.5	37	68.6	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1976829	0.77	1876585	105.34	70	120	

Continuing Calibration Blank (CCB) Report

In	115	1	nogas	2304969	1.41	2238444	102.97	70	120	
Li	6	1	nogas	1123855	2.70	1057328	106.29	70	120	
Bi	209	1	nogas	2395016	2.14	2377273	100.75	70	120	
Ge	72	2	He	701833	0.59	684462	102.54	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	054_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:36:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.006	204.7	123	39.4	1	
B	11	1	nogas	7.359	34.6	49547	10.9	10	
Al	27	1	nogas	0.831	111.8	50246	23.6	5	
P	31	1	nogas	1.052	52.6	19787	0.4	10	
Ti	47	1	nogas	0.275	82.8	527	58.0	2.5	
Ni	60	1	nogas	-0.206	-2.1	317	6.6	2.5	
Cu	63	1	nogas	-0.088	-43.4	3477	8.7	2	
Zn	66	1	nogas	0.255	31.3	1407	11.6	2.5	
Se	77	1	nogas	-9.181	-4.7	2957	3.1	2.5	
Se	82	1	nogas	0.937	45.0	367	15.0	2	
Sr	88	1	nogas	0.040	12.4	2294	3.9	2.5	
Mo	95	1	nogas	0.632	20.4	3437	20.0	2.5	
Ag	107	1	nogas	0.017	74.8	453	34.3	2.5	
Cd	111	1	nogas	0.002	229.0	53	21.7	1	
Sn	118	1	nogas	0.629	22.0	6905	16.6	5	
Sb	121	1	nogas	0.849	8.6	10160	6.4	2.5	
Ba	137	1	nogas	-0.034	-38.6	270	20.6	2.5	
Tl	205	1	nogas	0.283	54.4	8580	51.1	1	
Pb	208	1	nogas	0.077	33.6	4844	21.6	2.5	
U	238	1	nogas	0.042	46.9	2744	35.1	2.5	
Na	23	2	He	2.929	18.8	41308	1.9	100	
Mg	24	2	He	-0.070	-158.8	2404	3.8	100	
Al	27	2	He	0.876	200.7	2554	48.8	5	
K	39	2	He	0.252	2736.3	95602	8.1	100	
Ca	43	2	He	19.985	9.3	107	5.4	100	
Ca	44	2	He	14.840	12.0	2550	3.6	100	
V	51	2	He	-0.080	-5.1	2213	2.0	2.5	
Cr	52	2	He	-0.016	-133.7	1777	9.9	2.5	
Mn	55	2	He	-0.002	-269.1	727	3.5	2.5	
Fe	56	2	He	2.192	10.6	67285	2.9	100	
Co	59	2	He	0.000	3062.2	187	27.0	2.5	
Ni	60	2	He	-0.162	-20.8	157	49.6	2.5	
Cu	63	2	He	-0.100	-22.0	1847	7.6	2	
Zn	66	2	He	0.149	54.6	637	15.1	2.5	
As	75	2	He	0.130	6.0	341	2.8	2.5	
Sb	121	2	He	0.658	9.9	4857	7.9	2.5	
Se	78	2	He	0.105	254.1	171	14.9	2	
Ti	47	2	He	0.130	81.8	67	48.2	2.5	

Continuing Calibration Blank (CCB) Report

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1905312	1.48	1876585	101.53	70	120	
In	115	1	nogas	2325574	1.55	2238444	103.89	70	120	
Li	6	1	nogas	990354	1.68	1057328	93.67	70	120	
Bi	209	1	nogas	2534084	1.56	2377273	106.60	70	120	
Ge	72	2	He	704208	0.74	684462	102.88	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	055_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:38:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	95.254	3.430	388554	0.56	100	95.3	90	110	
B	11	1	nogas	481.749	4.492	1130982	1.17	500	96.3	90	110	
Al	27	1	nogas	103.379	1.274	1420947	1.22	100	103.4	90	110	
P	31	1	nogas	469.719	0.622	333952	0.61	500	93.9	90	110	
Ti	47	1	nogas	97.254	0.722	132597	0.74	100	97.3	90	110	
Ni	60	1	nogas	98.530	0.928	359379	0.91	100	98.5	90	110	
Cu	63	1	nogas	94.885	0.730	857845	0.71	100	94.9	90	110	
Zn	66	1	nogas	101.952	0.867	231988	0.85	100	102.0	90	110	
Se	77	1	nogas	97.359	1.668	14483	1.22	100	97.4	90	110	
Se	82	1	nogas	102.222	2.049	14706	2.02	100	102.2	90	110	
Sr	88	1	nogas	100.583	0.768	2409696	0.24	100	100.6	90	110	
Mo	95	1	nogas	97.971	1.685	458935	0.98	100	98.0	90	110	
Ag	107	1	nogas	96.669	1.120	1091691	0.45	100	96.7	90	110	
Cd	111	1	nogas	102.232	1.496	226381	0.78	100	102.2	90	110	
Sn	118	1	nogas	101.420	1.240	722993	0.55	100	101.4	90	110	
Sb	121	1	nogas	99.787	0.639	998496	0.65	100	99.8	90	110	
Ba	137	1	nogas	103.835	1.312	400550	0.69	100	103.8	90	110	
Tl	205	1	nogas	101.567	2.769	2708397	1.56	100	101.6	90	110	
Pb	208	1	nogas	97.626	2.351	3648307	0.51	100	97.6	90	110	
U	238	1	nogas	97.882	2.324	4508677	0.28	100	97.9	90	110	
Li	7	1	nogas	98.805	4.119	1493686	1.27	100	98.8	90	110	
Ba	135	1	nogas	103.562	0.325	226846	1.04	100	103.6	90	110	
Tl	203	1	nogas	94.547	3.514	1049704	1.45	100	94.5	90	110	
Na	23	2	He	9289.202	1.640	14636944	1.10	10000	92.9	90	110	
Mg	24	2	He	9393.805	0.164	9177434	0.69	10000	93.9	90	110	
Al	27	2	He	102.892	1.178	73087	0.62	100	102.9	90	110	
K	39	2	He	9475.267	0.867	11507970	0.86	10000	94.8	90	110	
Ca	43	2	He	9319.637	1.773	31851	2.30	10000	93.2	90	110	
Ca	44	2	He	9551.112	0.381	542243	0.74	10000	95.5	90	110	
V	51	2	He	92.444	0.619	633748	0.48	100	92.4	90	110	
Cr	52	2	He	91.922	1.356	690213	1.65	100	91.9	90	110	
Mn	55	2	He	95.870	0.644	557281	1.17	100	95.9	90	110	
Fe	56	2	He	9614.178	0.437	62345696	0.65	10000	96.1	90	110	
Co	59	2	He	93.048	0.665	918852	0.95	100	93.0	90	110	
Ni	60	2	He	97.494	1.002	225263	1.42	100	97.5	90	110	
Cu	63	2	He	97.529	0.489	583584	0.81	100	97.5	90	110	
Zn	66	2	He	98.517	0.810	116496	1.19	100	98.5	90	110	
As	75	2	He	94.935	1.193	88714	1.73	100	94.9	90	110	
Sb	121	2	He	101.959	0.985	593298	0.71	100	102.0	90	110	
Se	78	2	He	96.579	0.468	9371	0.21	100	96.6	90	110	
Ti	47	2	He	94.606	0.900	28258	0.78	100	94.6	90	110	
Pd	105	1	nogas	152.077	11.522	4524	2.23	100	152.1	90	110	CCV Main CR1-2 Failed
Pt	195	1	nogas	441.923	76.556	20	50.00	100	441.9	90	110	CCV Main CR1-2 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1888794	0.02	1876585	100.65	70	120	
In	115	1	nogas	2207099	0.73	2238444	98.60	70	120	
Li	6	1	nogas	938507	3.15	1057328	88.76	70	120	
Bi	209	1	nogas	2425507	2.12	2377273	102.03	70	120	
Ge	72	2	He	696607	0.54	684462	101.77	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-20
Data File Name	059SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:47:31-05:00
Sample Type	Sample
Dilution	10
Comment	TW166932
ISTD Ref FileName	013CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	0.008	0.079	38.12	137	0.01	2000	
B	11	1	nogas	-5.295	-52.953	-2.95	19537	-0.03	2000	
Al	27	1	nogas	4.647	46.469	13.84	106653	0.00	2000	
Ti	47	1	nogas	0.239	2.386	26.45	503	0.05	2000	
Ni	60	1	nogas	1.266	12.655	7.64	5991	0.02	2000	
Cu	63	1	nogas	-0.109	-1.094	-10.06	3440	0.00	2000	
Zn	66	1	nogas	225.352	2253.524	1.68	540948	0.04	2000	
Se	77	1	nogas	-3.095	-30.947	-90.57	3794	-0.08	2000	
Se	82	1	nogas	-0.006	-0.055	-6112.34	243	0.00	2000	
Sr	88	1	nogas	4.529	45.291	1.19	118117	0.00	2000	
Mo	95	1	nogas	0.043	0.433	17.06	540	0.01	2000	
Ag	107	1	nogas	-0.011	-0.106	-23.57	130	-0.01	2000	
Cd	111	1	nogas	-0.003	-0.026	-569.02	43	-0.01	2000	
Sn	118	1	nogas	-0.143	-1.431	-1.79	1133	-0.01	2000	
Sb	121	1	nogas	0.235	2.352	10.55	4164	0.01	2000	
Ba	137	1	nogas	9.621	96.213	2.14	40351	0.02	2000	
Tl	205	1	nogas	-0.019	-0.186	-7.58	157	-0.01	2000	
Pb	208	1	nogas	-0.018	-0.178	-37.84	1163	0.00	2000	
U	238	1	nogas	-0.011	-0.114	-3.72	197	-0.01	2000	
Na	23	2	He	1751.706	17517.063	0.53	2922988	0.06	200000	
Mg	24	2	He	192.894	1928.938	0.94	199960	0.10	200000	
Al	27	2	He	4.585	45.853	9.80	5331	0.09	2000	
K	39	2	He	49.401	494.008	5.84	161173	0.03	200000	
Ca	43	2	He	260.444	2604.436	17.33	970	26.85	200000	
Ca	44	2	He	221.366	2213.656	4.98	14893	1.49	200000	
V	51	2	He	-0.011	-0.113	-189.77	2788	0.00	2000	
Cr	52	2	He	0.154	1.535	14.43	3174	0.00	2000	
Mn	55	2	He	12.291	122.907	1.33	75520	0.02	2000	
Fe	56	2	He	867.755	8677.545	0.49	5946067	0.01	200000	
Co	59	2	He	0.460	4.599	4.91	4951	0.01	2000	
Ni	60	2	He	1.333	13.330	7.39	3774	0.04	2000	
Cu	63	2	He	-0.074	-0.738	-89.05	2073	0.00	2000	
Zn	66	2	He	220.855	2208.552	0.31	273046	0.08	2000	
As	75	2	He	-0.050	-0.496	-16.43	178	-0.03	2000	
Sb	121	2	He	0.229	2.289	10.78	2420	0.01	2000	
Se	78	2	He	0.030	0.296	1639.69	170	0.02	2000	
Ti	47	2	He	0.058	0.583	33.02	47	0.12	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1996697	1.49	1876585	106.40	70	120	
In	115	1	nogas	2377066	0.76	2238444	106.19	70	120	
Li	6	1	nogas	1014705	1.61	1057328	95.97	70	120	
Bi	209	1	nogas	2595138	2.65	2377273	109.16	70	120	

Sample Report

Ge	72	2	He	729892	0.58	684462	106.64	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	061_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:51:37-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	94.959	0.814	390458	1.05	100	95.0	90	110	
B	11	1	nogas	465.573	4.480	1102538	2.52	500	93.1	90	110	
Al	27	1	nogas	103.090	1.560	1426130	2.45	100	103.1	90	110	
P	31	1	nogas	471.143	1.724	336973	0.11	500	94.2	90	110	
Ti	47	1	nogas	97.820	2.044	134185	0.75	100	97.8	90	110	
Ni	60	1	nogas	97.680	1.729	358518	1.72	100	97.7	90	110	
Cu	63	1	nogas	94.609	2.040	860608	0.55	100	94.6	90	110	
Zn	66	1	nogas	100.438	2.818	229936	1.29	100	100.4	90	110	
Se	77	1	nogas	95.794	4.240	14399	1.59	100	95.8	90	110	
Se	82	1	nogas	99.815	4.406	14459	5.17	100	99.8	90	110	
Sr	88	1	nogas	99.850	0.204	2434585	0.20	100	99.8	90	110	
Mo	95	1	nogas	94.563	0.616	450861	0.70	100	94.6	90	110	
Ag	107	1	nogas	94.400	0.771	1085011	0.93	100	94.4	90	110	
Cd	111	1	nogas	100.040	0.498	225466	0.47	100	100.0	90	110	
Sn	118	1	nogas	99.335	1.193	720757	1.31	100	99.3	90	110	
Sb	121	1	nogas	98.834	2.236	995018	0.74	100	98.8	90	110	
Ba	137	1	nogas	100.563	0.294	394834	0.43	100	100.6	90	110	
Tl	205	1	nogas	100.797	4.874	2690825	0.87	100	100.8	90	110	
Pb	208	1	nogas	96.277	3.396	3603363	0.72	100	96.3	90	110	
U	238	1	nogas	96.278	3.675	4441632	1.74	100	96.3	90	110	
Li	7	1	nogas	96.709	0.858	1475202	1.14	100	96.7	90	110	
Ba	135	1	nogas	101.856	1.479	227063	1.59	100	101.9	90	110	
Tl	203	1	nogas	93.195	4.557	1036111	0.54	100	93.2	90	110	
Na	23	2	He	9272.294	1.467	14810806	1.84	10000	92.7	90	110	
Mg	24	2	He	9312.822	0.314	9222166	0.20	10000	93.1	90	110	
Al	27	2	He	100.802	2.776	72615	2.33	100	100.8	90	110	
K	39	2	He	9473.494	0.213	11662654	0.34	10000	94.7	90	110	
Ca	43	2	He	9610.089	2.852	33290	3.21	10000	96.1	90	110	
Ca	44	2	He	9599.370	0.483	552404	0.90	10000	96.0	90	110	
V	51	2	He	91.956	0.577	639004	0.16	100	92.0	90	110	
Cr	52	2	He	91.288	0.327	694779	0.22	100	91.3	90	110	
Mn	55	2	He	95.389	0.856	562047	1.27	100	95.4	90	110	
Fe	56	2	He	9509.457	0.754	62506392	0.50	10000	95.1	90	110	
Co	59	2	He	91.977	0.673	920632	0.26	100	92.0	90	110	
Ni	60	2	He	96.674	0.441	226408	0.28	100	96.7	90	110	
Cu	63	2	He	95.786	0.390	581008	0.65	100	95.8	90	110	
Zn	66	2	He	98.309	1.433	117838	1.79	100	98.3	90	110	
As	75	2	He	95.429	0.132	90385	0.29	100	95.4	90	110	
Sb	121	2	He	101.364	0.364	597884	0.15	100	101.4	90	110	
Se	78	2	He	96.726	0.537	9513	0.95	100	96.7	90	110	
Ti	47	2	He	95.411	2.579	28886	2.28	100	95.4	90	110	
Pd	105	1	nogas	160.866	42.854	4601	7.78	100	160.9	90	110	CCV Main CR1-2 Failed
Pt	195	1	nogas	-5.748	-3299.926	7	86.60	100	-5.7	90	110	CCV Main CR1-2 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1900763	1.54	1876585	101.29	70	120	
In	115	1	nogas	2246175	0.16	2238444	100.35	70	120	
Li	6	1	nogas	945446	1.82	1057328	89.42	70	120	
Bi	209	1	nogas	2430689	4.18	2377273	102.25	70	120	
Ge	72	2	He	706097	0.42	684462	103.16	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	062_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:53:35-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	013CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.010	66.8	143	19.2	1	
B	11	1	nogas	8.015	30.4	51492	11.4	10	
Al	27	1	nogas	-1.084	-20.1	25195	10.5	5	
P	31	1	nogas	0.076	1334.9	19647	1.9	10	
Ti	47	1	nogas	0.680	134.9	1109	115.5	2.5	
Ni	60	1	nogas	-0.199	-12.1	350	24.4	2.5	
Cu	63	1	nogas	-0.171	-24.9	2797	12.7	2	
Zn	66	1	nogas	0.192	20.1	1300	8.5	2.5	
Se	77	1	nogas	-8.981	-14.9	3060	5.4	2.5	
Se	82	1	nogas	0.686	45.5	340	11.8	2	
Sr	88	1	nogas	-0.003	-338.5	1217	17.3	2.5	
Mo	95	1	nogas	0.664	16.7	3577	15.0	2.5	
Ag	107	1	nogas	0.020	56.4	483	26.6	2.5	
Cd	111	1	nogas	0.022	69.7	100	36.1	1	
Sn	118	1	nogas	0.661	21.2	7108	14.6	5	
Sb	121	1	nogas	0.700	17.8	8886	12.8	2.5	
Ba	137	1	nogas	-0.021	-120.1	323	31.1	2.5	
Tl	205	1	nogas	0.284	49.3	8643	48.9	1	
Pb	208	1	nogas	0.069	43.8	4534	29.8	2.5	
U	238	1	nogas	0.043	43.7	2840	35.9	2.5	
Na	23	2	He	1.383	27.5	39858	1.4	100	
Mg	24	2	He	-0.503	-21.3	2027	4.9	100	
Al	27	2	He	-1.001	-5.1	1270	3.4	5	
K	39	2	He	-1.748	-67.7	95612	1.1	100	
Ca	43	2	He	3.168	556.9	50	124.9	100	
Ca	44	2	He	-5.779	-32.9	1407	8.5	100	
V	51	2	He	-0.100	-8.2	2129	3.1	2.5	
Cr	52	2	He	-0.035	-100.5	1680	15.6	2.5	
Mn	55	2	He	-0.024	-8.7	613	1.9	2.5	
Fe	56	2	He	1.547	20.6	64690	3.4	100	
Co	59	2	He	-0.002	-67.9	167	9.2	2.5	
Ni	60	2	He	-0.199	-6.0	73	39.4	2.5	
Cu	63	2	He	-0.155	-7.1	1553	3.8	2	
Zn	66	2	He	0.130	65.6	630	16.5	2.5	
As	75	2	He	0.059	36.5	281	6.8	2.5	
Sb	121	2	He	0.515	10.6	4121	8.4	2.5	
Se	78	2	He	0.362	77.9	201	14.5	2	
Ti	47	2	He	0.987	175.0	334	160.2	2.5	

Continuing Calibration Blank (CCB) Report

QC ISTD Table

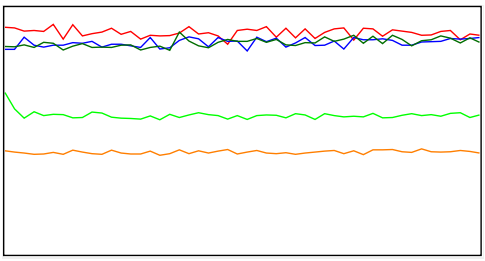
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1957579	1.93	1876585	104.32	70	120	
In	115	1	nogas	2318091	0.68	2238444	103.56	70	120	
Li	6	1	nogas	996297	1.17	1057328	94.23	70	120	
Bi	209	1	nogas	2525949	3.38	2377273	106.25	70	120	
Ge	72	2	He	722449	0.62	684462	105.55	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq. Date-Time	6/21/2021 10:15:22 AM
Report Comment	---
Instrument Name	G3281A JP11080910

[nogas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	5000	4496	44959.11		
24	20000	11274	112740.34		
59	20000	17165	171652.27		
115	50000	20685	206849.55		
208	20000	17158	171576.90		

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

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	1.955	5.000	
24	2.881	5.000	
59	1.890	5.000	
115	1.591	5.000	
208	2.001	5.000	

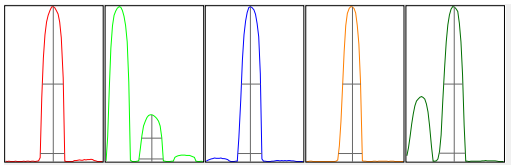
Mass	Background	Background (Required)	Background (Flag)
9	1.200		
24	0.100		
59	0.200		
115	1.900		
208	3.400		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.533 %
Doubly Charged	70 / 140 0.675 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4393.88	9.00	8.90 - 9.10	
24	11215.24	23.95	23.90 - 24.10	
59	17488.71	58.90	58.90 - 59.10	
115	20900.82	114.95	114.90 - 115.10	
208	17183.12	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.742		
24	0.61	0.739		
59	0.59	0.731		
115	0.55	0.723		
208	0.58	0.800		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.45 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	---
RF Matching	1.70 V	Nebulizer Pump	0.10 rps	Plasma Gas	---
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.0 V	Deflect	12.0 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9992	QP Bias	-3.0 V
Mass Offset	127	Axis Offset	0.03		

Hardware Settings

Torch

Torch H	-0.1 mm	Torch V	-0.1 mm

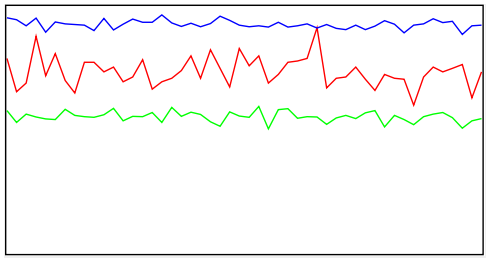
EM

Discriminator	4.5 mV	Analog HV	1621 V	Pulse HV	1314 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

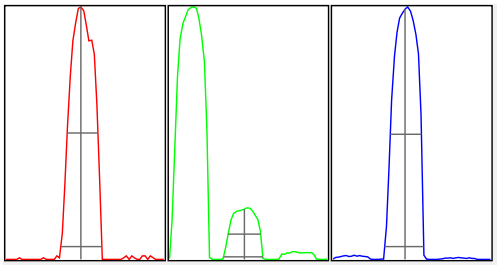
Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	200	147	1472.26		
24	2000	1107	11066.38		
59	10000	9281	92812.20		

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

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	8.206	5.000	Fail
24	3.897	5.000	
59	1.833	5.000	

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

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	156.26	8.95	8.90 - 9.10	
24	1096.35	23.95	23.90 - 24.10	
59	9261.02	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.57	0.769		
24	0.61	0.736		
59	0.58	0.728		

Tune Parameters

Plasma Parameters

Tune Check Report

Plasma Mode	---	Nebulizer Gas	0.45 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	---
RF Matching	1.70 V	Nebulizer Pump	0.10 rps	Plasma Gas	---
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.0 V	Deflect	2.0 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9992	QP Bias	-13.0 V
Mass Offset	127	Axis Offset	0.03		

Hardware Settings

Torch

Torch H	-0.1 mm	Torch V	-0.1 mm

EM

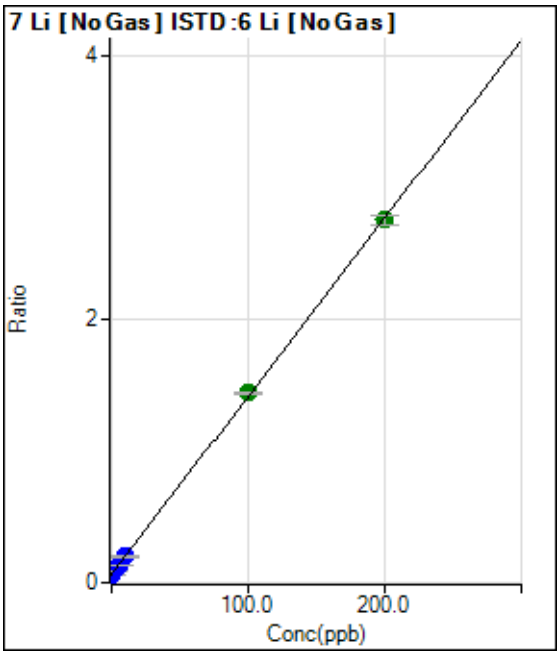
Discriminator	4.5 mV	Analog HV	1621 V	Pulse HV	1314 V

Calibration for 018_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\061721A.b\
Analysis File: 061721A.batch.bin
DA Date-Time: 6/17/2021 8:32:46 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	011CALB.d	CAL BLK	6/17/2021 10:18:53 AM
2	012CALS.d	2/10/200	6/17/2021 10:20:52 AM
3	013CALS.d	5/25/500	6/17/2021 10:22:50 AM
4	014CALS.d	10/50/100	6/17/2021 10:24:49 AM
5	015CALS.d	100/500/10K	6/17/2021 10:26:48 AM
6	016CALS.d	200/1000/20K	6/17/2021 10:28:41 AM

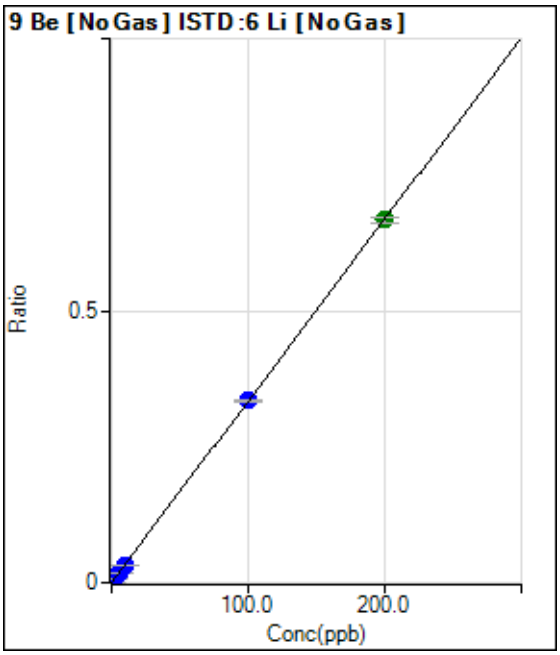
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77218.42	0.0634	P	1.4
2	☐	2.000	2.013	110927.62	0.0906	P	0.7
3	☐	5.000	5.049	160284.26	0.1316	P	1.3
4	☐	10.000	9.957	240749.31	0.1979	P	0.9
5	☐	100.000	101.740	1686594.50	1.4376	A	1.9
6	☐	200.000	199.131	3131012.87	2.7530	A	2.6

y = 0.0135 * x + 0.0634
R = 0.9999
DL = 0.2041
BEC = 4.692

Weight: <None>
Min Conc: <None>

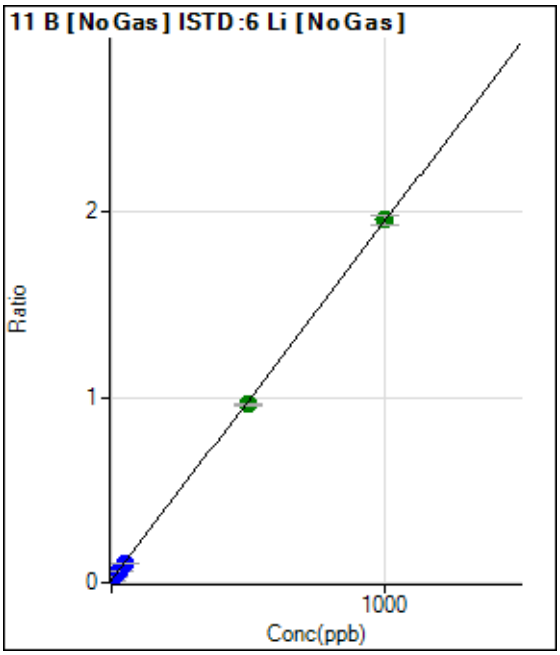


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.00	0.0000	P	13.2
2	☐	2.000	1.945	7985.65	0.0065	P	1.4
3	☐	5.000	4.830	19673.80	0.0162	P	0.9
4	☐	10.000	9.727	39537.18	0.0325	P	1.4
5	☐	100.000	100.446	393339.82	0.3353	P	1.3
6	☐	200.000	199.795	758562.07	0.6669	A	1.9

y = 0.0033 * x + 2.8693E-005
R = 1.0000
DL = 0.003404
BEC = 0.008597

Weight: <None>
Min Conc: <None>

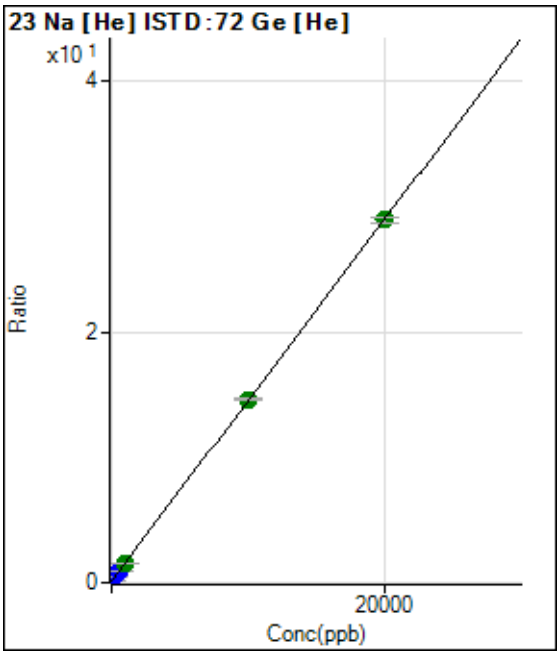
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17963.21	0.0147	P	0.6
2	☐	10.000	9.232	39921.59	0.0326	P	0.8
3	☐	25.000	24.183	74923.42	0.0615	P	1.7
4	☐	50.000	48.113	131149.79	0.1078	P	0.5
5	☐	500.000	490.353	1129751.49	0.9630	A	1.2
6	☐	1000.000	1004.946	2226802.72	1.9581	A	2.7

y = 0.0019 * x + 0.0147
R = 0.9999
DL = 0.1428
BEC = 7.623

Weight: <None>
Min Conc: <None>

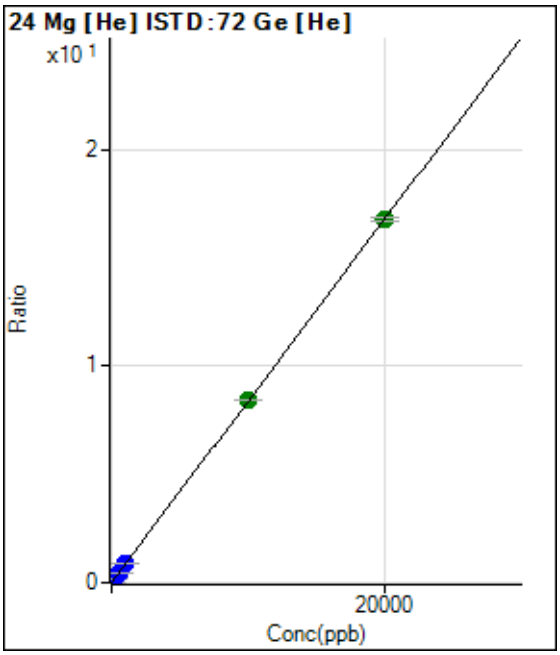


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88506.03	0.1205	P	1.5
2	☐	200.000	205.177	306299.20	0.4167	P	0.3
3	☐	500.000	511.041	623008.06	0.8582	P	1.4
4	☐	1000.000	1018.879	1152435.69	1.5912	A	1.5
5	☐	10000.000	10035.768	10459766.51	14.6066	A	1.3
6	☐	20000.000	19980.844	20163208.45	28.9617	A	1.5

y = 0.0014 * x + 0.1205
R = 1.0000
DL = 3.65
BEC = 83.51

Weight: <None>
Min Conc: <None>

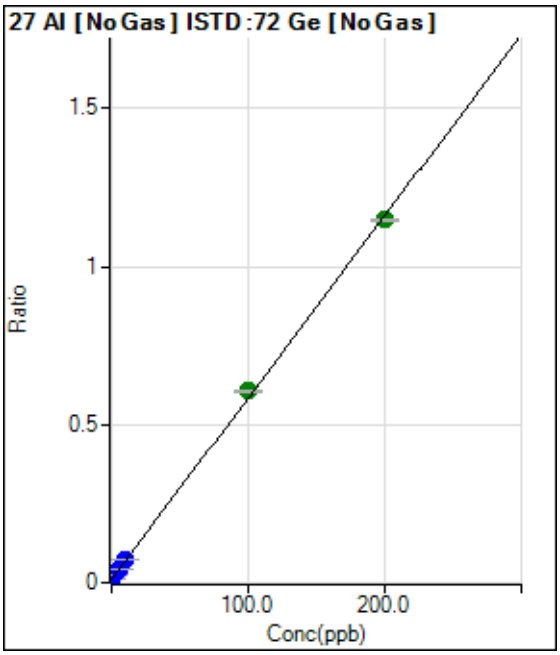
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	330.01	0.0004	P	8.6
2	☐	200.000	208.246	128814.36	0.1752	P	0.7
3	☐	500.000	524.202	319746.26	0.4404	P	1.0
4	☐	1000.000	1027.269	624818.96	0.8627	P	0.5
5	☐	10000.000	10044.013	6038535.54	8.4311	A	0.7
6	☐	20000.000	19975.943	11673596.91	16.7676	A	1.2

y = 8.3937E-004 * x + 4.4934E-004
R = 1.0000
DL = 0.1378
BEC = 0.5353

Weight: <None>
Min Conc: <None>

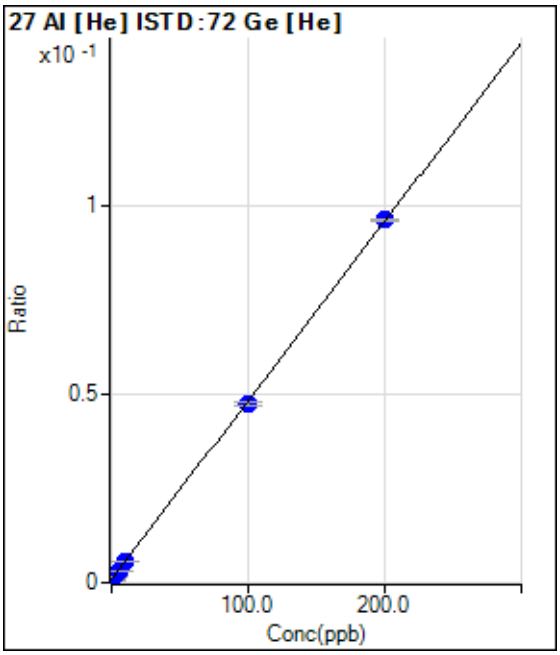


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25750.82	0.0099	P	1.3
2	☐	2.000	2.275	58995.03	0.0230	P	1.5
3	☐	5.000	5.559	106152.67	0.0419	P	0.4
4	☐	10.000	10.697	184343.04	0.0714	P	2.0
5	☐	100.000	103.972	1527107.27	0.6077	A	1.1
6	☐	200.000	197.962	2864299.33	1.1481	A	0.8

y = 0.0057 * x + 0.0099
R = 0.9997
DL = 0.06758
BEC = 1.724

Weight: <None>
Min Conc: <None>

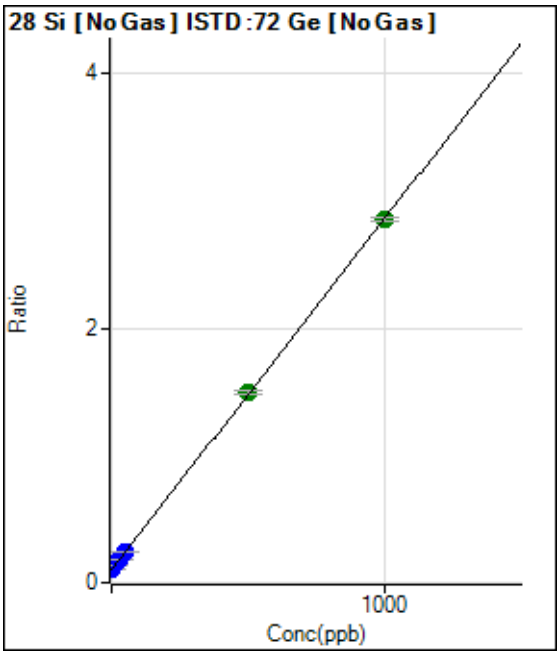
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	626.69	0.0009	P	27.8
2	☐	2.000	1.910	1293.42	0.0018	P	12.7
3	☐	5.000	4.792	2270.23	0.0031	P	10.4
4	☐	10.000	10.238	4130.69	0.0057	P	1.8
5	☐	100.000	97.957	33834.85	0.0473	P	2.1
6	☐	200.000	201.016	66880.37	0.0961	P	0.9

y = 4.7365E-004 * x + 8.5454E-004
R = 0.9999
DL = 1.504
BEC = 1.804

Weight: <None>
Min Conc: <None>

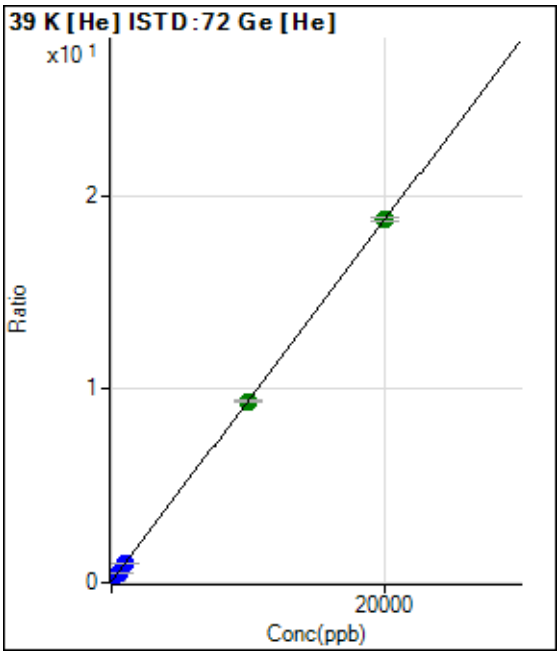


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	260430.00	0.1002	P	1.8
2	☐	10.000	10.764	333369.47	0.1299	P	0.9
3	☐	25.000	27.268	444675.47	0.1754	P	0.5
4	☐	50.000	50.737	619802.32	0.2401	P	1.5
5	☐	500.000	506.253	3758447.34	1.4957	A	1.9
6	☐	1000.000	996.772	7104725.52	2.8478	A	0.9

y = 0.0028 * x + 0.1002
R = 1.0000
DL = 1.917
BEC = 36.37

Weight: <None>
Min Conc: <None>

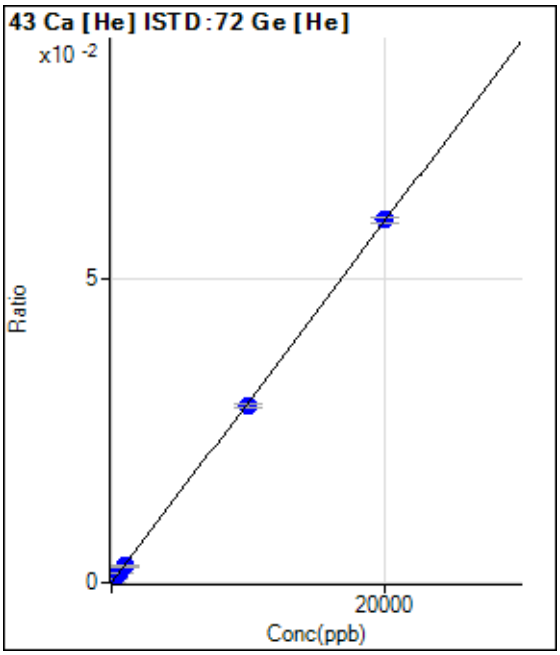
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55381.07	0.0754	P	1.1
2	☐	200.000	199.374	192233.34	0.2615	P	0.3
3	☐	500.000	501.511	394605.33	0.5435	P	0.9
4	☐	1000.000	983.870	719762.72	0.9938	P	0.6
5	☐	10000.000	9965.619	6715452.19	9.3773	A	0.8
6	☐	20000.000	20017.966	13060713.97	18.7602	A	1.2

y = 9.3340E-004 * x + 0.0754
R = 1.0000
DL = 2.723
BEC = 80.81

Weight: <None>
Min Conc: <None>

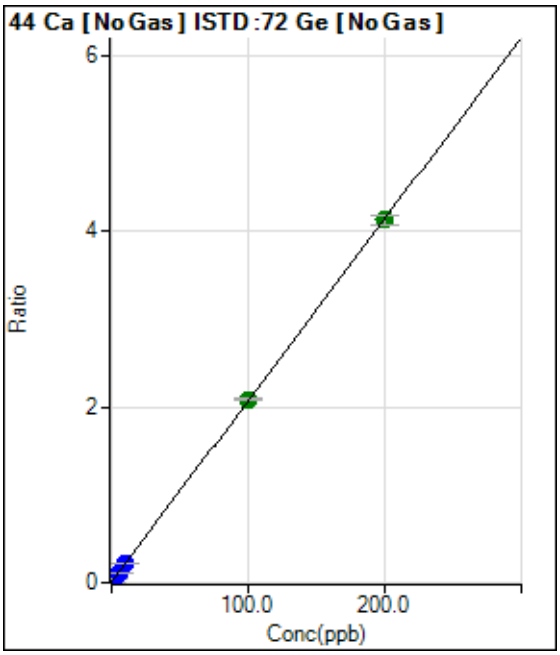


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	114.9
2	☐	200.000	178.786	403.35	0.0005	P	13.3
3	☐	500.000	495.151	1080.06	0.0015	P	7.1
4	☐	1000.000	939.954	2033.52	0.0028	P	9.1
5	☐	10000.000	9807.542	20846.07	0.0291	P	2.8
6	☐	20000.000	20099.565	41526.16	0.0596	P	1.5

y = 2.9667E-006 * x + 1.8168E-005
R = 0.9999
DL = 21.12
BEC = 6.124

Weight: <None>
Min Conc: <None>

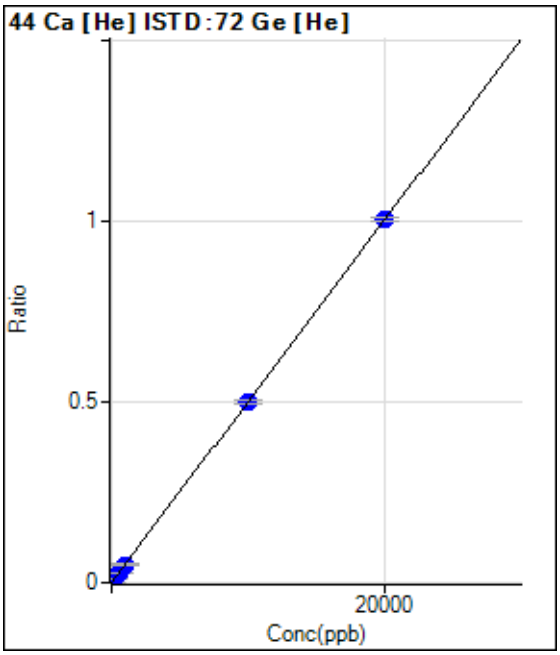
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17648.28	0.0068	P	5.0
2	☐	2.000	2.104	128858.61	0.0502	P	1.1
3	☐	5.000	5.199	289274.58	0.1141	P	1.0
4	☐	10.000	9.981	549394.95	0.2128	P	1.3
5	☐	100.000	100.721	5241783.78	2.0860	A	1.6
6	☐	200.000	199.634	10297602.14	4.1279	A	2.4

y = 0.0206 * x + 0.0068
R = 1.0000
DL = 0.04953
BEC = 0.3289

Weight: <None>
Min Conc: <None>

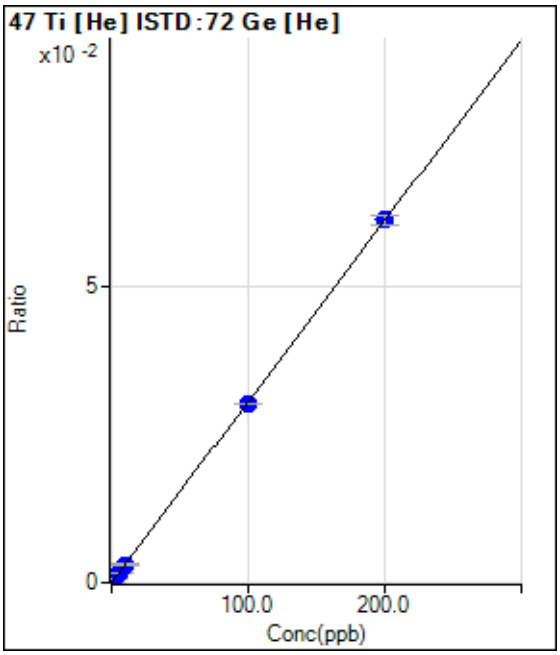


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	306.68	0.0004	P	10.4
2	☐	200.000	207.311	7935.76	0.0108	P	5.1
3	☐	500.000	487.303	18018.75	0.0248	P	1.2
4	☐	1000.000	992.466	36288.08	0.0501	P	3.5
5	☐	10000.000	9957.021	357293.18	0.4989	P	1.6
6	☐	20000.000	20022.111	698212.64	1.0029	P	1.1

y = 5.0068E-005 * x + 4.1765E-004
R = 1.0000
DL = 2.594
BEC = 8.342

Weight: <None>
Min Conc: <None>

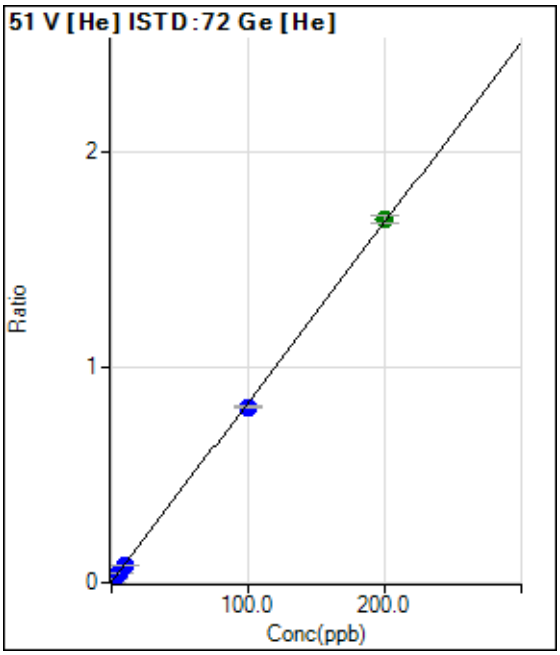
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	2.160	490.02	0.0007	P	3.7
3	☐	5.000	5.353	1190.07	0.0016	P	2.5
4	☐	10.000	9.722	2150.22	0.0030	P	8.6
5	☐	100.000	98.790	21547.22	0.0301	P	0.6
6	☐	200.000	200.608	42529.55	0.0611	P	2.5

y = 3.0447E-004 * x + 9.0610E-006
R = 1.0000
DL = 0.07732
BEC = 0.02976

Weight: <None>
Min Conc: <None>

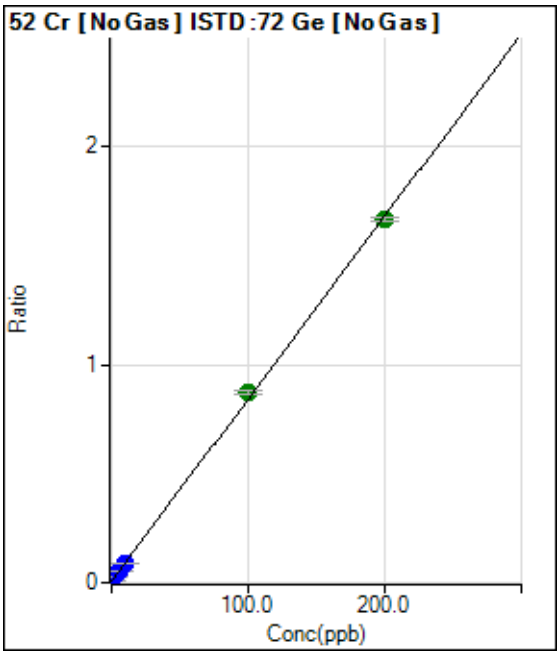


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2579.15	0.0035	P	2.4
2	☐	2.000	1.947	14536.64	0.0198	P	0.7
3	☐	5.000	4.862	32042.89	0.0441	P	0.3
4	☐	10.000	9.516	60122.35	0.0830	P	1.4
5	☐	100.000	97.279	584519.51	0.8162	P	1.0
6	☐	200.000	201.389	1173811.83	1.6860	A	2.2

y = 0.0084 * x + 0.0035
R = 0.9999
DL = 0.03019
BEC = 0.4205

Weight: <None>
Min Conc: <None>

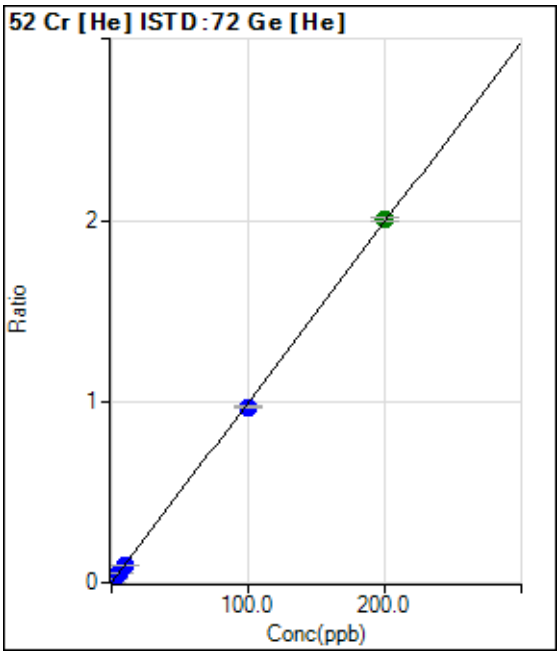
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16186.48	0.0062	P	0.9
2	☐	2.000	2.074	60557.15	0.0236	P	0.5
3	☐	5.000	5.156	125275.77	0.0494	P	1.2
4	☐	10.000	9.961	231466.22	0.0897	P	1.3
5	☐	100.000	103.718	2198696.95	0.8750	A	1.9
6	☐	200.000	198.138	4156013.27	1.6659	A	1.2

y = 0.0084 * x + 0.0062
R = 0.9998
DL = 0.02108
BEC = 0.7437

Weight: <None>
Min Conc: <None>

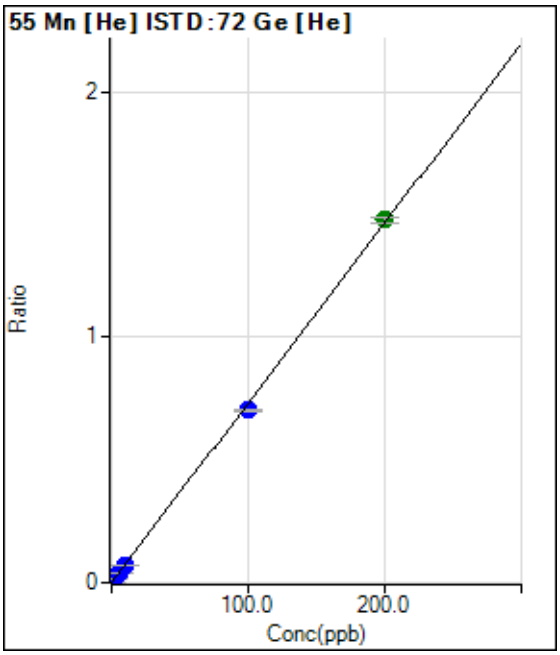


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1170.07	0.0016	P	13.8
2	☐	2.000	1.959	15482.34	0.0211	P	2.5
3	☐	5.000	4.990	37160.81	0.0512	P	0.7
4	☐	10.000	9.707	71017.24	0.0981	P	2.2
5	☐	100.000	97.341	693932.46	0.9690	P	0.8
6	☐	200.000	201.345	1394214.35	2.0026	A	0.9

y = 0.0099 * x + 0.0016
R = 0.9999
DL = 0.06645
BEC = 0.1604

Weight: <None>
Min Conc: <None>

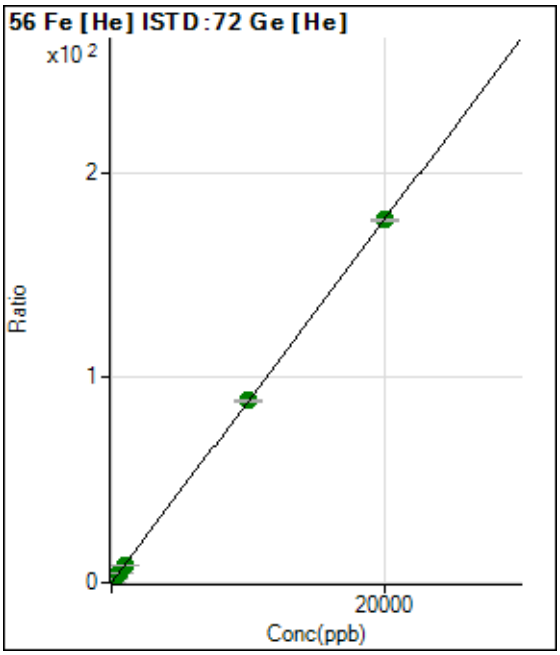
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	370.01	0.0005	P	18.4
2	☐	2.000	2.032	11291.54	0.0154	P	4.0
3	☐	5.000	4.892	26339.06	0.0363	P	2.1
4	☐	10.000	9.543	50908.43	0.0703	P	1.3
5	☐	100.000	96.168	504027.83	0.7038	P	0.9
6	☐	200.000	201.941	1028499.98	1.4773	A	1.5

y = 0.0073 * x + 5.0374E-004
R = 0.9997
DL = 0.03806
BEC = 0.06888

Weight: <None>
Min Conc: <None>

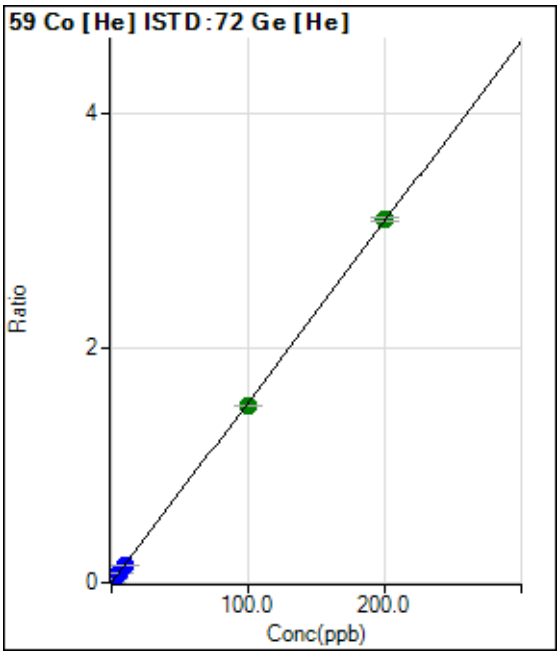


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14537.95	0.0198	P	1.7
2	☐	200.000	206.680	1357960.24	1.8474	A	1.0
3	☐	500.000	514.127	3314934.74	4.5661	A	0.8
4	☐	1000.000	991.668	6365212.20	8.7888	A	0.8
5	☐	10000.000	10017.547	63447989.06	88.6019	A	1.3
6	☐	20000.000	19991.223	123084814.83	176.7961	A	0.5

y = 0.0088 * x + 0.0198
R = 1.0000
DL = 0.111
BEC = 2.239

Weight: <None>
Min Conc: <None>

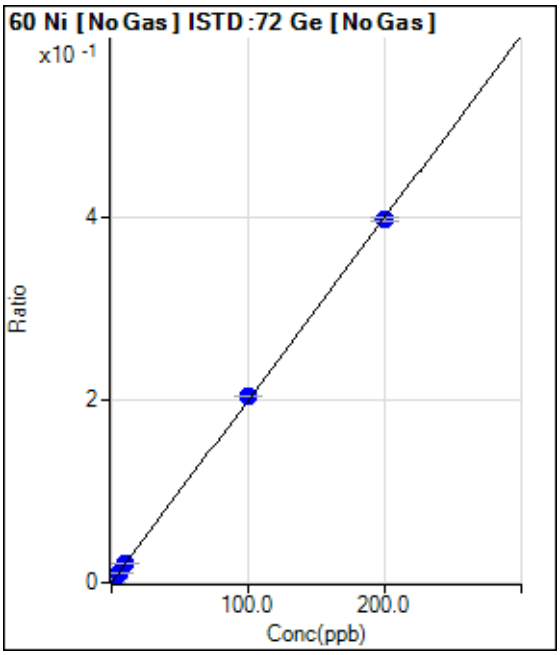
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43.33	0.0001	P	113.3
2	☐	2.000	1.848	20956.36	0.0285	P	0.7
3	☐	5.000	4.799	53699.14	0.0740	P	0.4
4	☐	10.000	9.373	104579.09	0.1444	P	1.1
5	☐	100.000	98.284	1083954.80	1.5135	A	0.2
6	☐	200.000	200.896	2153791.01	3.0936	A	1.0

y = 0.0154 * x + 5.8748E-005
R = 0.9999
DL = 0.01297
BEC = 0.003815

Weight: <None>
Min Conc: <None>

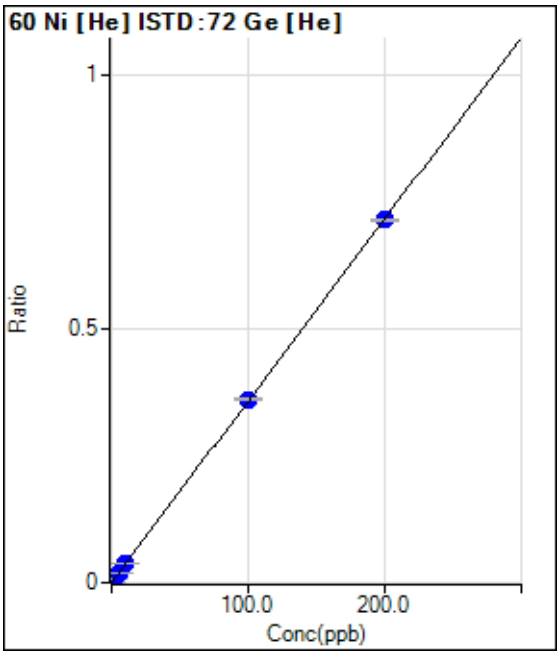


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	536.69	0.0002	P	24.6
2	☐	2.000	2.213	11895.39	0.0046	P	1.1
3	☐	5.000	5.318	27504.73	0.0108	P	2.0
4	☐	10.000	10.267	53588.85	0.0208	P	1.0
5	☐	100.000	102.289	514985.94	0.2049	P	0.5
6	☐	200.000	198.832	993287.41	0.3981	P	1.0

y = 0.0020 * x + 2.0640E-004
R = 0.9999
DL = 0.07596
BEC = 0.1031

Weight: <None>
Min Conc: <None>

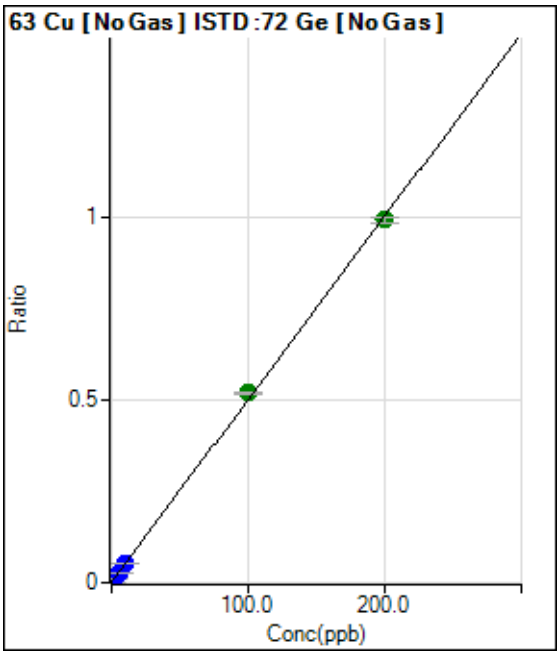
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	160.00	0.0002	P	12.6
2	☐	2.000	2.078	5621.28	0.0076	P	8.8
3	☐	5.000	5.154	13533.64	0.0186	P	3.0
4	☐	10.000	10.157	26456.01	0.0365	P	1.8
5	☐	100.000	100.695	257917.48	0.3602	P	1.3
6	☐	200.000	199.640	496984.08	0.7139	P	0.5

y = 0.0036 * x + 2.1794E-004
R = 1.0000
DL = 0.02309
BEC = 0.06097

Weight: <None>
Min Conc: <None>

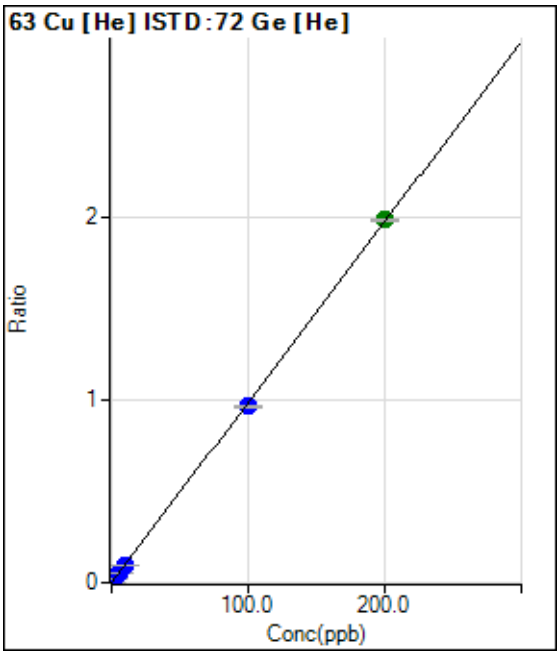


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2950.38	0.0011	P	13.0
2	☐	2.000	2.032	29021.30	0.0113	P	2.3
3	☐	5.000	5.226	69205.91	0.0273	P	1.9
4	☐	10.000	10.058	132901.61	0.0515	P	2.2
5	☐	100.000	103.660	1307021.46	0.5201	A	0.9
6	☐	200.000	198.161	2477657.88	0.9931	A	1.4

y = 0.0050 * x + 0.0011
R = 0.9998
DL = 0.0886
BEC = 0.2271

Weight: <None>
Min Conc: <None>

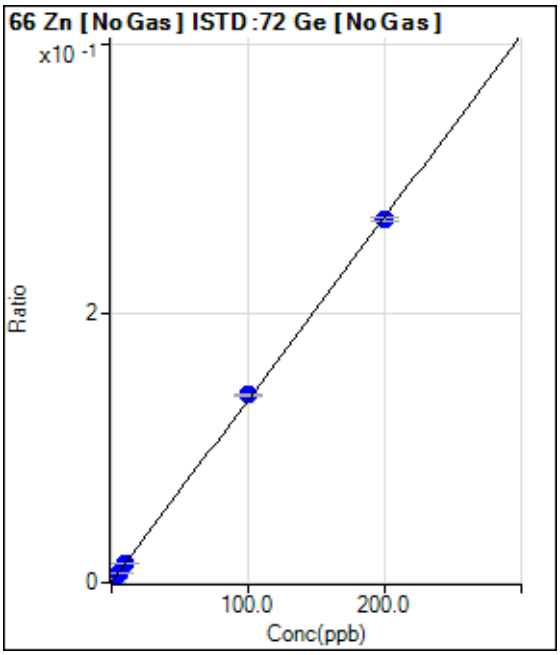
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1196.75	0.0016	P	8.8
2	☐	2.000	2.020	15846.11	0.0216	P	1.1
3	☐	5.000	5.060	37428.62	0.0516	P	1.3
4	☐	10.000	9.842	71514.86	0.0987	P	1.7
5	☐	100.000	97.665	691214.13	0.9653	P	1.7
6	☐	200.000	201.174	1383064.20	1.9866	A	0.7

y = 0.0099 * x + 0.0016
R = 0.9999
DL = 0.0436
BEC = 0.1651

Weight: <None>
Min Conc: <None>

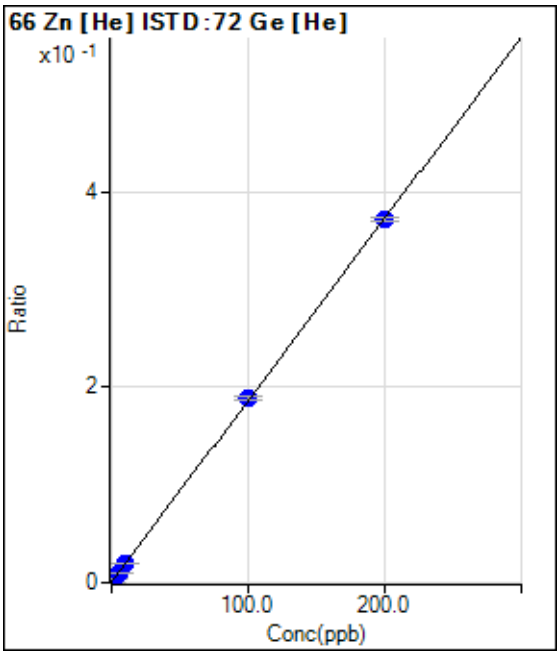


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	990.06	0.0004	P	8.5
2	☐	2.000	2.287	8923.08	0.0035	P	5.3
3	☐	5.000	5.374	19404.16	0.0077	P	3.2
4	☐	10.000	10.117	36318.84	0.0141	P	4.1
5	☐	100.000	102.782	350477.51	0.1395	P	1.3
6	☐	200.000	198.591	671417.52	0.2691	P	1.0

y = 0.0014 * x + 3.8130E-004
R = 0.9999
DL = 0.0718
BEC = 0.2818

Weight: <None>
Min Conc: <None>

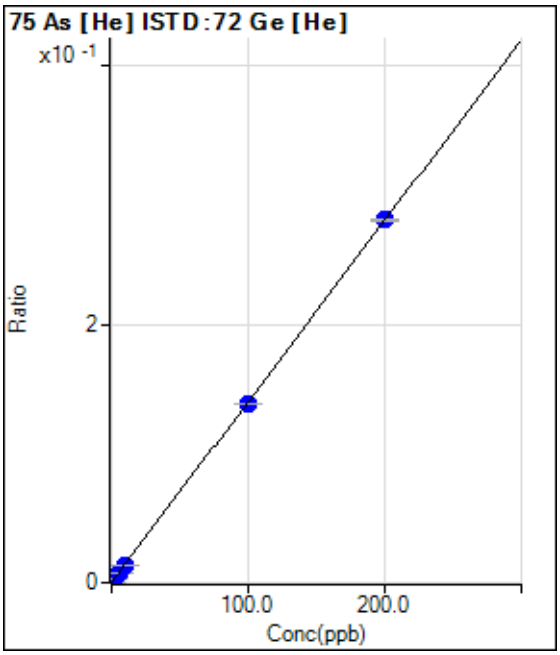
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	363.35	0.0005	P	21.2
2	☐	2.000	2.238	3423.83	0.0047	P	4.5
3	☐	5.000	5.122	7275.43	0.0100	P	3.8
4	☐	10.000	10.047	13894.00	0.0192	P	2.2
5	☐	100.000	101.192	135138.11	0.1887	P	1.9
6	☐	200.000	199.396	258564.18	0.3714	P	1.1

y = 0.0019 * x + 4.9509E-004
R = 1.0000
DL = 0.1692
BEC = 0.2662

Weight: <None>
Min Conc: <None>

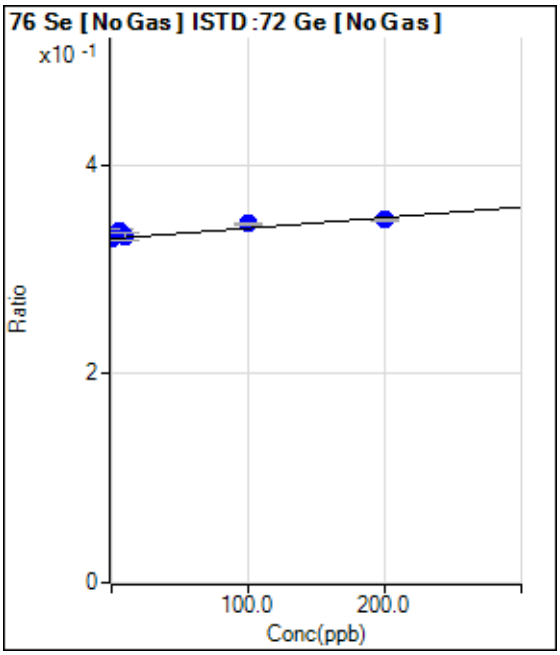


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	164.45	0.0002	P	7.6
2	☐	2.000	1.945	2165.74	0.0029	P	1.2
3	☐	5.000	4.992	5236.60	0.0072	P	2.0
4	☐	10.000	9.778	10077.13	0.0139	P	0.8
5	☐	100.000	98.978	99401.92	0.1388	P	0.3
6	☐	200.000	200.523	195605.13	0.2810	P	0.8

y = 0.0014 * x + 2.2404E-004
R = 1.0000
DL = 0.03643
BEC = 0.16

Weight: <None>
Min Conc: <None>

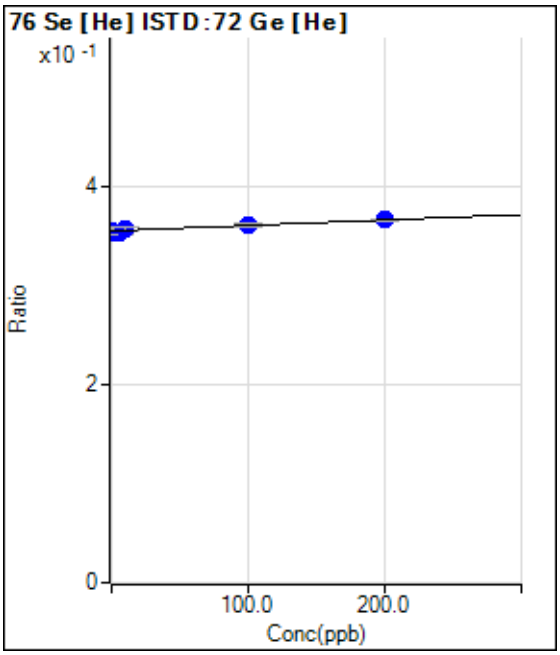
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	854771.39	0.3290	P	1.2
2	☐	2.000	40.624	854793.35	0.3331	P	0.7
3	☐	5.000	74.083	853057.64	0.3365	P	0.9
4	☐	10.000	20.961	854654.21	0.3311	P	2.7
5	☐	100.000	139.789	862360.56	0.3432	P	1.0
6	☐	200.000	177.444	865666.68	0.3470	P	0.8

y = 1.0137E-004 * x + 0.3290
R = 0.9177
DL = 115
BEC = 3245

Weight: <None>
Min Conc: <None>

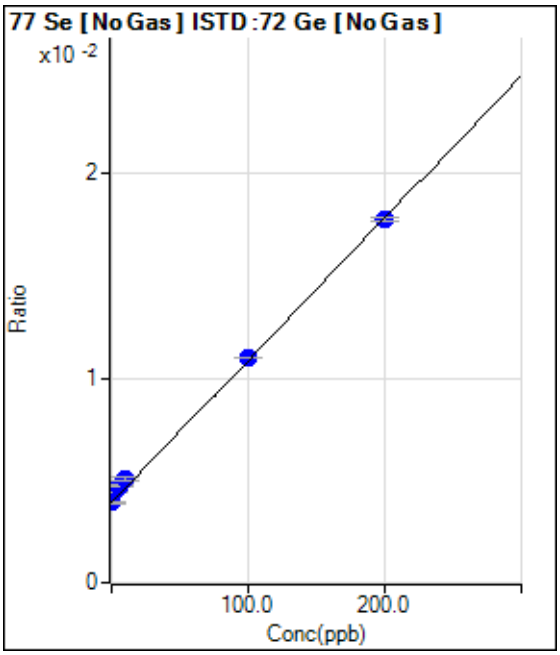


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	260425.50	0.3547	P	1.1
2	☐	2.000	-19.654	259930.28	0.3536	P	0.5
3	☐	5.000	-30.419	256282.11	0.3530	P	1.7
4	☐	10.000	37.221	258388.02	0.3568	P	1.1
5	☐	100.000	100.262	257991.25	0.3603	P	1.0
6	☐	200.000	199.610	254636.44	0.3658	P	0.5

y = 5.5319E-005 * x + 0.3547
R = 0.9708
DL = 215.7
BEC = 6412

Weight: <None>
Min Conc: <None>

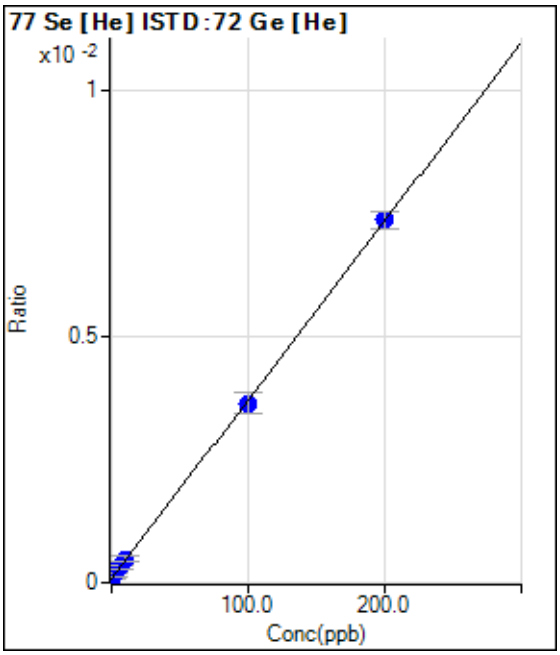
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10187.33	0.0039	P	1.7
2	☐	2.000	7.739	11441.67	0.0045	P	2.7
3	☐	5.000	11.691	11998.87	0.0047	P	2.8
4	☐	10.000	16.281	13043.16	0.0051	P	3.3
5	☐	100.000	101.766	27638.61	0.0110	P	0.7
6	☐	200.000	198.578	44236.04	0.0177	P	1.2

y = 6.9547E-005 * x + 0.0039
R = 0.9995
DL = 2.839
BEC = 56.37

Weight: <None>
Min Conc: <None>

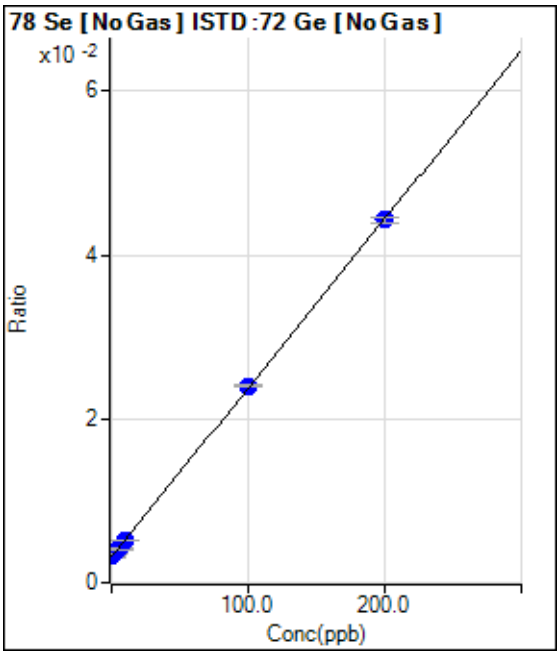


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0001	P	44.1
2	☐	2.000	2.242	120.00	0.0002	P	38.1
3	☐	5.000	6.605	233.34	0.0003	P	25.7
4	☐	10.000	11.186	353.35	0.0005	P	22.2
5	☐	100.000	98.246	2613.63	0.0037	P	11.5
6	☐	200.000	200.775	5137.73	0.0074	P	4.8

y = 3.6350E-005 * x + 8.1687E-005
R = 0.9999
DL = 2.972
BEC = 2.247

Weight: <None>
Min Conc: <None>

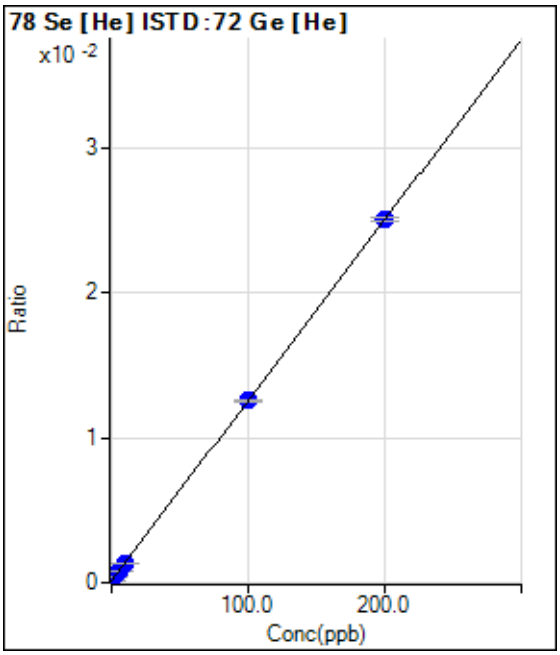
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8229.31	0.0032	P	2.5
2	☐	2.000	1.686	9019.85	0.0035	P	3.4
3	☐	5.000	4.972	10627.70	0.0042	P	4.3
4	☐	10.000	9.490	13223.41	0.0051	P	2.6
5	☐	100.000	101.017	60254.77	0.0240	P	1.0
6	☐	200.000	199.521	110440.17	0.0443	P	1.6

y = 2.0600E-004 * x + 0.0032
R = 1.0000
DL = 1.171
BEC = 15.38

Weight: <None>
Min Conc: <None>

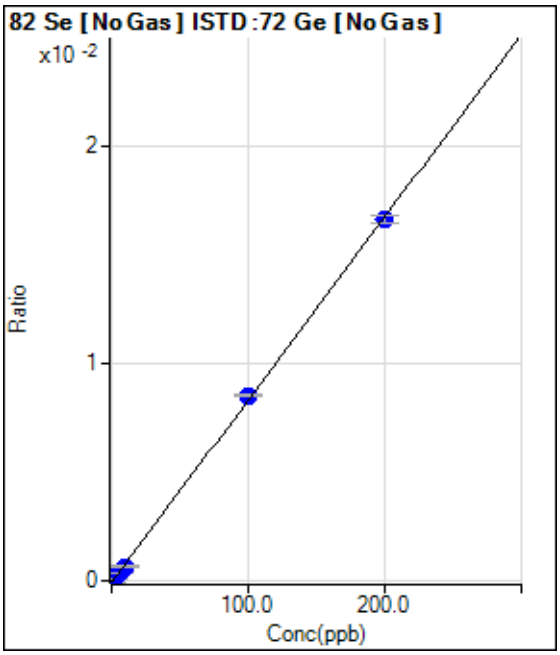


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.00	0.0001	P	15.0
2	☐	2.000	1.867	262.67	0.0004	P	10.5
3	☐	5.000	5.225	562.68	0.0008	P	2.9
4	☐	10.000	9.940	986.04	0.0014	P	3.5
5	☐	100.000	99.820	8979.67	0.0125	P	1.8
6	☐	200.000	200.089	17407.90	0.0250	P	1.2

y = 1.2434E-004 * x + 1.2527E-004
R = 1.0000
DL = 0.453
BEC = 1.007

Weight: <None>
Min Conc: <None>

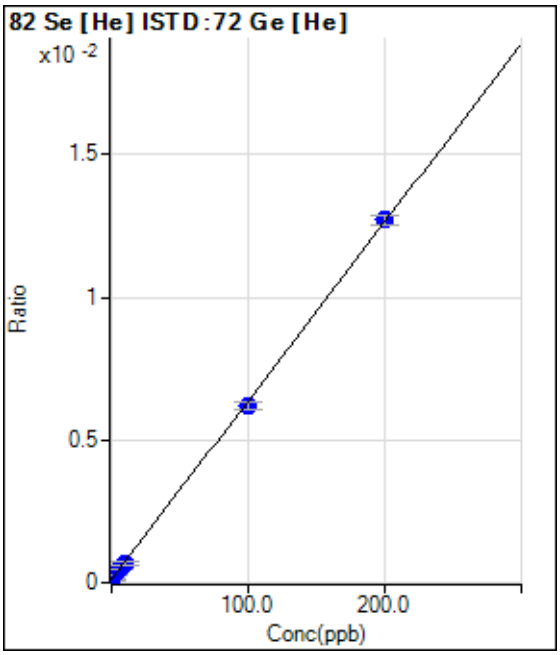
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.95	0.0000	P	-56.0
2	☐	2.000	2.439	401.96	0.0002	P	27.6
3	☐	5.000	5.466	1041.78	0.0004	P	4.1
4	☐	10.000	8.817	1788.17	0.0007	P	6.2
5	☐	100.000	102.500	21506.83	0.0086	P	1.3
6	☐	200.000	198.793	41518.14	0.0166	P	2.4

y = 8.3962E-005 * x - 4.7955E-005
R = 0.9999
DL = 0.9597
BEC = -0.5712

Weight: <None>
Min Conc: <None>

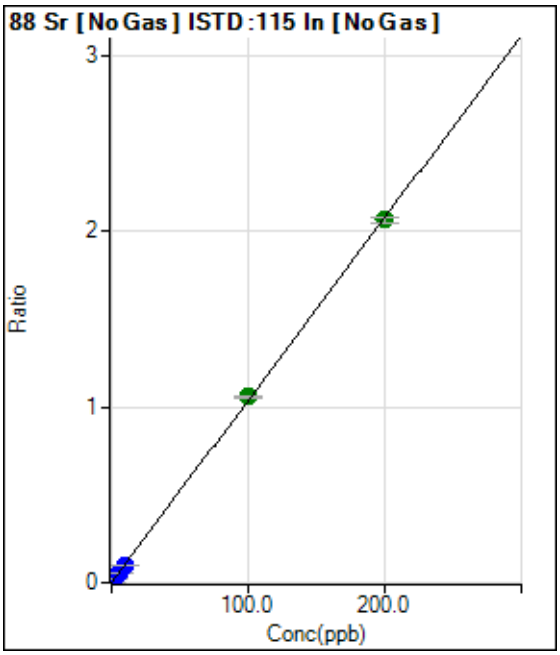


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0001	P	68.3
2	☐	2.000	2.678	206.67	0.0003	P	29.3
3	☐	5.000	5.678	340.01	0.0005	P	9.0
4	☐	10.000	8.994	490.02	0.0007	P	15.7
5	☐	100.000	97.371	4444.15	0.0062	P	4.9
6	☐	200.000	201.341	8849.72	0.0127	P	2.5

y = 6.2572E-005 * x + 1.1339E-004
R = 0.9998
DL = 3.714
BEC = 1.812

Weight: <None>
Min Conc: <None>

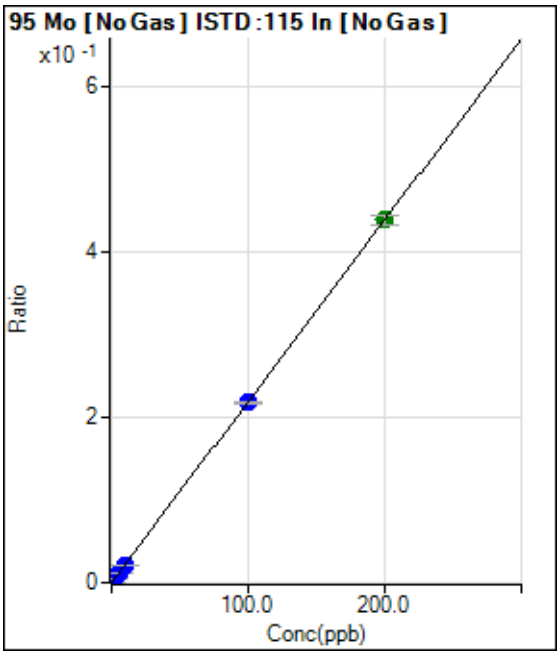
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	913.39	0.0003	P	4.3
2	☐	2.000	2.014	68719.98	0.0212	P	1.3
3	☐	5.000	5.130	172274.76	0.0534	P	0.8
4	☐	10.000	9.937	333203.31	0.1032	P	0.4
5	☐	100.000	102.016	3357579.32	1.0573	A	0.9
6	☐	200.000	198.992	6469611.99	2.0621	A	1.3

y = 0.0104 * x + 2.8419E-004
R = 0.9999
DL = 0.00353
BEC = 0.02743

Weight: <None>
Min Conc: <None>

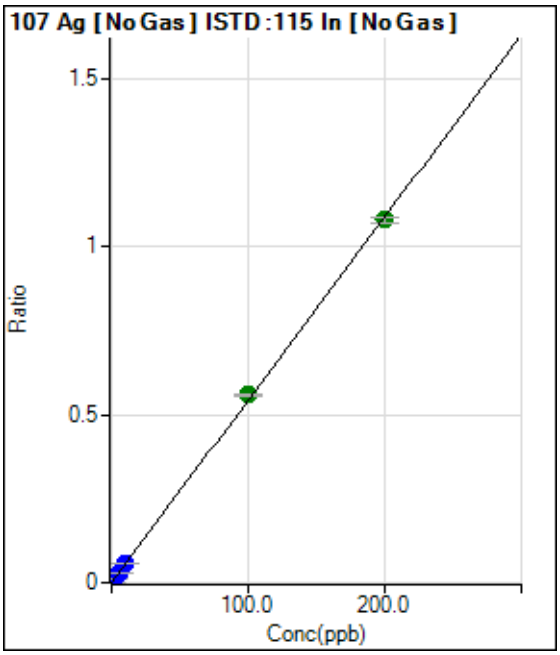


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	143.34	0.0000	P	18.1
2	☐	2.000	1.948	13994.18	0.0043	P	3.4
3	☐	5.000	5.000	35440.90	0.0110	P	2.7
4	☐	10.000	9.689	68599.50	0.0213	P	0.5
5	☐	100.000	99.546	692147.83	0.2180	P	1.5
6	☐	200.000	200.243	1375185.81	0.4384	A	2.3

y = 0.0022 * x + 4.4619E-005
R = 1.0000
DL = 0.01104
BEC = 0.02038

Weight: <None>
Min Conc: <None>

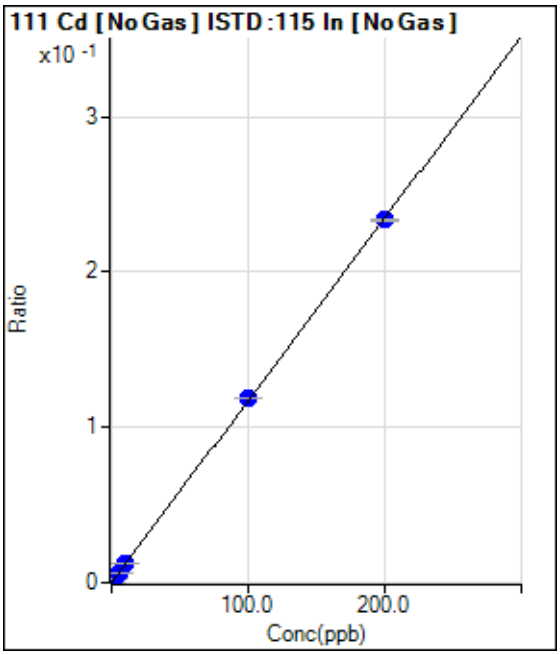
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	580.02	0.0002	P	22.9
2	☐	2.000	2.137	38305.86	0.0118	P	0.9
3	☐	5.000	5.373	94700.64	0.0294	P	1.3
4	☐	10.000	10.502	184732.40	0.0572	P	0.9
5	☐	100.000	102.653	1771751.17	0.5579	A	1.7
6	☐	200.000	198.638	3386155.78	1.0795	A	1.7

y = 0.0054 * x + 1.8036E-004
R = 0.9999
DL = 0.02281
BEC = 0.0332

Weight: <None>
Min Conc: <None>

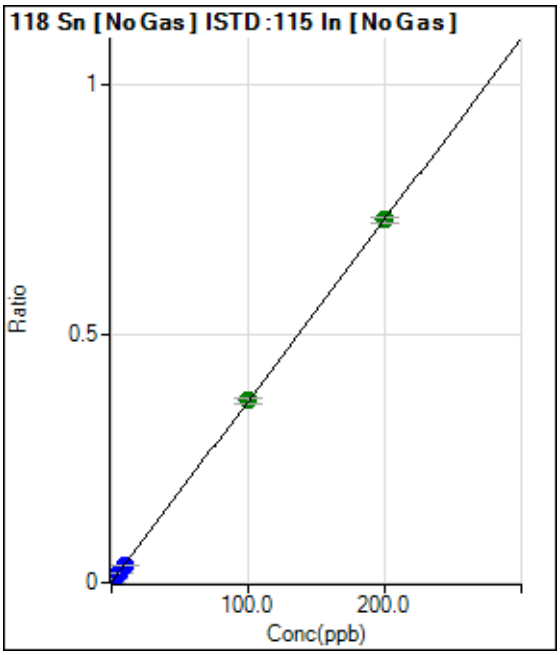


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	35.1
2	☐	2.000	2.038	7775.79	0.0024	P	2.2
3	☐	5.000	5.182	19588.23	0.0061	P	3.6
4	☐	10.000	10.091	38185.60	0.0118	P	0.8
5	☐	100.000	101.436	377490.53	0.1189	P	0.7
6	☐	200.000	199.272	732673.87	0.2335	P	0.5

y = 0.0012 * x + 5.1936E-006
R = 1.0000
DL = 0.004671
BEC = 0.004432

Weight: <None>
Min Conc: <None>

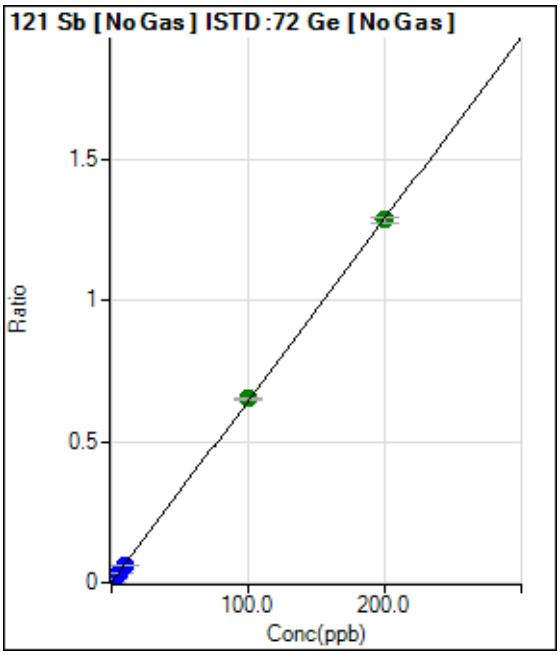
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1890.18	0.0006	P	4.4
2	☐	2.000	1.893	24319.57	0.0075	P	3.5
3	☐	5.000	4.826	58577.50	0.0182	P	3.2
4	☐	10.000	9.688	115838.28	0.0359	P	0.6
5	☐	100.000	100.183	1161124.39	0.3656	A	3.2
6	☐	200.000	199.929	2287231.95	0.7291	A	1.4

y = 0.0036 * x + 5.8818E-004
R = 1.0000
DL = 0.02118
BEC = 0.1614

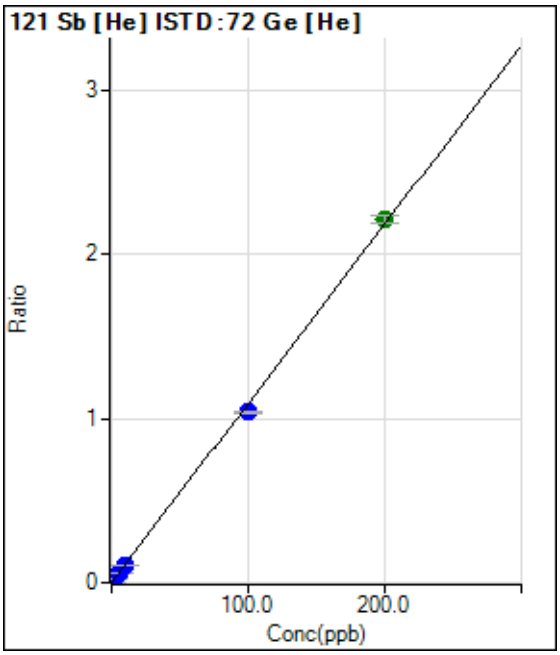
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2110.21	0.0008	P	6.1
2	☐	2.000	2.085	36588.15	0.0143	P	1.4
3	☐	5.000	5.018	84111.96	0.0332	P	0.2
4	☐	10.000	9.659	162911.98	0.0631	P	2.8
5	☐	100.000	100.949	1638175.50	0.6519	A	1.6
6	☐	200.000	199.541	3213063.49	1.2878	A	1.3

y = 0.0064 * x + 8.1239E-004
R = 1.0000
DL = 0.0232
BEC = 0.126

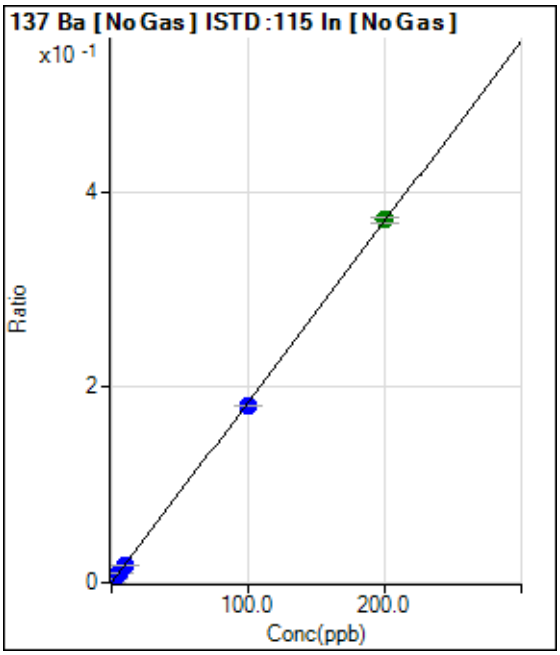
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1113.40	0.0015	P	1.0
2	☐	2.000	1.944	16710.90	0.0227	P	0.8
3	☐	5.000	4.792	39068.45	0.0538	P	2.6
4	☐	10.000	9.440	75721.41	0.1046	P	0.7
5	☐	100.000	94.975	743487.13	1.0382	P	1.3
6	☐	200.000	202.546	1540195.03	2.2123	A	2.1

y = 0.0109 * x + 0.0015
R = 0.9996
DL = 0.004002
BEC = 0.1389

Weight: <None>
Min Conc: <None>

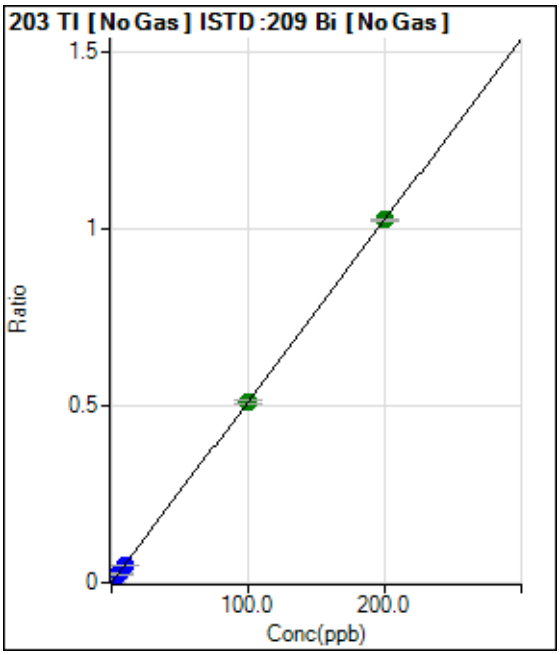


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	230.01	0.0001	P	28.1
2	☐	2.000	2.026	12386.12	0.0038	P	4.2
3	☐	5.000	5.074	30436.03	0.0094	P	1.8
4	☐	10.000	9.836	58846.55	0.0182	P	0.8
5	☐	100.000	98.313	576707.89	0.1816	P	0.1
6	☐	200.000	200.850	1163704.23	0.3709	A	1.5

y = 0.0018 * x + 7.1520E-005
R = 0.9999
DL = 0.03269
BEC = 0.03873

Weight: <None>
Min Conc: <None>

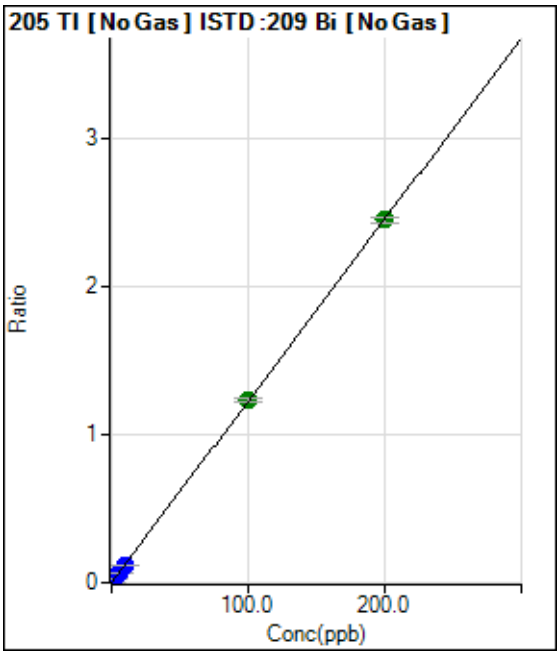
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	343.35	0.0001	P	23.1
2	☐	2.000	1.915	34504.53	0.0099	P	4.0
3	☐	5.000	4.794	86998.87	0.0247	P	4.9
4	☐	10.000	9.444	170442.02	0.0485	P	1.7
5	☐	100.000	99.779	1784461.54	0.5120	A	2.4
6	☐	200.000	200.144	3475948.39	1.0269	A	0.8

y = 0.0051 * x + 9.8042E-005
R = 1.0000
DL = 0.01326
BEC = 0.01911

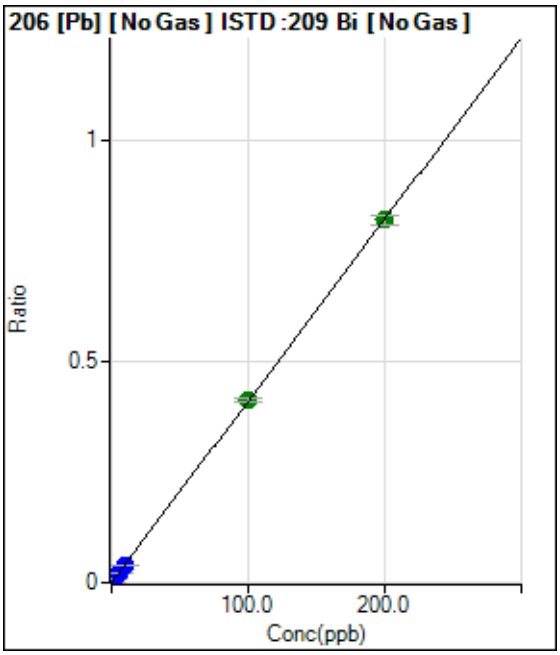
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	926.72	0.0003	P	6.7
2	☐	2.000	1.920	82669.79	0.0238	P	2.2
3	☐	5.000	4.910	212789.08	0.0604	P	3.1
4	☐	10.000	9.612	414013.76	0.1179	P	1.8
5	☐	100.000	100.316	4281434.10	1.2283	A	1.8
6	☐	200.000	199.864	8282128.42	2.4469	A	1.6

y = 0.0122 * x + 2.6481E-004
R = 1.0000
DL = 0.004327
BEC = 0.02163

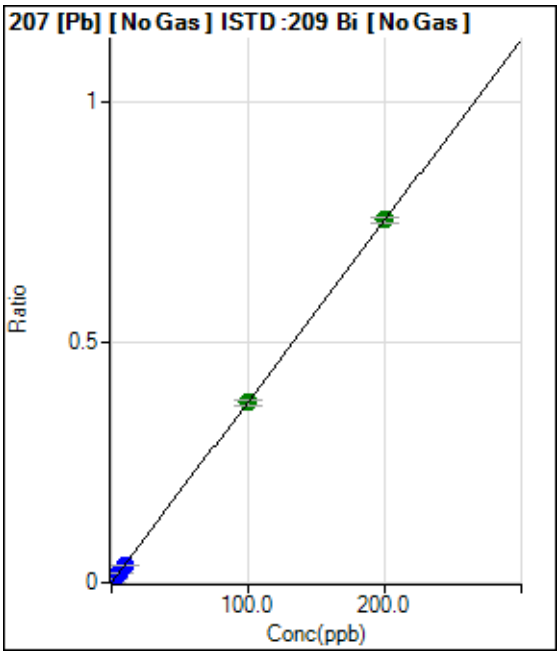
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	443.35	0.0001	P	29.4
2	☐	2.000	1.949	28215.53	0.0081	P	2.0
3	☐	5.000	4.889	71048.44	0.0202	P	2.8
4	☐	10.000	9.541	137657.41	0.0392	P	1.3
5	☐	100.000	100.361	1433377.48	0.4112	A	2.4
6	☐	200.000	199.846	2770944.54	0.8187	A	2.3

y = 0.0041 * x + 1.2631E-004
R = 1.0000
DL = 0.02716
BEC = 0.03084

Weight: <None>
Min Conc: <None>

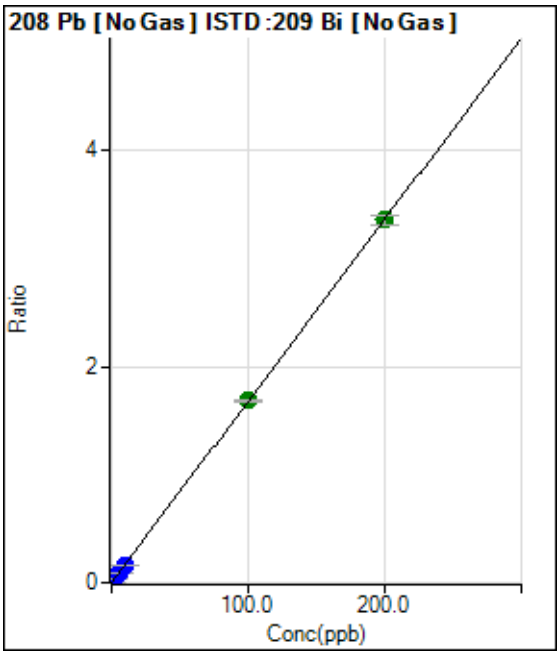


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	440.02	0.0001	P	3.0
2	☐	2.000	1.942	25860.62	0.0074	P	1.0
3	☐	5.000	4.860	64895.44	0.0184	P	1.6
4	☐	10.000	9.563	126717.53	0.0361	P	2.9
5	☐	100.000	99.318	1302576.15	0.3737	A	2.7
6	☐	200.000	200.367	2551307.10	0.7538	A	1.9

y = 0.0038 * x + 1.2573E-004
R = 1.0000
DL = 0.003056
BEC = 0.03342

Weight: <None>
Min Conc: <None>

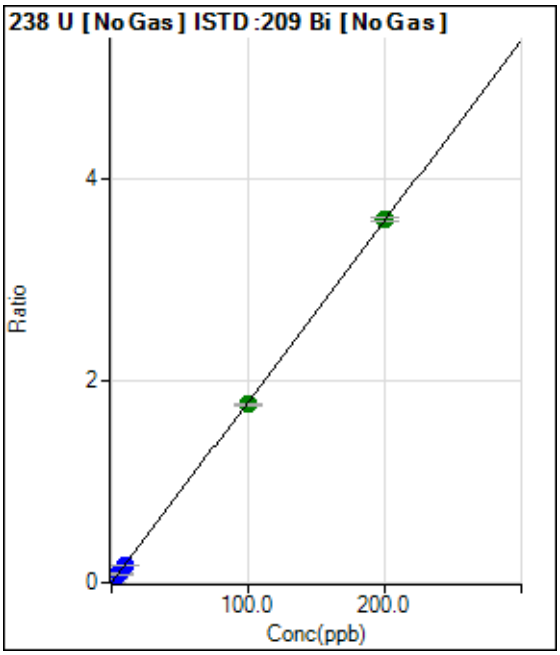
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1916.77	0.0005	P	2.7
2	☐	2.000	1.949	115822.79	0.0333	P	2.5
3	☐	5.000	4.889	291521.24	0.0827	P	2.2
4	☐	10.000	9.538	564615.93	0.1608	P	2.0
5	☐	100.000	100.155	5868323.48	1.6836	A	1.3
6	☐	200.000	199.949	11373490.51	3.3605	A	2.5

y = 0.0168 * x + 5.4767E-004
R = 1.0000
DL = 0.002639
BEC = 0.03259

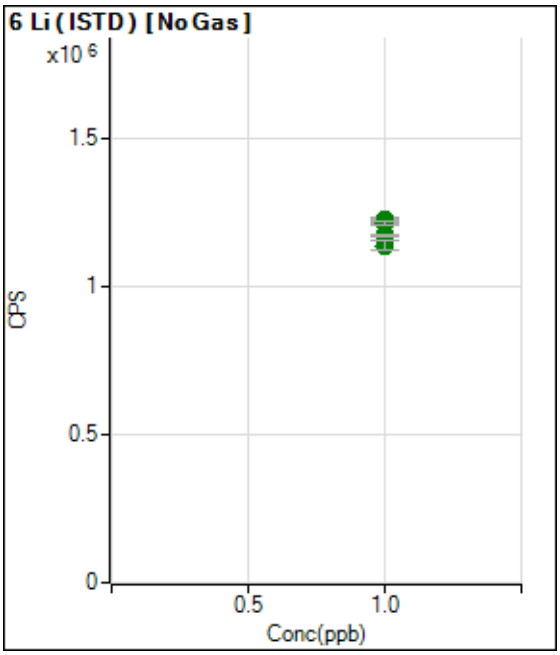
Weight: <None>
Min Conc: <None>



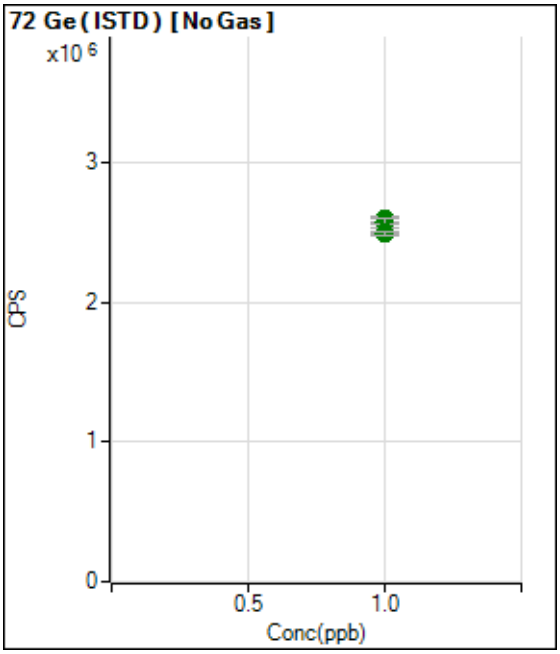
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.33	0.0000	P	5.1
2	☐	2.000	1.913	119089.39	0.0342	P	3.6
3	☐	5.000	4.798	302563.45	0.0858	P	2.8
4	☐	10.000	9.493	596035.19	0.1698	P	3.0
5	☐	100.000	98.744	6155313.66	1.7659	A	1.4
6	☐	200.000	200.659	12147386.90	3.5885	A	1.0

y = 0.0179 * x + 3.8120E-005
R = 1.0000
DL = 0.0003246
BEC = 0.002132

Weight: <None>
Min Conc: <None>

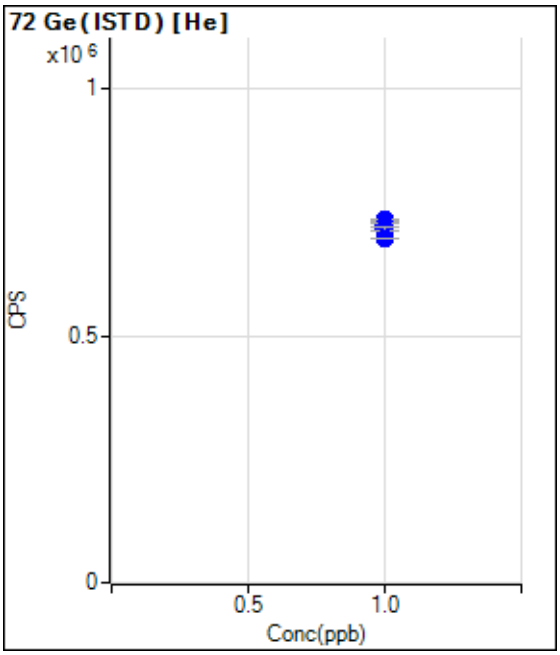


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1218583.66		A	1.6
2	☐	1.000		1224844.12		A	1.2
3	☐	1.000		1218251.22		A	1.0
4	☐	1.000		1216770.58		A	1.1
5	☐	1.000		1173236.07		A	0.7
6	☐	1.000		1137769.99		A	2.7

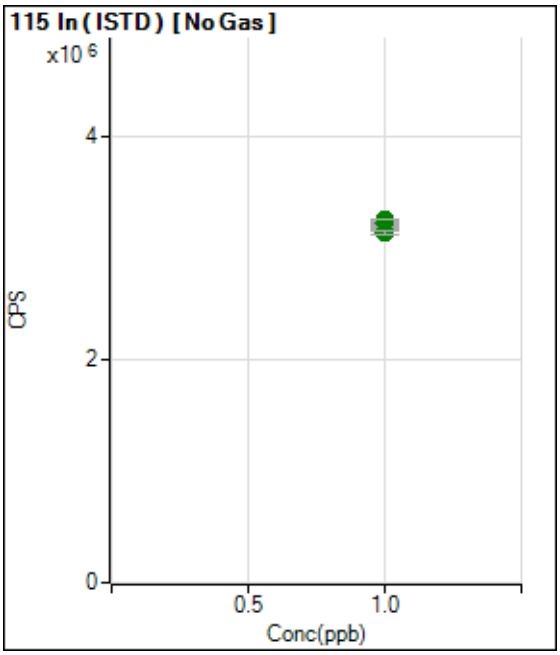


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2598394.13		A	1.3
2	☐	1.000		2566179.49		A	0.6
3	☐	1.000		2535125.38		A	0.2
4	☐	1.000		2581816.63		A	1.4
5	☐	1.000		2513155.33		A	1.1
6	☐	1.000		2494947.04		A	0.9

Calibration for 018_ICV.d

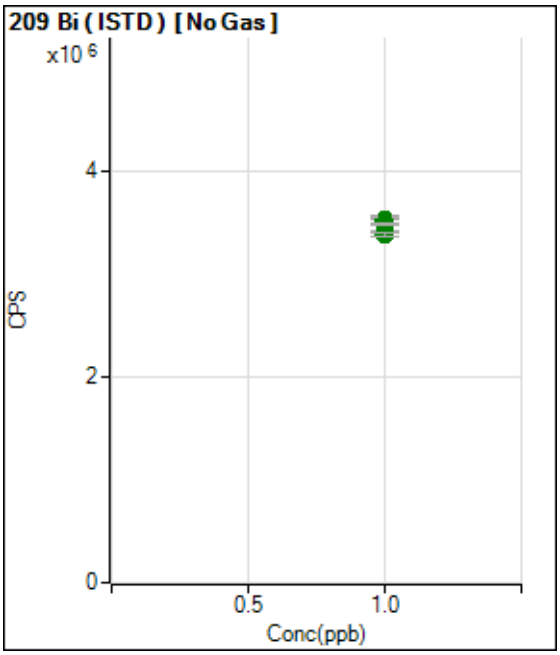


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		734219.55		P	0.6
2	☐	1.000		735049.86		P	0.3
3	☐	1.000		726016.66		P	1.4
4	☐	1.000		724264.99		P	0.7
5	☐	1.000		716187.25		P	1.4
6	☐	1.000		696198.06		P	0.1



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3214164.95		A	0.8
2	☐	1.000		3248603.64		A	0.7
3	☐	1.000		3224136.95		A	1.4
4	☐	1.000		3227431.97		A	1.3
5	☐	1.000		3175536.61		A	0.4
6	☐	1.000		3137329.64		A	1.2

Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3498812.55		A	1.6
2	☐	1.000		3480125.99		A	2.9
3	☐	1.000		3526315.15		A	2.4
4	☐	1.000		3511587.87		A	2.3
5	☐	1.000		3485914.95		A	0.9
6	☐	1.000		3385108.39		A	1.3

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	011CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:18:53-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	77218	0.00
Be	9	1	No Gas	35	40.82
V	51	2	He	2579	0.08
Cr	52	2	He	1170	1.18
Fe	56	2	He	14538	0.02
Se	78	2	He	92	16.54
As	75	2	He	164	4.33
Ca	44	2	He	307	3.42
Na	23	2	He	88506	0.00
Mg	24	2	He	330	2.75
K	39	2	He	55381	0.00
Mn	55	2	He	370	5.06
Co	59	2	He	43	262.70
Ni	60	2	He	160	7.81
Cu	63	2	He	1197	0.78
Zn	66	2	He	363	5.74
Al	27	2	He	627	4.35
B	11	1	No Gas	17963	0.01
Al	27	1	No Gas	25751	0.01
Si	28	1	No Gas	260430	0.00
Ag	107	1	No Gas	580	4.02
Cd	111	1	No Gas	17	207.85
Sr	88	1	No Gas	913	0.45
Mo	95	1	No Gas	143	12.25
Sn	118	1	No Gas	1890	0.20
Sb	121	1	No Gas	2110	0.26
Ba	137	1	No Gas	230	12.40
Tl	205	1	No Gas	927	0.79
Tl	203	1	No Gas	343	6.91
Pb	208	1	No Gas	1917	0.23
U	238	1	No Gas	133	3.25
Ca	43	2	He	13	859.23
Sb	121	2	He	1113	0.05
Ti	47	2	He	7	1299.04
Cu	63	1	No Gas	2950	0.40

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	1218584	1.59
Ge	72	2	He	734220	0.63
Ge	72	1	No Gas	2598394	1.30
In	115	1	No Gas	3214165	0.76

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	3498813	1.63

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	012CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:20:52-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7986	0.00
V	51	2	He	14537	0.00
Cr	52	2	He	15482	0.02
Fe	56	2	He	1357960	0.00
Se	78	2	He	263	3.94
As	75	2	He	2166	0.05
Ca	44	2	He	7936	0.06
Na	23	2	He	306299	0.00
Mg	24	2	He	128814	0.00
K	39	2	He	192233	0.00
Mn	55	2	He	11292	0.04
Co	59	2	He	20956	0.00
Ni	60	2	He	5621	0.16
Cu	63	2	He	15846	0.01
Zn	66	2	He	3424	0.14
Al	27	2	He	1293	0.99
B	11	1	No Gas	39922	0.00
Al	27	1	No Gas	58995	0.00
Si	28	1	No Gas	333369	0.00
Ag	107	1	No Gas	38306	0.00
Cd	111	1	No Gas	7776	0.03
Sr	88	1	No Gas	68720	0.00
Mo	95	1	No Gas	13994	0.02
Sn	118	1	No Gas	24320	0.01
Sb	121	1	No Gas	36588	0.00
Ba	137	1	No Gas	12386	0.04
Tl	205	1	No Gas	82670	0.00
Tl	203	1	No Gas	34505	0.00
Pb	208	1	No Gas	115823	0.00
U	238	1	No Gas	119089	0.00
Ca	43	2	He	403	3.39
Sb	121	2	He	16711	0.00
Cu	63	1	No Gas	29021	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1224844	1.24	1218584	100.51	70	120	
Ge	72	2	He	735050	0.34	734220	100.11	70	120	
Ge	72	1	No Gas	2566179	0.58	2598394	98.76	70	120	

Calibration Standard Report

In	115	1	No Gas	3248604	0.73	3214165	101.07	70	120	
Bi	209	1	No Gas	3480126	2.91	3498813	99.47	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	013CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:22:50-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	19674	0.00
V	51	2	He	32043	0.00
Cr	52	2	He	37161	0.01
Fe	56	2	He	3314935	0.00
Se	78	2	He	563	0.68
As	75	2	He	5237	0.04
Ca	44	2	He	18019	0.01
Na	23	2	He	623008	0.00
Mg	24	2	He	319746	0.00
K	39	2	He	394605	0.00
Mn	55	2	He	26339	0.01
Co	59	2	He	53699	0.00
Ni	60	2	He	13534	0.02
Cu	63	2	He	37429	0.00
Zn	66	2	He	7275	0.04
Al	27	2	He	2270	0.52
B	11	1	No Gas	74923	0.00
Al	27	1	No Gas	106153	0.00
Si	28	1	No Gas	444675	0.00
Ag	107	1	No Gas	94701	0.00
Cd	111	1	No Gas	19588	0.01
Sr	88	1	No Gas	172275	0.00
Mo	95	1	No Gas	35441	0.01
Sn	118	1	No Gas	58577	0.00
Sb	121	1	No Gas	84112	0.00
Ba	137	1	No Gas	30436	0.00
Tl	205	1	No Gas	212789	0.00
Tl	203	1	No Gas	86999	0.00
Pb	208	1	No Gas	291521	0.00
U	238	1	No Gas	302563	0.00
Ca	43	2	He	1080	0.73
Sb	121	2	He	39068	0.00
Cu	63	1	No Gas	69206	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1218251	1.00	1218584	99.97	70	120	
Ge	72	2	He	726017	1.40	734220	98.88	70	120	
Ge	72	1	No Gas	2535125	0.23	2598394	97.57	70	120	

Calibration Standard Report

In	115	1	No Gas	3224137	1.40	3214165	100.31	70	120	
Bi	209	1	No Gas	3526315	2.39	3498813	100.79	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	014CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:24:49-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	39537	0.00
V	51	2	He	60122	0.00
Cr	52	2	He	71017	0.00
Fe	56	2	He	6365212	0.00
Se	78	2	He	986	0.42
As	75	2	He	10077	0.01
Ca	44	2	He	36288	0.01
Na	23	2	He	1152436	0.00
Mg	24	2	He	624819	0.00
K	39	2	He	719763	0.00
Mn	55	2	He	50908	0.00
Co	59	2	He	104579	0.00
Ni	60	2	He	26456	0.01
Cu	63	2	He	71515	0.00
Zn	66	2	He	13894	0.02
Al	27	2	He	4131	0.03
B	11	1	No Gas	131150	0.00
Al	27	1	No Gas	184343	0.00
Si	28	1	No Gas	619802	0.00
Ag	107	1	No Gas	184732	0.00
Cd	111	1	No Gas	38186	0.01
Sr	88	1	No Gas	333203	0.00
Mo	95	1	No Gas	68600	0.00
Sn	118	1	No Gas	115838	0.00
Sb	121	1	No Gas	162912	0.00
Ba	137	1	No Gas	58847	0.00
Tl	205	1	No Gas	414014	0.00
Tl	203	1	No Gas	170442	0.00
Pb	208	1	No Gas	564616	0.00
U	238	1	No Gas	596035	0.00
Ca	43	2	He	2034	0.48
Sb	121	2	He	75721	0.00
Cu	63	1	No Gas	132902	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1216771	1.07	1218584	99.85	70	120	
Ge	72	2	He	724265	0.66	734220	98.64	70	120	
Ge	72	1	No Gas	2581817	1.44	2598394	99.36	70	120	

Calibration Standard Report

In	115	1	No Gas	3227432	1.32	3214165	100.41	70	120	
Bi	209	1	No Gas	3511588	2.25	3498813	100.37	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	015CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:26:48-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	393340	0.00
V	51	2	He	584520	0.00
Cr	52	2	He	693932	0.00
Fe	56	2	He	63447989	0.00
Se	78	2	He	8980	0.03
As	75	2	He	99402	0.00
Ca	44	2	He	357293	0.00
Na	23	2	He	10459767	0.00
Mg	24	2	He	6038536	0.00
K	39	2	He	6715452	0.00
Mn	55	2	He	504028	0.00
Co	59	2	He	1083955	0.00
Ni	60	2	He	257917	0.00
Cu	63	2	He	691214	0.00
Zn	66	2	He	135138	0.00
Al	27	2	He	33835	0.00
B	11	1	No Gas	1129751	0.00
Al	27	1	No Gas	1527107	0.00
Si	28	1	No Gas	3758447	0.00
Ag	107	1	No Gas	1771751	0.00
Cd	111	1	No Gas	377491	0.00
Sr	88	1	No Gas	3357579	0.00
Mo	95	1	No Gas	692148	0.00
Sn	118	1	No Gas	1161124	0.00
Sb	121	1	No Gas	1638175	0.00
Ba	137	1	No Gas	576708	0.00
Tl	205	1	No Gas	4281434	0.00
Tl	203	1	No Gas	1784462	0.00
Pb	208	1	No Gas	5868323	0.00
U	238	1	No Gas	6155314	0.00
Ca	43	2	He	20846	0.01
Sb	121	2	He	743487	0.00
Cu	63	1	No Gas	1307021	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1173236	0.66	1218584	96.28	70	120	
Ge	72	2	He	716187	1.41	734220	97.54	70	120	
Ge	72	1	No Gas	2513155	1.12	2598394	96.72	70	120	

Calibration Standard Report

In	115	1	No Gas	3175537	0.44	3214165	98.80	70	120	
Bi	209	1	No Gas	3485915	0.91	3498813	99.63	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	016CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:28:41-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	758562	0.00
V	51	2	He	1173812	0.00
Cr	52	2	He	1394214	0.00
Fe	56	2	He	123084815	0.00
Se	78	2	He	17408	0.01
As	75	2	He	195605	0.00
Ca	44	2	He	698213	0.00
Na	23	2	He	20163208	0.00
Mg	24	2	He	11673597	0.00
K	39	2	He	13060714	0.00
Mn	55	2	He	1028500	0.00
Co	59	2	He	2153791	0.00
Ni	60	2	He	496984	0.00
Cu	63	2	He	1383064	0.00
Zn	66	2	He	258564	0.00
Al	27	2	He	66880	0.00
B	11	1	No Gas	2226803	0.00
Al	27	1	No Gas	2864299	0.00
Si	28	1	No Gas	7104726	0.00
Ag	107	1	No Gas	3386156	0.00
Cd	111	1	No Gas	732674	0.00
Sr	88	1	No Gas	6469612	0.00
Mo	95	1	No Gas	1375186	0.00
Sn	118	1	No Gas	2287232	0.00
Sb	121	1	No Gas	3213063	0.00
Ba	137	1	No Gas	1163704	0.00
Tl	205	1	No Gas	8282128	0.00
Tl	203	1	No Gas	3475948	0.00
Pb	208	1	No Gas	11373491	0.00
U	238	1	No Gas	12147387	0.00
Ca	43	2	He	41526	0.00
Sb	121	2	He	1540195	0.00
Cu	63	1	No Gas	2477658	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1137770	2.71	1218584	93.37	70	120	
Ge	72	2	He	696198	0.08	734220	94.82	70	120	
Ge	72	1	No Gas	2494947	0.89	2598394	96.02	70	120	

Calibration Standard Report

In	115	1	No Gas	3137330	1.22	3214165	97.61	70	120	
Bi	209	1	No Gas	3385108	1.31	3498813	96.75	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	018_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:32:29-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	102.348	3.740	1666913	1.84	100	102.3	90	110	
Be	9	1	No Gas	101.196	3.901	389367	0.55	100	101.2	90	110	
V	51	2	He	95.969	0.255	590509	0.27	100	96.0	90	110	
Cr	52	2	He	95.837	0.808	699613	1.19	100	95.8	90	110	
Fe	56	2	He	9990.301	0.516	64794009	0.18	10000	99.9	90	110	
Se	78	2	He	98.707	1.794	9092	1.88	100	98.7	90	110	
As	75	2	He	95.747	1.461	98459	1.25	100	95.7	90	110	
Ca	44	2	He	10076.477	0.943	370255	0.69	10000	100.8	90	110	
Na	23	2	He	10042.244	2.257	10717578	2.13	10000	100.4	90	110	
Mg	24	2	He	10064.873	1.249	6195149	0.98	10000	100.6	90	110	
K	39	2	He	9939.745	1.192	6858493	0.92	10000	99.4	90	110	
Mn	55	2	He	94.560	0.894	507446	0.55	100	94.6	90	110	
Co	59	2	He	94.794	1.697	1070467	1.83	100	94.8	90	110	
Ni	60	2	He	100.454	0.976	263483	1.34	100	100.5	90	110	
Cu	63	2	He	95.350	0.832	691095	1.15	100	95.3	90	110	
Zn	66	2	He	98.422	0.323	134612	0.68	100	98.4	90	110	
Al	27	2	He	98.718	0.559	34914	0.83	100	98.7	90	110	
B	11	1	No Gas	519.713	3.006	1175808	1.28	500	103.9	90	110	
Al	27	1	No Gas	102.482	0.968	1529107	1.14	100	102.5	90	110	
Si	28	1	No Gas	512.365	1.730	3860176	1.04	500	102.5	90	110	
Ag	107	1	No Gas	102.158	2.558	1785497	1.92	100	102.2	90	110	
Cd	111	1	No Gas	101.016	2.775	380683	2.23	100	101.0	90	110	
Sr	88	1	No Gas	100.699	0.952	3356297	0.23	100	100.7	90	110	
Mo	95	1	No Gas	96.016	1.043	676118	0.72	100	96.0	90	110	
Sn	118	1	No Gas	101.773	1.562	1194419	1.11	100	101.8	90	110	
Sb	121	1	No Gas	102.720	2.374	1693162	2.96	100	102.7	90	110	
Ba	137	1	No Gas	100.013	1.290	594129	0.64	100	100.0	90	110	
Tl	205	1	No Gas	101.648	0.871	4324389	1.12	100	101.6	90	110	
Tl	203	1	No Gas	101.570	0.815	1810813	1.00	100	101.6	90	110	
Pb	208	1	No Gas	100.862	1.667	5890272	0.29	100	100.9	90	110	
U	238	1	No Gas	94.194	2.205	5852150	1.01	100	94.2	90	110	
Ca	43	2	He	9917.096	1.859	21587	1.72	10000	99.2	90	110	
Sb	121	2	He	95.447	0.419	765074	0.79	100	95.4	90	110	
Ti	47	2	He	95.941	3.860	21427	3.87	100	95.9	90	110	
Cu	63	1	No Gas	100.623	0.792	1288516	0.56	100	100.6	90	110	
Se	82	1	No Gas	100.737	1.388	21464	1.00	100	100.7	90	110	

QC ISTD Table

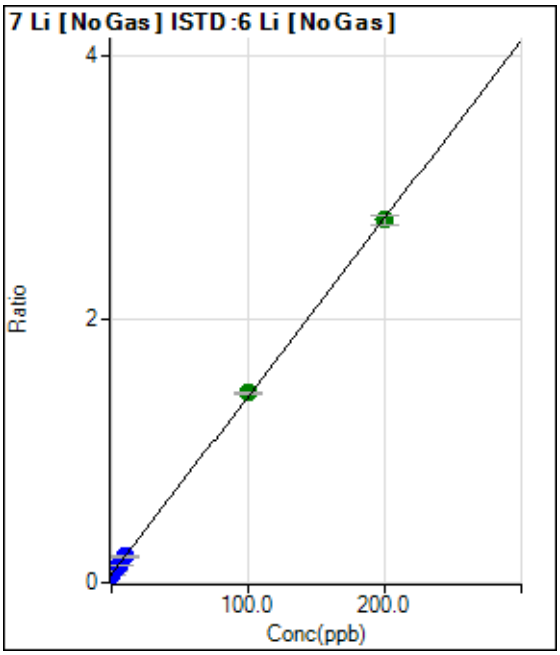
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1154003	4.31	1218584	94.70	70	120	
Ge	72	2	He	733297	0.38	734220	99.87	70	120	
Ge	72	1	No Gas	2552253	0.59	2598394	98.22	70	120	
In	115	1	No Gas	3216047	0.76	3214165	100.06	70	120	
Bi	209	1	No Gas	3474792	1.68	3498813	99.31	70	120	

Calibration for 018_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\061721A.b\
Analysis File: 061721A.batch.bin
DA Date-Time: 6/17/2021 8:32:46 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	011CALB.d	CAL BLK	6/17/2021 10:18:53 AM
2	012CALS.d	2/10/200	6/17/2021 10:20:52 AM
3	013CALS.d	5/25/500	6/17/2021 10:22:50 AM
4	014CALS.d	10/50/100	6/17/2021 10:24:49 AM
5	015CALS.d	100/500/10K	6/17/2021 10:26:48 AM
6	016CALS.d	200/1000/20K	6/17/2021 10:28:41 AM

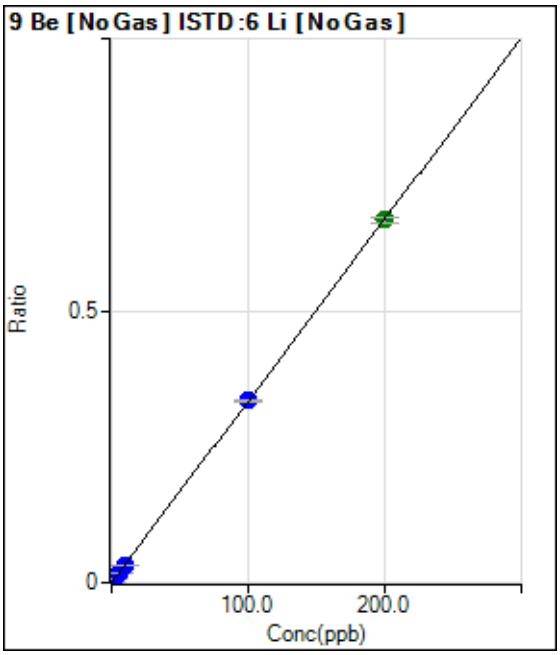
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77218.42	0.0634	P	1.4
2	☐	2.000	2.013	110927.62	0.0906	P	0.7
3	☐	5.000	5.049	160284.26	0.1316	P	1.3
4	☐	10.000	9.957	240749.31	0.1979	P	0.9
5	☐	100.000	101.740	1686594.50	1.4376	A	1.9
6	☐	200.000	199.131	3131012.87	2.7530	A	2.6

y = 0.0135 * x + 0.0634
R = 0.9999
DL = 0.2041
BEC = 4.692

Weight: <None>
Min Conc: <None>

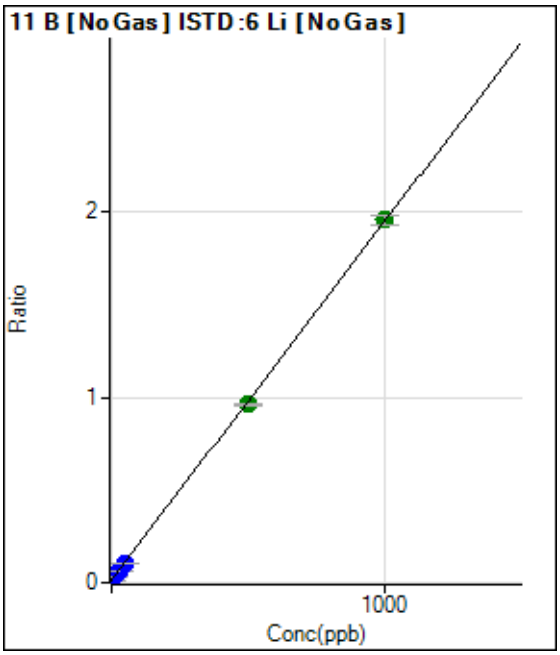


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.00	0.0000	P	13.2
2	☐	2.000	1.945	7985.65	0.0065	P	1.4
3	☐	5.000	4.830	19673.80	0.0162	P	0.9
4	☐	10.000	9.727	39537.18	0.0325	P	1.4
5	☐	100.000	100.446	393339.82	0.3353	P	1.3
6	☐	200.000	199.795	758562.07	0.6669	A	1.9

y = 0.0033 * x + 2.8693E-005
R = 1.0000
DL = 0.003404
BEC = 0.008597

Weight: <None>
Min Conc: <None>

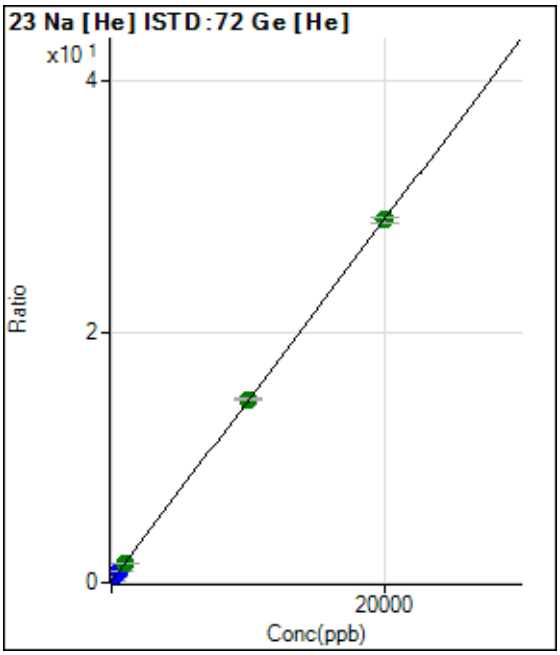
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17963.21	0.0147	P	0.6
2	☐	10.000	9.232	39921.59	0.0326	P	0.8
3	☐	25.000	24.183	74923.42	0.0615	P	1.7
4	☐	50.000	48.113	131149.79	0.1078	P	0.5
5	☐	500.000	490.353	1129751.49	0.9630	A	1.2
6	☐	1000.000	1004.946	2226802.72	1.9581	A	2.7

y = 0.0019 * x + 0.0147
R = 0.9999
DL = 0.1428
BEC = 7.623

Weight: <None>
Min Conc: <None>

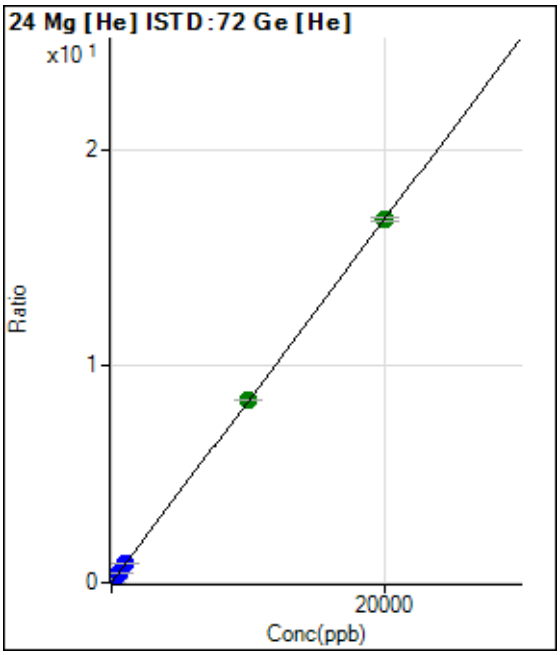


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88506.03	0.1205	P	1.5
2	☐	200.000	205.177	306299.20	0.4167	P	0.3
3	☐	500.000	511.041	623008.06	0.8582	P	1.4
4	☐	1000.000	1018.879	1152435.69	1.5912	A	1.5
5	☐	10000.000	10035.768	10459766.51	14.6066	A	1.3
6	☐	20000.000	19980.844	20163208.45	28.9617	A	1.5

y = 0.0014 * x + 0.1205
R = 1.0000
DL = 3.65
BEC = 83.51

Weight: <None>
Min Conc: <None>

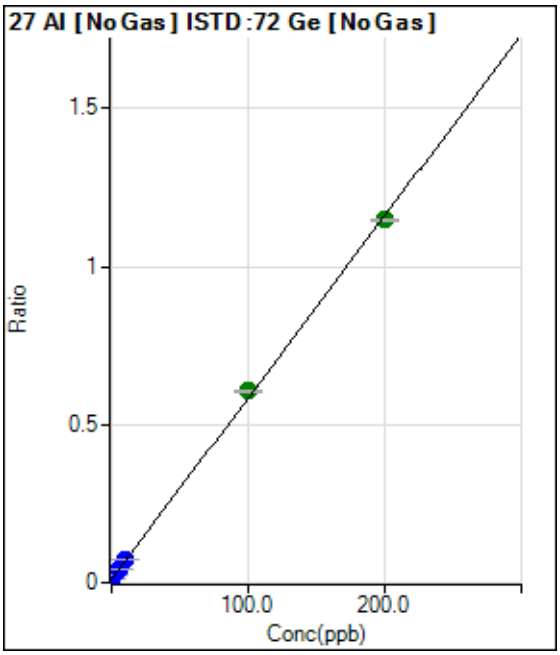
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	330.01	0.0004	P	8.6
2	☐	200.000	208.246	128814.36	0.1752	P	0.7
3	☐	500.000	524.202	319746.26	0.4404	P	1.0
4	☐	1000.000	1027.269	624818.96	0.8627	P	0.5
5	☐	10000.000	10044.013	6038535.54	8.4311	A	0.7
6	☐	20000.000	19975.943	11673596.91	16.7676	A	1.2

y = 8.3937E-004 * x + 4.4934E-004
R = 1.0000
DL = 0.1378
BEC = 0.5353

Weight: <None>
Min Conc: <None>

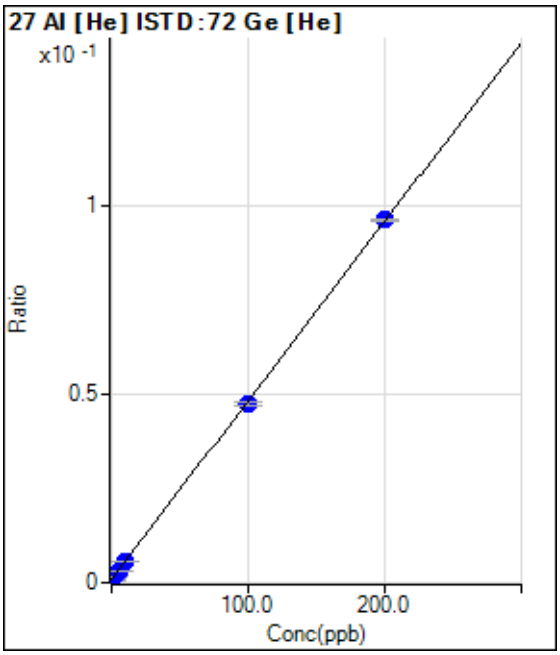


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25750.82	0.0099	P	1.3
2	☐	2.000	2.275	58995.03	0.0230	P	1.5
3	☐	5.000	5.559	106152.67	0.0419	P	0.4
4	☐	10.000	10.697	184343.04	0.0714	P	2.0
5	☐	100.000	103.972	1527107.27	0.6077	A	1.1
6	☐	200.000	197.962	2864299.33	1.1481	A	0.8

y = 0.0057 * x + 0.0099
R = 0.9997
DL = 0.06758
BEC = 1.724

Weight: <None>
Min Conc: <None>

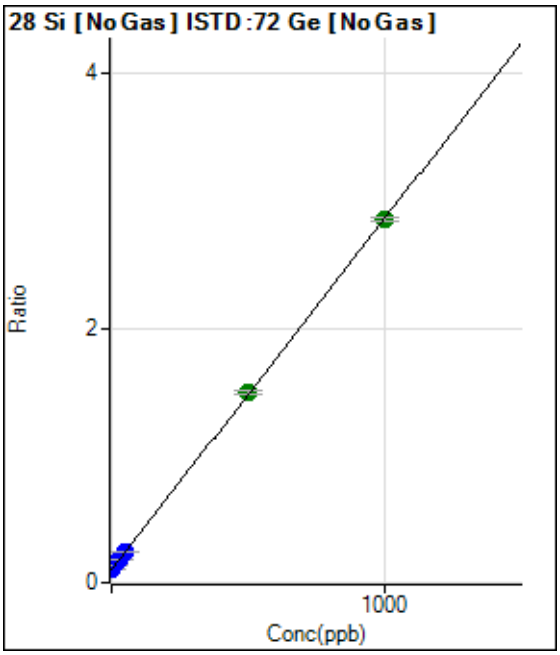
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	626.69	0.0009	P	27.8
2	☐	2.000	1.910	1293.42	0.0018	P	12.7
3	☐	5.000	4.792	2270.23	0.0031	P	10.4
4	☐	10.000	10.238	4130.69	0.0057	P	1.8
5	☐	100.000	97.957	33834.85	0.0473	P	2.1
6	☐	200.000	201.016	66880.37	0.0961	P	0.9

y = 4.7365E-004 * x + 8.5454E-004
R = 0.9999
DL = 1.504
BEC = 1.804

Weight: <None>
Min Conc: <None>

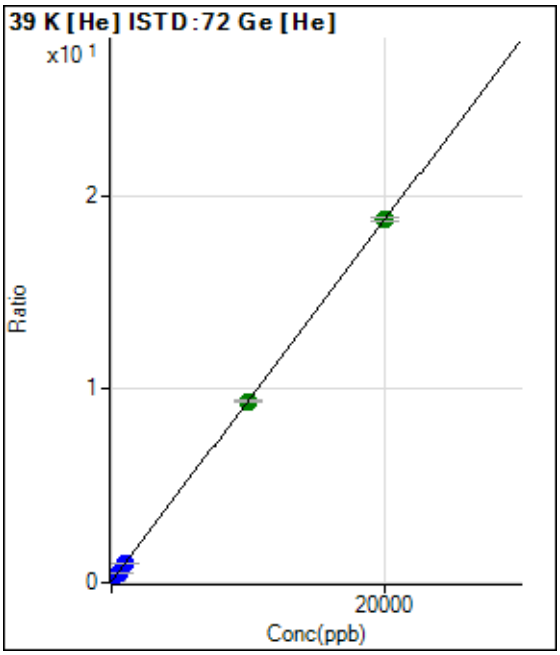


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	260430.00	0.1002	P	1.8
2	☐	10.000	10.764	333369.47	0.1299	P	0.9
3	☐	25.000	27.268	444675.47	0.1754	P	0.5
4	☐	50.000	50.737	619802.32	0.2401	P	1.5
5	☐	500.000	506.253	3758447.34	1.4957	A	1.9
6	☐	1000.000	996.772	7104725.52	2.8478	A	0.9

y = 0.0028 * x + 0.1002
R = 1.0000
DL = 1.917
BEC = 36.37

Weight: <None>
Min Conc: <None>

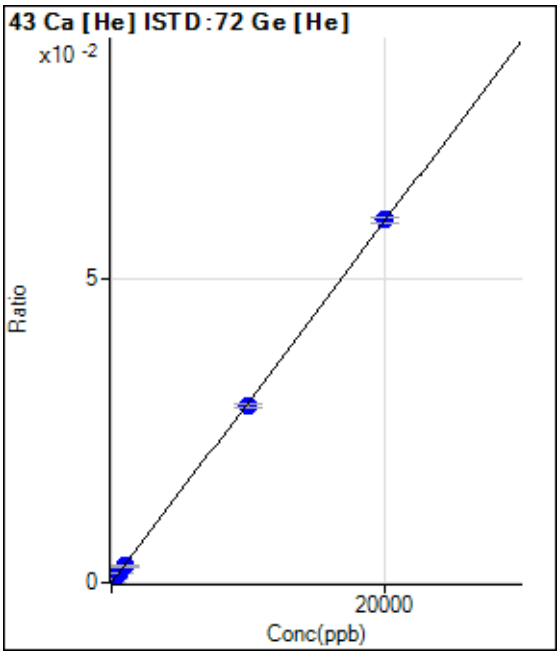
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55381.07	0.0754	P	1.1
2	☐	200.000	199.374	192233.34	0.2615	P	0.3
3	☐	500.000	501.511	394605.33	0.5435	P	0.9
4	☐	1000.000	983.870	719762.72	0.9938	P	0.6
5	☐	10000.000	9965.619	6715452.19	9.3773	A	0.8
6	☐	20000.000	20017.966	13060713.97	18.7602	A	1.2

y = 9.3340E-004 * x + 0.0754
R = 1.0000
DL = 2.723
BEC = 80.81

Weight: <None>
Min Conc: <None>

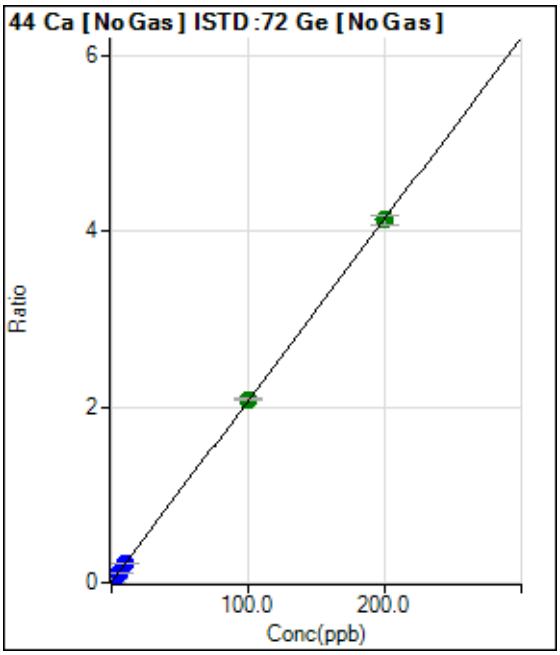


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	114.9
2	☐	200.000	178.786	403.35	0.0005	P	13.3
3	☐	500.000	495.151	1080.06	0.0015	P	7.1
4	☐	1000.000	939.954	2033.52	0.0028	P	9.1
5	☐	10000.000	9807.542	20846.07	0.0291	P	2.8
6	☐	20000.000	20099.565	41526.16	0.0596	P	1.5

y = 2.9667E-006 * x + 1.8168E-005
R = 0.9999
DL = 21.12
BEC = 6.124

Weight: <None>
Min Conc: <None>

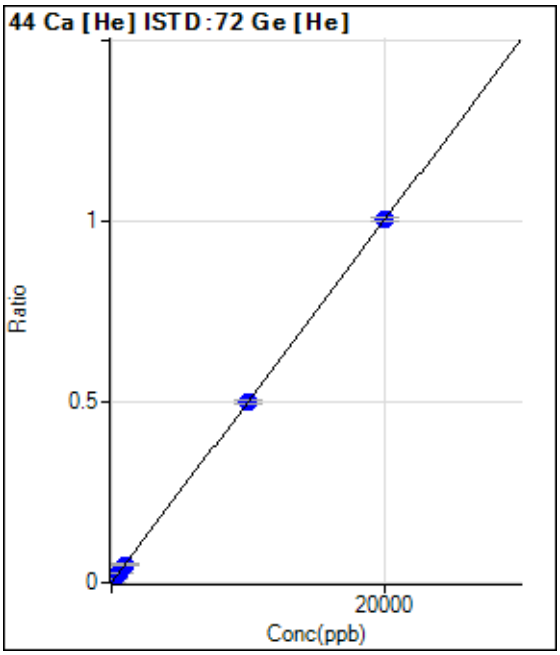
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17648.28	0.0068	P	5.0
2	☐	2.000	2.104	128858.61	0.0502	P	1.1
3	☐	5.000	5.199	289274.58	0.1141	P	1.0
4	☐	10.000	9.981	549394.95	0.2128	P	1.3
5	☐	100.000	100.721	5241783.78	2.0860	A	1.6
6	☐	200.000	199.634	10297602.14	4.1279	A	2.4

y = 0.0206 * x + 0.0068
R = 1.0000
DL = 0.04953
BEC = 0.3289

Weight: <None>
Min Conc: <None>

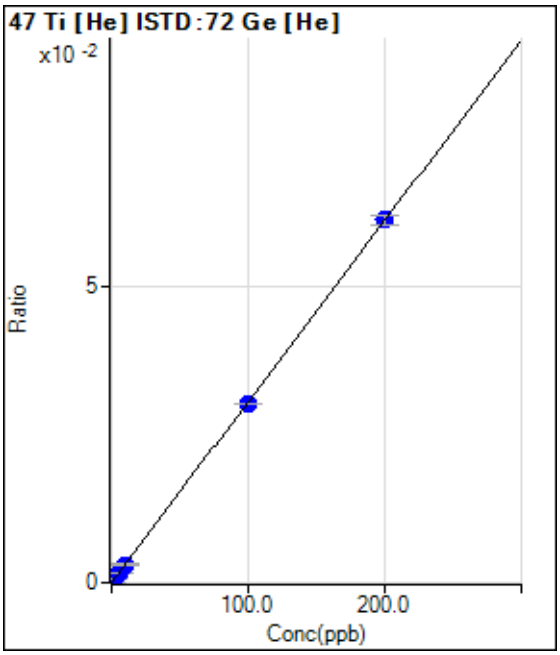


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	306.68	0.0004	P	10.4
2	☐	200.000	207.311	7935.76	0.0108	P	5.1
3	☐	500.000	487.303	18018.75	0.0248	P	1.2
4	☐	1000.000	992.466	36288.08	0.0501	P	3.5
5	☐	10000.000	9957.021	357293.18	0.4989	P	1.6
6	☐	20000.000	20022.111	698212.64	1.0029	P	1.1

y = 5.0068E-005 * x + 4.1765E-004
R = 1.0000
DL = 2.594
BEC = 8.342

Weight: <None>
Min Conc: <None>

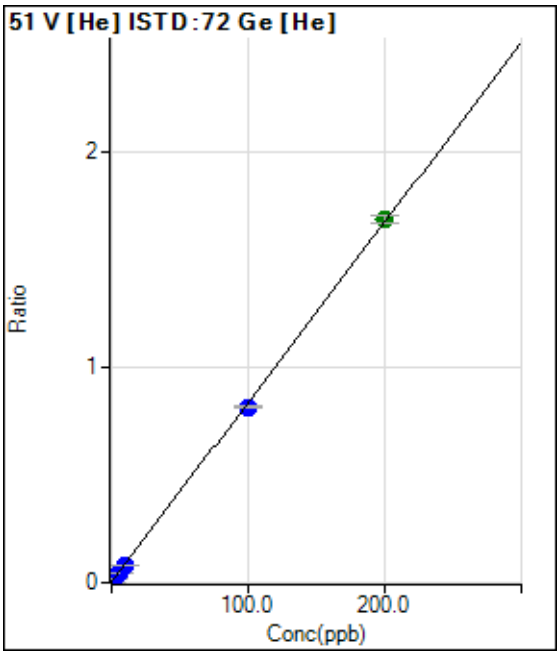
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	2.160	490.02	0.0007	P	3.7
3	☐	5.000	5.353	1190.07	0.0016	P	2.5
4	☐	10.000	9.722	2150.22	0.0030	P	8.6
5	☐	100.000	98.790	21547.22	0.0301	P	0.6
6	☐	200.000	200.608	42529.55	0.0611	P	2.5

y = 3.0447E-004 * x + 9.0610E-006
R = 1.0000
DL = 0.07732
BEC = 0.02976

Weight: <None>
Min Conc: <None>

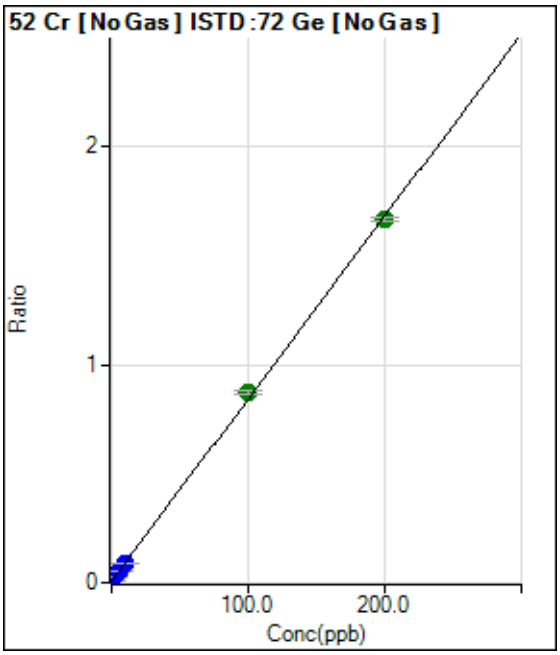


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2579.15	0.0035	P	2.4
2	☐	2.000	1.947	14536.64	0.0198	P	0.7
3	☐	5.000	4.862	32042.89	0.0441	P	0.3
4	☐	10.000	9.516	60122.35	0.0830	P	1.4
5	☐	100.000	97.279	584519.51	0.8162	P	1.0
6	☐	200.000	201.389	1173811.83	1.6860	A	2.2

y = 0.0084 * x + 0.0035
R = 0.9999
DL = 0.03019
BEC = 0.4205

Weight: <None>
Min Conc: <None>

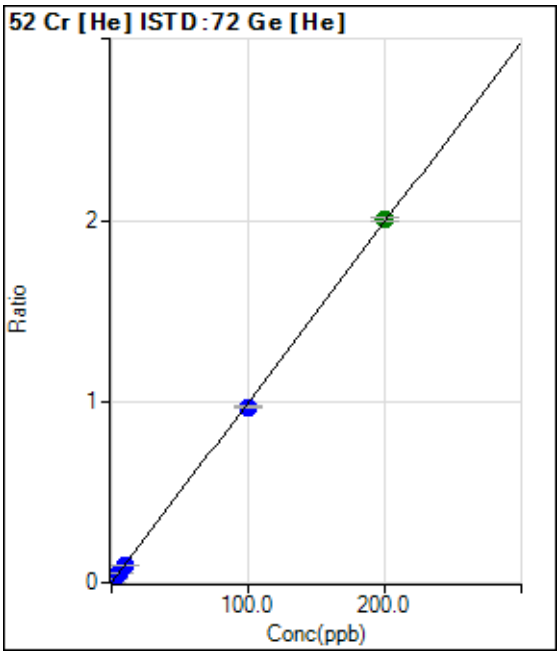
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16186.48	0.0062	P	0.9
2	☐	2.000	2.074	60557.15	0.0236	P	0.5
3	☐	5.000	5.156	125275.77	0.0494	P	1.2
4	☐	10.000	9.961	231466.22	0.0897	P	1.3
5	☐	100.000	103.718	2198696.95	0.8750	A	1.9
6	☐	200.000	198.138	4156013.27	1.6659	A	1.2

y = 0.0084 * x + 0.0062
R = 0.9998
DL = 0.02108
BEC = 0.7437

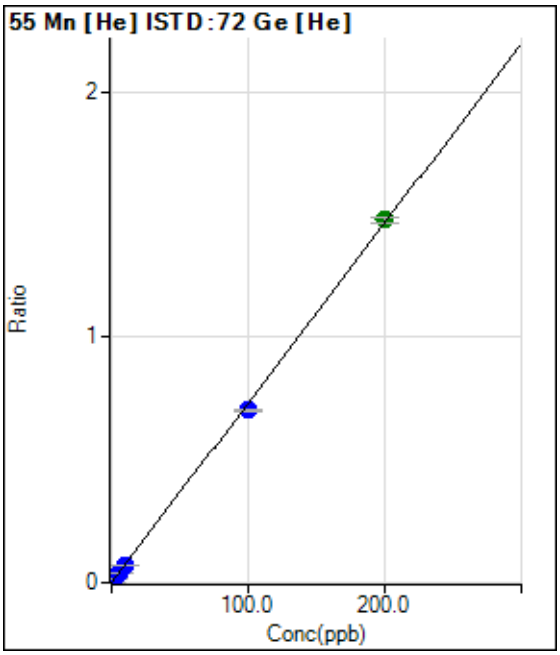
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1170.07	0.0016	P	13.8
2	☐	2.000	1.959	15482.34	0.0211	P	2.5
3	☐	5.000	4.990	37160.81	0.0512	P	0.7
4	☐	10.000	9.707	71017.24	0.0981	P	2.2
5	☐	100.000	97.341	693932.46	0.9690	P	0.8
6	☐	200.000	201.345	1394214.35	2.0026	A	0.9

y = 0.0099 * x + 0.0016
R = 0.9999
DL = 0.06645
BEC = 0.1604

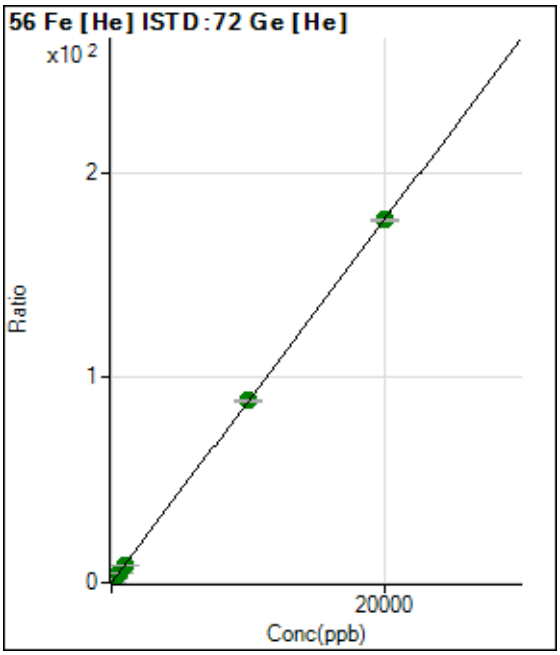
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	370.01	0.0005	P	18.4
2	☐	2.000	2.032	11291.54	0.0154	P	4.0
3	☐	5.000	4.892	26339.06	0.0363	P	2.1
4	☐	10.000	9.543	50908.43	0.0703	P	1.3
5	☐	100.000	96.168	504027.83	0.7038	P	0.9
6	☐	200.000	201.941	1028499.98	1.4773	A	1.5

y = 0.0073 * x + 5.0374E-004
R = 0.9997
DL = 0.03806
BEC = 0.06888

Weight: <None>
Min Conc: <None>

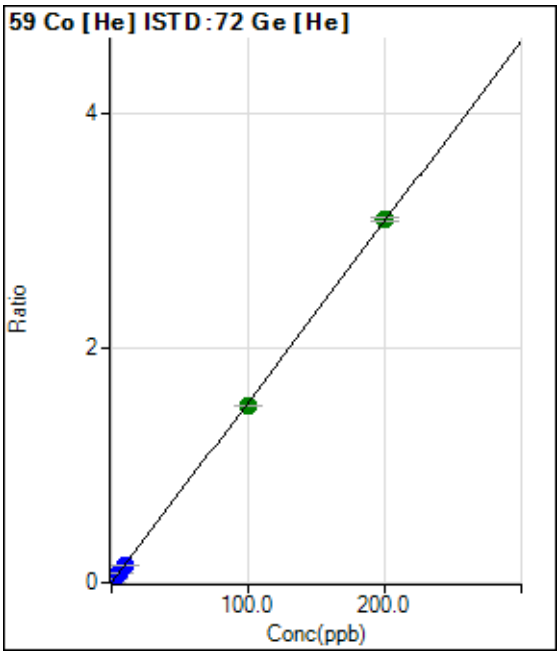


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14537.95	0.0198	P	1.7
2	☐	200.000	206.680	1357960.24	1.8474	A	1.0
3	☐	500.000	514.127	3314934.74	4.5661	A	0.8
4	☐	1000.000	991.668	6365212.20	8.7888	A	0.8
5	☐	10000.000	10017.547	63447989.06	88.6019	A	1.3
6	☐	20000.000	19991.223	123084814.83	176.7961	A	0.5

y = 0.0088 * x + 0.0198
R = 1.0000
DL = 0.111
BEC = 2.239

Weight: <None>
Min Conc: <None>

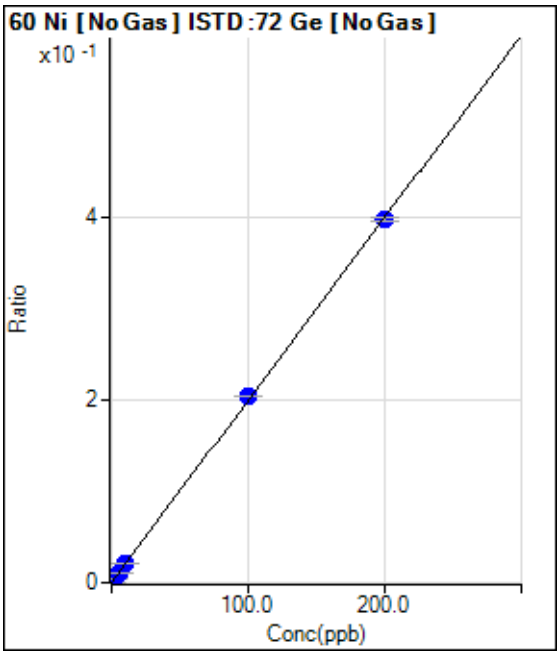
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43.33	0.0001	P	113.3
2	☐	2.000	1.848	20956.36	0.0285	P	0.7
3	☐	5.000	4.799	53699.14	0.0740	P	0.4
4	☐	10.000	9.373	104579.09	0.1444	P	1.1
5	☐	100.000	98.284	1083954.80	1.5135	A	0.2
6	☐	200.000	200.896	2153791.01	3.0936	A	1.0

y = 0.0154 * x + 5.8748E-005
R = 0.9999
DL = 0.01297
BEC = 0.003815

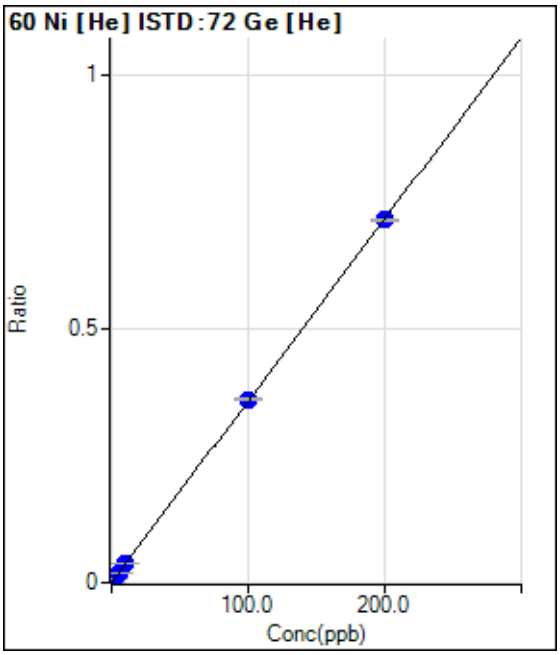
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	536.69	0.0002	P	24.6
2	☐	2.000	2.213	11895.39	0.0046	P	1.1
3	☐	5.000	5.318	27504.73	0.0108	P	2.0
4	☐	10.000	10.267	53588.85	0.0208	P	1.0
5	☐	100.000	102.289	514985.94	0.2049	P	0.5
6	☐	200.000	198.832	993287.41	0.3981	P	1.0

y = 0.0020 * x + 2.0640E-004
R = 0.9999
DL = 0.07596
BEC = 0.1031

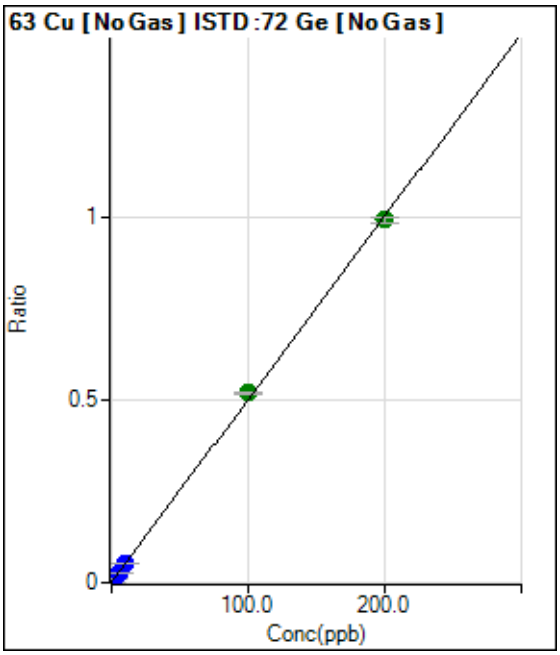
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	160.00	0.0002	P	12.6
2	☐	2.000	2.078	5621.28	0.0076	P	8.8
3	☐	5.000	5.154	13533.64	0.0186	P	3.0
4	☐	10.000	10.157	26456.01	0.0365	P	1.8
5	☐	100.000	100.695	257917.48	0.3602	P	1.3
6	☐	200.000	199.640	496984.08	0.7139	P	0.5

y = 0.0036 * x + 2.1794E-004
R = 1.0000
DL = 0.02309
BEC = 0.06097

Weight: <None>
Min Conc: <None>

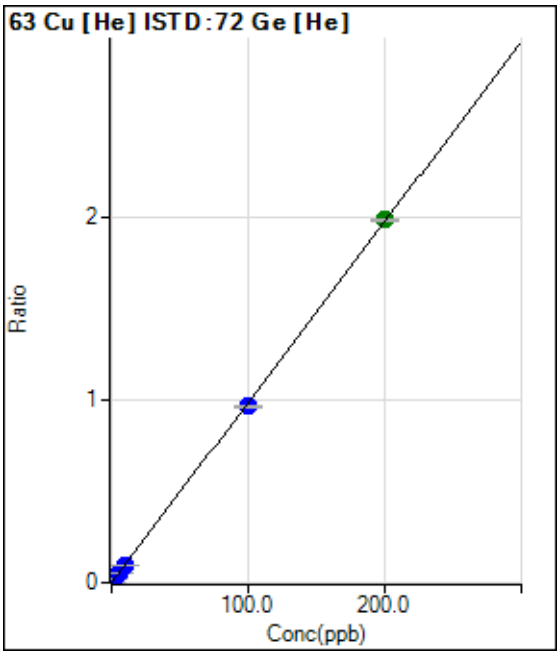


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2950.38	0.0011	P	13.0
2	☐	2.000	2.032	29021.30	0.0113	P	2.3
3	☐	5.000	5.226	69205.91	0.0273	P	1.9
4	☐	10.000	10.058	132901.61	0.0515	P	2.2
5	☐	100.000	103.660	1307021.46	0.5201	A	0.9
6	☐	200.000	198.161	2477657.88	0.9931	A	1.4

y = 0.0050 * x + 0.0011
R = 0.9998
DL = 0.0886
BEC = 0.2271

Weight: <None>
Min Conc: <None>

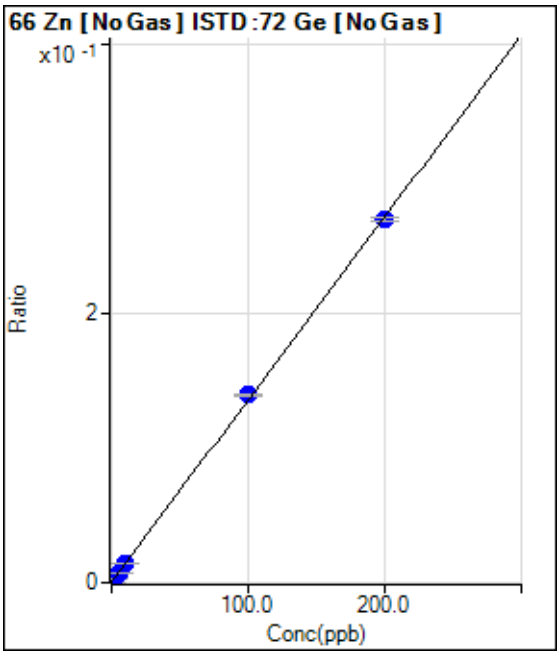
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1196.75	0.0016	P	8.8
2	☐	2.000	2.020	15846.11	0.0216	P	1.1
3	☐	5.000	5.060	37428.62	0.0516	P	1.3
4	☐	10.000	9.842	71514.86	0.0987	P	1.7
5	☐	100.000	97.665	691214.13	0.9653	P	1.7
6	☐	200.000	201.174	1383064.20	1.9866	A	0.7

y = 0.0099 * x + 0.0016
R = 0.9999
DL = 0.0436
BEC = 0.1651

Weight: <None>
Min Conc: <None>

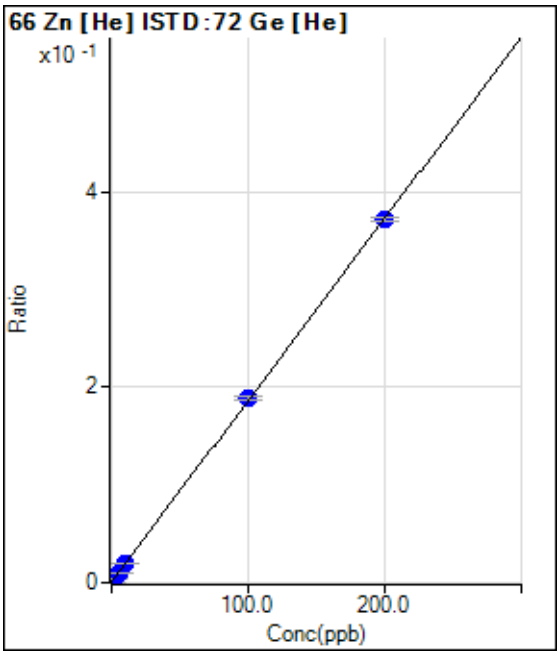


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	990.06	0.0004	P	8.5
2	☐	2.000	2.287	8923.08	0.0035	P	5.3
3	☐	5.000	5.374	19404.16	0.0077	P	3.2
4	☐	10.000	10.117	36318.84	0.0141	P	4.1
5	☐	100.000	102.782	350477.51	0.1395	P	1.3
6	☐	200.000	198.591	671417.52	0.2691	P	1.0

y = 0.0014 * x + 3.8130E-004
R = 0.9999
DL = 0.0718
BEC = 0.2818

Weight: <None>
Min Conc: <None>

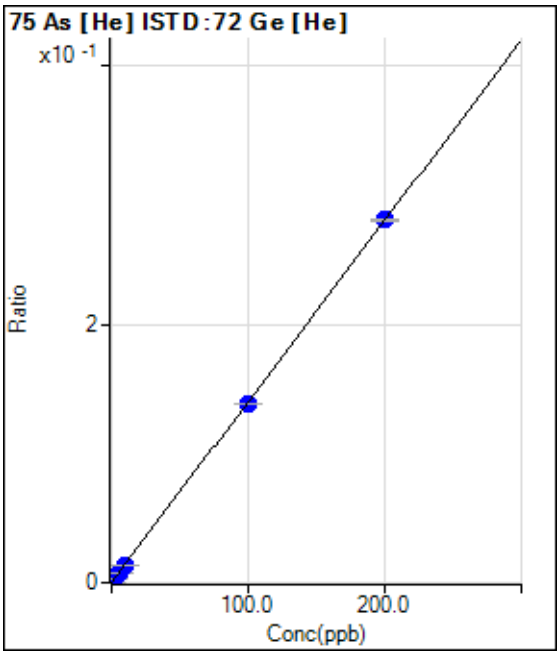
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	363.35	0.0005	P	21.2
2	☐	2.000	2.238	3423.83	0.0047	P	4.5
3	☐	5.000	5.122	7275.43	0.0100	P	3.8
4	☐	10.000	10.047	13894.00	0.0192	P	2.2
5	☐	100.000	101.192	135138.11	0.1887	P	1.9
6	☐	200.000	199.396	258564.18	0.3714	P	1.1

y = 0.0019 * x + 4.9509E-004
R = 1.0000
DL = 0.1692
BEC = 0.2662

Weight: <None>
Min Conc: <None>

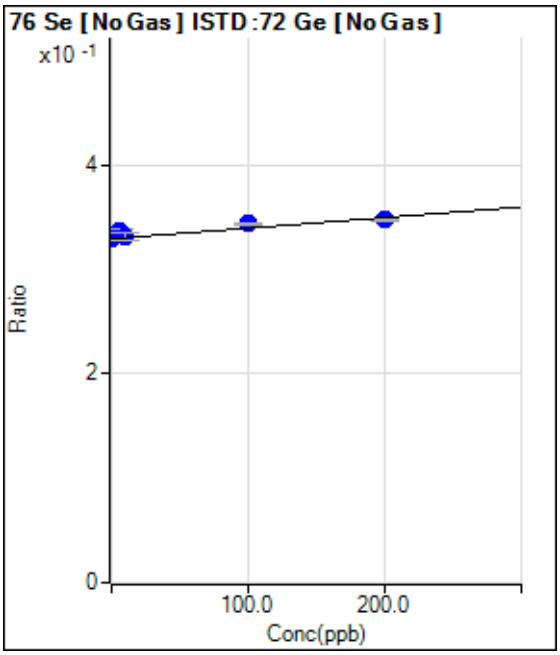


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	164.45	0.0002	P	7.6
2	☐	2.000	1.945	2165.74	0.0029	P	1.2
3	☐	5.000	4.992	5236.60	0.0072	P	2.0
4	☐	10.000	9.778	10077.13	0.0139	P	0.8
5	☐	100.000	98.978	99401.92	0.1388	P	0.3
6	☐	200.000	200.523	195605.13	0.2810	P	0.8

y = 0.0014 * x + 2.2404E-004
R = 1.0000
DL = 0.03643
BEC = 0.16

Weight: <None>
Min Conc: <None>

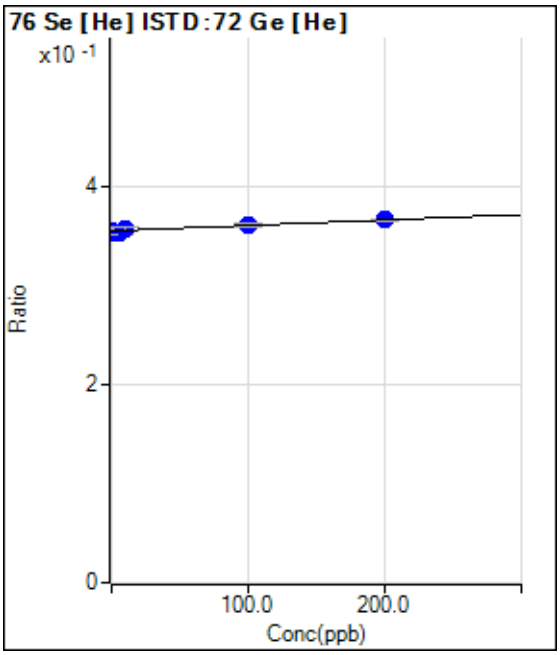
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	854771.39	0.3290	P	1.2
2	☐	2.000	40.624	854793.35	0.3331	P	0.7
3	☐	5.000	74.083	853057.64	0.3365	P	0.9
4	☐	10.000	20.961	854654.21	0.3311	P	2.7
5	☐	100.000	139.789	862360.56	0.3432	P	1.0
6	☐	200.000	177.444	865666.68	0.3470	P	0.8

y = 1.0137E-004 * x + 0.3290
R = 0.9177
DL = 115
BEC = 3245

Weight: <None>
Min Conc: <None>

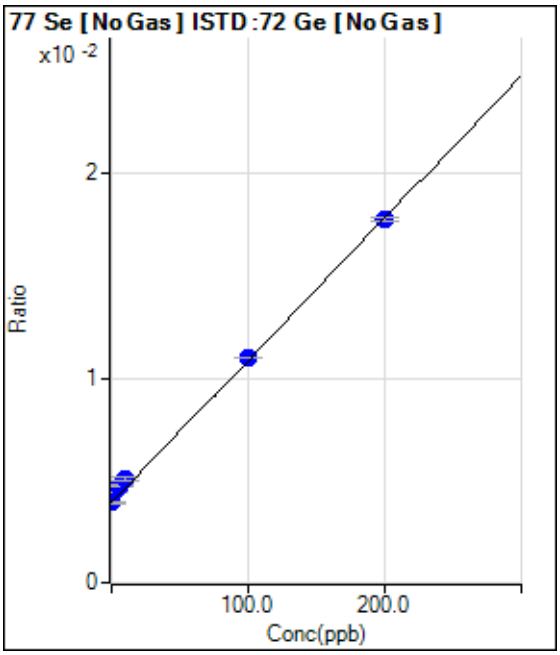


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	260425.50	0.3547	P	1.1
2	☐	2.000	-19.654	259930.28	0.3536	P	0.5
3	☐	5.000	-30.419	256282.11	0.3530	P	1.7
4	☐	10.000	37.221	258388.02	0.3568	P	1.1
5	☐	100.000	100.262	257991.25	0.3603	P	1.0
6	☐	200.000	199.610	254636.44	0.3658	P	0.5

y = 5.5319E-005 * x + 0.3547
R = 0.9708
DL = 215.7
BEC = 6412

Weight: <None>
Min Conc: <None>

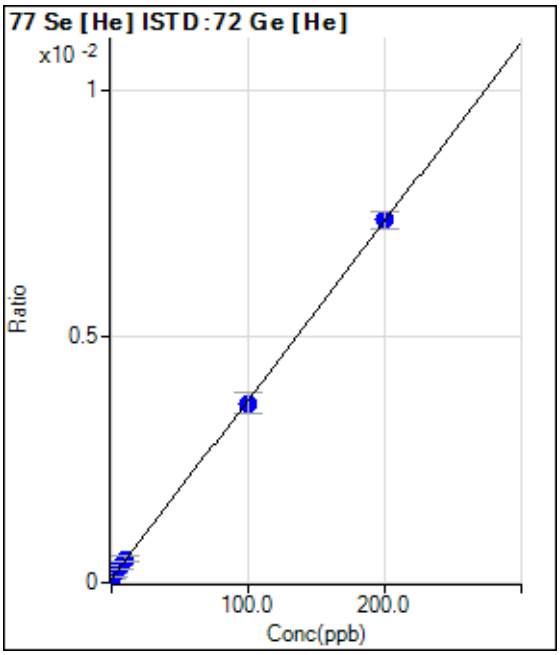
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10187.33	0.0039	P	1.7
2	☐	2.000	7.739	11441.67	0.0045	P	2.7
3	☐	5.000	11.691	11998.87	0.0047	P	2.8
4	☐	10.000	16.281	13043.16	0.0051	P	3.3
5	☐	100.000	101.766	27638.61	0.0110	P	0.7
6	☐	200.000	198.578	44236.04	0.0177	P	1.2

y = 6.9547E-005 * x + 0.0039
R = 0.9995
DL = 2.839
BEC = 56.37

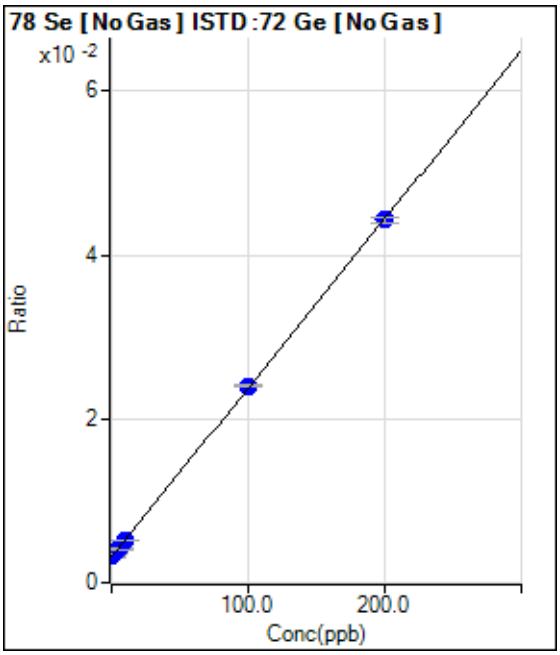
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0001	P	44.1
2	☐	2.000	2.242	120.00	0.0002	P	38.1
3	☐	5.000	6.605	233.34	0.0003	P	25.7
4	☐	10.000	11.186	353.35	0.0005	P	22.2
5	☐	100.000	98.246	2613.63	0.0037	P	11.5
6	☐	200.000	200.775	5137.73	0.0074	P	4.8

y = 3.6350E-005 * x + 8.1687E-005
R = 0.9999
DL = 2.972
BEC = 2.247

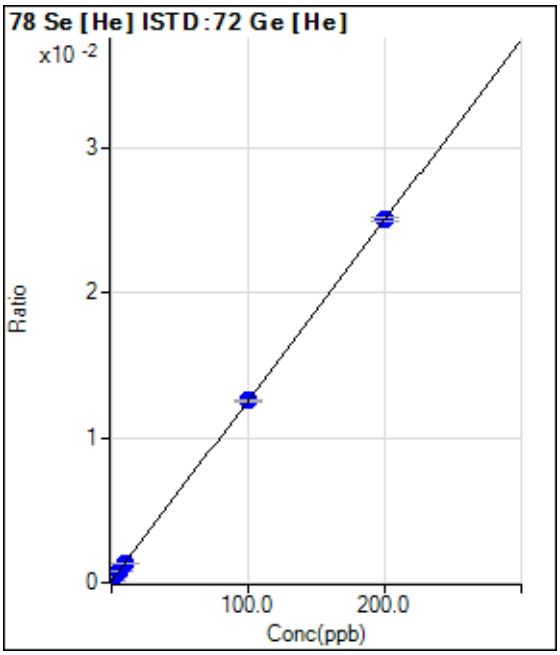
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8229.31	0.0032	P	2.5
2	☐	2.000	1.686	9019.85	0.0035	P	3.4
3	☐	5.000	4.972	10627.70	0.0042	P	4.3
4	☐	10.000	9.490	13223.41	0.0051	P	2.6
5	☐	100.000	101.017	60254.77	0.0240	P	1.0
6	☐	200.000	199.521	110440.17	0.0443	P	1.6

y = 2.0600E-004 * x + 0.0032
R = 1.0000
DL = 1.171
BEC = 15.38

Weight: <None>
Min Conc: <None>

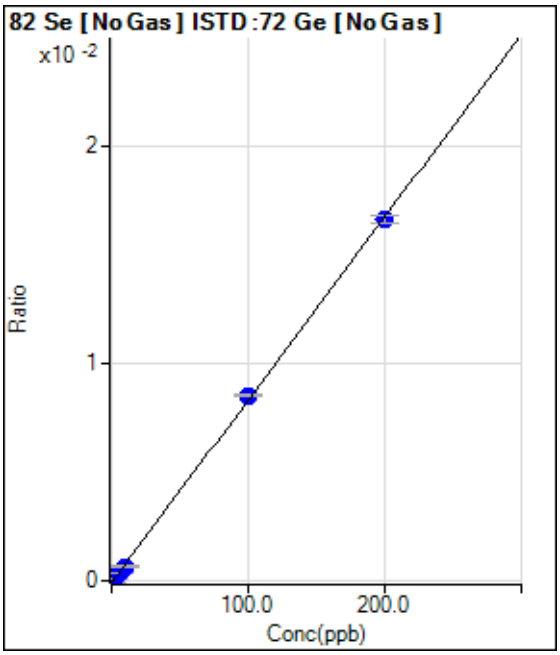


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.00	0.0001	P	15.0
2	☐	2.000	1.867	262.67	0.0004	P	10.5
3	☐	5.000	5.225	562.68	0.0008	P	2.9
4	☐	10.000	9.940	986.04	0.0014	P	3.5
5	☐	100.000	99.820	8979.67	0.0125	P	1.8
6	☐	200.000	200.089	17407.90	0.0250	P	1.2

y = 1.2434E-004 * x + 1.2527E-004
R = 1.0000
DL = 0.453
BEC = 1.007

Weight: <None>
Min Conc: <None>

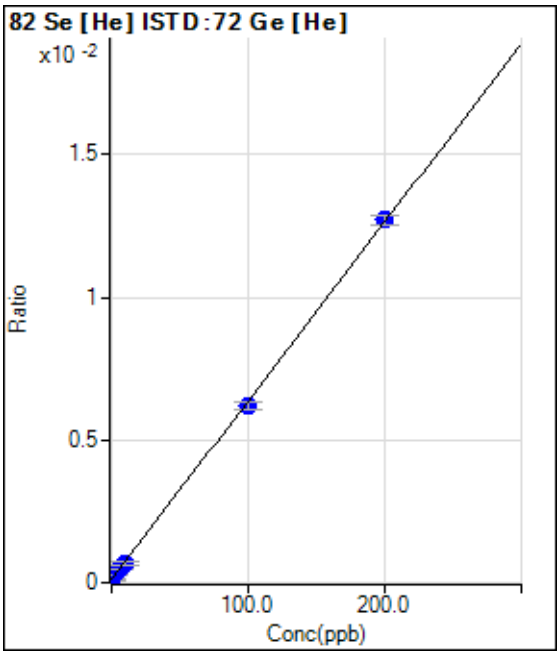
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.95	0.0000	P	-56.0
2	☐	2.000	2.439	401.96	0.0002	P	27.6
3	☐	5.000	5.466	1041.78	0.0004	P	4.1
4	☐	10.000	8.817	1788.17	0.0007	P	6.2
5	☐	100.000	102.500	21506.83	0.0086	P	1.3
6	☐	200.000	198.793	41518.14	0.0166	P	2.4

y = 8.3962E-005 * x - 4.7955E-005
R = 0.9999
DL = 0.9597
BEC = -0.5712

Weight: <None>
Min Conc: <None>

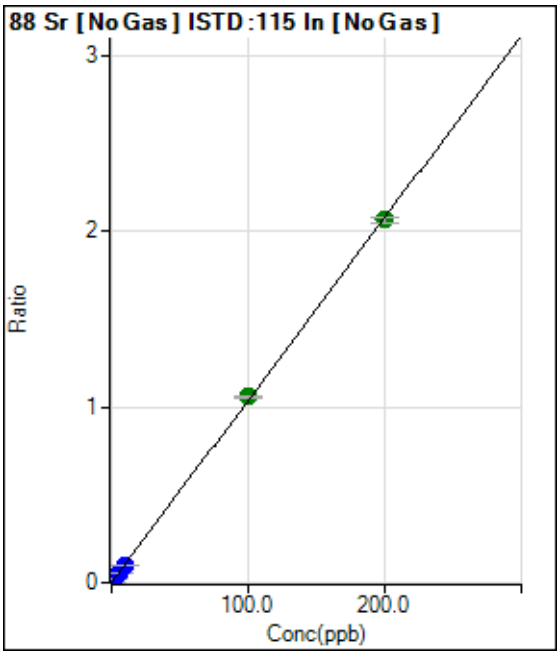


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0001	P	68.3
2	☐	2.000	2.678	206.67	0.0003	P	29.3
3	☐	5.000	5.678	340.01	0.0005	P	9.0
4	☐	10.000	8.994	490.02	0.0007	P	15.7
5	☐	100.000	97.371	4444.15	0.0062	P	4.9
6	☐	200.000	201.341	8849.72	0.0127	P	2.5

y = 6.2572E-005 * x + 1.1339E-004
R = 0.9998
DL = 3.714
BEC = 1.812

Weight: <None>
Min Conc: <None>

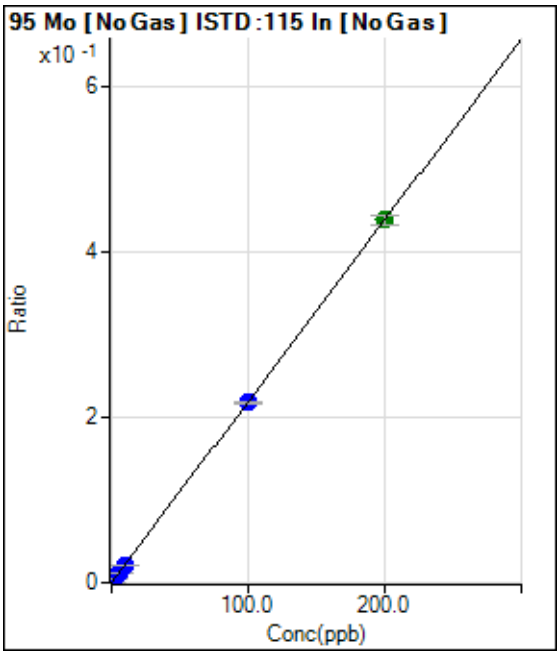
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	913.39	0.0003	P	4.3
2	☐	2.000	2.014	68719.98	0.0212	P	1.3
3	☐	5.000	5.130	172274.76	0.0534	P	0.8
4	☐	10.000	9.937	333203.31	0.1032	P	0.4
5	☐	100.000	102.016	3357579.32	1.0573	A	0.9
6	☐	200.000	198.992	6469611.99	2.0621	A	1.3

y = 0.0104 * x + 2.8419E-004
R = 0.9999
DL = 0.00353
BEC = 0.02743

Weight: <None>
Min Conc: <None>

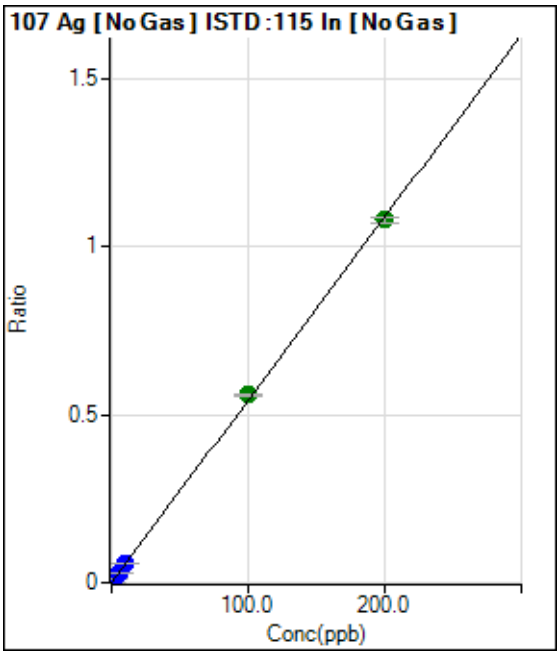


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	143.34	0.0000	P	18.1
2	☐	2.000	1.948	13994.18	0.0043	P	3.4
3	☐	5.000	5.000	35440.90	0.0110	P	2.7
4	☐	10.000	9.689	68599.50	0.0213	P	0.5
5	☐	100.000	99.546	692147.83	0.2180	P	1.5
6	☐	200.000	200.243	1375185.81	0.4384	A	2.3

y = 0.0022 * x + 4.4619E-005
R = 1.0000
DL = 0.01104
BEC = 0.02038

Weight: <None>
Min Conc: <None>

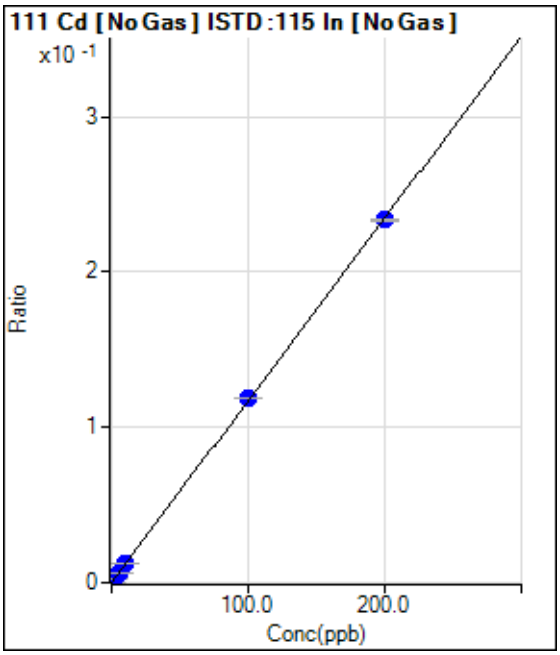
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	580.02	0.0002	P	22.9
2	☐	2.000	2.137	38305.86	0.0118	P	0.9
3	☐	5.000	5.373	94700.64	0.0294	P	1.3
4	☐	10.000	10.502	184732.40	0.0572	P	0.9
5	☐	100.000	102.653	1771751.17	0.5579	A	1.7
6	☐	200.000	198.638	3386155.78	1.0795	A	1.7

y = 0.0054 * x + 1.8036E-004
R = 0.9999
DL = 0.02281
BEC = 0.0332

Weight: <None>
Min Conc: <None>

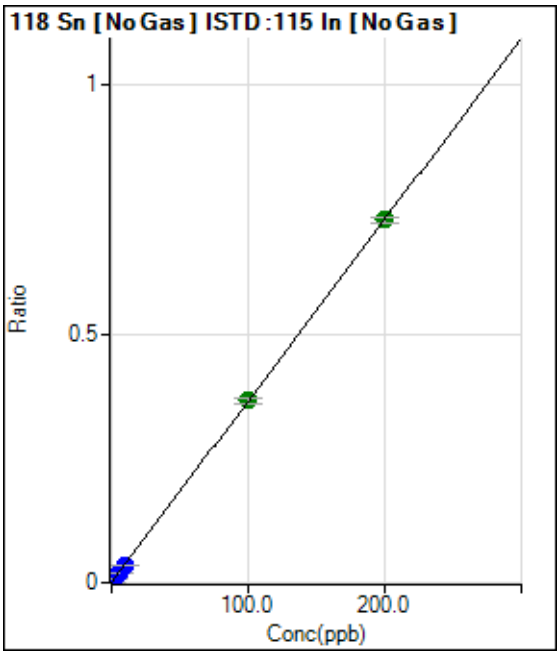


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	35.1
2	☐	2.000	2.038	7775.79	0.0024	P	2.2
3	☐	5.000	5.182	19588.23	0.0061	P	3.6
4	☐	10.000	10.091	38185.60	0.0118	P	0.8
5	☐	100.000	101.436	377490.53	0.1189	P	0.7
6	☐	200.000	199.272	732673.87	0.2335	P	0.5

y = 0.0012 * x + 5.1936E-006
R = 1.0000
DL = 0.004671
BEC = 0.004432

Weight: <None>
Min Conc: <None>

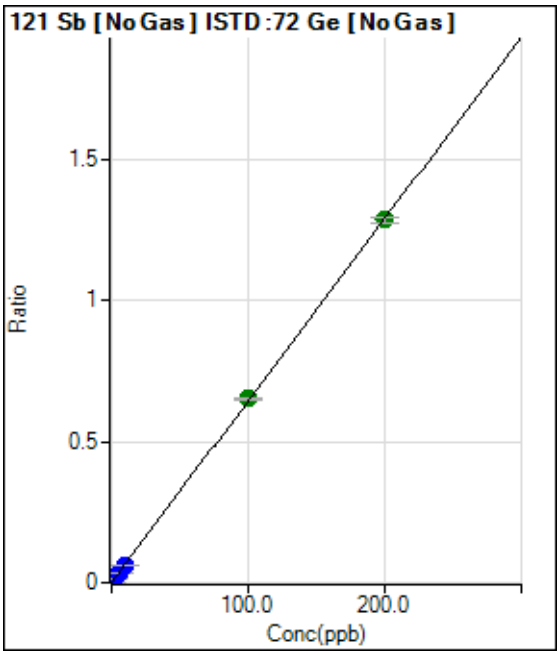
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1890.18	0.0006	P	4.4
2	☐	2.000	1.893	24319.57	0.0075	P	3.5
3	☐	5.000	4.826	58577.50	0.0182	P	3.2
4	☐	10.000	9.688	115838.28	0.0359	P	0.6
5	☐	100.000	100.183	1161124.39	0.3656	A	3.2
6	☐	200.000	199.929	2287231.95	0.7291	A	1.4

y = 0.0036 * x + 5.8818E-004
R = 1.0000
DL = 0.02118
BEC = 0.1614

Weight: <None>
Min Conc: <None>

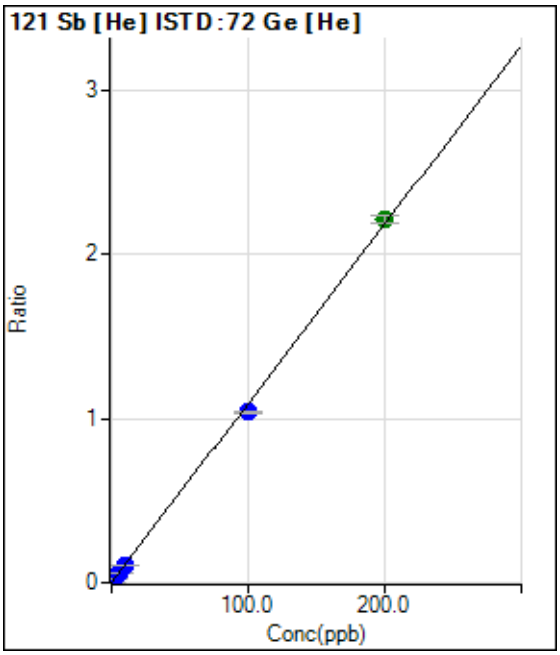


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2110.21	0.0008	P	6.1
2	☐	2.000	2.085	36588.15	0.0143	P	1.4
3	☐	5.000	5.018	84111.96	0.0332	P	0.2
4	☐	10.000	9.659	162911.98	0.0631	P	2.8
5	☐	100.000	100.949	1638175.50	0.6519	A	1.6
6	☐	200.000	199.541	3213063.49	1.2878	A	1.3

y = 0.0064 * x + 8.1239E-004
R = 1.0000
DL = 0.0232
BEC = 0.126

Weight: <None>
Min Conc: <None>

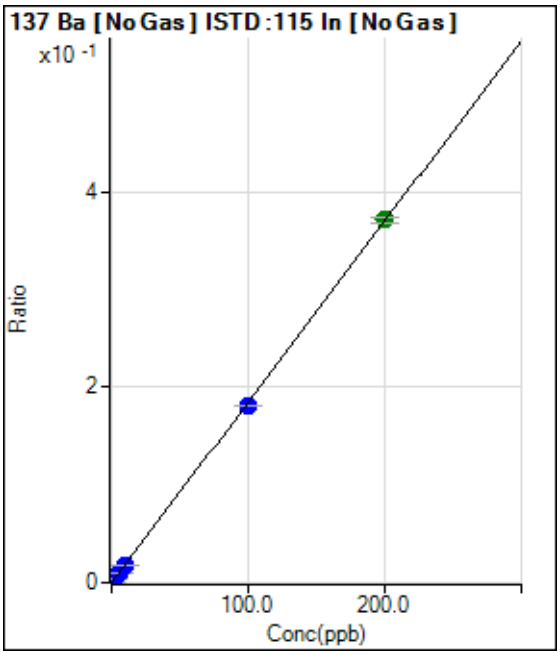
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1113.40	0.0015	P	1.0
2	☐	2.000	1.944	16710.90	0.0227	P	0.8
3	☐	5.000	4.792	39068.45	0.0538	P	2.6
4	☐	10.000	9.440	75721.41	0.1046	P	0.7
5	☐	100.000	94.975	743487.13	1.0382	P	1.3
6	☐	200.000	202.546	1540195.03	2.2123	A	2.1

y = 0.0109 * x + 0.0015
R = 0.9996
DL = 0.004002
BEC = 0.1389

Weight: <None>
Min Conc: <None>

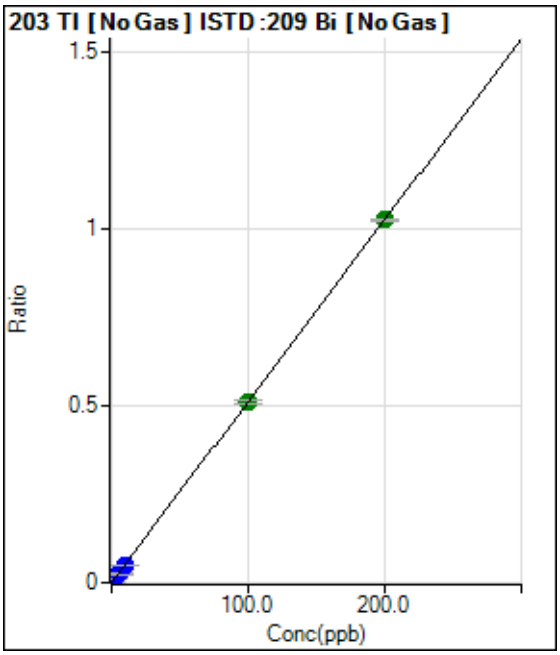


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	230.01	0.0001	P	28.1
2	☐	2.000	2.026	12386.12	0.0038	P	4.2
3	☐	5.000	5.074	30436.03	0.0094	P	1.8
4	☐	10.000	9.836	58846.55	0.0182	P	0.8
5	☐	100.000	98.313	576707.89	0.1816	P	0.1
6	☐	200.000	200.850	1163704.23	0.3709	A	1.5

y = 0.0018 * x + 7.1520E-005
R = 0.9999
DL = 0.03269
BEC = 0.03873

Weight: <None>
Min Conc: <None>

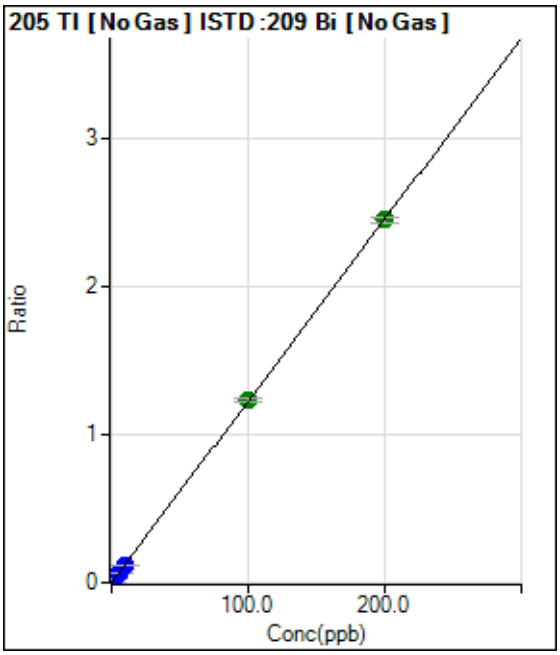
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	343.35	0.0001	P	23.1
2	☐	2.000	1.915	34504.53	0.0099	P	4.0
3	☐	5.000	4.794	86998.87	0.0247	P	4.9
4	☐	10.000	9.444	170442.02	0.0485	P	1.7
5	☐	100.000	99.779	1784461.54	0.5120	A	2.4
6	☐	200.000	200.144	3475948.39	1.0269	A	0.8

y = 0.0051 * x + 9.8042E-005
R = 1.0000
DL = 0.01326
BEC = 0.01911

Weight: <None>
Min Conc: <None>

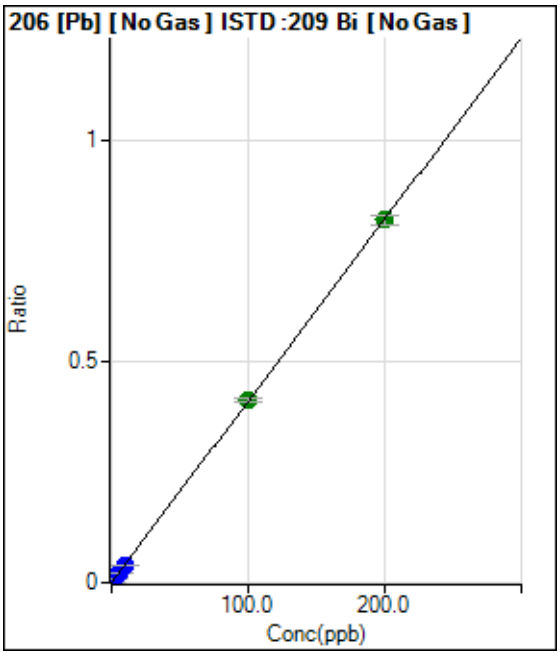


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	926.72	0.0003	P	6.7
2	☐	2.000	1.920	82669.79	0.0238	P	2.2
3	☐	5.000	4.910	212789.08	0.0604	P	3.1
4	☐	10.000	9.612	414013.76	0.1179	P	1.8
5	☐	100.000	100.316	4281434.10	1.2283	A	1.8
6	☐	200.000	199.864	8282128.42	2.4469	A	1.6

y = 0.0122 * x + 2.6481E-004
R = 1.0000
DL = 0.004327
BEC = 0.02163

Weight: <None>
Min Conc: <None>

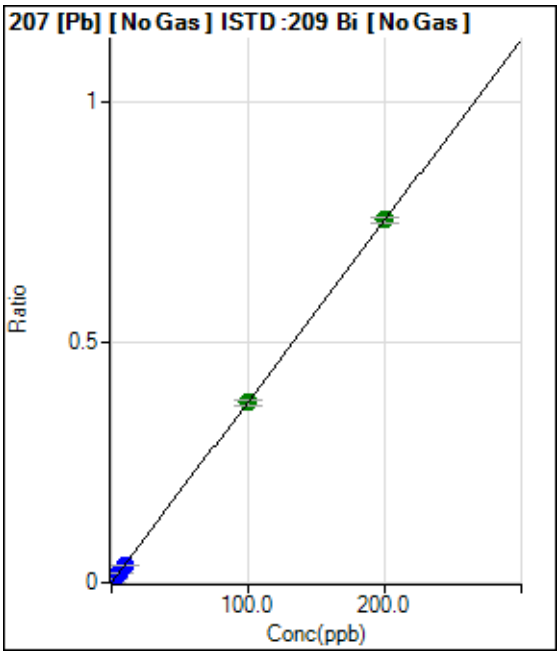
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	443.35	0.0001	P	29.4
2	☐	2.000	1.949	28215.53	0.0081	P	2.0
3	☐	5.000	4.889	71048.44	0.0202	P	2.8
4	☐	10.000	9.541	137657.41	0.0392	P	1.3
5	☐	100.000	100.361	1433377.48	0.4112	A	2.4
6	☐	200.000	199.846	2770944.54	0.8187	A	2.3

y = 0.0041 * x + 1.2631E-004
R = 1.0000
DL = 0.02716
BEC = 0.03084

Weight: <None>
Min Conc: <None>

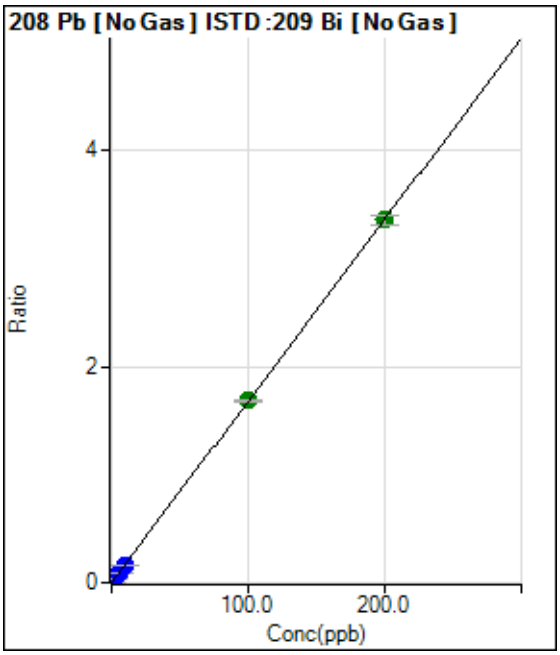


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	440.02	0.0001	P	3.0
2	☐	2.000	1.942	25860.62	0.0074	P	1.0
3	☐	5.000	4.860	64895.44	0.0184	P	1.6
4	☐	10.000	9.563	126717.53	0.0361	P	2.9
5	☐	100.000	99.318	1302576.15	0.3737	A	2.7
6	☐	200.000	200.367	2551307.10	0.7538	A	1.9

y = 0.0038 * x + 1.2573E-004
R = 1.0000
DL = 0.003056
BEC = 0.03342

Weight: <None>
Min Conc: <None>

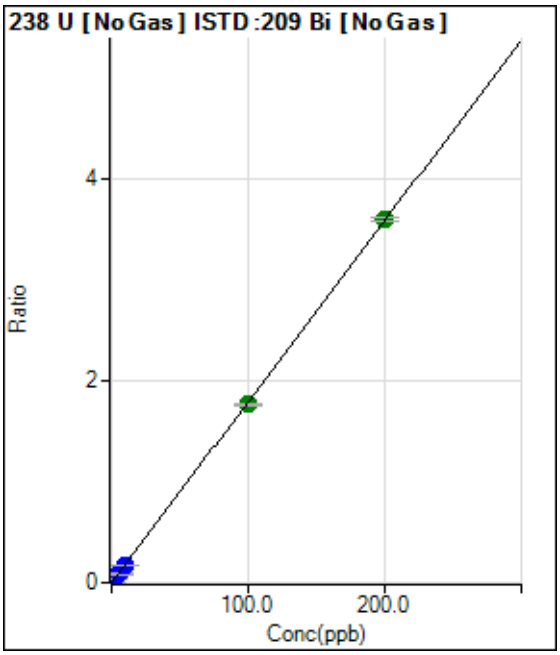
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1916.77	0.0005	P	2.7
2	☐	2.000	1.949	115822.79	0.0333	P	2.5
3	☐	5.000	4.889	291521.24	0.0827	P	2.2
4	☐	10.000	9.538	564615.93	0.1608	P	2.0
5	☐	100.000	100.155	5868323.48	1.6836	A	1.3
6	☐	200.000	199.949	11373490.51	3.3605	A	2.5

y = 0.0168 * x + 5.4767E-004
R = 1.0000
DL = 0.002639
BEC = 0.03259

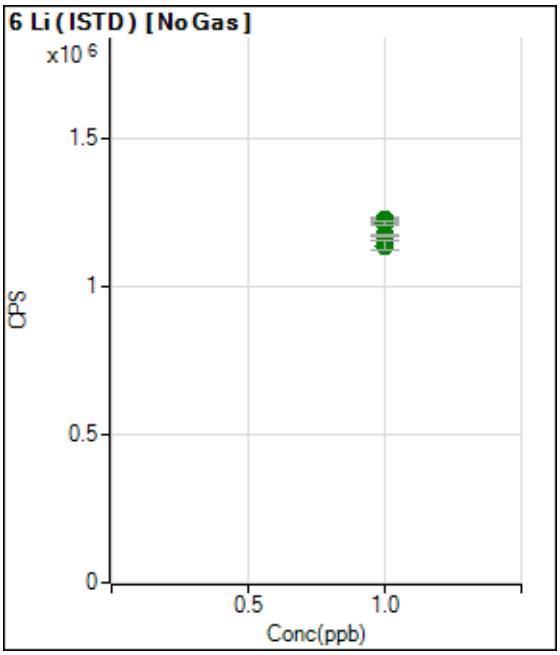
Weight: <None>
Min Conc: <None>



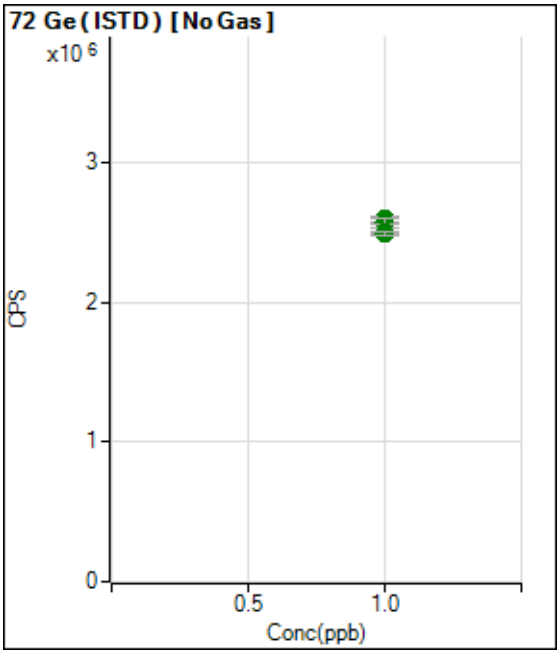
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.33	0.0000	P	5.1
2	☐	2.000	1.913	119089.39	0.0342	P	3.6
3	☐	5.000	4.798	302563.45	0.0858	P	2.8
4	☐	10.000	9.493	596035.19	0.1698	P	3.0
5	☐	100.000	98.744	6155313.66	1.7659	A	1.4
6	☐	200.000	200.659	12147386.90	3.5885	A	1.0

y = 0.0179 * x + 3.8120E-005
R = 1.0000
DL = 0.0003246
BEC = 0.002132

Weight: <None>
Min Conc: <None>

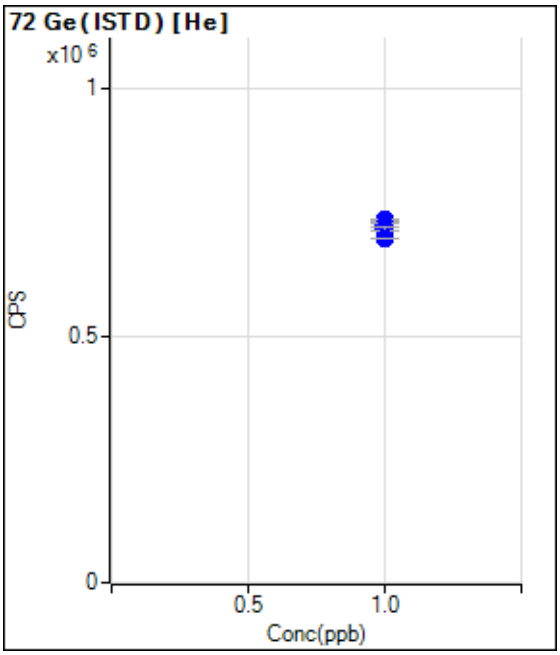


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1218583.66		A	1.6
2	☐	1.000		1224844.12		A	1.2
3	☐	1.000		1218251.22		A	1.0
4	☐	1.000		1216770.58		A	1.1
5	☐	1.000		1173236.07		A	0.7
6	☐	1.000		1137769.99		A	2.7

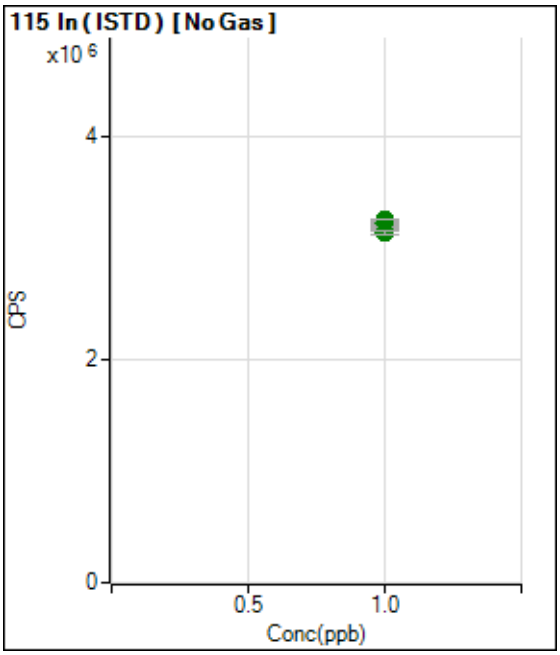


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2598394.13		A	1.3
2	☐	1.000		2566179.49		A	0.6
3	☐	1.000		2535125.38		A	0.2
4	☐	1.000		2581816.63		A	1.4
5	☐	1.000		2513155.33		A	1.1
6	☐	1.000		2494947.04		A	0.9

Calibration for 018_ICV.d

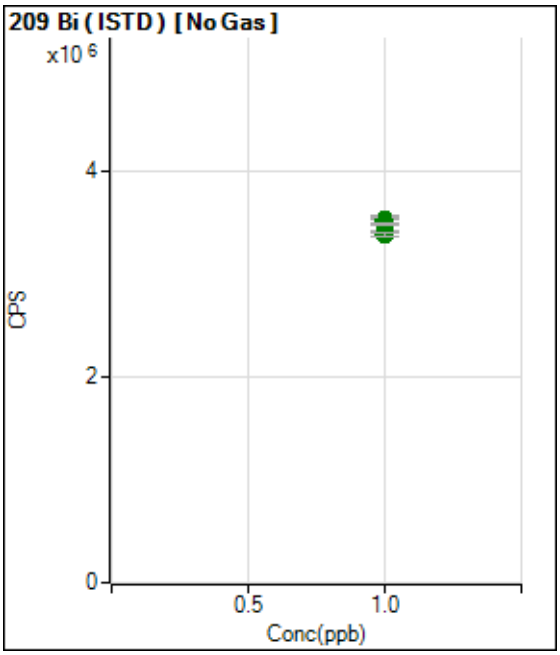


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		734219.55		P	0.6
2	☐	1.000		735049.86		P	0.3
3	☐	1.000		726016.66		P	1.4
4	☐	1.000		724264.99		P	0.7
5	☐	1.000		716187.25		P	1.4
6	☐	1.000		696198.06		P	0.1



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3214164.95		A	0.8
2	☐	1.000		3248603.64		A	0.7
3	☐	1.000		3224136.95		A	1.4
4	☐	1.000		3227431.97		A	1.3
5	☐	1.000		3175536.61		A	0.4
6	☐	1.000		3137329.64		A	1.2

Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3498812.55		A	1.6
2	☐	1.000		3480125.99		A	2.9
3	☐	1.000		3526315.15		A	2.4
4	☐	1.000		3511587.87		A	2.3
5	☐	1.000		3485914.95		A	0.9
6	☐	1.000		3385108.39		A	1.3

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	019_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:34:22-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.189	-69.2	75918	1.0	0.5	
Be	9	1	No Gas	0.007	23.1	65	13.3	0.5	
V	51	2	He	0.057	29.8	2904	3.7	2.5	
Cr	52	2	He	-0.007	-146.4	1110	6.5	2.5	
Fe	56	2	He	0.838	10.9	19828	3.4	100	
Se	78	2	He	0.016	478.5	93	6.9	1	
As	75	2	He	0.027	106.2	191	16.5	2.5	
Ca	44	2	He	1.975	58.1	377	12.3	100	
Na	23	2	He	2.931	36.6	90908	0.3	100	
Mg	24	2	He	0.222	71.2	463	21.2	100	
K	39	2	He	-0.925	-141.7	54327	1.4	100	
Mn	55	2	He	0.002	162.4	377	4.1	2.5	
Co	59	2	He	0.004	74.7	90	38.5	2.5	
Ni	60	2	He	-0.014	-73.8	123	20.4	2.5	
Cu	63	2	He	0.026	84.1	1377	11.9	1	
Zn	66	2	He	-0.013	-181.7	343	10.2	2.5	
Al	27	2	He	0.254	52.6	710	5.6	5	
B	11	1	No Gas	16.554	5.5	58423	6.5	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	0.327	17.4	30046	2.7	5	
Si	28	1	No Gas	3.923	13.2	283066	0.8	10	
Ag	107	1	No Gas	0.000	-1227.8	573	11.2	2.5	
Cd	111	1	No Gas	0.001	300.1	20	50.0	1	
Sr	88	1	No Gas	0.010	12.1	1247	3.6	2.5	
Mo	95	1	No Gas	0.136	49.8	1100	43.8	2.5	
Sn	118	1	No Gas	0.038	45.2	2337	8.8	5	
Sb	121	1	No Gas	0.142	3.6	4411	2.1	2.5	
Ba	137	1	No Gas	0.003	195.4	247	13.0	2.5	
Tl	205	1	No Gas	0.072	57.3	4018	44.8	1	
Tl	203	1	No Gas	0.076	48.4	1714	39.5	1	
Pb	208	1	No Gas	0.013	49.4	2700	15.2	2.5	
U	238	1	No Gas	0.021	24.9	1423	23.4	2.5	
Ca	43	2	He	-1.497	-3.3	10	0.0	100	
Sb	121	2	He	0.128	13.5	2120	5.7	2.5	
Ti	47	2	He	-0.015	-178.3	3	173.2	2.5	
Se	82	1	No Gas	0.063	82.0	-109	-10.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1248914	3.32	1218584	102.49	70	120	
Ge	72	2	He	728622	1.09	734220	99.24	70	120	
Ge	72	1	No Gas	2549002	0.87	2598394	98.10	70	120	
In	115	1	No Gas	3211258	0.68	3214165	99.91	70	120	
Bi	209	1	No Gas	3504757	1.09	3498813	100.17	70	120	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	020LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:36:21-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.922	1.922	4.06	109493	0.00	2	
Be	9	1	No Gas	1.969	1.969	1.62	8091	0.02	2	
V	51	2	He	1.955	1.955	1.14	14558	0.01	2	
Cr	52	2	He	1.928	1.928	2.89	15225	0.01	2	
Fe	56	2	He	205.535	205.535	1.29	1347929	0.02	200	
Se	78	2	He	1.953	1.953	18.26	270	0.72	2	
As	75	2	He	1.962	1.962	2.20	2180	0.09	2	
Ca	44	2	He	202.876	202.876	2.99	7759	2.61	200	
Na	23	2	He	205.028	205.028	1.21	305561	0.07	200	
Mg	24	2	He	208.757	208.757	0.82	128882	0.16	200	
K	39	2	He	197.090	197.090	0.56	190303	0.10	200	
Mn	55	2	He	1.915	1.915	0.96	10644	0.02	2	
Co	59	2	He	1.910	1.910	2.35	21614	0.01	2	
Ni	60	2	He	2.176	2.176	1.60	5868	0.04	2	
Cu	63	2	He	1.959	1.959	4.95	15372	0.01	2	
Zn	66	2	He	2.133	2.133	3.17	3274	0.07	2	
Al	27	2	He	2.371	2.371	28.45	1450	0.16	2	
B	11	1	No Gas	15.155	15.155	1.97	53992	0.03	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.304	2.304	3.25	59715	0.00	2	
Si	28	1	No Gas	14.093	14.093	27.23	358899	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	2.172	2.172	0.64	38777	0.01	2	
Cd	111	1	No Gas	2.082	2.082	2.35	7916	0.03	2	
Sr	88	1	No Gas	2.018	2.018	1.38	68619	0.00	2	
Mo	95	1	No Gas	2.001	2.001	0.73	14321	0.01	2	
Sn	118	1	No Gas	1.931	1.931	0.34	24684	0.01	2	
Sb	121	1	No Gas	2.140	2.140	1.99	37695	0.01	2	
Ba	137	1	No Gas	2.055	2.055	1.21	12516	0.02	2	
Tl	205	1	No Gas	1.938	1.938	1.31	83556	0.00	2	
Tl	203	1	No Gas	1.901	1.901	2.13	34307	0.01	2	
Pb	208	1	No Gas	1.970	1.970	0.73	117153	0.00	2	
U	238	1	No Gas	1.944	1.944	1.31	121213	0.00	2	
Ca	43	2	He	197.675	197.675	11.64	443	44.59	200	
Sb	121	2	He	1.992	1.992	1.13	17068	0.01	2	
Ti	47	2	He	1.942	1.942	17.99	440	0.44	200	
Cu	63	1	No Gas	2.003	2.003	1.93	28787	0.01	2	
Se	82	1	No Gas	1.647	1.647	18.90	233	0.71	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1225728	0.66	1218584	100.59	70	120	
Ge	72	2	He	733653	0.68	734220	99.92	70	120	
Ge	72	1	No Gas	2579145	1.36	2598394	99.26	70	120	
In	115	1	No Gas	3236997	0.36	3214165	100.71	70	120	
Bi	209	1	No Gas	3482111	0.66	3498813	99.52	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	021LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:38:20-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.061	5.061	2.54	159880	0.00	5	
Be	9	1	No Gas	4.975	4.975	0.96	20188	0.02	5	
V	51	2	He	4.892	4.892	0.85	32410	0.02	5	
Cr	52	2	He	4.949	4.949	2.13	37074	0.01	5	
Fe	56	2	He	516.506	516.506	1.62	3349514	0.02	500	
Se	78	2	He	5.014	5.014	9.09	547	0.92	5	
As	75	2	He	5.072	5.072	2.58	5349	0.09	5	
Ca	44	2	He	502.056	502.056	1.02	18660	2.69	500	
Na	23	2	He	518.317	518.317	0.50	634312	0.08	500	
Mg	24	2	He	527.683	527.683	1.28	323733	0.16	500	
K	39	2	He	500.532	500.532	1.66	396217	0.13	500	
Mn	55	2	He	4.947	4.947	2.32	26787	0.02	5	
Co	59	2	He	4.750	4.750	0.75	53452	0.01	5	
Ni	60	2	He	5.218	5.218	3.98	13780	0.04	5	
Cu	63	2	He	5.008	5.008	1.40	37271	0.01	5	
Zn	66	2	He	4.970	4.970	1.01	7112	0.07	5	
Al	27	2	He	4.944	4.944	7.86	2334	0.21	5	
B	11	1	No Gas	28.123	28.123	2.90	83889	0.03	25	
Al	27	1	No Gas	5.549	5.549	0.58	107365	0.01	5	
Si	28	1	No Gas	26.707	26.707	2.31	446387	0.01	25	
Ag	107	1	No Gas	5.382	5.382	0.84	94912	0.01	5	
Cd	111	1	No Gas	5.083	5.083	1.69	19231	0.03	5	
Sr	88	1	No Gas	5.108	5.108	1.41	171619	0.00	5	
Mo	95	1	No Gas	4.941	4.941	0.31	35033	0.01	5	
Sn	118	1	No Gas	4.952	4.952	2.97	60093	0.01	5	
Sb	121	1	No Gas	5.108	5.108	1.08	86675	0.01	5	
Ba	137	1	No Gas	5.030	5.030	2.03	30185	0.02	5	
Tl	205	1	No Gas	4.892	4.892	3.09	211236	0.00	5	
Tl	203	1	No Gas	4.899	4.899	3.56	88586	0.01	5	
Pb	208	1	No Gas	4.915	4.915	1.91	291975	0.00	5	
U	238	1	No Gas	4.778	4.778	3.00	300192	0.00	5	
Ca	43	2	He	477.043	477.043	7.19	1047	45.57	500	
Sb	121	2	He	4.870	4.870	0.95	39918	0.01	5	
Ti	47	2	He	4.979	4.979	7.97	1113	0.45	5	
Cu	63	1	No Gas	5.175	5.175	1.63	69430	0.01	5	
Se	82	1	No Gas	5.182	5.182	13.70	995	0.52	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1213752	1.01	1218584	99.60	70	120	
Ge	72	2	He	730173	0.41	734220	99.45	70	120	
Ge	72	1	No Gas	2567680	1.00	2598394	98.82	70	120	

Sample Report

In	115	1	No Gas	3225746	1.19	3214165	100.36	70	120	
Bi	209	1	No Gas	3512664	1.72	3498813	100.40	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	023ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:51:59-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.553	5.1	82486	1.2	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.002	-162.9	27	43.3	0	ICSA Main CR1 Failed
V	51	2	He	0.276	4.6	4021	2.0	0	ICSA Main CR1 Failed
Cr	52	2	He	2.172	3.5	16016	3.5	0	ICSA Main CR1 Failed
Fe	56	2	He	106160.265	0.6	648659217	0.4	0	
Se	78	2	He	0.187	99.1	103	15.6	0	ICSA Main CR1 Failed
As	75	2	He	0.128	29.2	279	12.7	0	ICSA Main CR1 Failed
Ca	44	2	He	105889.083	0.3	3663663	0.6	0	
Na	23	2	He	106249.466	0.6	106056388	0.9	0	
Mg	24	2	He	106508.247	1.0	61772859	0.8	0	
K	39	2	He	106758.860	1.0	68906011	0.6	0	
Mn	55	2	He	1.927	2.5	10087	2.1	0	ICSA Main CR1 Failed
Co	59	2	He	0.082	9.5	917	8.8	0	ICSA Main CR1 Failed
Ni	60	2	He	0.178	17.8	590	13.6	0	ICSA Main CR1 Failed
Cu	63	2	He	0.249	22.9	2824	13.5	0	ICSA Main CR1 Failed
Zn	66	2	He	1.101	7.4	1757	5.7	0	ICSA Main CR1 Failed
Al	27	2	He	100930.070	0.4	33033486	0.8	0	
B	11	1	No Gas	2.711	11.8	23264	1.7	0	
Al	27	1	No Gas	101714.083	1.1	1432566805	0.8	0	
Si	28	1	No Gas	28.989	1.6	441313	0.8	0	
Ag	107	1	No Gas	0.313	1.6	5578	1.3	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.914	2.5	6665	3.0	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	1.219	0.9	38282	1.9	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2116.614	1.7	13733719	0.9	0	
Sn	118	1	No Gas	0.099	35.0	2811	12.4	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.249	3.1	5928	1.5	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.411	5.5	2460	4.7	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.007	45.6	1090	11.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.012	55.0	503	21.9	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.087	9.2	6261	6.5	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.002	39.7	213	17.7	0	ICSA Main CR1 Failed
Ca	43	2	He	104709.443	1.5	214653	1.1	0	
Sb	121	2	He	0.199	3.0	2547	1.8	0	ICSA Main CR1 Failed
Ti	47	2	He	2136.256	0.5	449441	0.8	0	
Se	82	1	No Gas	-0.512	-135.5	-223	-64.0	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1164407	1.40	1218584	95.55	70	120	
Ge	72	2	He	690981	0.32	734220	94.11	70	120	
Ge	72	1	No Gas	2449766	0.85	2598394	94.28	70	120	
In	115	1	No Gas	2964194	1.02	3214165	92.22	70	120	
Bi	209	1	No Gas	3105733	0.19	3498813	88.77	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	024ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T10:54:01-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	107.724	4.007	1727588	0.74	100	107.7	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	108.171	2.161	410946	0.97	100	108.2	80	120	
V	51	2	He	108.003	1.178	623378	0.41	100	108.0	80	120	
Cr	52	2	He	107.399	1.391	735629	0.56	100	107.4	80	120	
Fe	56	2	He	115381.680	1.101	702164176	0.41	100	115381.7	80	120	
Se	78	2	He	112.432	1.222	9707	0.58	100	112.4	80	120	
As	75	2	He	110.313	0.468	106447	1.14	100	110.3	80	120	
Ca	44	2	He	116067.590	1.055	3999862	1.51	100	116067.6	80	120	
Na	23	2	He	116120.852	0.854	115434345	0.26	100	116120.9	80	120	
Mg	24	2	He	116318.386	1.509	67192401	1.38	100	116318.4	80	120	
K	39	2	He	117074.756	0.930	75257226	0.68	100	117074.8	80	120	
Mn	55	2	He	105.580	1.003	531706	0.25	100	105.6	80	120	
Co	59	2	He	104.186	1.572	1104101	0.73	100	104.2	80	120	
Ni	60	2	He	105.470	0.212	259619	0.65	100	105.5	80	120	
Cu	63	2	He	101.416	0.554	689787	0.31	100	101.4	80	120	
Zn	66	2	He	109.829	0.704	140943	1.24	100	109.8	80	120	
Al	27	2	He	101039.230	0.905	32935817	0.44	100	101039.2	80	120	
B	11	1	No Gas	544.682	3.290	1215370	0.86	100	544.7	80	120	
Al	27	1	No Gas	101675.548	2.995	1421356192	1.70	100	101675.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	578.483	0.925	4121803	1.54	100	578.5	80	120	
Ag	107	1	No Gas	105.398	2.740	1688028	1.14	100	105.4	80	120	
Cd	111	1	No Gas	111.032	1.803	383494	1.59	100	111.0	80	120	
Sr	88	1	No Gas	113.928	2.897	3479151	1.13	100	113.9	80	120	
Mo	95	1	No Gas	2243.094	3.008	14469449	1.25	100	2243.1	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	109.901	2.266	1181955	2.21	100	109.9	80	120	
Sb	121	1	No Gas	107.655	3.074	1690269	1.97	100	107.7	80	120	
Ba	137	1	No Gas	107.944	1.598	587654	1.11	100	107.9	80	120	
Tl	205	1	No Gas	111.235	2.174	4195341	1.34	100	111.2	80	120	
Tl	203	1	No Gas	108.847	1.046	1720713	2.04	100	108.8	80	120	
Pb	208	1	No Gas	111.424	1.792	5769867	1.78	100	111.4	80	120	
U	238	1	No Gas	111.900	0.892	6164805	0.60	100	111.9	80	120	
Ca	43	2	He	113181.646	0.329	231108	1.16	100	113181.6	80	120	
Sb	121	2	He	102.925	0.529	774202	0.35	100	102.9	80	120	
Ti	47	2	He	2249.300	0.970	471334	1.26	100	2249.3	80	120	
Cu	63	1	No Gas	106.851	0.482	1303745	1.90	100	106.9	80	120	
Se	82	1	No Gas	115.571	2.400	23479	1.76	100	115.6	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1138676	3.14	1218584	93.44	70	120	
Ge	72	2	He	688232	0.86	734220	93.74	70	120	
Ge	72	1	No Gas	2432058	1.43	2598394	93.60	70	120	
In	115	1	No Gas	2947623	1.75	3214165	91.71	70	120	
Bi	209	1	No Gas	3080758	1.08	3498813	88.05	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	026_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:08:39-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	97.698	2.567	1674596	1.26	100	97.7	90	110	
Be	9	1	No Gas	96.199	2.994	388754	0.79	100	96.2	90	110	
V	51	2	He	97.528	0.545	592144	0.49	100	97.5	90	110	
Cr	52	2	He	98.069	0.324	706414	0.46	100	98.1	90	110	
Fe	56	2	He	10056.596	0.279	64363617	0.21	10000	100.6	90	110	
Se	78	2	He	100.038	2.747	9091	2.48	100	100.0	90	110	
As	75	2	He	100.092	0.682	101563	0.41	100	100.1	90	110	
Ca	44	2	He	9860.953	0.701	357571	0.94	10000	98.6	90	110	
Na	23	2	He	9886.575	0.657	10413812	0.83	10000	98.9	90	110	
Mg	24	2	He	9892.862	0.258	6009046	0.28	10000	98.9	90	110	
K	39	2	He	9839.921	0.658	6700640	0.45	10000	98.4	90	110	
Mn	55	2	He	97.076	0.783	514074	0.81	100	97.1	90	110	
Co	59	2	He	99.808	1.611	1112159	1.33	100	99.8	90	110	
Ni	60	2	He	100.395	0.923	259844	0.78	100	100.4	90	110	
Cu	63	2	He	97.776	0.803	699292	1.00	100	97.8	90	110	
Zn	66	2	He	100.031	1.521	134997	1.25	100	100.0	90	110	
Al	27	2	He	98.506	1.448	34379	1.21	100	98.5	90	110	
B	11	1	No Gas	482.655	3.918	1147616	0.64	500	96.5	90	110	
Al	27	1	No Gas	102.577	1.971	1543969	1.64	100	102.6	90	110	
Si	28	1	No Gas	501.123	2.790	3814439	2.08	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.670	0.852	1793140	0.49	100	102.7	90	110	
Cd	111	1	No Gas	101.153	1.339	380913	0.81	100	101.2	90	110	
Sr	88	1	No Gas	102.180	0.861	3403057	1.04	100	102.2	90	110	
Mo	95	1	No Gas	99.120	0.769	697432	0.95	100	99.1	90	110	
Sn	118	1	No Gas	100.199	1.785	1174997	0.99	100	100.2	90	110	
Sb	121	1	No Gas	100.237	2.554	1666726	2.53	100	100.2	90	110	
Ba	137	1	No Gas	98.207	1.139	582941	0.61	100	98.2	90	110	
Tl	205	1	No Gas	100.098	0.588	4241649	1.81	100	100.1	90	110	
Tl	203	1	No Gas	99.771	1.411	1771641	1.95	100	99.8	90	110	
Pb	208	1	No Gas	101.088	1.246	5879877	0.33	100	101.1	90	110	
U	238	1	No Gas	98.725	1.191	6109426	0.50	100	98.7	90	110	
Ca	43	2	He	9813.128	3.177	21080	3.23	10000	98.1	90	110	
Sb	121	2	He	95.014	0.422	751556	0.69	100	95.0	90	110	
Ti	47	2	He	96.195	2.225	21200	2.21	100	96.2	90	110	
Cu	63	1	No Gas	100.391	0.617	1296958	0.84	100	100.4	90	110	
Se	82	1	No Gas	102.917	1.990	22124	1.39	100	102.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1211512	3.48	1218584	99.42	70	120	
Ge	72	2	He	723618	0.28	734220	98.56	70	120	
Ge	72	1	No Gas	2574843	0.61	2598394	99.09	70	120	
In	115	1	No Gas	3213482	0.79	3214165	99.98	70	120	
Bi	209	1	No Gas	3460697	1.50	3498813	98.91	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	027_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:10:32-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.049	224.3	78698	0.3	0.5	
Be	9	1	No Gas	-0.001	-204.2	30	33.3	0.5	
V	51	2	He	0.126	17.0	3346	4.2	2.5	
Cr	52	2	He	-0.016	-122.0	1050	14.9	2.5	
Fe	56	2	He	1.003	3.2	21000	0.1	100	
Se	78	2	He	0.070	326.8	98	20.4	2	
As	75	2	He	-0.001	-2401.1	163	11.4	2.5	
Ca	44	2	He	-0.254	-236.4	297	7.8	100	
Na	23	2	He	0.469	124.4	88794	0.5	100	
Mg	24	2	He	0.300	33.4	513	11.1	100	
K	39	2	He	5.812	26.5	59221	0.8	100	
Mn	55	2	He	0.019	25.4	473	6.1	2.5	
Co	59	2	He	-0.003	-19.7	13	43.3	2.5	
Ni	60	2	He	0.026	49.4	227	15.5	2.5	
Cu	63	2	He	0.042	66.8	1497	13.7	2	
Zn	66	2	He	0.072	102.6	460	21.0	2.5	
Al	27	2	He	-0.441	-33.2	473	11.6	5	
B	11	1	No Gas	12.349	17.2	47412	8.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.379	-6.8	19678	2.3	5	
Si	28	1	No Gas	1.044	26.9	262372	0.4	10	
Ag	107	1	No Gas	-0.001	-856.0	573	24.7	2.5	
Cd	111	1	No Gas	0.004	140.9	33	69.3	1	
Sr	88	1	No Gas	-0.010	-12.1	603	6.3	2.5	
Mo	95	1	No Gas	0.202	24.0	1593	22.7	2.5	
Sn	118	1	No Gas	0.051	66.4	2530	16.8	5	
Sb	121	1	No Gas	0.450	8.4	9450	7.1	2.5	
Ba	137	1	No Gas	-0.009	-142.3	180	41.9	2.5	
Tl	205	1	No Gas	0.085	63.0	4594	51.6	1	
Tl	203	1	No Gas	0.087	69.6	1907	58.3	1	
Pb	208	1	No Gas	0.009	59.2	2430	13.6	2.5	
U	238	1	No Gas	0.020	42.5	1393	39.7	2.5	
Ca	43	2	He	0.020	13485.5	13	43.3	100	
Sb	121	2	He	0.295	6.7	3471	4.0	2.5	
Ti	47	2	He	0.000	8282.8	7	86.6	2.5	
Cu	63	1	No Gas	0.055	5.2	3594	1.5	2.5	
Se	82	1	No Gas	0.300	180.2	-58	-199.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1229218	2.08	1218584	100.87	70	120	
Ge	72	2	He	732520	1.06	734220	99.77	70	120	
Ge	72	1	No Gas	2544400	0.53	2598394	97.92	70	120	
In	115	1	No Gas	3263993	0.89	3214165	101.55	70	120	
Bi	209	1	No Gas	3490462	1.36	3498813	99.76	70	120	

Sample Report

Sample Table

Sample Name	MBLK-166919
Data File Name	028SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:22:16-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	-0.038	-0.038	-253.35	80505	0.00	2000	
Be	9	1	No Gas	-0.001	-0.001	-156.85	32	0.00	2000	
V	51	2	He	0.344	0.344	6.09	4721	0.01	2000	
Cr	52	2	He	0.095	0.095	17.83	1880	0.01	2000	
Fe	56	2	He	1.598	1.598	3.06	25080	0.01	200000	
Se	78	2	He	-0.050	-0.050	-212.49	88	-0.06	2000	
As	75	2	He	0.023	0.023	82.72	189	0.01	2000	
Ca	44	2	He	6.514	6.514	16.85	550	1.18	200000	
Na	23	2	He	5.075	5.075	31.57	94525	0.01	200000	
Mg	24	2	He	6.248	6.248	8.41	4211	0.15	200000	
K	39	2	He	7.445	7.445	19.72	60898	0.01	200000	
Mn	55	2	He	0.102	0.102	15.54	927	0.01	2000	
Co	59	2	He	-0.001	-0.001	-112.08	33	0.00	2000	
Ni	60	2	He	0.068	0.068	39.22	340	0.02	2000	
Cu	63	2	He	0.084	0.084	20.74	1817	0.00	2000	
Zn	66	2	He	0.555	0.555	16.21	1130	0.05	2000	
Al	27	2	He	3.756	3.756	4.97	1947	0.19	2000	
B	11	1	No Gas	1.775	1.775	24.37	23269	0.01	2000	
Al	27	1	No Gas	3.524	3.524	4.06	79610	0.00	2000	
Si	28	1	No Gas	27.760	27.760	4.85	466462	0.01	2000	
Ag	107	1	No Gas	0.014	0.014	55.55	840	0.00	2000	
Cd	111	1	No Gas	-0.004	-0.004	-41.44	3	-0.11	2000	
Sr	88	1	No Gas	0.003	0.003	103.64	1047	0.00	2000	
Mo	95	1	No Gas	0.077	0.077	24.51	703	0.01	2000	
Sn	118	1	No Gas	-0.007	-0.007	-184.29	1857	0.00	2000	
Sb	121	1	No Gas	0.158	0.158	1.35	4834	0.00	2000	
Ba	137	1	No Gas	0.025	0.025	53.10	390	0.01	2000	
Tl	205	1	No Gas	0.003	0.003	136.20	1133	0.00	2000	
Tl	203	1	No Gas	0.005	0.005	65.82	480	0.00	2000	
Pb	208	1	No Gas	-0.003	-0.003	-142.12	1897	0.00	2000	
U	238	1	No Gas	0.000	0.000	166.69	170	0.00	2000	
Ca	43	2	He	10.559	10.559	131.52	37	28.80	200000	
Sb	121	2	He	0.107	0.107	31.50	1984	0.01	2000	
Ti	47	2	He	0.029	0.029	86.05	13	0.22	2000	
Cu	63	1	No Gas	0.089	0.089	13.77	4181	0.00	2000	
Zn	66	1	No Gas	0.522	0.522	2.10	2870	0.02	2000	
Se	82	1	No Gas	0.127	0.127	124.49	-99	-0.13	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1280708	1.19	1218584	105.10	70	120	
Ge	72	2	He	739265	0.68	734220	100.69	70	120	

Sample Report

Ge	72	1	No Gas	2639273	0.99	2598394	101.57	70	120	
In	115	1	No Gas	3299655	0.65	3214165	102.66	70	120	
Bi	209	1	No Gas	3804116	7.10	3498813	108.73	70	120	

Sample Report

Sample Table

Sample Name	LCS-166919
Data File Name	029SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:24:16-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	99.985	99.985	2.88	1709301	0.01	2000	
Be	9	1	No Gas	49.180	49.180	0.65	198505	0.02	2000	
V	51	2	He	47.159	47.159	1.36	301148	0.02	2000	
Cr	52	2	He	47.286	47.286	1.23	357237	0.01	2000	
Fe	56	2	He	4854.210	4854.210	1.77	32533042	0.01	200000	
Se	78	2	He	49.576	49.576	4.29	4764	1.04	2000	
As	75	2	He	46.961	46.961	1.44	49980	0.09	2000	
Ca	44	2	He	4870.110	4870.110	2.18	185035	2.63	200000	
Na	23	2	He	4768.665	4768.665	2.26	5305684	0.09	200000	
Mg	24	2	He	4919.015	4919.015	1.49	3128486	0.16	200000	
K	39	2	He	4869.543	4869.543	2.39	3500403	0.14	200000	
Mn	55	2	He	46.373	46.373	1.05	257316	0.02	2000	
Co	59	2	He	45.968	45.968	0.96	536338	0.01	2000	
Ni	60	2	He	50.284	50.284	1.45	136343	0.04	2000	
Cu	63	2	He	48.157	48.157	1.89	361196	0.01	2000	
Zn	66	2	He	51.196	51.196	3.31	72507	0.07	2000	
Al	27	2	He	102.614	102.614	3.65	37461	0.27	2000	
B	11	1	No Gas	276.921	276.921	0.58	665388	0.04	2000	
Al	27	1	No Gas	104.308	104.308	0.42	1635302	0.01	2000	
Si	28	1	No Gas	363.068	363.068	0.56	2953720	0.01	2000	
Ag	107	1	No Gas	53.069	53.069	0.98	945288	0.01	2000	
Cd	111	1	No Gas	50.379	50.379	0.67	193450	0.03	2000	
Sr	88	1	No Gas	101.332	101.332	0.53	3441064	0.00	2000	
Mo	95	1	No Gas	48.329	48.329	0.46	346800	0.01	2000	
Sn	118	1	No Gas	98.885	98.885	1.58	1182334	0.01	2000	
Sb	121	1	No Gas	47.667	47.667	1.36	826842	0.01	2000	
Ba	137	1	No Gas	48.771	48.771	0.58	295302	0.02	2000	
Tl	205	1	No Gas	48.054	48.054	1.36	2081709	0.00	2000	
Tl	203	1	No Gas	44.732	44.732	1.95	812067	0.01	2000	
Pb	208	1	No Gas	47.747	47.747	0.23	2840038	0.00	2000	
U	238	1	No Gas	91.040	91.040	1.17	5759157	0.00	2000	
Ca	43	2	He	4904.237	4904.237	4.54	11035	44.44	200000	
Sb	121	2	He	46.556	46.556	1.47	386148	0.01	2000	
Ti	47	2	He	141.169	141.169	2.65	32566	0.43	2000	
Cu	63	1	No Gas	48.526	48.526	1.52	654640	0.01	2000	
Zn	66	1	No Gas	51.213	51.213	1.98	186910	0.03	2000	
Se	82	1	No Gas	49.733	49.733	3.48	11070	0.45	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1209187	1.20	1218584	99.23	70	120	
Ge	72	2	He	757697	1.51	734220	103.20	70	120	
Ge	72	1	No Gas	2682593	1.21	2598394	103.24	70	120	
In	115	1	No Gas	3276417	0.89	3214165	101.94	70	120	

Sample Report

Bi	209	1	No Gas	3537228	0.19	3498813	101.10	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-02
Data File Name	030SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:26:12-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	17.683	17.683	0.95	378099	0.00	2000	
Be	9	1	No Gas	0.069	0.069	18.23	325	0.02	2000	
V	51	2	He	1.578	1.578	2.69	12817	0.01	2000	
Cr	52	2	He	4.438	4.438	0.64	35082	0.01	2000	
Fe	56	2	He	109.636	109.636	1.32	759348	0.01	200000	
Se	78	2	He	0.033	0.033	802.45	99	0.03	2000	
As	75	2	He	0.489	0.489	8.59	698	0.07	2000	
Ca	44	2	He	16108.907	16108.907	0.31	619433	2.60	200000	
Na	23	2	He	136858.284	136858.284	0.19	151730131	0.09	200000	
Mg	24	2	He	14843.634	14843.634	0.18	9564173	0.16	200000	
K	39	2	He	960.357	960.357	0.38	745971	0.13	200000	
Mn	55	2	He	67.769	67.769	1.68	380808	0.02	2000	
Co	59	2	He	1.642	1.642	0.71	19457	0.01	2000	
Ni	60	2	He	21.568	21.568	1.26	59350	0.04	2000	
Cu	63	2	He	8.526	8.526	1.97	65826	0.01	2000	
Zn	66	2	He	273.503	273.503	0.95	390883	0.07	2000	
Al	27	2	He	18.361	18.361	16.42	7329	0.25	2000	
B	11	1	No Gas	107.744	107.744	0.78	279124	0.04	2000	
Al	27	1	No Gas	19.293	19.293	5.30	320815	0.01	2000	
Si	28	1	No Gas	22215.853	22215.853	0.64	162866898	0.01	2000	>LDR
Ag	107	1	No Gas	-0.004	-0.004	-85.97	517	0.00	2000	
Cd	111	1	No Gas	0.115	0.115	0.39	460	0.03	2000	
Sr	88	1	No Gas	325.386	325.386	2.90	11054502	0.00	2000	
Mo	95	1	No Gas	0.379	0.379	16.09	2867	0.01	2000	
Sn	118	1	No Gas	0.083	0.083	37.97	2917	0.00	2000	
Sb	121	1	No Gas	0.709	0.709	5.38	14305	0.00	2000	
Ba	137	1	No Gas	99.570	99.570	1.11	603047	0.02	2000	
Tl	205	1	No Gas	0.860	0.860	56.97	36409	0.00	2000	
Tl	203	1	No Gas	0.853	0.853	57.46	15095	0.01	2000	
Pb	208	1	No Gas	0.063	0.063	8.89	5461	0.00	2000	
U	238	1	No Gas	0.149	0.149	9.72	9134	0.00	2000	
Ca	43	2	He	16565.052	16565.052	1.59	37739	43.89	200000	
Sb	121	2	He	0.649	0.649	6.54	6598	0.01	2000	
Ti	47	2	He	0.227	0.227	32.99	60	0.38	2000	
Cu	63	1	No Gas	9.015	9.015	0.86	122858	0.01	2000	
Zn	66	1	No Gas	277.665	277.665	0.37	998718	0.03	2000	
Se	82	1	No Gas	0.729	0.729	59.67	35	2.09	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1251095	0.49	1218584	102.67	70	120	
Ge	72	2	He	767606	0.45	734220	104.55	70	120	
Ge	72	1	No Gas	2655260	0.46	2598394	102.19	70	120	
In	115	1	No Gas	3278723	0.37	3214165	102.01	70	120	
Bi	209	1	No Gas	3391163	1.82	3498813	96.92	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-02SD
Data File Name	031SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:28:14-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.750	18.748	1.35	148271	0.00	2000	
Be	9	1	No Gas	0.009	0.043	11.51	75	0.01	2000	
V	51	2	He	1.285	6.426	1.98	11003	0.01	2000	
Cr	52	2	He	0.937	4.684	4.21	8419	0.01	2000	
Fe	56	2	He	23.323	116.613	1.51	174527	0.01	200000	
Se	78	2	He	-0.119	-0.596	-154.67	85	-0.14	2000	
As	75	2	He	0.203	1.014	12.67	392	0.05	2000	
Ca	44	2	He	3319.744	16598.720	0.89	128663	2.58	200000	
Na	23	2	He	27690.884	138454.422	1.17	30955515	0.09	200000	
Mg	24	2	He	3061.745	15308.724	2.56	1984636	0.15	200000	
K	39	2	He	194.463	972.317	1.18	198397	0.10	200000	
Mn	55	2	He	13.702	68.509	1.54	77758	0.02	2000	
Co	59	2	He	0.341	1.705	2.73	4101	0.01	2000	
Ni	60	2	He	4.520	22.601	3.09	12646	0.04	2000	
Cu	63	2	He	2.306	11.532	1.81	18830	0.01	2000	
Zn	66	2	He	55.783	278.915	1.01	80501	0.07	2000	
Al	27	2	He	4.288	21.438	24.06	2227	0.19	2000	
B	11	1	No Gas	24.186	120.931	1.56	79988	0.03	2000	
Al	27	1	No Gas	5.038	25.192	10.05	106768	0.00	2000	
Si	28	1	No Gas	4362.220	21811.098	1.41	33271959	0.01	2000	>LDR
Ag	107	1	No Gas	-0.013	-0.066	-41.80	367	0.00	2000	
Cd	111	1	No Gas	0.020	0.100	31.34	97	0.02	2000	
Sr	88	1	No Gas	66.290	331.451	0.73	2314633	0.00	2000	
Mo	95	1	No Gas	0.186	0.928	4.83	1520	0.01	2000	
Sn	118	1	No Gas	-0.004	-0.022	-338.64	1927	0.00	2000	
Sb	121	1	No Gas	0.181	0.905	8.09	5435	0.00	2000	
Ba	137	1	No Gas	19.820	99.101	1.42	123534	0.02	2000	
Tl	205	1	No Gas	0.001	0.004	233.15	963	0.00	2000	
Tl	203	1	No Gas	0.006	0.032	83.63	457	0.00	2000	
Pb	208	1	No Gas	0.017	0.087	13.21	2930	0.00	2000	
U	238	1	No Gas	0.029	0.143	4.16	1917	0.00	2000	
Ca	43	2	He	3442.208	17211.040	3.91	7899	43.58	200000	
Sb	121	2	He	0.156	0.780	11.79	2487	0.01	2000	
Ti	47	2	He	0.112	0.561	116.31	33	0.34	2000	
Cu	63	1	No Gas	2.515	12.574	2.66	37663	0.01	2000	
Zn	66	1	No Gas	57.545	287.724	0.98	214749	0.03	2000	
Se	82	1	No Gas	-0.129	-0.644	-461.80	-162	0.08	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1300379	0.92	1218584	106.71	70	120	
Ge	72	2	He	772167	0.56	734220	105.17	70	120	
Ge	72	1	No Gas	2744401	1.44	2598394	105.62	70	120	
In	115	1	No Gas	3368725	1.46	3214165	104.81	70	120	

Sample Report

Bi	209	1	No Gas	3492147	0.59	3498813	99.81	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-02MS
Data File Name	032SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:30:13-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	119.459	119.459	1.85	2068727	0.01	2000	
Be	9	1	No Gas	50.847	50.847	2.57	209360	0.02	2000	
V	51	2	He	51.385	51.385	1.47	326536	0.02	2000	
Cr	52	2	He	53.168	53.168	1.06	399871	0.01	2000	
Fe	56	2	He	5059.974	5059.974	1.08	33773260	0.01	200000	
Se	78	2	He	49.260	49.260	2.14	4716	1.04	2000	
As	75	2	He	49.709	49.709	1.22	52679	0.09	2000	
Ca	44	2	He	22527.771	22527.771	1.27	851301	2.65	200000	
Na	23	2	He	152444.675	152444.675	0.68	166128854	0.09	200000	
Mg	24	2	He	20991.034	20991.034	1.15	13293809	0.16	200000	
K	39	2	He	5994.808	5994.808	0.35	4278861	0.14	200000	
Mn	55	2	He	119.607	119.607	1.13	660314	0.02	2000	
Co	59	2	He	48.235	48.235	0.90	560454	0.01	2000	
Ni	60	2	He	72.739	72.739	1.00	196357	0.04	2000	
Cu	63	2	He	57.025	57.025	1.10	425750	0.01	2000	
Zn	66	2	He	337.927	337.927	0.92	474687	0.07	2000	
Al	27	2	He	118.076	118.076	1.09	42843	0.28	2000	
B	11	1	No Gas	404.730	404.730	1.65	983756	0.04	2000	
Al	27	1	No Gas	121.021	121.021	1.95	1901073	0.01	2000	
Si	28	1	No Gas	23805.910	23805.910	1.15	177049124	0.01	2000	>LDR
Ag	107	1	No Gas	51.892	51.892	0.52	921291	0.01	2000	
Cd	111	1	No Gas	51.029	51.029	0.77	195286	0.03	2000	
Sr	88	1	No Gas	456.251	456.251	0.68	15438964	0.00	2000	
Mo	95	1	No Gas	50.576	50.576	0.48	361703	0.01	2000	
Sn	118	1	No Gas	103.345	103.345	0.65	1231545	0.01	2000	
Sb	121	1	No Gas	49.714	49.714	1.52	865975	0.01	2000	
Ba	137	1	No Gas	156.623	156.623	0.69	944656	0.02	2000	
Tl	205	1	No Gas	48.937	48.937	2.50	2047979	0.00	2000	
Tl	203	1	No Gas	45.378	45.378	2.82	795811	0.01	2000	
Pb	208	1	No Gas	48.323	48.323	1.67	2776728	0.00	2000	
U	238	1	No Gas	96.052	96.052	1.83	5869969	0.00	2000	
Ca	43	2	He	23096.121	23096.121	2.76	51704	44.67	200000	
Sb	121	2	He	48.424	48.424	0.91	399932	0.01	2000	
Ti	47	2	He	149.936	149.936	3.83	34450	0.44	2000	
Cu	63	1	No Gas	58.090	58.090	0.87	786464	0.01	2000	
Zn	66	1	No Gas	347.324	347.324	1.55	1267188	0.03	2000	
Se	82	1	No Gas	49.528	49.528	1.23	11073	0.45	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1233952	2.58	1218584	101.26	70	120	
Ge	72	2	He	754537	1.08	734220	102.77	70	120	
Ge	72	1	No Gas	2693978	0.36	2598394	103.68	70	120	
In	115	1	No Gas	3265597	1.10	3214165	101.60	70	120	
Bi	209	1	No Gas	3417435	0.59	3498813	97.67	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-02MSD
Data File Name	033SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:32:13-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	120.980	120.980	2.28	2110732	0.01	2000	
Be	9	1	No Gas	52.218	52.218	0.79	216759	0.02	2000	
V	51	2	He	53.099	53.099	1.37	336208	0.02	2000	
Cr	52	2	He	54.441	54.441	1.41	408028	0.01	2000	
Fe	56	2	He	5204.057	5204.057	2.30	34615233	0.02	200000	
Se	78	2	He	52.545	52.545	2.13	5008	1.05	2000	
As	75	2	He	52.088	52.088	1.33	55006	0.09	2000	
Ca	44	2	He	23157.582	23157.582	0.92	872164	2.66	200000	
Na	23	2	He	157737.289	157737.289	1.85	171287984	0.09	200000	
Mg	24	2	He	21534.149	21534.149	1.34	13591744	0.16	200000	
K	39	2	He	6189.981	6189.981	0.70	4401313	0.14	200000	
Mn	55	2	He	123.308	123.308	1.28	678438	0.02	2000	
Co	59	2	He	50.170	50.170	0.89	580966	0.01	2000	
Ni	60	2	He	75.813	75.813	1.14	203941	0.04	2000	
Cu	63	2	He	58.911	58.911	0.34	438331	0.01	2000	
Zn	66	2	He	351.529	351.529	0.75	492062	0.07	2000	
Al	27	2	He	123.901	123.901	2.09	44773	0.28	2000	
B	11	1	No Gas	423.486	423.486	1.75	1036845	0.04	2000	
Al	27	1	No Gas	124.479	124.479	0.58	1929381	0.01	2000	
Si	28	1	No Gas	24998.673	24998.673	1.80	183463791	0.01	2000	>LDR
Ag	107	1	No Gas	54.527	54.527	0.63	952387	0.01	2000	
Cd	111	1	No Gas	53.590	53.590	0.66	201775	0.03	2000	
Sr	88	1	No Gas	482.678	482.678	0.65	16067942	0.00	2000	
Mo	95	1	No Gas	53.104	53.104	0.33	373626	0.01	2000	
Sn	118	1	No Gas	107.579	107.579	2.60	1261150	0.01	2000	
Sb	121	1	No Gas	51.820	51.820	1.83	890755	0.01	2000	
Ba	137	1	No Gas	164.800	164.800	0.36	977879	0.02	2000	
Tl	205	1	No Gas	52.001	52.001	3.74	2122342	0.00	2000	
Tl	203	1	No Gas	49.375	49.375	2.83	844639	0.01	2000	
Pb	208	1	No Gas	51.039	51.039	2.55	2860782	0.00	2000	
U	238	1	No Gas	96.640	96.640	2.65	5760967	0.00	2000	
Ca	43	2	He	23437.721	23437.721	0.99	52299	44.81	200000	
Sb	121	2	He	50.143	50.143	1.17	412704	0.01	2000	
Ti	47	2	He	154.722	154.722	0.90	35433	0.44	2000	
Cu	63	1	No Gas	60.618	60.618	1.88	809784	0.01	2000	
Zn	66	1	No Gas	363.981	363.981	1.71	1310541	0.03	2000	
Se	82	1	No Gas	52.421	52.421	3.18	11573	0.45	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1243610	1.59	1218584	102.05	70	120	
Ge	72	2	He	751984	0.83	734220	102.42	70	120	
Ge	72	1	No Gas	2658952	1.15	2598394	102.33	70	120	
In	115	1	No Gas	3212689	0.29	3214165	99.95	70	120	
Bi	209	1	No Gas	3335093	3.00	3498813	95.32	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-02PDS
Data File Name	034SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:34:12-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	18.276	18.276	0.73	402509	0.00	2000	
Be	9	1	No Gas	109.444	109.444	1.15	473944	0.02	2000	
V	51	2	He	113.577	113.577	1.08	706722	0.02	2000	
Cr	52	2	He	114.396	114.396	1.02	844828	0.01	2000	
Fe	56	2	He	11302.701	11302.701	0.44	74183872	0.02	200000	
Se	78	2	He	113.029	113.029	0.38	10522	1.07	2000	
As	75	2	He	113.782	113.782	0.75	118375	0.10	2000	
Ca	44	2	He	28454.854	28454.854	1.93	1057469	2.69	200000	
Na	23	2	He	154895.977	154895.977	0.49	166004168	0.09	200000	
Mg	24	2	He	26996.708	26996.708	1.49	16815430	0.16	200000	
K	39	2	He	12112.315	12112.315	1.10	8445325	0.14	200000	
Mn	55	2	He	182.623	182.623	1.02	991456	0.02	2000	
Co	59	2	He	113.386	113.386	0.71	1295761	0.01	2000	
Ni	60	2	He	134.857	134.857	0.67	357884	0.04	2000	
Cu	63	2	He	117.700	117.700	0.53	862995	0.01	2000	
Zn	66	2	He	394.005	394.005	0.94	544215	0.07	2000	
Al	27	2	He	128.866	128.866	1.23	45927	0.28	2000	
B	11	1	No Gas	112.750	112.750	0.44	302017	0.04	2000	
Al	27	1	No Gas	134.998	134.998	5.29	2057429	0.01	2000	
Si	28	1	No Gas	23518.454	23518.454	1.62	169999651	0.01	2000	>LDR
Ag	107	1	No Gas	113.634	113.634	2.46	1956717	0.01	2000	
Cd	111	1	No Gas	116.122	116.122	0.99	431218	0.03	2000	
Sr	88	1	No Gas	343.835	343.835	1.15	11291316	0.00	2000	
Mo	95	1	No Gas	115.112	115.112	0.69	798677	0.01	2000	
Sn	118	1	No Gas	0.127	0.127	32.95	3327	0.00	2000	
Sb	121	1	No Gas	113.882	113.882	1.01	1925610	0.01	2000	
Ba	137	1	No Gas	224.203	224.203	1.07	1312224	0.02	2000	
Tl	205	1	No Gas	114.101	114.101	1.34	4621160	0.00	2000	
Tl	203	1	No Gas	113.349	113.349	1.97	1923642	0.01	2000	
Pb	208	1	No Gas	114.475	114.475	1.69	6364579	0.00	2000	
U	238	1	No Gas	0.157	0.157	6.86	9440	0.00	2000	
Ca	43	2	He	27984.949	27984.949	1.86	61621	45.41	200000	
Sb	121	2	He	107.918	107.918	0.64	875229	0.01	2000	
Ti	47	2	He	113.478	113.478	3.29	25644	0.44	2000	
Cu	63	1	No Gas	122.861	122.861	1.69	1613256	0.01	2000	
Zn	66	1	No Gas	403.310	403.310	0.55	1430150	0.03	2000	
Se	82	1	No Gas	113.267	113.267	3.70	24766	0.46	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1297487	1.14	1218584	106.47	70	120	
Ge	72	2	He	742080	0.53	734220	101.07	70	120	
Ge	72	1	No Gas	2618763	2.26	2598394	100.78	70	120	
In	115	1	No Gas	3168881	1.22	3214165	98.59	70	120	
Bi	209	1	No Gas	3308233	1.67	3498813	94.55	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	038_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:46:54-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.284	2.944	1666000	0.83	100	98.3	90	110	
Be	9	1	No Gas	96.122	2.935	384297	0.93	100	96.1	90	110	
V	51	2	He	96.839	1.759	574940	1.06	100	96.8	90	110	
Cr	52	2	He	97.805	1.086	688917	0.47	100	97.8	90	110	
Fe	56	2	He	9955.277	0.993	62304856	0.50	10000	99.6	90	110	
Se	78	2	He	98.186	0.867	8728	0.98	100	98.2	90	110	
As	75	2	He	99.190	0.412	98427	1.04	100	99.2	90	110	
Ca	44	2	He	9870.415	1.547	349976	0.92	10000	98.7	90	110	
Na	23	2	He	9820.341	0.641	10115793	0.67	10000	98.2	90	110	
Mg	24	2	He	9823.160	1.597	5834749	1.57	10000	98.2	90	110	
K	39	2	He	9756.081	1.173	6496971	0.76	10000	97.6	90	110	
Mn	55	2	He	96.409	1.461	499238	1.18	100	96.4	90	110	
Co	59	2	He	97.217	3.617	1059196	2.92	100	97.2	90	110	
Ni	60	2	He	101.007	1.588	255650	1.74	100	101.0	90	110	
Cu	63	2	He	97.602	0.976	682598	0.80	100	97.6	90	110	
Zn	66	2	He	100.912	0.242	133179	1.03	100	100.9	90	110	
Al	27	2	He	97.641	1.533	33334	2.39	100	97.6	90	110	
B	11	1	No Gas	495.886	5.683	1165720	3.24	500	99.2	90	110	
Al	27	1	No Gas	101.797	2.033	1516645	2.00	100	101.8	90	110	
Si	28	1	No Gas	501.146	0.469	3775582	0.89	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.099	0.843	1760604	1.66	100	101.1	90	110	
Cd	111	1	No Gas	99.890	1.417	375031	0.61	100	99.9	90	110	
Sr	88	1	No Gas	100.614	1.085	3340764	0.28	100	100.6	90	110	
Mo	95	1	No Gas	98.577	0.977	691515	0.18	100	98.6	90	110	
Sn	118	1	No Gas	99.822	1.242	1167268	1.98	100	99.8	90	110	
Sb	121	1	No Gas	101.312	0.826	1667204	0.95	100	101.3	90	110	
Ba	137	1	No Gas	97.904	0.224	579438	0.64	100	97.9	90	110	
Tl	205	1	No Gas	101.143	0.949	4333039	0.28	100	101.1	90	110	
Tl	203	1	No Gas	99.094	2.875	1778829	1.95	100	99.1	90	110	
Pb	208	1	No Gas	100.881	1.152	5933155	0.29	100	100.9	90	110	
U	238	1	No Gas	98.500	0.788	6163686	1.22	100	98.5	90	110	
Ca	43	2	He	9947.559	1.394	20896	1.66	10000	99.5	90	110	
Sb	121	2	He	95.582	1.636	739269	0.87	100	95.6	90	110	
Ti	47	2	He	99.142	0.767	21367	1.27	100	99.1	90	110	
Cu	63	1	No Gas	100.498	2.126	1284835	1.72	100	100.5	90	110	
Se	82	1	No Gas	99.990	1.772	21270	1.23	100	100.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1198311	2.44	1218584	98.34	70	120	
Ge	72	2	He	707633	0.88	734220	96.38	70	120	
Ge	72	1	No Gas	2548241	0.58	2598394	98.07	70	120	
In	115	1	No Gas	3203915	0.81	3214165	99.68	70	120	
Bi	209	1	No Gas	3499056	1.03	3498813	100.01	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T11:48:48-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.056	93.5	79240	0.9	0.5	
Be	9	1	No Gas	0.001	263.6	38	19.9	0.5	
V	51	2	He	0.209	8.9	3768	2.9	2.5	
Cr	52	2	He	0.003	1134.0	1163	21.2	2.5	
Fe	56	2	He	0.768	7.5	19047	1.9	100	
Se	78	2	He	-0.139	-66.8	77	10.8	2	
As	75	2	He	0.045	47.6	206	10.4	2.5	
Ca	44	2	He	-0.163	-262.8	293	5.2	100	
Na	23	2	He	6.938	25.4	93529	2.0	100	
Mg	24	2	He	0.124	73.3	397	13.9	100	
K	39	2	He	1.264	48.1	54879	0.7	100	
Mn	55	2	He	0.013	90.6	430	14.5	2.5	
Co	59	2	He	-0.001	-135.2	27	78.1	2.5	
Ni	60	2	He	0.025	68.4	220	19.8	2.5	
Cu	63	2	He	0.040	22.3	1450	4.3	2	
Zn	66	2	He	0.092	24.9	477	6.4	2.5	
Al	27	2	He	-0.615	-22.1	403	11.5	5	
B	11	1	No Gas	12.119	11.6	47164	6.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.485	-2.9	18286	1.1	5	
Si	28	1	No Gas	0.188	200.6	258759	1.2	10	
Ag	107	1	No Gas	-0.009	-32.1	420	12.6	2.5	
Cd	111	1	No Gas	0.004	2.0	30	0.0	1	
Sr	88	1	No Gas	-0.004	-105.6	770	20.4	2.5	
Mo	95	1	No Gas	0.144	51.5	1157	44.5	2.5	
Sn	118	1	No Gas	0.033	67.1	2270	11.8	5	
Sb	121	1	No Gas	0.386	11.7	8480	8.9	2.5	
Ba	137	1	No Gas	-0.001	-363.2	223	9.3	2.5	
Tl	205	1	No Gas	0.130	64.5	6542	58.0	1	
Tl	203	1	No Gas	0.132	65.2	2734	59.8	1	
Pb	208	1	No Gas	0.006	67.4	2277	13.4	2.5	
U	238	1	No Gas	0.015	42.2	1090	39.7	2.5	
Ca	43	2	He	4.854	55.8	23	24.7	100	
Sb	121	2	He	0.270	9.1	3200	6.1	2.5	
Ti	47	2	He	0.001	3244.5	7	86.6	2.5	
Cu	63	1	No Gas	0.027	27.7	3260	3.1	2.5	
Se	82	1	No Gas	-0.475	-87.2	-226	-39.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1235584	0.34	1218584	101.40	70	120	
Ge	72	2	He	716352	0.06	734220	97.57	70	120	
Ge	72	1	No Gas	2568040	0.18	2598394	98.83	70	120	
In	115	1	No Gas	3211302	0.88	3214165	99.91	70	120	
Bi	209	1	No Gas	3497204	2.78	3498813	99.95	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-01
Data File Name	047SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T12:07:06-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	7.486	7.486	2.71	204686	0.00	2000	
Be	9	1	No Gas	0.039	0.039	11.99	198	0.02	2000	
V	51	2	He	2.934	2.934	1.17	19733	0.01	2000	
Cr	52	2	He	33.292	33.292	1.60	234094	0.01	2000	
Fe	56	2	He	4831.999	4831.999	0.22	30098195	0.02	200000	
Se	78	2	He	0.317	0.317	22.38	116	0.27	2000	
As	75	2	He	2.565	2.565	5.69	2686	0.10	2000	
Ca	44	2	He	13761.865	13761.865	0.79	485422	2.84	200000	
Na	23	2	He	122775.172	122775.172	1.06	124867935	0.10	200000	
Mg	24	2	He	14240.213	14240.213	1.24	8416042	0.17	200000	
K	39	2	He	1169.990	1169.990	0.25	822022	0.14	200000	
Mn	55	2	He	249.388	249.388	1.96	1284563	0.02	2000	
Co	59	2	He	8.384	8.384	0.55	90946	0.01	2000	
Ni	60	2	He	17.674	17.674	0.81	44637	0.04	2000	
Cu	63	2	He	28.307	28.307	0.61	197807	0.01	2000	
Zn	66	2	He	57.580	57.580	0.79	75762	0.08	2000	
Al	27	2	He	295.407	295.407	3.17	99116	0.30	2000	
B	11	1	No Gas	54.285	54.285	1.10	148979	0.04	2000	
Al	27	1	No Gas	310.264	310.264	2.97	4518266	0.01	2000	
Si	28	1	No Gas	14335.801	14335.801	0.63	99794982	0.01	2000	>LDR
Ag	107	1	No Gas	-0.010	-0.010	-60.77	377	0.00	2000	
Cd	111	1	No Gas	0.024	0.024	38.97	103	0.02	2000	
Sr	88	1	No Gas	254.495	254.495	0.38	8059544	0.00	2000	
Mo	95	1	No Gas	2.150	2.150	2.57	14522	0.01	2000	
Sn	118	1	No Gas	0.830	0.830	6.81	11032	0.01	2000	
Sb	121	1	No Gas	0.210	0.210	3.73	5465	0.00	2000	
Ba	137	1	No Gas	153.991	153.991	0.82	869192	0.02	2000	
Tl	205	1	No Gas	-0.003	-0.003	-37.13	790	0.00	2000	
Tl	203	1	No Gas	-0.004	-0.004	-43.32	270	0.00	2000	
Pb	208	1	No Gas	0.434	0.434	3.95	27139	0.00	2000	
U	238	1	No Gas	0.157	0.157	7.28	9807	0.00	2000	
Ca	43	2	He	13775.489	13775.489	1.82	28787	47.85	200000	
Sb	121	2	He	0.188	0.188	13.24	2514	0.01	2000	
Ti	47	2	He	5.936	5.936	24.27	1280	0.46	2000	
Cu	63	1	No Gas	29.022	29.022	0.95	368843	0.01	2000	
Zn	66	1	No Gas	58.308	58.308	1.32	199734	0.03	2000	
Se	82	1	No Gas	0.545	0.545	142.39	-6	-9.37	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1244493	1.14	1218584	102.13	70	120	
Ge	72	2	He	704095	0.61	734220	95.90	70	120	
Ge	72	1	No Gas	2519078	0.40	2598394	96.95	70	120	
In	115	1	No Gas	3056237	1.50	3214165	95.09	70	120	
Bi	209	1	No Gas	3462293	4.59	3498813	98.96	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	050_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T12:13:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.946	2.168	1706554	0.23	100	102.9	90	110	
Be	9	1	No Gas	100.241	1.048	392797	0.88	100	100.2	90	110	
V	51	2	He	97.879	1.298	571837	0.60	100	97.9	90	110	
Cr	52	2	He	97.544	1.342	676125	0.94	100	97.5	90	110	
Fe	56	2	He	10035.875	0.960	61813324	1.66	10000	100.4	90	110	
Se	78	2	He	101.585	2.257	8882	1.26	100	101.6	90	110	
As	75	2	He	101.214	1.490	98826	1.19	100	101.2	90	110	
Ca	44	2	He	9929.308	1.664	346455	1.23	10000	99.3	90	110	
Na	23	2	He	10001.195	0.435	10136372	0.56	10000	100.0	90	110	
Mg	24	2	He	10094.065	0.937	5899937	0.19	10000	100.9	90	110	
K	39	2	He	9828.436	2.851	6439853	2.10	10000	98.3	90	110	
Mn	55	2	He	96.202	0.689	490237	0.58	100	96.2	90	110	
Co	59	2	He	96.621	2.486	1036263	3.35	100	96.6	90	110	
Ni	60	2	He	100.575	0.676	250495	0.61	100	100.6	90	110	
Cu	63	2	He	96.866	0.446	666674	0.58	100	96.9	90	110	
Zn	66	2	He	100.143	1.344	130052	0.97	100	100.1	90	110	
Al	27	2	He	102.233	1.343	34313	1.01	100	102.2	90	110	
B	11	1	No Gas	496.154	1.416	1143705	1.56	500	99.2	90	110	
Al	27	1	No Gas	101.164	2.409	1487904	1.10	100	101.2	90	110	
Si	28	1	No Gas	503.802	2.303	3745295	1.10	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.061	1.869	1732622	0.23	100	102.1	90	110	
Cd	111	1	No Gas	100.886	0.929	369328	1.18	100	100.9	90	110	
Sr	88	1	No Gas	102.093	2.598	3304600	0.89	100	102.1	90	110	
Mo	95	1	No Gas	98.740	0.803	675392	1.24	100	98.7	90	110	
Sn	118	1	No Gas	98.972	2.372	1128135	0.56	100	99.0	90	110	
Sb	121	1	No Gas	101.186	0.555	1643982	1.59	100	101.2	90	110	
Ba	137	1	No Gas	97.808	1.617	564350	0.30	100	97.8	90	110	
Tl	205	1	No Gas	101.828	1.924	4222071	1.50	100	101.8	90	110	
Tl	203	1	No Gas	99.563	3.285	1729468	0.93	100	99.6	90	110	
Pb	208	1	No Gas	100.934	2.978	5743980	0.36	100	100.9	90	110	
U	238	1	No Gas	99.252	3.331	6008763	0.43	100	99.3	90	110	
Ca	43	2	He	9944.059	0.671	20556	0.97	10000	99.4	90	110	
Sb	121	2	He	96.031	0.473	730946	0.51	100	96.0	90	110	
Ti	47	2	He	98.160	5.196	20813	4.47	100	98.2	90	110	
Cu	63	1	No Gas	100.770	1.144	1271886	0.60	100	100.8	90	110	
Se	82	1	No Gas	99.209	0.345	20836	1.28	100	99.2	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1174114	1.93	1218584	96.35	70	120	
Ge	72	2	He	696359	0.98	734220	94.84	70	120	
Ge	72	1	No Gas	2515847	1.40	2598394	96.82	70	120	
In	115	1	No Gas	3124150	1.91	3214165	97.20	70	120	
Bi	209	1	No Gas	3387637	3.22	3498813	96.82	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	051_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T12:14:59-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.192	42.1	81301	1.8	0.5	
Be	9	1	No Gas	-0.002	-276.4	27	92.5	0.5	
V	51	2	He	0.511	4.1	5526	2.2	2.5	
Cr	52	2	He	-0.016	-64.2	1017	7.0	2.5	
Fe	56	2	He	0.748	13.4	18753	3.1	100	
Se	78	2	He	-0.056	-180.9	84	10.4	2	
As	75	2	He	0.142	12.9	300	6.2	2.5	
Ca	44	2	He	0.375	443.3	310	19.4	100	
Na	23	2	He	42.673	2.6	129331	0.6	100	
Mg	24	2	He	0.259	19.0	473	6.5	100	
K	39	2	He	-0.615	-129.3	53153	1.1	100	
Mn	55	2	He	0.011	28.3	413	3.7	2.5	
Co	59	2	He	0.002	128.6	67	48.2	2.5	
Ni	60	2	He	0.009	251.3	177	31.2	2.5	
Cu	63	2	He	0.019	57.7	1293	5.9	2	
Zn	66	2	He	-0.014	-219.4	333	12.1	2.5	
Al	27	2	He	-0.377	-45.0	480	11.6	5	
B	11	1	No Gas	9.687	14.0	41259	8.1	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.352	-54.6	19580	13.5	5	
Si	28	1	No Gas	-0.187	-246.6	247774	0.4	10	
Ag	107	1	No Gas	-0.011	-24.0	380	12.1	2.5	
Cd	111	1	No Gas	-0.001	-165.3	13	43.3	1	
Sr	88	1	No Gas	-0.005	-9.4	757	2.0	2.5	
Mo	95	1	No Gas	0.109	26.6	913	21.9	2.5	
Sn	118	1	No Gas	0.013	93.3	2047	6.4	5	
Sb	121	1	No Gas	0.297	18.6	6769	12.2	2.5	
Ba	137	1	No Gas	-0.008	-73.9	180	20.0	2.5	
Tl	205	1	No Gas	0.141	64.2	6809	56.4	1	
Tl	203	1	No Gas	0.136	59.5	2734	52.9	1	
Pb	208	1	No Gas	0.004	104.3	2090	11.6	2.5	
U	238	1	No Gas	0.015	22.1	1067	20.2	2.5	
Ca	43	2	He	4.957	55.9	23	24.7	100	
Sb	121	2	He	0.177	1.9	2450	1.1	2.5	
Ti	47	2	He	0.032	221.3	13	114.6	2.5	
Cu	63	1	No Gas	0.061	24.6	3587	4.4	2.5	
Se	82	1	No Gas	0.129	313.9	-92	-91.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1232453	1.28	1218584	101.14	70	120	
Ge	72	2	He	710063	0.27	734220	96.71	70	120	
Ge	72	1	No Gas	2484702	1.02	2598394	95.62	70	120	
In	115	1	No Gas	3221096	0.70	3214165	100.22	70	120	
Bi	209	1	No Gas	3419942	0.79	3498813	97.75	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-02PDS
Data File Name	052SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T12:19:57-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	17.644	17.644	1.58	363716	0.00	2000	
Be	9	1	No Gas	85.967	85.967	1.46	345934	0.02	2000	
V	51	2	He	86.003	86.003	0.24	506853	0.02	2000	
Cr	52	2	He	87.070	87.070	0.35	608563	0.01	2000	
Fe	56	2	He	8565.112	8565.112	1.50	53180056	0.02	200000	
Se	78	2	He	87.379	87.379	0.25	7715	1.13	2000	
As	75	2	He	85.451	85.451	1.51	84134	0.10	2000	
Ca	44	2	He	24672.531	24672.531	0.34	867457	2.84	200000	
Na	23	2	He	143120.649	143120.649	1.03	145099931	0.10	200000	
Mg	24	2	He	23252.361	23252.361	0.49	13701284	0.17	200000	
K	39	2	He	9537.224	9537.224	0.31	6302037	0.15	200000	
Mn	55	2	He	148.395	148.395	0.38	762150	0.02	2000	
Co	59	2	He	81.117	81.117	0.70	876876	0.01	2000	
Ni	60	2	He	105.795	105.795	1.20	265617	0.04	2000	
Cu	63	2	He	90.006	90.006	0.97	624547	0.01	2000	
Zn	66	2	He	355.051	355.051	0.89	463953	0.08	2000	
Al	27	2	He	103.766	103.766	2.13	35102	0.30	2000	
B	11	1	No Gas	97.367	97.367	1.10	244767	0.04	2000	
Al	27	1	No Gas	103.623	103.623	1.06	1513882	0.01	2000	
Si	28	1	No Gas	21894.093	21894.093	1.53	151094751	0.01	2000	>LDR
Ag	107	1	No Gas	84.955	84.955	2.03	1437770	0.01	2000	
Cd	111	1	No Gas	85.775	85.775	1.78	312982	0.03	2000	
Sr	88	1	No Gas	321.109	321.109	1.75	10360187	0.00	2000	
Mo	95	1	No Gas	84.904	84.904	1.79	578857	0.01	2000	
Sn	118	1	No Gas	-0.029	-0.029	-70.32	1503	0.00	2000	
Sb	121	1	No Gas	87.498	87.498	2.09	1412494	0.01	2000	
Ba	137	1	No Gas	181.733	181.733	1.26	1045086	0.02	2000	
Tl	205	1	No Gas	83.287	83.287	4.06	3470635	0.00	2000	
Tl	203	1	No Gas	81.543	81.543	2.14	1424523	0.01	2000	
Pb	208	1	No Gas	80.915	80.915	4.50	4628777	0.00	2000	
U	238	1	No Gas	0.104	0.104	8.49	6449	0.00	2000	
Ca	43	2	He	24477.308	24477.308	1.42	50988	48.01	200000	
Sb	121	2	He	83.667	83.667	1.43	642104	0.01	2000	
Ti	47	2	He	86.838	86.838	3.76	18570	0.47	2000	
Cu	63	1	No Gas	95.309	95.309	0.93	1195449	0.01	2000	
Zn	66	1	No Gas	361.551	361.551	2.08	1223773	0.03	2000	
Se	82	1	No Gas	91.010	91.010	1.57	18980	0.48	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1205677	1.32	1218584	98.94	70	120	
Ge	72	2	He	701993	0.68	734220	95.61	70	120	
Ge	72	1	No Gas	2499609	1.00	2598394	96.20	70	120	
In	115	1	No Gas	3113819	0.79	3214165	96.88	70	120	
Bi	209	1	No Gas	3405946	3.06	3498813	97.35	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	062_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T12:39:57-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	97.956	2.730	1660820	1.93	100	98.0	90	110	
Be	9	1	No Gas	98.223	1.199	392764	0.78	100	98.2	90	110	
V	51	2	He	97.314	0.847	572962	0.38	100	97.3	90	110	
Cr	52	2	He	97.141	0.944	678554	0.41	100	97.1	90	110	
Fe	56	2	He	9890.686	1.010	61386334	0.87	10000	98.9	90	110	
Se	78	2	He	99.284	1.278	8751	1.58	100	99.3	90	110	
As	75	2	He	99.534	0.841	97941	0.36	100	99.5	90	110	
Ca	44	2	He	9787.342	0.447	344160	0.27	10000	97.9	90	110	
Na	23	2	He	9899.679	0.606	10112121	0.98	10000	99.0	90	110	
Mg	24	2	He	9982.038	1.285	5879554	0.76	10000	99.8	90	110	
K	39	2	He	9691.224	0.412	6400632	0.70	10000	96.9	90	110	
Mn	55	2	He	96.019	0.596	493092	0.24	100	96.0	90	110	
Co	59	2	He	94.549	3.334	1021705	3.31	100	94.5	90	110	
Ni	60	2	He	101.126	1.886	253803	1.42	100	101.1	90	110	
Cu	63	2	He	96.438	0.975	668846	0.48	100	96.4	90	110	
Zn	66	2	He	101.252	1.061	132506	0.69	100	101.3	90	110	
Al	27	2	He	99.479	2.617	33661	2.13	100	99.5	90	110	
B	11	1	No Gas	481.385	1.200	1132838	0.55	500	96.3	90	110	
Al	27	1	No Gas	101.820	1.708	1511048	0.40	100	101.8	90	110	
Si	28	1	No Gas	505.575	1.692	3792068	1.57	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.448	2.295	1723829	0.43	100	101.4	90	110	
Cd	111	1	No Gas	100.961	2.219	369904	0.23	100	101.0	90	110	
Sr	88	1	No Gas	102.529	1.623	3322607	1.43	100	102.5	90	110	
Mo	95	1	No Gas	98.504	1.839	674357	0.45	100	98.5	90	110	
Sn	118	1	No Gas	101.535	1.845	1158578	1.26	100	101.5	90	110	
Sb	121	1	No Gas	98.961	1.824	1622288	1.56	100	99.0	90	110	
Ba	137	1	No Gas	98.416	1.137	568477	1.32	100	98.4	90	110	
Tl	205	1	No Gas	101.733	2.810	4165282	1.36	100	101.7	90	110	
Tl	203	1	No Gas	101.171	2.801	1735964	1.77	100	101.2	90	110	
Pb	208	1	No Gas	101.895	3.560	5727002	2.11	100	101.9	90	110	
U	238	1	No Gas	99.736	0.623	5965607	0.87	100	99.7	90	110	
Ca	43	2	He	9682.471	2.200	20168	1.67	10000	96.8	90	110	
Sb	121	2	He	95.414	0.350	731886	0.74	100	95.4	90	110	
Ti	47	2	He	95.896	0.934	20496	1.43	100	95.9	90	110	
Cu	63	1	No Gas	100.411	0.677	1278967	1.52	100	100.4	90	110	
Se	82	1	No Gas	96.735	5.369	20488	4.30	100	96.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1198024	0.84	1218584	98.31	70	120	
Ge	72	2	He	701730	0.53	734220	95.57	70	120	
Ge	72	1	No Gas	2538617	1.28	2598394	97.70	70	120	
In	115	1	No Gas	3127302	2.03	3214165	97.30	70	120	
Bi	209	1	No Gas	3344797	1.47	3498813	95.60	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	063_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T12:41:50-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.098	-167.5	75789	1.1	0.5	
Be	9	1	No Gas	0.002	142.5	43	24.0	0.5	
V	51	2	He	0.419	0.7	4945	1.0	2.5	
Cr	52	2	He	-0.002	-262.4	1110	3.9	2.5	
Fe	56	2	He	0.719	2.6	18450	1.6	100	
Se	78	2	He	0.028	664.1	91	16.8	2	
As	75	2	He	0.102	16.5	259	5.8	2.5	
Ca	44	2	He	0.798	368.5	323	33.1	100	
Na	23	2	He	40.492	4.0	126219	0.3	100	
Mg	24	2	He	0.219	15.0	447	3.4	100	
K	39	2	He	-2.101	-42.9	51811	1.3	100	
Mn	55	2	He	0.004	354.5	373	17.2	2.5	
Co	59	2	He	0.000	-122.8	37	15.7	2.5	
Ni	60	2	He	0.000	-26219.3	153	32.8	2.5	
Cu	63	2	He	0.007	183.2	1197	6.4	2	
Zn	66	2	He	0.044	34.1	407	5.7	2.5	
Al	27	2	He	-0.576	-23.3	410	10.6	5	
B	11	1	No Gas	9.204	23.4	39708	11.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.455	-3.3	18426	0.5	5	
Si	28	1	No Gas	-0.617	-111.8	248841	0.5	10	
Ag	107	1	No Gas	-0.012	-33.2	373	18.8	2.5	
Cd	111	1	No Gas	0.004	148.8	30	66.7	1	
Sr	88	1	No Gas	-0.003	-71.5	793	10.3	2.5	
Mo	95	1	No Gas	0.156	41.0	1227	37.9	2.5	
Sn	118	1	No Gas	0.029	85.5	2200	14.3	5	
Sb	121	1	No Gas	0.249	20.0	6118	14.2	2.5	
Ba	137	1	No Gas	-0.004	-244.6	203	27.1	2.5	
Tl	205	1	No Gas	0.160	65.3	7513	59.3	1	
Tl	203	1	No Gas	0.163	66.2	3154	61.0	1	
Pb	208	1	No Gas	0.008	64.9	2297	14.6	2.5	
U	238	1	No Gas	0.026	33.1	1703	32.2	2.5	
Ca	43	2	He	1.888	390.2	17	91.7	100	
Sb	121	2	He	0.125	16.9	2034	7.8	2.5	
Ti	47	2	He	-0.014	-188.2	3	173.2	2.5	
Cu	63	1	No Gas	0.087	24.2	3967	8.0	2.5	
Se	82	1	No Gas	0.566	33.7	-1	-3691.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1222470	3.74	1218584	100.32	70	120	
Ge	72	2	He	705219	0.98	734220	96.05	70	120	
Ge	72	1	No Gas	2525701	1.57	2598394	97.20	70	120	
In	115	1	No Gas	3167330	1.59	3214165	98.54	70	120	
Bi	209	1	No Gas	3351007	1.64	3498813	95.78	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	098_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:01:27-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	106.198	1.301	1641634	1.21	100	106.2	90	110	
Be	9	1	No Gas	105.371	0.570	385500	0.95	100	105.4	90	110	
V	51	2	He	100.764	0.521	572322	0.89	100	100.8	90	110	
Cr	52	2	He	100.732	0.307	678849	0.75	100	100.7	90	110	
Fe	56	2	He	10378.419	0.827	62145511	0.88	10000	103.8	90	110	
Se	78	2	He	101.896	1.314	8663	1.76	100	101.9	90	110	
As	75	2	He	102.450	1.315	97259	1.39	100	102.4	90	110	
Ca	44	2	He	10333.167	0.932	350558	1.39	10000	103.3	90	110	
Na	23	2	He	10417.141	1.035	10261303	0.54	10000	104.2	90	110	
Mg	24	2	He	10430.931	0.024	5927876	0.49	10000	104.3	90	110	
K	39	2	He	10168.656	1.023	6477084	1.36	10000	101.7	90	110	
Mn	55	2	He	99.422	1.298	492581	1.23	100	99.4	90	110	
Co	59	2	He	100.280	0.933	1045522	1.32	100	100.3	90	110	
Ni	60	2	He	105.076	1.076	254436	0.85	100	105.1	90	110	
Cu	63	2	He	99.735	0.599	667358	1.07	100	99.7	90	110	
Zn	66	2	He	105.141	0.759	132742	0.72	100	105.1	90	110	
Al	27	2	He	113.537	0.318	36986	0.38	100	113.5	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	530.164	2.226	1139762	1.60	500	106.0	90	110	
Al	27	1	No Gas	115.456	1.191	1604678	0.85	100	115.5	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	630.215	0.664	4376486	0.58	5000	12.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	107.072	1.001	1755448	1.53	100	107.1	90	110	
Cd	111	1	No Gas	105.723	0.947	373712	0.29	100	105.7	90	110	
Sr	88	1	No Gas	105.364	1.370	3293834	1.37	100	105.4	90	110	
Mo	95	1	No Gas	99.781	0.633	659019	0.21	100	99.8	90	110	
Sn	118	1	No Gas	104.537	0.462	1150738	1.10	100	104.5	90	110	
Sb	121	1	No Gas	108.225	1.381	1664501	0.76	100	108.2	90	110	
Ba	137	1	No Gas	103.111	1.151	574535	1.23	100	103.1	90	110	
Tl	205	1	No Gas	107.403	1.039	4267509	0.54	100	107.4	90	110	
Tl	203	1	No Gas	106.547	2.403	1774015	1.81	100	106.5	90	110	
Pb	208	1	No Gas	106.816	1.666	5826426	0.99	100	106.8	90	110	
U	238	1	No Gas	100.902	1.212	5855760	0.66	100	100.9	90	110	
Ca	43	2	He	10187.294	2.330	20472	1.84	10000	101.9	90	110	
Sb	121	2	He	100.817	0.243	746029	0.35	100	100.8	90	110	
Ti	47	2	He	103.013	0.603	21240	0.15	100	103.0	90	110	
Cu	63	1	No Gas	103.372	0.713	1235289	0.20	100	103.4	90	110	
Se	82	1	No Gas	105.444	1.936	20973	1.57	100	105.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1096117	1.52	1218584	89.95	70	120	
Ge	72	2	He	677021	0.49	734220	92.21	70	120	
Ge	72	1	No Gas	2381926	0.63	2598394	91.67	70	120	
In	115	1	No Gas	3016432	0.78	3214165	93.85	70	120	
Bi	209	1	No Gas	3245254	0.68	3498813	92.75	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	099_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:03:20-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.192	-34.9	71008	1.1	0.5	
Be	9	1	No Gas	-0.003	-23.5	22	13.3	0.5	
V	51	2	He	0.236	8.5	3729	4.4	2.5	
Cr	52	2	He	-0.013	-53.1	993	5.9	2.5	
Fe	56	2	He	0.676	29.3	17505	5.4	100	
Se	78	2	He	-0.028	-438.1	83	11.4	2	
As	75	2	He	0.072	43.7	221	14.9	2.5	
Ca	44	2	He	0.970	116.8	317	12.0	100	
Na	23	2	He	15.864	12.1	97439	0.4	100	
Mg	24	2	He	0.125	37.9	377	8.1	100	
K	39	2	He	4.599	49.2	54150	1.1	100	
Mn	55	2	He	-0.007	-253.8	307	28.5	2.5	
Co	59	2	He	-0.001	-79.9	33	17.3	2.5	
Ni	60	2	He	0.022	142.9	200	36.1	2.5	
Cu	63	2	He	0.015	93.3	1210	8.9	2	
Zn	66	2	He	0.069	15.5	423	2.7	2.5	
Al	27	2	He	-0.519	-28.1	413	10.1	5	
B	11	1	No Gas	15.459	11.8	52138	7.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.482	-5.6	17154	1.6	5	
Si	28	1	No Gas	3.821	9.5	266180	1.6	10	
Ag	107	1	No Gas	-0.010	-49.8	380	22.9	2.5	
Cd	111	1	No Gas	0.000	821.1	17	34.6	1	
Sr	88	1	No Gas	-0.005	-79.5	720	16.8	2.5	
Mo	95	1	No Gas	0.091	33.2	747	27.0	2.5	
Sn	118	1	No Gas	0.039	20.7	2240	3.9	5	
Sb	121	1	No Gas	0.072	15.2	3067	5.1	2.5	
Ba	137	1	No Gas	-0.011	-131.4	160	48.8	2.5	
Tl	205	1	No Gas	0.275	80.0	12186	75.2	1	
Tl	203	1	No Gas	0.274	81.3	5052	77.0	1	
Pb	208	1	No Gas	0.006	71.4	2190	12.9	2.5	
U	238	1	No Gas	0.018	52.6	1183	48.1	2.5	
Ca	43	2	He	2.069	361.6	17	91.7	100	
Sb	121	2	He	0.028	77.1	1233	11.8	2.5	
Ti	47	2	He	0.018	263.2	10	100.0	2.5	
Cu	63	1	No Gas	0.068	11.2	3554	2.3	2.5	
Se	82	1	No Gas	-0.146	-61.6	-145	-11.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1168128	0.42	1218584	95.86	70	120	
Ge	72	2	He	679409	1.55	734220	92.53	70	120	
Ge	72	1	No Gas	2402785	0.83	2598394	92.47	70	120	
In	115	1	No Gas	3072885	0.26	3214165	95.60	70	120	
Bi	209	1	No Gas	3336745	1.11	3498813	95.37	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	111_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:31:09-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.546	1.734	1656546	0.43	100	105.5	90	110	
Be	9	1	No Gas	104.418	2.772	387703	1.06	100	104.4	90	110	
V	51	2	He	99.768	0.999	578919	0.43	100	99.8	90	110	
Cr	52	2	He	99.136	0.830	682549	0.85	100	99.1	90	110	
Fe	56	2	He	10226.518	1.014	62560324	1.00	10000	102.3	90	110	
Se	78	2	He	99.407	1.118	8635	0.76	100	99.4	90	110	
As	75	2	He	100.482	1.115	97453	0.70	100	100.5	90	110	
Ca	44	2	He	9963.629	1.616	345314	1.12	10000	99.6	90	110	
Na	23	2	He	10048.369	0.810	10115210	0.53	10000	100.5	90	110	
Mg	24	2	He	10064.466	3.363	5842622	2.81	10000	100.6	90	110	
K	39	2	He	9872.849	2.487	6425676	2.13	10000	98.7	90	110	
Mn	55	2	He	97.347	1.834	492723	1.57	100	97.3	90	110	
Co	59	2	He	101.447	2.743	1080460	2.37	100	101.4	90	110	
Ni	60	2	He	104.038	0.858	257372	0.30	100	104.0	90	110	
Cu	63	2	He	98.449	1.561	672964	1.02	100	98.4	90	110	
Zn	66	2	He	102.928	0.586	132764	0.12	100	102.9	90	110	
Al	27	2	He	108.590	3.733	36164	3.53	100	108.6	90	110	
B	11	1	No Gas	528.867	2.753	1154063	1.00	500	105.8	90	110	
Al	27	1	No Gas	112.393	1.892	1618526	1.86	100	112.4	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	591.384	1.999	4268185	0.73	5000	11.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	106.073	2.324	1790592	1.20	100	106.1	90	110	
Cd	111	1	No Gas	104.761	2.658	381272	0.54	100	104.8	90	110	
Sr	88	1	No Gas	104.603	2.785	3366883	1.42	100	104.6	90	110	
Mo	95	1	No Gas	100.334	3.565	682148	0.67	100	100.3	90	110	
Sn	118	1	No Gas	103.507	4.136	1172734	1.29	100	103.5	90	110	
Sb	121	1	No Gas	106.163	2.167	1691035	1.52	100	106.2	90	110	
Ba	137	1	No Gas	102.557	3.635	588225	0.84	100	102.6	90	110	
Tl	205	1	No Gas	106.916	1.990	4379827	0.89	100	106.9	90	110	
Tl	203	1	No Gas	106.958	2.512	1836039	1.18	100	107.0	90	110	
Pb	208	1	No Gas	105.619	1.890	5939879	0.48	100	105.6	90	110	
U	238	1	No Gas	100.609	2.194	6019516	0.68	100	100.6	90	110	
Ca	43	2	He	9731.629	1.149	19981	1.23	10000	97.3	90	110	
Sb	121	2	He	99.705	0.857	753764	0.76	100	99.7	90	110	
Ti	47	2	He	97.872	2.054	20616	1.51	100	97.9	90	110	
Cu	63	1	No Gas	104.098	2.331	1288142	0.63	100	104.1	90	110	
Se	82	1	No Gas	102.058	2.745	21016	1.03	100	102.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1112781	2.08	1218584	91.32	70	120	
Ge	72	2	He	691666	0.56	734220	94.20	70	120	
Ge	72	1	No Gas	2467134	1.73	2598394	94.95	70	120	
In	115	1	No Gas	3107171	2.95	3214165	96.67	70	120	
Bi	209	1	No Gas	3346305	1.54	3498813	95.64	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	112_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:33:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.136	-42.5	70824	0.6	0.5	
Be	9	1	No Gas	0.002	192.9	40	33.1	0.5	
V	51	2	He	0.169	2.3	3415	0.8	2.5	
Cr	52	2	He	-0.019	-57.7	973	7.6	2.5	
Fe	56	2	He	0.557	12.5	17154	2.3	100	
Se	78	2	He	0.059	302.5	92	16.4	2	
As	75	2	He	0.034	99.6	189	17.7	2.5	
Ca	44	2	He	-0.568	-222.6	270	16.1	100	
Na	23	2	He	0.921	131.6	84565	1.1	100	
Mg	24	2	He	0.094	66.2	367	9.6	100	
K	39	2	He	1.342	145.4	53206	2.2	100	
Mn	55	2	He	-0.020	-20.0	250	8.0	2.5	
Co	59	2	He	0.000	-373.2	37	41.7	2.5	
Ni	60	2	He	0.001	2134.4	153	29.4	2.5	
Cu	63	2	He	0.019	65.0	1263	6.9	2	
Zn	66	2	He	0.052	120.7	410	19.4	2.5	
Al	27	2	He	-0.627	-20.4	387	10.5	5	
B	11	1	No Gas	15.417	10.8	51300	8.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.493	-4.7	17498	0.5	5	
Si	28	1	No Gas	1.116	61.2	255476	0.4	10	
Ag	107	1	No Gas	-0.003	-402.4	513	36.9	2.5	
Cd	111	1	No Gas	0.001	459.7	20	86.6	1	
Sr	88	1	No Gas	-0.006	-28.4	687	8.4	2.5	
Mo	95	1	No Gas	0.077	35.0	667	26.2	2.5	
Sn	118	1	No Gas	0.037	77.4	2257	12.9	5	
Sb	121	1	No Gas	0.068	6.8	3090	2.8	2.5	
Ba	137	1	No Gas	-0.005	-255.2	197	34.6	2.5	
Tl	205	1	No Gas	0.233	79.7	10757	73.5	1	
Tl	203	1	No Gas	0.236	71.7	4518	67.0	1	
Pb	208	1	No Gas	0.007	120.1	2277	21.2	2.5	
U	238	1	No Gas	0.018	47.3	1250	43.0	2.5	
Ca	43	2	He	-2.882	-97.4	7	86.6	100	
Sb	121	2	He	0.017	139.3	1183	15.4	2.5	
Ti	47	2	He	0.002	1585.1	7	86.6	2.5	
Cu	63	1	No Gas	0.057	33.3	3511	5.9	2.5	
Se	82	1	No Gas	0.137	473.4	-91	-149.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1150921	0.83	1218584	94.45	70	120	
Ge	72	2	He	693879	0.42	734220	94.51	70	120	
Ge	72	1	No Gas	2473137	1.46	2598394	95.18	70	120	
In	115	1	No Gas	3127919	1.56	3214165	97.32	70	120	
Bi	209	1	No Gas	3444727	0.62	3498813	98.45	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-03
Data File Name	115SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:39:02-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	6.331	6.331	1.90	181098	0.00	2000	
Be	9	1	No Gas	0.433	0.433	9.91	1795	0.02	2000	
V	51	2	He	8.718	8.718	0.91	55013	0.02	2000	
Cr	52	2	He	8.503	8.503	1.32	62034	0.01	2000	
Fe	56	2	He	3306.853	3306.853	0.31	21083768	0.02	200000	
Se	78	2	He	0.453	0.453	65.85	131	0.35	2000	
As	75	2	He	0.628	0.628	8.92	794	0.08	2000	
Ca	44	2	He	1856.881	1856.881	0.27	67291	2.76	200000	
Na	23	2	He	16962.320	16962.320	1.58	17727433	0.10	200000	
Mg	24	2	He	2065.032	2065.032	1.54	1249147	0.17	200000	
K	39	2	He	1216.375	1216.375	0.72	872428	0.14	200000	
Mn	55	2	He	30.474	30.474	1.80	160937	0.02	2000	
Co	59	2	He	1.214	1.214	2.01	13514	0.01	2000	
Ni	60	2	He	11.686	11.686	1.24	30254	0.04	2000	
Cu	63	2	He	5.148	5.148	1.57	37773	0.01	2000	
Zn	66	2	He	40.657	40.657	1.60	54851	0.07	2000	
Al	27	2	He	6342.898	6342.898	0.52	2165403	0.29	2000	>LDR
B	11	1	No Gas	16.032	16.032	0.82	55641	0.03	2000	
Al	27	1	No Gas	6487.987	6487.987	1.36	95474485	0.01	2000	>LDR
Si	28	1	No Gas	25111.366	25111.366	1.47	177369517	0.01	2000	>LDR
Ag	107	1	No Gas	0.004	0.004	95.39	657	0.00	2000	
Cd	111	1	No Gas	0.065	0.065	7.23	260	0.02	2000	
Sr	88	1	No Gas	42.585	42.585	1.76	1419776	0.00	2000	
Mo	95	1	No Gas	0.267	0.267	12.64	2027	0.01	2000	
Sn	118	1	No Gas	0.128	0.128	29.36	3384	0.00	2000	
Sb	121	1	No Gas	0.064	0.064	21.43	3140	0.00	2000	
Ba	137	1	No Gas	98.427	98.427	1.63	584688	0.02	2000	
Tl	205	1	No Gas	0.026	0.026	3.27	1997	0.00	2000	
Tl	203	1	No Gas	0.028	0.028	34.24	840	0.00	2000	
Pb	208	1	No Gas	1.132	1.132	3.55	67534	0.00	2000	
U	238	1	No Gas	0.164	0.164	8.79	10274	0.00	2000	
Ca	43	2	He	1861.023	1861.023	2.82	3991	46.63	200000	
Sb	121	2	He	0.050	0.050	32.03	1487	0.00	2000	
Ti	47	2	He	130.288	130.288	3.08	28594	0.46	2000	
Cu	63	1	No Gas	5.316	5.316	2.67	71002	0.01	2000	
Zn	66	1	No Gas	40.966	40.966	0.94	142836	0.03	2000	
Se	82	1	No Gas	0.469	0.469	32.32	-22	-2.15	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1216361	0.45	1218584	99.82	70	120	
Ge	72	2	He	720542	0.84	734220	98.14	70	120	
Ge	72	1	No Gas	2559246	2.01	2598394	98.49	70	120	
In	115	1	No Gas	3216293	1.79	3214165	100.07	70	120	

Sample Report

Bi	209	1	No Gas	3449962	0.95	3498813	98.60	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-04
Data File Name	116SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:41:01-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	11.089	11.089	1.25	246784	0.00	2000	
Be	9	1	No Gas	0.085	0.085	16.39	360	0.02	2000	
V	51	2	He	1.546	1.546	1.50	11599	0.01	2000	
Cr	52	2	He	1.006	1.006	3.84	8183	0.01	2000	
Fe	56	2	He	2757.331	2757.331	1.39	17223759	0.02	200000	
Se	78	2	He	0.124	0.124	57.45	99	0.12	2000	
As	75	2	He	1.576	1.576	6.82	1715	0.09	2000	
Ca	44	2	He	9867.136	9867.136	0.61	349021	2.83	200000	
Na	23	2	He	52311.378	52311.378	1.27	53382829	0.10	200000	
Mg	24	2	He	7951.616	7951.616	0.17	4711759	0.17	200000	
K	39	2	He	1584.751	1584.751	2.71	1097215	0.14	200000	
Mn	55	2	He	247.052	247.052	1.08	1275627	0.02	2000	
Co	59	2	He	2.460	2.460	0.81	26787	0.01	2000	
Ni	60	2	He	11.952	11.952	3.15	30304	0.04	2000	
Cu	63	2	He	5.834	5.834	1.51	41778	0.01	2000	
Zn	66	2	He	57.015	57.015	2.23	75201	0.08	2000	
Al	27	2	He	49.477	49.477	8.42	17151	0.29	2000	
B	11	1	No Gas	16.988	16.988	3.96	55096	0.03	2000	
Al	27	1	No Gas	78.365	78.365	17.81	1170891	0.01	2000	
Si	28	1	No Gas	17327.193	17327.193	0.53	121738842	0.01	2000	>LDR
Ag	107	1	No Gas	-0.016	-0.016	-43.99	290	-0.01	2000	
Cd	111	1	No Gas	0.023	0.023	19.70	100	0.02	2000	
Sr	88	1	No Gas	191.894	191.894	0.86	6249113	0.00	2000	
Mo	95	1	No Gas	0.082	0.082	5.81	703	0.01	2000	
Sn	118	1	No Gas	-0.048	-0.048	-7.14	1297	0.00	2000	
Sb	121	1	No Gas	0.160	0.160	6.75	4694	0.00	2000	
Ba	137	1	No Gas	325.353	325.353	0.51	1888254	0.02	2000	
Tl	205	1	No Gas	-0.015	-0.015	-8.94	290	-0.01	2000	
Tl	203	1	No Gas	-0.011	-0.011	-8.43	143	-0.01	2000	
Pb	208	1	No Gas	0.082	0.082	5.95	6491	0.00	2000	
U	238	1	No Gas	0.122	0.122	6.38	7492	0.00	2000	
Ca	43	2	He	10038.595	10038.595	0.29	21036	47.72	200000	
Sb	121	2	He	0.154	0.154	5.80	2260	0.01	2000	
Ti	47	2	He	0.730	0.730	39.10	163	0.45	2000	
Cu	63	1	No Gas	6.077	6.077	1.49	80273	0.01	2000	
Zn	66	1	No Gas	57.639	57.639	0.90	199365	0.03	2000	
Se	82	1	No Gas	0.061	0.061	197.14	-109	-0.06	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1157802	0.90	1218584	95.01	70	120	
Ge	72	2	He	705916	1.29	734220	96.15	70	120	
Ge	72	1	No Gas	2543579	0.61	2598394	97.89	70	120	
In	115	1	No Gas	3142646	1.25	3214165	97.77	70	120	

Sample Report

Bi	209	1	No Gas	3378942	0.82	3498813	96.57	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-05
Data File Name	117SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:43:00-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	11.005	11.005	1.89	246986	0.00	2000	
Be	9	1	No Gas	0.072	0.072	4.10	313	0.02	2000	
V	51	2	He	1.634	1.634	0.64	12108	0.01	2000	
Cr	52	2	He	1.130	1.130	1.99	9043	0.01	2000	
Fe	56	2	He	3016.561	3016.561	0.49	18826577	0.02	200000	
Se	78	2	He	0.095	0.095	143.71	97	0.10	2000	
As	75	2	He	1.574	1.574	0.48	1712	0.09	2000	
Ca	44	2	He	10096.209	10096.209	0.06	356802	2.83	200000	
Na	23	2	He	53564.607	53564.607	0.47	54614221	0.10	200000	
Mg	24	2	He	8129.791	8129.791	1.09	4812707	0.17	200000	
K	39	2	He	1580.201	1580.201	0.64	1093397	0.14	200000	
Mn	55	2	He	250.501	250.501	1.53	1292359	0.02	2000	
Co	59	2	He	2.473	2.473	1.06	26904	0.01	2000	
Ni	60	2	He	13.764	13.764	1.82	34855	0.04	2000	
Cu	63	2	He	8.708	8.708	1.64	61747	0.01	2000	
Zn	66	2	He	74.168	74.168	0.55	97646	0.08	2000	
Al	27	2	He	49.834	49.834	6.41	17251	0.29	2000	
B	11	1	No Gas	16.208	16.208	0.90	53689	0.03	2000	
Al	27	1	No Gas	55.436	55.436	1.91	819748	0.01	2000	
Si	28	1	No Gas	17716.368	17716.368	1.88	122041678	0.01	2000	>LDR
Ag	107	1	No Gas	-0.016	-0.016	-40.91	287	-0.01	2000	
Cd	111	1	No Gas	0.022	0.022	28.88	93	0.02	2000	
Sr	88	1	No Gas	200.130	200.130	1.37	6350254	0.00	2000	
Mo	95	1	No Gas	0.067	0.067	17.83	583	0.01	2000	
Sn	118	1	No Gas	-0.054	-0.054	-3.86	1197	0.00	2000	
Sb	121	1	No Gas	0.237	0.237	2.99	5831	0.00	2000	
Ba	137	1	No Gas	345.617	345.617	0.26	1954525	0.02	2000	
Tl	205	1	No Gas	-0.015	-0.015	-7.08	277	-0.01	2000	
Tl	203	1	No Gas	-0.010	-0.010	-12.17	157	-0.01	2000	
Pb	208	1	No Gas	0.082	0.082	1.86	6314	0.00	2000	
U	238	1	No Gas	0.119	0.119	3.22	7106	0.00	2000	
Ca	43	2	He	10125.506	10125.506	2.12	21200	47.76	200000	
Sb	121	2	He	0.203	0.203	3.92	2634	0.01	2000	
Ti	47	2	He	0.933	0.933	7.19	207	0.45	2000	
Cu	63	1	No Gas	9.038	9.038	1.67	115683	0.01	2000	
Zn	66	1	No Gas	76.001	76.001	1.06	257465	0.03	2000	
Se	82	1	No Gas	0.288	0.288	144.89	-59	-0.49	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1165075	1.69	1218584	95.61	70	120	
Ge	72	2	He	705257	0.56	734220	96.06	70	120	
Ge	72	1	No Gas	2494287	1.06	2598394	95.99	70	120	
In	115	1	No Gas	3062187	0.96	3214165	95.27	70	120	

Sample Report

Bi	209	1	No Gas	3286952	1.33	3498813	93.94	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-06
Data File Name	118SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:44:59-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	25.057	25.057	1.88	451745	0.01	2000	
Be	9	1	No Gas	0.214	0.214	5.49	837	0.03	2000	
V	51	2	He	0.874	0.874	6.00	7186	0.01	2000	
Cr	52	2	He	124.007	124.007	1.17	820231	0.02	2000	
Fe	56	2	He	32668.279	32668.279	2.00	192020157	0.02	200000	
Se	78	2	He	0.606	0.606	55.40	133	0.45	2000	
As	75	2	He	35.224	35.224	1.13	32928	0.11	2000	
Ca	44	2	He	60603.690	60603.690	2.34	2017081	3.00	200000	
Na	23	2	He	190226.479	190226.479	0.78	182597417	0.10	200000	>LDR
Mg	24	2	He	50003.024	50003.024	0.88	27899895	0.18	200000	
K	39	2	He	2147.776	2147.776	2.41	1382614	0.16	200000	
Mn	55	2	He	3837.981	3837.981	1.49	18656341	0.02	2000	>LDR
Co	59	2	He	82.994	82.994	0.83	849587	0.01	2000	
Ni	60	2	He	1469.540	1469.540	0.81	3491970	0.04	2000	
Cu	63	2	He	429.669	429.669	0.50	2819235	0.02	2000	
Zn	66	2	He	3224.787	3224.787	1.77	3987368	0.08	2000	>LDR
Al	27	2	He	37.048	37.048	11.54	12227	0.30	2000	
B	11	1	No Gas	13.076	13.076	0.60	45004	0.03	2000	
Al	27	1	No Gas	35.221	35.221	2.08	506327	0.01	2000	
Si	28	1	No Gas	24203.519	24203.519	1.36	159260274	0.02	2000	>LDR
Ag	107	1	No Gas	0.076	0.076	9.92	1713	0.00	2000	
Cd	111	1	No Gas	2.502	2.502	2.35	8510	0.03	2000	
Sr	88	1	No Gas	1302.463	1302.463	1.56	39085213	0.00	2000	
Mo	95	1	No Gas	1.860	1.860	1.55	11922	0.02	2000	
Sn	118	1	No Gas	0.093	0.093	8.78	2687	0.00	2000	
Sb	121	1	No Gas	0.127	0.127	9.37	3891	0.00	2000	
Ba	137	1	No Gas	2185.383	2185.383	1.47	11687640	0.02	2000	>LDR
Tl	205	1	No Gas	0.046	0.046	13.29	2557	0.00	2000	
Tl	203	1	No Gas	0.042	0.042	20.85	967	0.00	2000	
Pb	208	1	No Gas	14.212	14.212	1.56	740328	0.00	2000	
U	238	1	No Gas	0.187	0.187	4.13	10465	0.00	2000	
Ca	43	2	He	59144.828	59144.828	0.89	116644	50.71	200000	
Sb	121	2	He	0.123	0.123	21.14	1904	0.01	2000	
Ti	47	2	He	0.234	0.234	32.20	53	0.44	2000	
Cu	63	1	No Gas	424.328	424.328	0.88	5066055	0.01	2000	
Zn	66	1	No Gas	3098.313	3098.313	0.71	9995088	0.03	2000	>LDR
Se	82	1	No Gas	1.216	1.216	44.60	129	0.95	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1124326	0.82	1218584	92.26	70	120	
Ge	72	2	He	664727	0.65	734220	90.54	70	120	
Ge	72	1	No Gas	2383716	0.76	2598394	91.74	70	120	
In	115	1	No Gas	2896565	1.32	3214165	90.12	70	120	
Bi	209	1	No Gas	3093224	1.61	3498813	88.41	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-07
Data File Name	119SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:47:00-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	11.914	11.914	1.23	259624	0.00	2000	
Be	9	1	No Gas	0.072	0.072	38.57	310	0.02	2000	
V	51	2	He	1.256	1.256	2.77	9518	0.01	2000	
Cr	52	2	He	44.724	44.724	0.75	303121	0.01	2000	
Fe	56	2	He	171.769	171.769	0.68	1045589	0.02	200000	
Se	78	2	He	0.097	0.097	41.14	93	0.10	2000	
As	75	2	He	0.377	0.377	6.88	511	0.07	2000	
Ca	44	2	He	27597.660	27597.660	1.68	939222	2.94	200000	
Na	23	2	He	127766.376	127766.376	0.60	125401721	0.10	200000	
Mg	24	2	He	19860.005	19860.005	0.54	11327944	0.18	200000	
K	39	2	He	1439.044	1439.044	2.40	964010	0.15	200000	
Mn	55	2	He	56.447	56.447	1.42	280849	0.02	2000	
Co	59	2	He	0.717	0.717	6.67	7546	0.01	2000	
Ni	60	2	He	61.298	61.298	1.28	149042	0.04	2000	
Cu	63	2	He	1.174	1.174	1.95	8980	0.01	2000	
Zn	66	2	He	22.895	22.895	1.02	29275	0.08	2000	
Al	27	2	He	10.481	10.481	10.52	3954	0.27	2000	
B	11	1	No Gas	22.573	22.573	0.73	67597	0.03	2000	
Al	27	1	No Gas	11.940	11.940	3.10	191141	0.01	2000	
Si	28	1	No Gas	20160.656	20160.656	2.85	135457205	0.01	2000	>LDR
Ag	107	1	No Gas	-0.016	-0.016	-22.50	283	-0.01	2000	
Cd	111	1	No Gas	0.130	0.130	23.92	480	0.03	2000	
Sr	88	1	No Gas	569.483	569.483	0.93	17914928	0.00	2000	
Mo	95	1	No Gas	0.419	0.419	5.12	2920	0.01	2000	
Sn	118	1	No Gas	-0.017	-0.017	-76.65	1597	0.00	2000	
Sb	121	1	No Gas	0.023	0.023	43.99	2340	0.00	2000	
Ba	137	1	No Gas	766.615	766.615	0.95	4297830	0.02	2000	
Tl	205	1	No Gas	0.001	0.001	36.67	903	0.00	2000	
Tl	203	1	No Gas	0.000	0.000	1298.01	320	0.00	2000	
Pb	208	1	No Gas	0.001	0.001	166.30	1830	0.00	2000	
U	238	1	No Gas	0.099	0.099	8.07	5805	0.00	2000	
Ca	43	2	He	26651.314	26651.314	0.60	53742	49.59	200000	
Sb	121	2	He	0.008	0.008	45.18	1093	0.00	2000	
Ti	47	2	He	0.131	0.131	118.03	33	0.39	2000	
Cu	63	1	No Gas	1.674	1.674	7.24	23147	0.01	2000	
Zn	66	1	No Gas	23.459	23.459	1.94	78178	0.03	2000	
Se	82	1	No Gas	1.339	1.339	40.13	158	0.85	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1157585	1.04	1218584	94.99	70	120	
Ge	72	2	He	679537	0.49	734220	92.55	70	120	
Ge	72	1	No Gas	2433999	1.97	2598394	93.67	70	120	
In	115	1	No Gas	3036035	0.58	3214165	94.46	70	120	
Bi	209	1	No Gas	3213338	0.85	3498813	91.84	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-08
Data File Name	120SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:49:02-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	11.497	11.497	4.40	253200	0.00	2000	
Be	9	1	No Gas	0.054	0.054	6.62	243	0.02	2000	
V	51	2	He	1.662	1.662	2.23	12004	0.01	2000	
Cr	52	2	He	38.021	38.021	0.53	261805	0.01	2000	
Fe	56	2	He	143.748	143.748	0.52	890658	0.02	200000	
Se	78	2	He	0.019	0.019	1621.53	88	0.02	2000	
As	75	2	He	0.483	0.483	14.72	621	0.08	2000	
Ca	44	2	He	25839.671	25839.671	2.28	892850	2.89	200000	
Na	23	2	He	122823.304	122823.304	0.64	122403465	0.10	200000	
Mg	24	2	He	19078.951	19078.951	0.72	11049001	0.17	200000	
K	39	2	He	1367.517	1367.517	1.20	932702	0.15	200000	
Mn	55	2	He	50.004	50.004	0.97	252639	0.02	2000	
Co	59	2	He	0.563	0.563	5.17	6021	0.01	2000	
Ni	60	2	He	52.070	52.070	1.26	128569	0.04	2000	
Cu	63	2	He	1.074	1.074	1.32	8436	0.01	2000	
Zn	66	2	He	19.328	19.328	1.43	25147	0.08	2000	
Al	27	2	He	9.684	9.684	5.05	3754	0.26	2000	
B	11	1	No Gas	21.770	21.770	3.37	65828	0.03	2000	
Al	27	1	No Gas	11.157	11.157	3.71	181318	0.01	2000	
Si	28	1	No Gas	19262.717	19262.717	2.29	130266745	0.01	2000	>LDR
Ag	107	1	No Gas	-0.016	-0.016	-7.32	287	-0.01	2000	
Cd	111	1	No Gas	0.138	0.138	9.80	503	0.03	2000	
Sr	88	1	No Gas	545.873	545.873	1.26	17054484	0.00	2000	
Mo	95	1	No Gas	0.317	0.317	8.86	2224	0.01	2000	
Sn	118	1	No Gas	-0.028	-0.028	-44.42	1463	0.00	2000	
Sb	121	1	No Gas	0.010	0.010	84.40	2144	0.00	2000	
Ba	137	1	No Gas	738.096	738.096	0.91	4109864	0.02	2000	
Tl	205	1	No Gas	-0.003	-0.003	-94.36	737	0.00	2000	
Tl	203	1	No Gas	-0.004	-0.004	-55.38	253	0.00	2000	
Pb	208	1	No Gas	-0.004	-0.004	-45.35	1517	0.00	2000	
U	238	1	No Gas	0.095	0.095	3.17	5565	0.00	2000	
Ca	43	2	He	26016.930	26016.930	2.01	53263	48.85	200000	
Sb	121	2	He	-0.019	-0.019	-107.88	900	0.00	2000	
Ti	47	2	He	0.113	0.113	0.58	30	0.38	2000	
Cu	63	1	No Gas	1.507	1.507	1.84	21264	0.01	2000	
Zn	66	1	No Gas	19.236	19.236	3.17	64671	0.03	2000	
Se	82	1	No Gas	1.634	1.634	40.97	219	0.75	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1158638	2.98	1218584	95.08	70	120	
Ge	72	2	He	689945	0.46	734220	93.97	70	120	
Ge	72	1	No Gas	2449556	2.16	2598394	94.27	70	120	
In	115	1	No Gas	3015384	0.87	3214165	93.82	70	120	
Bi	209	1	No Gas	3193953	2.90	3498813	91.29	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-09
Data File Name	121SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:51:03-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.557	3.557	3.71	130027	0.00	2000	
Be	9	1	No Gas	1.013	1.013	6.58	3977	0.03	2000	
V	51	2	He	6.515	6.515	1.07	39714	0.02	2000	
Cr	52	2	He	958.346	958.346	1.52	6529599	0.01	2000	
Fe	56	2	He	13829.269	13829.269	0.36	83838025	0.02	200000	
Se	78	2	He	0.039	0.039	748.76	89	0.04	2000	
As	75	2	He	2.513	2.513	3.12	2566	0.10	2000	
Ca	44	2	He	1768.760	1768.760	0.66	60989	2.90	200000	
Na	23	2	He	19515.671	19515.671	2.39	19389869	0.10	200000	
Mg	24	2	He	1337.873	1337.873	0.94	770043	0.17	200000	
K	39	2	He	416.151	416.151	2.54	317928	0.13	200000	
Mn	55	2	He	54.869	54.869	0.53	275396	0.02	2000	
Co	59	2	He	2.135	2.135	2.10	22572	0.01	2000	
Ni	60	2	He	75.381	75.381	0.15	184858	0.04	2000	
Cu	63	2	He	543.307	543.307	1.56	3675550	0.01	2000	
Zn	66	2	He	73.628	73.628	1.22	94219	0.08	2000	
Al	27	2	He	207.830	207.830	4.13	68046	0.31	2000	
B	11	1	No Gas	13.078	13.078	2.99	46714	0.03	2000	
Al	27	1	No Gas	208.587	208.587	3.35	2931637	0.01	2000	
Si	28	1	No Gas	14337.505	14337.505	1.97	96043715	0.01	2000	>LDR
Ag	107	1	No Gas	0.147	0.147	10.88	2994	0.00	2000	
Cd	111	1	No Gas	0.149	0.149	22.44	550	0.03	2000	
Sr	88	1	No Gas	38.849	38.849	2.29	1229535	0.00	2000	
Mo	95	1	No Gas	13.804	13.804	2.43	92376	0.01	2000	
Sn	118	1	No Gas	20.840	20.840	2.37	233578	0.01	2000	
Sb	121	1	No Gas	1.032	1.032	4.58	18096	0.01	2000	
Ba	137	1	No Gas	111.500	111.500	2.26	628665	0.02	2000	
Tl	205	1	No Gas	-0.004	-0.004	-48.17	727	0.00	2000	
Tl	203	1	No Gas	-0.006	-0.006	-71.02	233	0.00	2000	
Pb	208	1	No Gas	39.703	39.703	0.55	2266214	0.00	2000	
U	238	1	No Gas	0.290	0.290	2.50	17760	0.00	2000	
Ca	43	2	He	1764.832	1764.832	8.21	3601	49.02	200000	
Sb	121	2	He	0.955	0.955	2.60	8183	0.01	2000	
Ti	47	2	He	2.963	2.963	42.44	623	0.48	2000	
Cu	63	1	No Gas	551.516	551.516	1.82	6695357	0.01	2000	
Zn	66	1	No Gas	76.682	76.682	0.69	252495	0.03	2000	
Se	82	1	No Gas	0.828	0.828	84.98	52	1.60	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1167089	1.15	1218584	95.77	70	120	
Ge	72	2	He	685475	0.89	734220	93.36	70	120	
Ge	72	1	No Gas	2424425	1.34	2598394	93.30	70	120	
In	115	1	No Gas	3052995	1.37	3214165	94.99	70	120	

Sample Report

Bi	209	1	No Gas	3394313	2.81	3498813	97.01	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	123_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:56:49-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	106.525	0.840	1591194	2.17	100	106.5	90	110	
Be	9	1	No Gas	104.852	2.064	370611	0.32	100	104.9	90	110	
V	51	2	He	100.867	1.098	556571	0.49	100	100.9	90	110	
Cr	52	2	He	99.808	1.428	653460	1.15	100	99.8	90	110	
Fe	56	2	He	10253.487	0.648	59648846	0.16	10000	102.5	90	110	
Se	78	2	He	101.914	1.318	8418	2.09	100	101.9	90	110	
As	75	2	He	101.619	1.384	93733	2.16	100	101.6	90	110	
Ca	44	2	He	10104.222	0.868	333026	0.82	10000	101.0	90	110	
Na	23	2	He	10235.283	1.681	9796229	1.02	10000	102.4	90	110	
Mg	24	2	He	10328.486	2.143	5702012	1.37	10000	103.3	90	110	
K	39	2	He	9964.255	1.276	6166787	0.61	10000	99.6	90	110	
Mn	55	2	He	99.327	0.413	478114	0.90	100	99.3	90	110	
Co	59	2	He	96.704	1.558	979456	0.99	100	96.7	90	110	
Ni	60	2	He	104.166	0.449	245057	0.46	100	104.2	90	110	
Cu	63	2	He	100.434	0.401	652900	1.09	100	100.4	90	110	
Zn	66	2	He	103.919	1.219	127475	1.79	100	103.9	90	110	
Al	27	2	He	109.641	1.860	34717	1.05	100	109.6	90	110	
B	11	1	No Gas	523.144	2.969	1086751	0.62	500	104.6	90	110	
Al	27	1	No Gas	111.564	1.005	1533035	0.92	100	111.6	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	594.360	1.420	4092237	1.77	5000	11.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.886	1.503	1717950	2.24	100	104.9	90	110	
Cd	111	1	No Gas	103.045	1.197	363915	1.98	100	103.0	90	110	
Sr	88	1	No Gas	104.809	2.445	3272843	1.69	100	104.8	90	110	
Mo	95	1	No Gas	98.868	0.606	652341	0.93	100	98.9	90	110	
Sn	118	1	No Gas	104.493	1.212	1149051	1.24	100	104.5	90	110	
Sb	121	1	No Gas	109.557	0.088	1665103	0.48	100	109.6	90	110	
Ba	137	1	No Gas	101.692	0.131	566063	0.86	100	101.7	90	110	
Tl	205	1	No Gas	108.479	2.514	4300692	2.17	100	108.5	90	110	
Tl	203	1	No Gas	105.312	4.202	1749311	3.16	100	105.3	90	110	
Pb	208	1	No Gas	105.746	1.745	5755639	1.40	100	105.7	90	110	
U	238	1	No Gas	100.106	2.056	5796749	1.59	100	100.1	90	110	
Ca	43	2	He	10257.362	0.919	20028	1.38	10000	102.6	90	110	
Sb	121	2	He	100.795	1.263	724625	1.15	100	100.8	90	110	
Ti	47	2	He	103.724	1.206	20779	1.89	100	103.7	90	110	
Cu	63	1	No Gas	103.743	1.180	1225085	1.42	100	103.7	90	110	
Se	82	1	No Gas	106.523	2.952	20940	3.23	100	106.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1059285	2.38	1218584	86.93	70	120	
Ge	72	2	He	657757	0.80	734220	89.59	70	120	
Ge	72	1	No Gas	2353713	0.50	2598394	90.58	70	120	
In	115	1	No Gas	3013365	0.77	3214165	93.75	70	120	
Bi	209	1	No Gas	3238634	2.19	3498813	92.56	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	124_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T14:58:42-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.146	-44.7	69622	1.1	0.5	
Be	9	1	No Gas	0.003	159.6	45	44.4	0.5	
V	51	2	He	0.341	3.7	4198	1.7	2.5	
Cr	52	2	He	-0.016	-105.2	943	12.2	2.5	
Fe	56	2	He	0.854	26.6	18040	7.2	100	
Se	78	2	He	0.162	113.7	96	16.3	2	
As	75	2	He	0.088	26.2	229	8.9	2.5	
Ca	44	2	He	-0.270	-410.1	267	14.2	100	
Na	23	2	He	16.647	12.0	95357	1.6	100	
Mg	24	2	He	0.169	27.8	390	6.8	100	
K	39	2	He	-0.153	-1349.1	49656	2.2	100	
Mn	55	2	He	0.004	637.5	350	32.2	2.5	
Co	59	2	He	-0.001	-125.3	27	57.3	2.5	
Ni	60	2	He	0.000	-3825.1	143	10.7	2.5	
Cu	63	2	He	0.017	76.3	1187	7.6	2	
Zn	66	2	He	0.082	86.6	427	20.2	2.5	
Al	27	2	He	-0.449	-37.0	423	12.1	5	
B	11	1	No Gas	12.834	16.9	44844	10.1	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.263	-135.1	19655	22.7	5	
Si	28	1	No Gas	3.724	44.5	258957	1.4	10	
Ag	107	1	No Gas	-0.015	-14.5	307	11.5	2.5	
Cd	111	1	No Gas	0.002	77.5	23	24.7	1	
Sr	88	1	No Gas	-0.005	-49.1	710	11.5	2.5	
Mo	95	1	No Gas	0.071	40.0	620	31.5	2.5	
Sn	118	1	No Gas	0.010	171.8	1930	10.4	5	
Sb	121	1	No Gas	0.059	15.7	2794	2.7	2.5	
Ba	137	1	No Gas	-0.006	-48.1	187	8.2	2.5	
Tl	205	1	No Gas	0.236	82.3	10330	77.1	1	
Tl	203	1	No Gas	0.247	79.3	4468	75.3	1	
Pb	208	1	No Gas	0.005	137.8	2033	18.3	2.5	
U	238	1	No Gas	0.014	37.3	967	33.6	2.5	
Ca	43	2	He	-4.416	-67.0	3	173.2	100	
Sb	121	2	He	0.023	63.4	1163	8.5	2.5	
Ti	47	2	He	-0.013	-219.7	3	173.2	2.5	
Cu	63	1	No Gas	0.098	34.7	3814	11.4	2.5	
Se	82	1	No Gas	-0.090	-718.2	-131	-97.0	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1133991	0.67	1218584	93.06	70	120	
Ge	72	2	He	659602	0.45	734220	89.84	70	120	
Ge	72	1	No Gas	2345389	3.33	2598394	90.26	70	120	
In	115	1	No Gas	3094685	0.75	3214165	96.28	70	120	
Bi	209	1	No Gas	3247716	1.89	3498813	92.82	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-10
Data File Name	125SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T15:02:39-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	12.350	12.350	3.51	260804	0.00	2000	
Be	9	1	No Gas	0.048	0.048	31.10	215	0.02	2000	
V	51	2	He	1.810	1.810	3.42	12724	0.01	2000	
Cr	52	2	He	57.759	57.759	1.31	393082	0.01	2000	
Fe	56	2	He	577.806	577.806	0.36	3502799	0.02	200000	
Se	78	2	He	0.250	0.250	153.79	107	0.23	2000	
As	75	2	He	0.512	0.512	7.77	642	0.08	2000	
Ca	44	2	He	22484.110	22484.110	1.00	769069	2.92	200000	
Na	23	2	He	144753.619	144753.619	0.65	142777901	0.10	200000	
Mg	24	2	He	16406.886	16406.886	0.86	9404783	0.17	200000	
K	39	2	He	946.337	946.337	0.72	654737	0.14	200000	
Mn	55	2	He	17.645	17.645	1.41	88466	0.02	2000	
Co	59	2	He	0.918	0.918	5.51	9694	0.01	2000	
Ni	60	2	He	72.022	72.022	0.21	175969	0.04	2000	
Cu	63	2	He	51.355	51.355	0.75	347170	0.01	2000	
Zn	66	2	He	25.299	25.299	0.35	32476	0.08	2000	
Al	27	2	He	43.931	43.931	3.78	14795	0.30	2000	
B	11	1	No Gas	37.580	37.580	3.04	99038	0.04	2000	
Al	27	1	No Gas	44.927	44.927	1.44	653567	0.01	2000	
Si	28	1	No Gas	20314.385	20314.385	1.23	136684091	0.01	2000	>LDR
Ag	107	1	No Gas	0.001	0.001	214.81	563	0.00	2000	
Cd	111	1	No Gas	0.073	0.073	19.55	277	0.03	2000	
Sr	88	1	No Gas	430.310	430.310	2.79	13533681	0.00	2000	
Mo	95	1	No Gas	1.097	1.097	2.59	7426	0.01	2000	
Sn	118	1	No Gas	0.225	0.225	7.38	4271	0.01	2000	
Sb	121	1	No Gas	0.062	0.062	30.23	2954	0.00	2000	
Ba	137	1	No Gas	284.924	284.924	0.74	1597234	0.02	2000	
Tl	205	1	No Gas	-0.003	-0.003	-47.65	740	0.00	2000	
Tl	203	1	No Gas	-0.004	-0.004	-106.28	257	0.00	2000	
Pb	208	1	No Gas	0.130	0.130	3.02	9051	0.00	2000	
U	238	1	No Gas	0.098	0.098	7.84	5922	0.00	2000	
Ca	43	2	He	22696.355	22696.355	1.38	45997	49.34	200000	
Sb	121	2	He	0.049	0.049	42.96	1400	0.00	2000	
Ti	47	2	He	0.611	0.611	39.70	133	0.46	2000	
Cu	63	1	No Gas	52.246	52.246	0.88	640075	0.01	2000	
Zn	66	1	No Gas	24.711	24.711	0.69	82410	0.03	2000	
Se	82	1	No Gas	1.023	1.023	36.44	92	1.11	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1133426	2.36	1218584	93.01	70	120	
Ge	72	2	He	682923	0.61	734220	93.01	70	120	
Ge	72	1	No Gas	2436791	1.39	2598394	93.78	70	120	
In	115	1	No Gas	3035425	0.33	3214165	94.44	70	120	
Bi	209	1	No Gas	3304130	3.50	3498813	94.44	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-11
Data File Name	126SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T15:04:42-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	12.976	12.976	3.14	281754	0.00	2000	
Be	9	1	No Gas	0.152	0.152	10.13	633	0.02	2000	
V	51	2	He	3.141	3.141	2.74	21071	0.01	2000	
Cr	52	2	He	72.322	72.322	2.40	510171	0.01	2000	
Fe	56	2	He	1168.955	1168.955	2.72	7334684	0.02	200000	
Se	78	2	He	0.757	0.757	50.59	155	0.49	2000	
As	75	2	He	0.702	0.702	15.62	854	0.08	2000	
Ca	44	2	He	4001.893	4001.893	1.93	142209	2.81	200000	
Na	23	2	He	69261.410	69261.410	1.31	70894761	0.10	200000	
Mg	24	2	He	3411.507	3411.507	1.19	2028625	0.17	200000	
K	39	2	He	274.761	274.761	1.61	235066	0.12	200000	
Mn	55	2	He	31.319	31.319	0.98	162578	0.02	2000	
Co	59	2	He	3.662	3.662	0.79	39986	0.01	2000	
Ni	60	2	He	183.172	183.172	1.58	463923	0.04	2000	
Cu	63	2	He	1.672	1.672	4.33	12840	0.01	2000	
Zn	66	2	He	5.026	5.026	1.84	6972	0.07	2000	
Al	27	2	He	408.174	408.174	2.93	137547	0.30	2000	
B	11	1	No Gas	26.337	26.337	2.92	77536	0.03	2000	
Al	27	1	No Gas	405.155	405.155	6.01	5884254	0.01	2000	
Si	28	1	No Gas	28990.528	28990.528	1.03	201308217	0.01	2000	>LDR
Ag	107	1	No Gas	-0.018	-0.018	-5.91	247	-0.01	2000	
Cd	111	1	No Gas	0.081	0.081	6.72	310	0.03	2000	
Sr	88	1	No Gas	83.027	83.027	2.28	2654881	0.00	2000	
Mo	95	1	No Gas	2.120	2.120	3.95	14451	0.01	2000	
Sn	118	1	No Gas	-0.004	-0.004	-182.67	1770	0.00	2000	
Sb	121	1	No Gas	0.025	0.025	28.31	2450	0.00	2000	
Ba	137	1	No Gas	93.988	93.988	1.62	535639	0.02	2000	
Tl	205	1	No Gas	-0.008	-0.008	-17.67	567	0.00	2000	
Tl	203	1	No Gas	-0.005	-0.005	-76.04	237	0.00	2000	
Pb	208	1	No Gas	0.190	0.190	17.49	12295	0.00	2000	
U	238	1	No Gas	0.043	0.043	8.04	2684	0.00	2000	
Ca	43	2	He	4102.811	4102.811	3.38	8633	47.53	200000	
Sb	121	2	He	-0.004	-0.004	-312.65	1043	0.00	2000	
Ti	47	2	He	10.008	10.008	12.18	2164	0.46	2000	
Cu	63	1	No Gas	2.052	2.052	1.53	28704	0.01	2000	
Zn	66	1	No Gas	4.957	4.957	1.39	17839	0.03	2000	
Se	82	1	No Gas	1.088	1.088	93.00	109	1.00	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1181058	2.38	1218584	96.92	70	120	
Ge	72	2	He	708303	0.68	734220	96.47	70	120	
Ge	72	1	No Gas	2516137	0.83	2598394	96.83	70	120	
In	115	1	No Gas	3085393	1.28	3214165	95.99	70	120	

Sample Report

Bi	209	1	No Gas	3292796	1.44	3498813	94.11	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-03
Data File Name	128SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T15:31:03-05:00
Sample Type	Sample
Dilution	10
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.295	2.952	25.52	81115	0.00	2000	
Be	9	1	No Gas	0.031	0.312	12.28	160	0.02	2000	
V	51	2	He	1.361	13.606	2.36	10291	0.01	2000	
Cr	52	2	He	0.612	6.123	9.12	5311	0.01	2000	
Fe	56	2	He	223.941	2239.408	2.21	1383089	0.02	200000	
Se	78	2	He	0.078	0.782	157.67	93	0.08	2000	
As	75	2	He	0.161	1.614	21.00	311	0.05	2000	
Ca	44	2	He	185.315	1853.153	2.57	6705	2.76	200000	
Na	23	2	He	1755.164	17551.636	1.18	1835489	0.10	200000	
Mg	24	2	He	190.843	1908.429	0.85	111090	0.17	200000	
K	39	2	He	104.000	1039.999	1.68	119295	0.09	200000	
Mn	55	2	He	2.902	29.020	1.91	15025	0.02	2000	
Co	59	2	He	0.091	0.907	3.66	1007	0.01	2000	
Ni	60	2	He	1.077	10.772	3.95	2814	0.04	2000	
Cu	63	2	He	0.620	6.201	4.98	5358	0.01	2000	
Zn	66	2	He	4.252	42.519	6.74	5811	0.07	2000	
Al	27	2	He	359.519	3595.190	0.73	118353	0.30	2000	
B	11	1	No Gas	2.086	20.862	18.79	22602	0.01	2000	
Al	27	1	No Gas	361.664	3616.642	1.67	5167930	0.01	2000	
Si	28	1	No Gas	1944.587	19445.874	0.74	13505644	0.01	2000	>LDR
Ag	107	1	No Gas	-0.005	-0.055	-84.22	467	0.00	2000	
Cd	111	1	No Gas	0.007	0.075	90.38	43	0.02	2000	
Sr	88	1	No Gas	4.248	42.485	3.87	137318	0.00	2000	
Mo	95	1	No Gas	0.018	0.175	59.34	257	0.01	2000	
Sn	118	1	No Gas	-0.016	-0.157	-26.11	1647	0.00	2000	
Sb	121	1	No Gas	0.129	1.292	8.01	4071	0.00	2000	
Ba	137	1	No Gas	9.227	92.271	2.78	53038	0.02	2000	
Tl	205	1	No Gas	-0.011	-0.113	-5.62	443	0.00	2000	
Tl	203	1	No Gas	-0.007	-0.068	-18.54	220	0.00	2000	
Pb	208	1	No Gas	0.082	0.816	10.15	6698	0.00	2000	
U	238	1	No Gas	0.008	0.080	6.95	630	0.00	2000	
Ca	43	2	He	182.426	1824.256	16.71	387	47.18	200000	
Sb	121	2	He	0.081	0.815	16.13	1663	0.00	2000	
Ti	47	2	He	6.284	62.845	17.42	1330	0.47	2000	
Cu	63	1	No Gas	0.692	6.923	4.12	11382	0.01	2000	
Zn	66	1	No Gas	4.346	43.456	0.83	15489	0.03	2000	
Se	82	1	No Gas	0.019	0.188	756.37	-115	-0.02	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1204390	2.06	1218584	98.84	70	120	
Ge	72	2	He	691569	0.39	734220	94.19	70	120	
Ge	72	1	No Gas	2473417	0.84	2598394	95.19	70	120	
In	115	1	No Gas	3101210	2.29	3214165	96.49	70	120	

Sample Report

Bi	209	1	No Gas	3490018	1.33	3498813	99.75	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-06
Data File Name	129SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T15:33:04-05:00
Sample Type	Sample
Dilution	10
Comment	DOD TW 166919
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.284	22.839	5.11	109733	0.00	2000	
Be	9	1	No Gas	0.016	0.159	44.85	95	0.02	2000	
V	51	2	He	0.845	8.449	6.16	7169	0.01	2000	
Cr	52	2	He	12.397	123.968	0.84	84637	0.01	2000	
Fe	56	2	He	3278.982	32789.823	1.57	19675449	0.02	200000	
Se	78	2	He	-0.037	-0.373	-792.39	82	-0.05	2000	
As	75	2	He	3.673	36.731	5.13	3641	0.10	2000	
Ca	44	2	He	5904.081	59040.812	0.41	200753	2.94	200000	
Na	23	2	He	19162.417	191624.173	3.26	18836711	0.10	200000	
Mg	24	2	He	5172.964	51729.637	2.05	2944697	0.18	200000	
K	39	2	He	213.394	2133.935	0.32	186236	0.11	200000	
Mn	55	2	He	402.275	4022.752	2.31	1995233	0.02	2000	
Co	59	2	He	8.475	84.753	1.35	88546	0.01	2000	
Ni	60	2	He	152.393	1523.928	1.03	369574	0.04	2000	
Cu	63	2	He	43.746	437.457	1.67	293812	0.01	2000	
Zn	66	2	He	319.513	3195.130	1.10	403370	0.08	2000	
Al	27	2	He	3.355	33.552	7.76	1657	0.20	2000	
B	11	1	No Gas	2.010	20.104	6.82	21704	0.01	2000	
Al	27	1	No Gas	6.515	65.149	43.26	116195	0.01	2000	
Si	28	1	No Gas	2426.001	24260.015	2.55	16624693	0.01	2000	>LDR
Ag	107	1	No Gas	-0.003	-0.032	-175.76	507	0.00	2000	
Cd	111	1	No Gas	0.237	2.370	9.92	883	0.03	2000	
Sr	88	1	No Gas	127.593	1275.933	1.10	4124343	0.00	2000	
Mo	95	1	No Gas	0.174	1.737	13.06	1323	0.01	2000	
Sn	118	1	No Gas	-0.039	-0.389	-27.89	1393	0.00	2000	
Sb	121	1	No Gas	0.150	1.499	5.12	4361	0.00	2000	
Ba	137	1	No Gas	214.102	2141.021	2.03	1233120	0.02	2000	
Tl	205	1	No Gas	-0.010	-0.097	-1.84	487	0.00	2000	
Tl	203	1	No Gas	-0.006	-0.062	-28.00	220	0.00	2000	
Pb	208	1	No Gas	1.385	13.846	2.21	79240	0.00	2000	
U	238	1	No Gas	0.017	0.167	4.27	1120	0.00	2000	
Ca	43	2	He	5923.147	59231.472	4.79	11929	49.65	200000	
Sb	121	2	He	0.122	1.216	25.02	1927	0.01	2000	
Ti	47	2	He	0.067	0.668	70.95	20	0.33	2000	
Cu	63	1	No Gas	44.058	440.583	2.65	542999	0.01	2000	
Zn	66	1	No Gas	326.108	3261.084	1.93	1081892	0.03	2000	
Se	82	1	No Gas	-0.071	-0.708	-954.16	-131	0.05	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1164810	1.82	1218584	95.59	70	120	
Ge	72	2	He	678183	1.16	734220	92.37	70	120	
Ge	72	1	No Gas	2449927	1.46	2598394	94.29	70	120	
In	115	1	No Gas	3119240	1.80	3214165	97.05	70	120	

Sample Report

Bi	209	1	No Gas	3328539	2.60	3498813	95.13	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	135_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T15:44:58-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.075	2.047	1536048	1.94	100	101.1	90	110	
Be	9	1	No Gas	101.296	0.836	363543	0.83	100	101.3	90	110	
V	51	2	He	95.679	1.139	541837	1.02	100	95.7	90	110	
Cr	52	2	He	95.733	1.213	643168	1.08	100	95.7	90	110	
Fe	56	2	He	9853.040	1.456	58820567	2.30	10000	98.5	90	110	
Se	78	2	He	96.690	3.278	8199	3.40	100	96.7	90	110	
As	75	2	He	97.144	0.610	91939	0.45	100	97.1	90	110	
Ca	44	2	He	9713.553	1.301	328493	0.77	10000	97.1	90	110	
Na	23	2	He	9646.886	1.116	9478552	0.33	10000	96.5	90	110	
Mg	24	2	He	9705.076	1.704	5497825	1.43	10000	97.1	90	110	
K	39	2	He	9536.435	0.551	6058311	0.77	10000	95.4	90	110	
Mn	55	2	He	94.400	0.415	466254	0.92	100	94.4	90	110	
Co	59	2	He	92.496	0.605	961320	0.93	100	92.5	90	110	
Ni	60	2	He	100.312	1.358	242138	1.00	100	100.3	90	110	
Cu	63	2	He	96.178	0.891	641559	1.03	100	96.2	90	110	
Zn	66	2	He	100.353	0.164	126317	1.05	100	100.4	90	110	
Al	27	2	He	99.972	3.022	32528	2.04	100	100.0	90	110	
B	11	1	No Gas	508.466	0.262	1073074	0.24	500	101.7	90	110	
Al	27	1	No Gas	107.682	1.788	1525737	2.79	100	107.7	90	110	
Si	28	1	No Gas	559.668	3.604	3983402	1.83	5000	11.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.518	1.365	1709673	2.73	100	102.5	90	110	
Cd	111	1	No Gas	100.634	2.542	361724	0.69	100	100.6	90	110	
Sr	88	1	No Gas	102.028	2.673	3243229	0.94	100	102.0	90	110	
Mo	95	1	No Gas	96.543	2.110	648480	1.81	100	96.5	90	110	
Sn	118	1	No Gas	100.701	2.096	1127466	2.33	100	100.7	90	110	
Sb	121	1	No Gas	103.377	1.970	1618911	1.33	100	103.4	90	110	
Ba	137	1	No Gas	99.408	2.183	563255	0.49	100	99.4	90	110	
Tl	205	1	No Gas	100.744	3.734	4142111	1.18	100	100.7	90	110	
Tl	203	1	No Gas	100.201	4.094	1726354	1.56	100	100.2	90	110	
Pb	208	1	No Gas	100.762	3.035	5688270	0.65	100	100.8	90	110	
U	238	1	No Gas	95.240	3.350	5719710	0.57	100	95.2	90	110	
Ca	43	2	He	9793.645	0.626	19621	0.63	10000	97.9	90	110	
Sb	121	2	He	95.437	0.169	704079	1.11	100	95.4	90	110	
Ti	47	2	He	96.472	2.463	19828	1.95	100	96.5	90	110	
Cu	63	1	No Gas	99.351	0.862	1209170	2.42	100	99.4	90	110	
Se	82	1	No Gas	99.949	1.736	20235	1.29	100	99.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1075207	0.02	1218584	88.23	70	120	
Ge	72	2	He	674906	0.98	734220	91.92	70	120	
Ge	72	1	No Gas	2425415	1.57	2598394	93.34	70	120	
In	115	1	No Gas	3068363	2.43	3214165	95.46	70	120	
Bi	209	1	No Gas	3360223	2.81	3498813	96.04	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	136_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq Date Time	2021-06-17T15:46:52-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.211	-33.9	70355	0.1	0.5	
Be	9	1	No Gas	0.004	165.7	48	52.1	0.5	
V	51	2	He	0.406	5.7	4731	3.1	2.5	
Cr	52	2	He	0.001	2139.7	1097	9.3	2.5	
Fe	56	2	He	0.775	11.6	18266	3.2	100	
Se	78	2	He	-0.107	-156.4	77	18.3	2	
As	75	2	He	0.106	19.5	256	7.4	2.5	
Ca	44	2	He	-0.664	-114.1	263	9.6	100	
Na	23	2	He	3.005	21.2	85574	1.1	100	
Mg	24	2	He	0.311	48.9	487	18.0	100	
K	39	2	He	-0.907	-96.1	51104	0.8	100	
Mn	55	2	He	-0.007	-122.0	310	14.1	2.5	
Co	59	2	He	0.003	69.0	77	32.8	2.5	
Ni	60	2	He	0.002	1491.6	153	39.3	2.5	
Cu	63	2	He	-0.002	-620.5	1100	8.8	2	
Zn	66	2	He	0.066	26.2	423	4.9	2.5	
Al	27	2	He	-0.469	-3.5	433	1.3	5	
B	11	1	No Gas	11.544	14.8	43098	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.459	-1.4	17598	0.9	5	
Si	28	1	No Gas	3.092	2.1	263333	0.9	10	
Ag	107	1	No Gas	-0.010	-22.1	390	9.2	2.5	
Cd	111	1	No Gas	-0.001	-404.1	13	86.6	1	
Sr	88	1	No Gas	-0.003	-155.2	783	20.8	2.5	
Mo	95	1	No Gas	0.078	58.2	673	47.1	2.5	
Sn	118	1	No Gas	0.096	89.8	2911	34.4	5	
Sb	121	1	No Gas	0.085	3.8	3294	0.9	2.5	
Ba	137	1	No Gas	-0.005	-174.4	193	25.5	2.5	
Tl	205	1	No Gas	0.286	84.6	13074	81.7	1	
Tl	203	1	No Gas	0.289	81.0	5475	79.0	1	
Pb	208	1	No Gas	0.004	164.3	2103	20.0	2.5	
U	238	1	No Gas	0.015	37.1	1067	35.5	2.5	
Ca	43	2	He	0.453	1667.9	13	114.6	100	
Sb	121	2	He	0.081	12.3	1643	4.4	2.5	
Ti	47	2	He	0.018	263.1	10	100.0	2.5	
Cu	63	1	No Gas	0.047	18.2	3324	3.3	2.5	
Se	82	1	No Gas	0.288	128.4	-58	-131.0	2	

QC ISTD Table

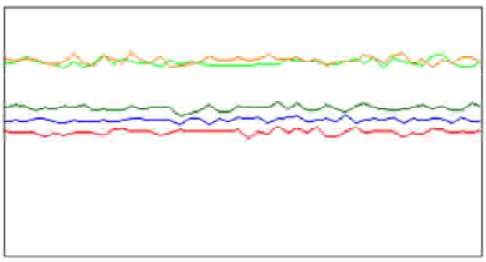
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1162565	1.51	1218584	95.40	70	120	
Ge	72	2	He	685215	0.35	734220	93.33	70	120	
Ge	72	1	No Gas	2421083	0.80	2598394	93.18	70	120	
In	115	1	No Gas	3102663	1.02	3214165	96.53	70	120	
Bi	209	1	No Gas	3422714	3.33	3498813	97.83	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\061721A.b
Acq. Date-Time	6/17/2021 9:30:11 AM
Report Comment	---
Instrument Name	G8421A SG18523544

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	10000	4998	49982.30		
24	20000	15622	156224.00		
59	50000	27444	274443.08		
115	50000	39573	395725.91		
208	50000	29849	298487.67		

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

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.182	5.000	
24	1.802	5.000	
59	1.521	5.000	
115	1.886	5.000	
208	1.870	5.000	

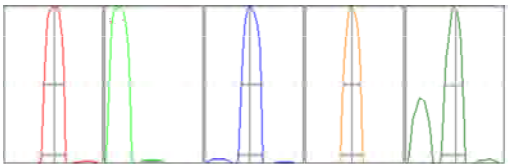
Mass	Background	Background (Required)	Background (Flag)
9	0.100		
24	0.500		
59	0.100		
115	0.500		
208	0.800		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.771 %
Doubly Charged	70 / 140 0.832 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	5026.35	9.05	8.90 - 9.10	
24	15592.79	23.95	23.90 - 24.10	
59	27947.97	58.90	58.90 - 59.10	
115	40142.42	114.95	114.90 - 115.10	
208	29474.22	208.05	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.740		
24	0.66	0.744		
59	0.60	0.738		
115	0.54	0.687		
208	0.56	0.734		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.47 L/min	Dilution Gas	0.55 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.0 V	Deflect	14.0 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	135	Axis Gain	1.0004	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.10		

Hardware Settings

Torch

Torch H	1.3 mm	Torch V	-0.6 mm

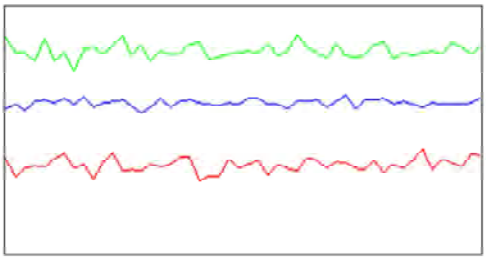
EM

Discriminator	4.5 mV	Analog HV	2542 V	Pulse HV	1305 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	500	179	1791.91		
24	1000	820	8200.80		
59	20000	12188	121877.59		

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

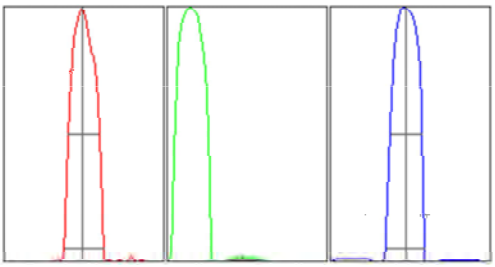
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	8.130	5.000	Fail
24	3.527	5.000	
59	2.346	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.000		
24	0.400		
59	0.000		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.444 %
Doubly Charged	70 / 140 0.779 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	189.27	9.00	8.90 - 9.10	
24	867.30	23.95	23.90 - 24.10	
59	12086.74	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.739		
24	0.66	0.742		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.60	0.737		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.47 L/min	Dilution Gas	0.55 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.0 V	Deflect	0.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.1 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	135	Axis Gain	1.0004	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.10		

Hardware Settings

Torch

Torch H	1.3 mm	Torch V	-0.6 mm

EM

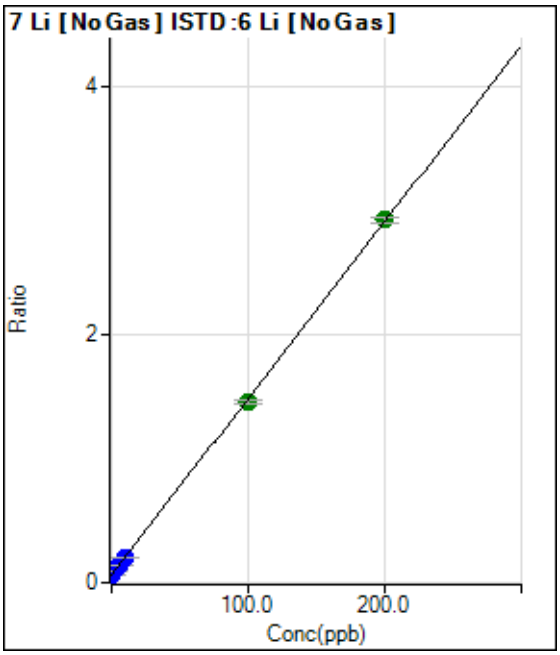
Discriminator	4.5 mV	Analog HV	2542 V	Pulse HV	1305 V

Calibration for 016_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\061821A.b\
Analysis File: 061821A.batch.bin
DA Date-Time: 6/18/2021 8:46:11 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	6/18/2021 10:38:04 AM
2	010CALS.d	2/10/200	6/18/2021 10:40:06 AM
3	011CALS.d	5/25/500	6/18/2021 10:42:04 AM
4	012CALS.d	10/50/100	6/18/2021 10:44:03 AM
5	013CALS.d	100/500/10K	6/18/2021 10:46:03 AM
6	014CALS.d	200/1000/20K	6/18/2021 10:47:56 AM

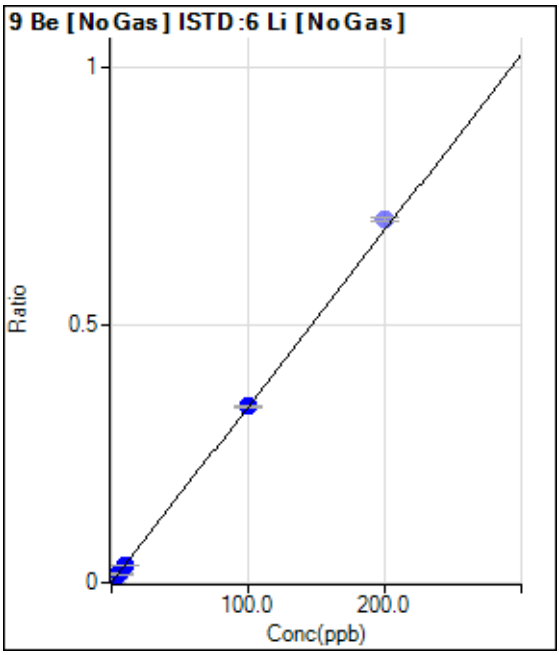
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70982.82	0.0632	P	2.4
2	☐	2.000	2.009	102083.37	0.0917	P	1.1
3	☐	5.000	5.204	150525.11	0.1372	P	3.3
4	☐	10.000	10.061	225055.59	0.2063	P	1.6
5	☐	100.000	97.704	1559133.52	1.4533	A	2.0
6	☐	200.000	201.140	3004927.25	2.9251	A	1.3

y = 0.0142 * x + 0.0632
R = 0.9999
DL = 0.3256
BEC = 4.439

Weight: <None>
Min Conc: <None>

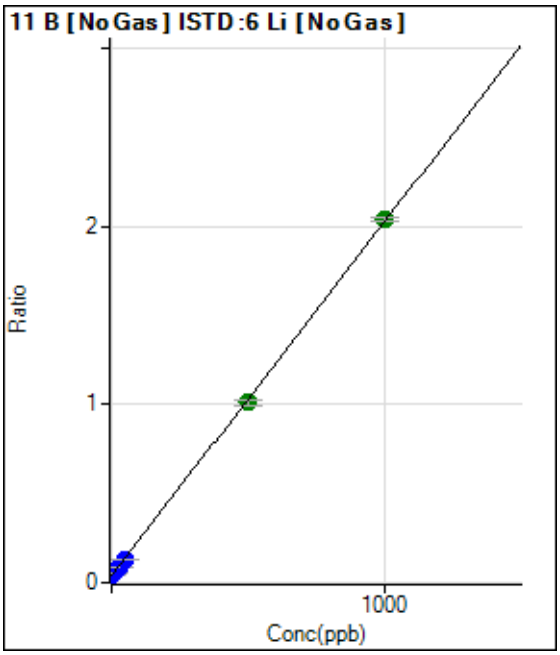


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	61.9
2	☐	2.000	1.958	7473.71	0.0067	P	3.9
3	☐	5.000	4.991	18745.89	0.0171	P	3.5
4	☐	10.000	9.809	36599.16	0.0336	P	1.0
5	☐	100.000	100.020	366732.15	0.3418	P	1.7
6	☑	200.000		723542.83	0.7043	P	1.2

y = 0.0034 * x + 2.9716E-005
R = 1.0000
DL = 0.01615
BEC = 0.008696

Weight: <None>
Min Conc: <None>

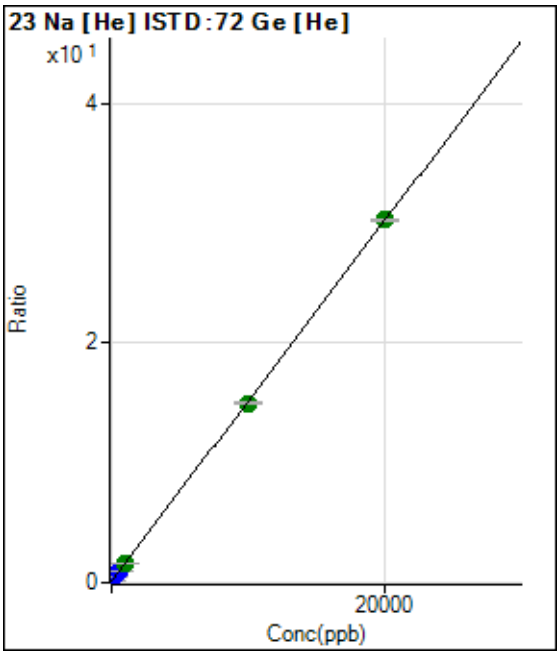
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43425.19	0.0386	P	0.7
2	☐	10.000	8.699	62186.87	0.0559	P	1.1
3	☐	25.000	23.195	92882.75	0.0847	P	3.5
4	☐	50.000	46.112	141978.08	0.1302	P	1.4
5	☐	500.000	489.125	1083427.69	1.0095	A	3.6
6	☐	1000.000	1005.690	2090693.30	2.0349	A	1.1

y = 0.0020 * x + 0.0386
R = 0.9999
DL = 0.4315
BEC = 19.46

Weight: <None>
Min Conc: <None>

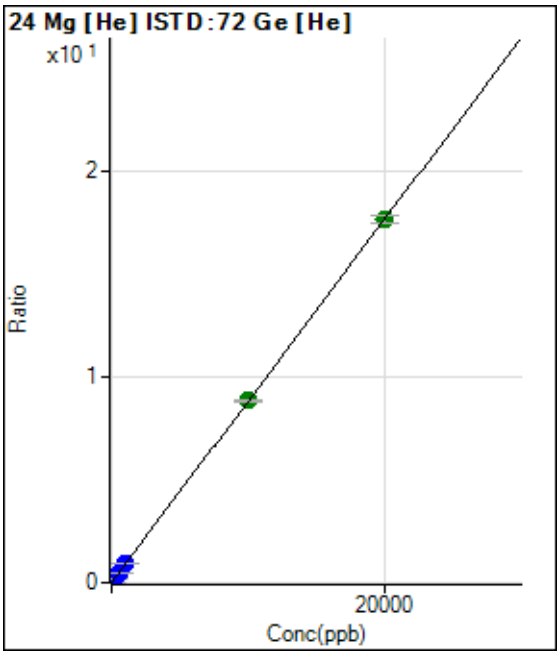


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68031.98	0.1063	P	1.2
2	☐	200.000	209.327	269950.63	0.4212	P	0.8
3	☐	500.000	524.640	572969.01	0.8956	P	0.8
4	☐	1000.000	1005.993	1029505.22	1.6197	A	1.9
5	☐	10000.00	9868.436	9465099.44	14.9525	A	1.3
6	☐	20000.00	20064.77	18643861.80	30.2919	A	0.8

y = 0.0015 * x + 0.1063
R = 1.0000
DL = 2.469
BEC = 70.66

Weight: <None>
Min Conc: <None>

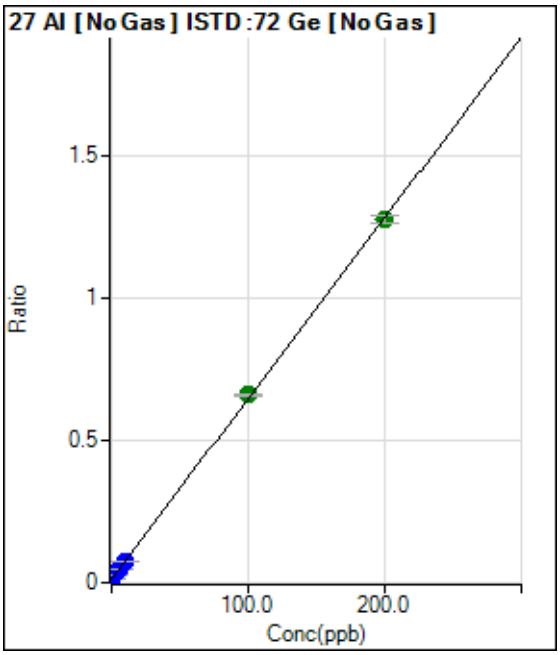
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	306.68	0.0005	P	17.7
2	☐	200.000	214.742	122023.76	0.1904	P	1.3
3	☐	500.000	541.277	306580.03	0.4792	P	1.6
4	☐	1000.000	1045.896	588260.29	0.9255	P	1.2
5	☐	10000.00	10043.70	5623690.12	8.8834	A	1.0
6	☐	20000.00	19974.67	10873091.92	17.6667	A	2.0

y = 8.8443E-004 * x + 4.7907E-004
R = 1.0000
DL = 0.2882
BEC = 0.5417

Weight: <None>
Min Conc: <None>

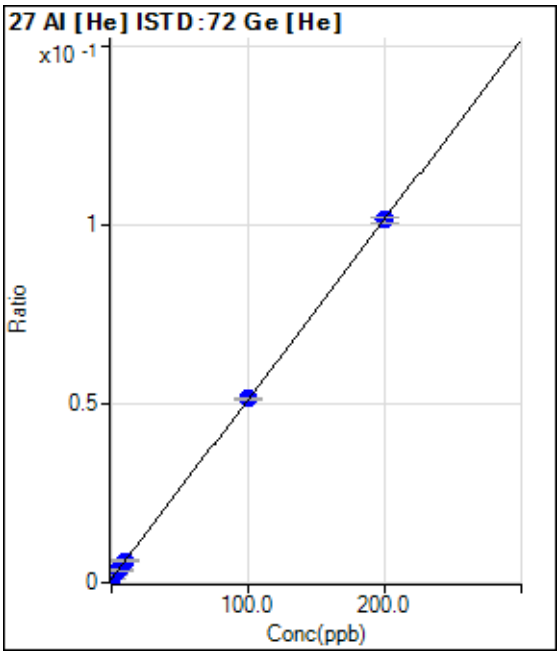


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26759.28	0.0118	P	0.5
2	☐	2.000	2.116	55748.45	0.0252	P	0.3
3	☐	5.000	5.229	99951.14	0.0450	P	1.5
4	☐	10.000	10.340	169360.63	0.0775	P	0.6
5	☐	100.000	101.997	1431846.28	0.6597	A	0.8
6	☐	200.000	198.977	2711531.73	1.2758	A	2.0

y = 0.0064 * x + 0.0118
R = 0.9999
DL = 0.02886
BEC = 1.855

Weight: <None>
Min Conc: <None>

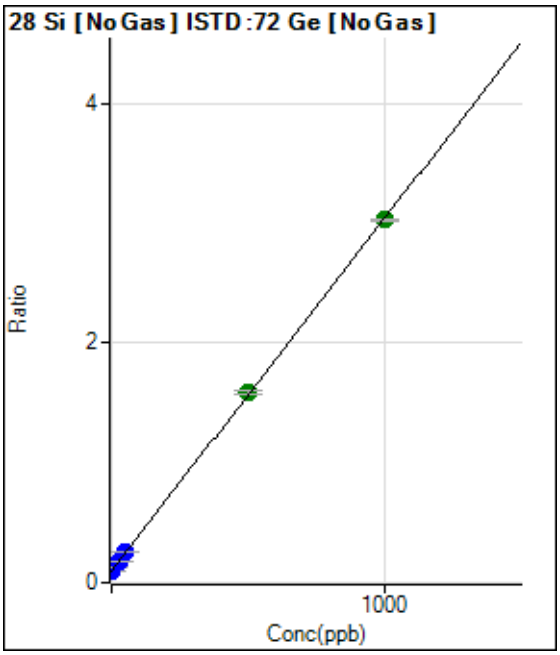
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	650.03	0.0010	P	15.9
2	☐	2.000	1.998	1293.42	0.0020	P	10.2
3	☐	5.000	5.083	2283.58	0.0036	P	12.6
4	☐	10.000	10.129	3880.61	0.0061	P	2.9
5	☐	100.000	100.269	32531.62	0.0514	P	1.8
6	☐	200.000	199.857	62429.94	0.1014	P	1.7

y = 5.0241E-004 * x + 0.0010
R = 1.0000
DL = 0.9669
BEC = 2.021

Weight: <None>
Min Conc: <None>

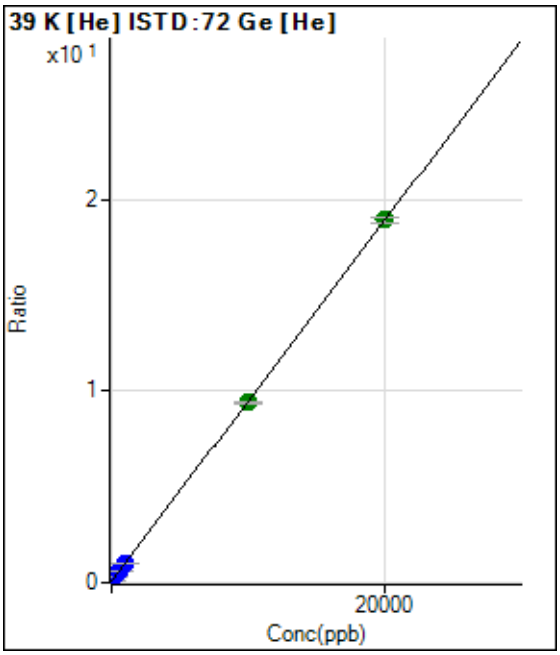


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	223672.53	0.0985	P	1.5
2	☐	10.000	16.390	324074.29	0.1467	P	16.8
3	☐	25.000	26.635	392662.74	0.1768	P	0.8
4	☐	50.000	51.886	548740.56	0.2510	P	0.6
5	☐	500.000	507.632	3451797.66	1.5906	A	1.6
6	☐	1000.000	995.985	6431816.15	3.0260	A	0.4

y = 0.0029 * x + 0.0985
R = 1.0000
DL = 1.536
BEC = 33.51

Weight: <None>
Min Conc: <None>

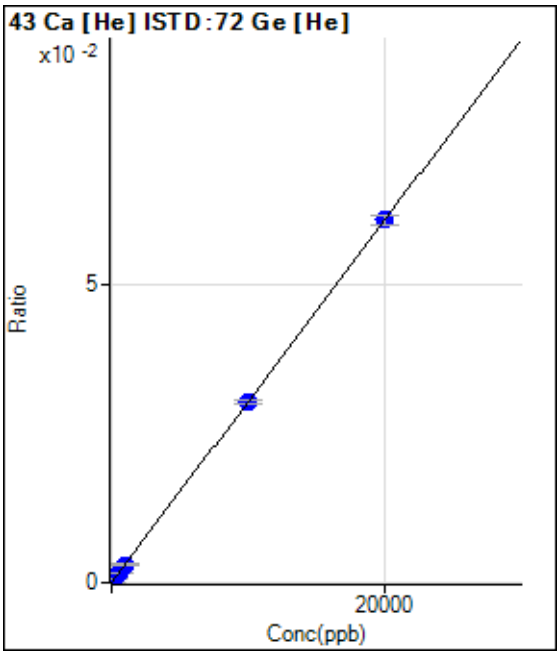
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51138.14	0.0799	P	0.9
2	☐	200.000	206.203	175498.06	0.2738	P	0.8
3	☐	500.000	517.366	362417.94	0.5665	P	1.2
4	☐	1000.000	1018.485	659624.70	1.0378	P	0.5
5	☐	10000.00	9916.345	5954092.00	9.4060	A	1.5
6	☐	20000.00	20040.40	11649136.08	18.9275	A	1.7

y = 9.4048E-004 * x + 0.0799
R = 1.0000
DL = 2.369
BEC = 84.96

Weight: <None>
Min Conc: <None>

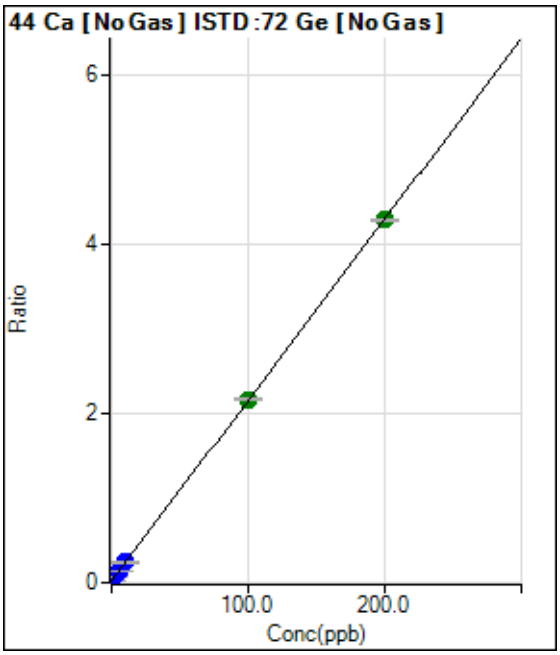


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.00	0.0000	P	100.6
2	☐	200.000	188.314	386.68	0.0006	P	13.2
3	☐	500.000	497.009	986.72	0.0015	P	6.1
4	☐	1000.000	971.503	1896.83	0.0030	P	15.9
5	☐	10000.00	9937.903	19143.50	0.0302	P	1.9
6	☐	20000.00	20032.66	37498.06	0.0609	P	2.6

y = 3.0400E-006 * x + 3.1371E-005
R = 1.0000
DL = 31.14
BEC = 10.32

Weight: <None>
Min Conc: <None>

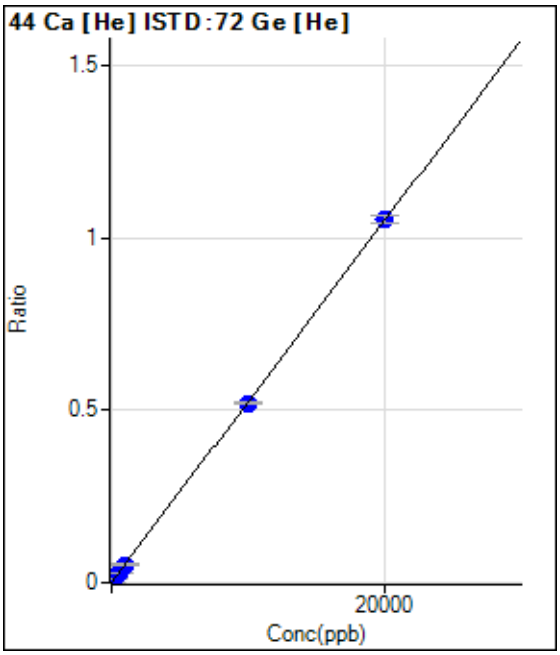
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46140.80	0.0203	P	1.6
2	☐	2.000	2.149	146377.95	0.0662	P	1.8
3	☐	5.000	5.191	291526.36	0.1312	P	0.6
4	☐	10.000	10.250	523242.70	0.2393	P	1.6
5	☐	100.000	100.474	4704023.37	2.1674	A	0.5
6	☐	200.000	199.744	9116122.37	4.2888	A	0.6

y = 0.0214 * x + 0.0203
R = 1.0000
DL = 0.04678
BEC = 0.9507

Weight: <None>
Min Conc: <None>

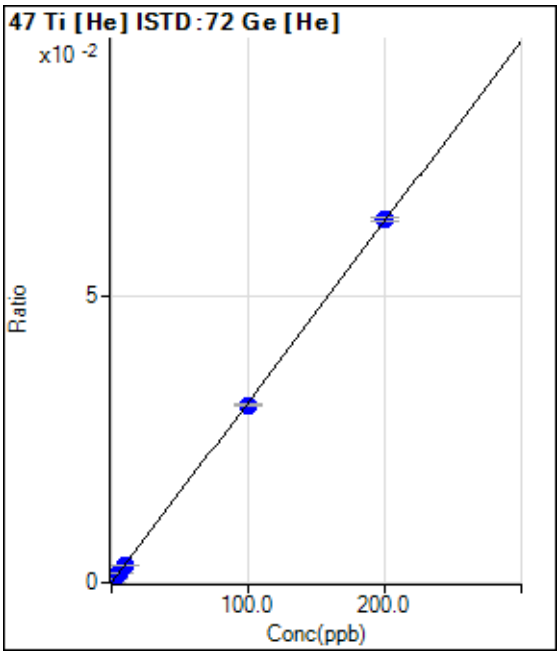


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	500.02	0.0008	P	21.2
2	☐	200.000	202.889	7318.70	0.0114	P	6.7
3	☐	500.000	497.804	17207.65	0.0269	P	3.7
4	☐	1000.000	991.718	33564.65	0.0528	P	1.0
5	☐	10000.00	9903.763	329394.23	0.5203	P	0.9
6	☐	20000.00	20048.55	647786.67	1.0526	P	2.0

y = 5.2462E-005 * x + 7.8034E-004
R = 1.0000
DL = 9.454
BEC = 14.87

Weight: <None>
Min Conc: <None>

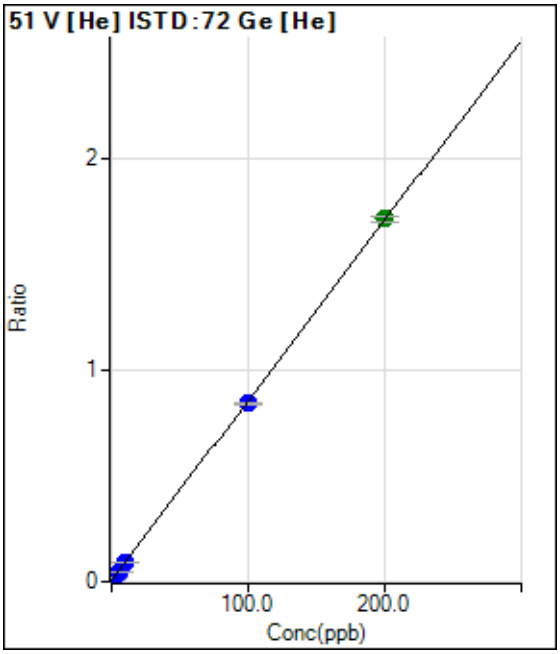
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.33	0.0000	P	173.2
2	☐	2.000	2.066	420.02	0.0007	P	18.6
3	☐	5.000	5.453	1100.06	0.0017	P	4.8
4	☐	10.000	9.477	1896.83	0.0030	P	6.7
5	☐	100.000	98.315	19570.90	0.0309	P	0.9
6	☐	200.000	200.856	38868.57	0.0632	P	1.0

y = 3.1439E-004 * x + 5.1686E-006
R = 0.9999
DL = 0.08542
BEC = 0.01644

Weight: <None>
Min Conc: <None>

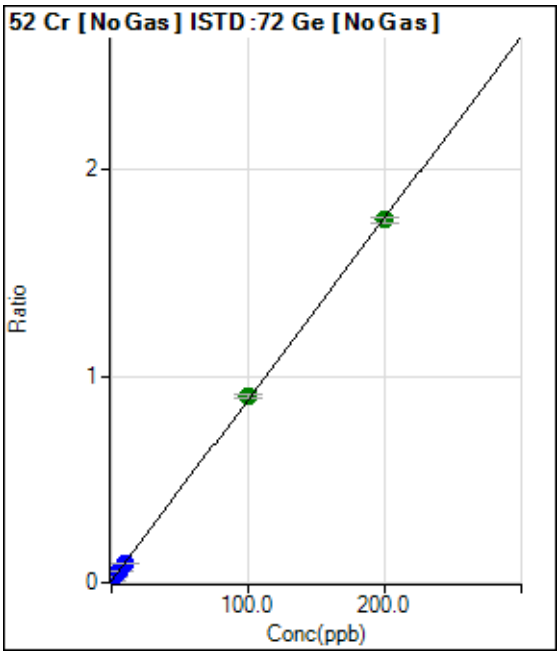


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3754.98	0.0059	P	1.7
2	☐	2.000	1.981	14576.70	0.0227	P	1.5
3	☐	5.000	4.919	30560.66	0.0478	P	1.5
4	☐	10.000	9.807	56821.58	0.0894	P	1.2
5	☐	100.000	98.230	533376.94	0.8426	P	0.6
6	☐	200.000	200.897	1056843.12	1.7171	A	1.8

y = 0.0085 * x + 0.0059
R = 0.9999
DL = 0.03445
BEC = 0.6889

Weight: <None>
Min Conc: <None>

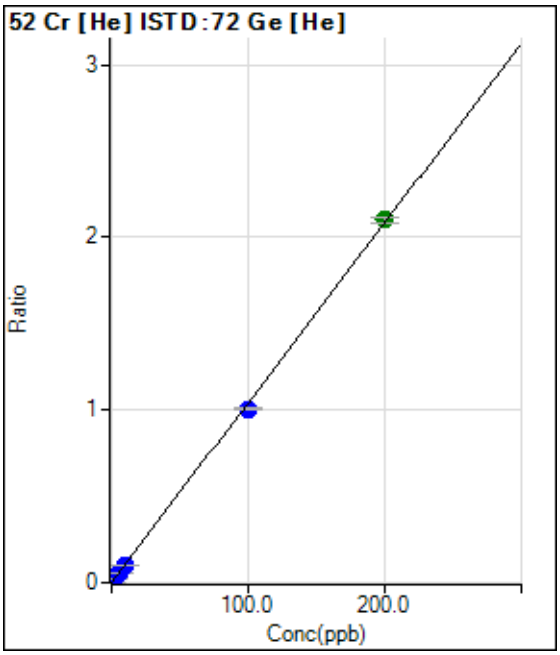
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19160.31	0.0084	P	3.1
2	☐	2.000	2.120	59793.85	0.0271	P	2.3
3	☐	5.000	5.132	118885.59	0.0535	P	1.3
4	☐	10.000	10.101	212456.24	0.0972	P	0.6
5	☐	100.000	101.936	1961607.83	0.9039	A	1.9
6	☐	200.000	199.023	3734120.36	1.7568	A	1.7

y = 0.0088 * x + 0.0084
R = 0.9999
DL = 0.09052
BEC = 0.9604

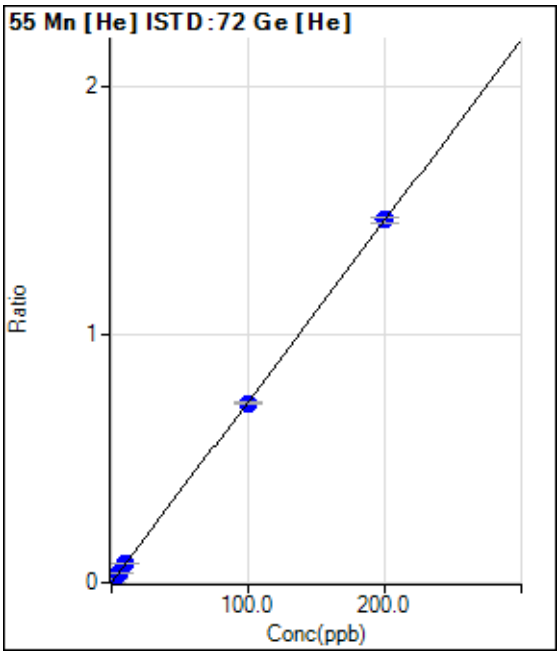
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1180.07	0.0018	P	10.9
2	☐	2.000	1.965	14277.67	0.0223	P	2.2
3	☐	5.000	4.991	34390.08	0.0538	P	0.7
4	☐	10.000	9.730	65492.87	0.1030	P	1.3
5	☐	100.000	96.473	636291.88	1.0052	P	1.0
6	☐	200.000	201.777	1292724.70	2.1003	A	1.5

y = 0.0104 * x + 0.0018
R = 0.9998
DL = 0.05812
BEC = 0.1773

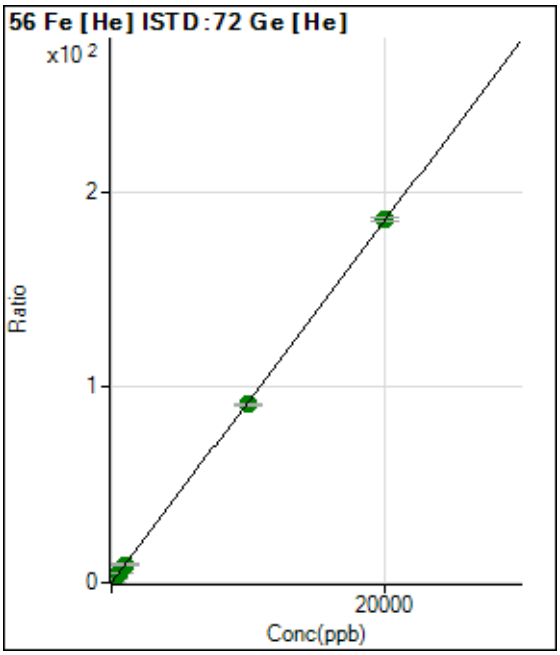
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	340.01	0.0005	P	7.8
2	☐	2.000	2.068	10000.48	0.0156	P	2.6
3	☐	5.000	5.140	24308.59	0.0380	P	2.4
4	☐	10.000	10.183	47513.05	0.0748	P	1.7
5	☐	100.000	99.062	457372.08	0.7225	P	0.9
6	☐	200.000	200.456	899482.95	1.4615	P	1.6

y = 0.0073 * x + 5.3130E-004
R = 1.0000
DL = 0.01708
BEC = 0.0729

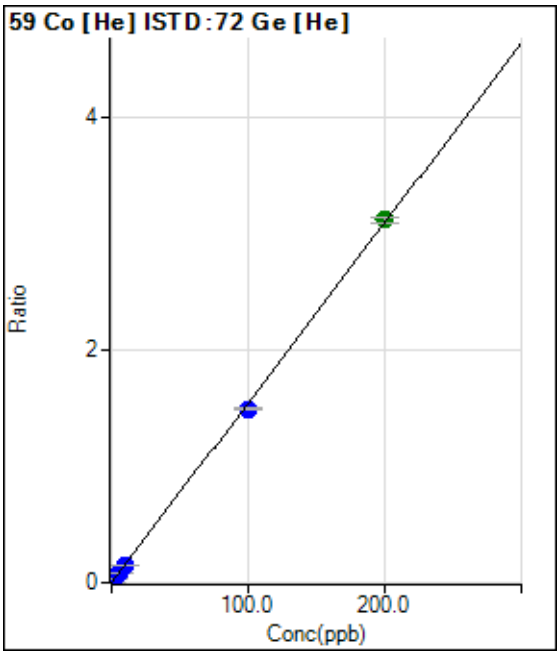
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11621.82	0.0182	P	2.9
2	☐	200.000	208.113	1245911.67	1.9439	A	0.5
3	☐	500.000	523.179	3108891.83	4.8593	A	1.5
4	☐	1000.000	1001.916	5904216.99	9.2893	A	1.8
5	☐	10000.00	9867.858	57812967.47	91.3295	A	1.2
6	☐	20000.00	20065.31	114286558.3	185.690	A	0.9

y = 0.0093 * x + 0.0182
R = 1.0000
DL = 0.1696
BEC = 1.962

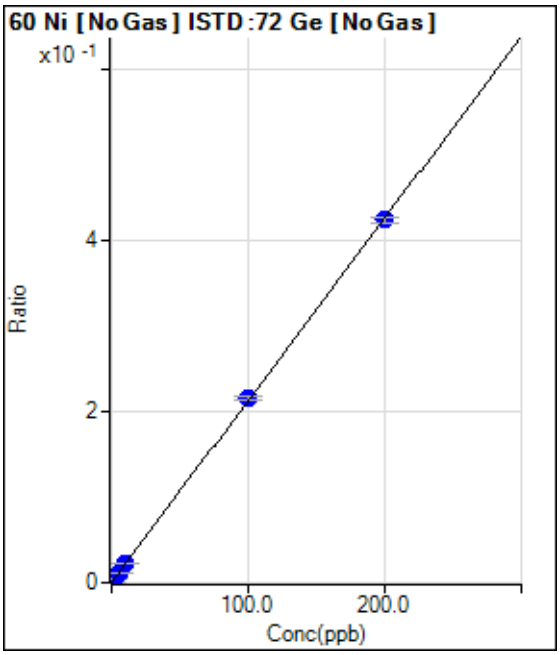
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23.33	0.0000	P	49.9
2	☐	2.000	2.031	20125.04	0.0314	P	3.1
3	☐	5.000	5.052	49931.76	0.0780	P	2.0
4	☐	10.000	9.812	96325.08	0.1515	P	1.5
5	☐	100.000	96.531	943598.42	1.4906	P	1.2
6	☐	200.000	201.742	1917306.43	3.1152	A	1.2

y = 0.0154 * x + 3.6540E-005
R = 0.9998
DL = 0.00354
BEC = 0.002366

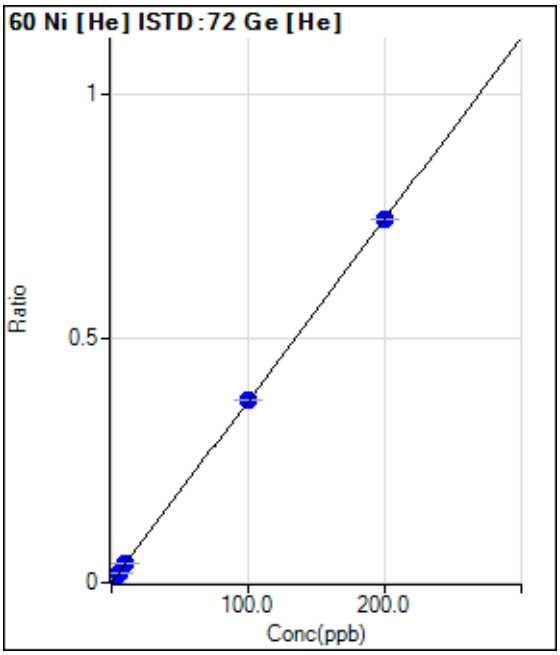
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	456.69	0.0002	P	9.2
2	☐	2.000	2.206	10807.81	0.0049	P	0.4
3	☐	5.000	5.168	24846.29	0.0112	P	0.9
4	☐	10.000	10.246	48051.62	0.0220	P	0.9
5	☐	100.000	101.426	468310.57	0.2158	P	1.2
6	☐	200.000	199.268	900668.50	0.4238	P	1.6

y = 0.0021 * x + 2.0108E-004
R = 1.0000
DL = 0.02623
BEC = 0.0946

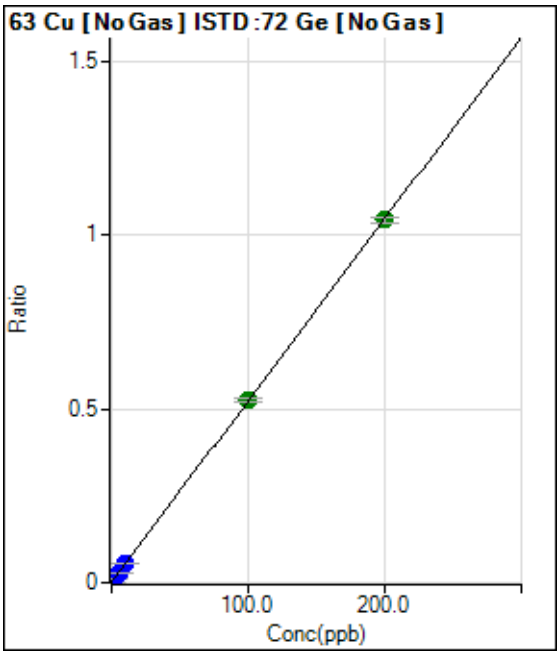
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	160.00	0.0002	P	6.0
2	☐	2.000	2.079	5121.05	0.0080	P	5.9
3	☐	5.000	5.278	12729.42	0.0199	P	0.7
4	☐	10.000	10.349	24645.97	0.0388	P	0.5
5	☐	100.000	100.525	237049.15	0.3745	P	0.3
6	☐	200.000	199.712	457731.56	0.7437	P	0.2

y = 0.0037 * x + 2.4998E-004
R = 1.0000
DL = 0.01207
BEC = 0.06715

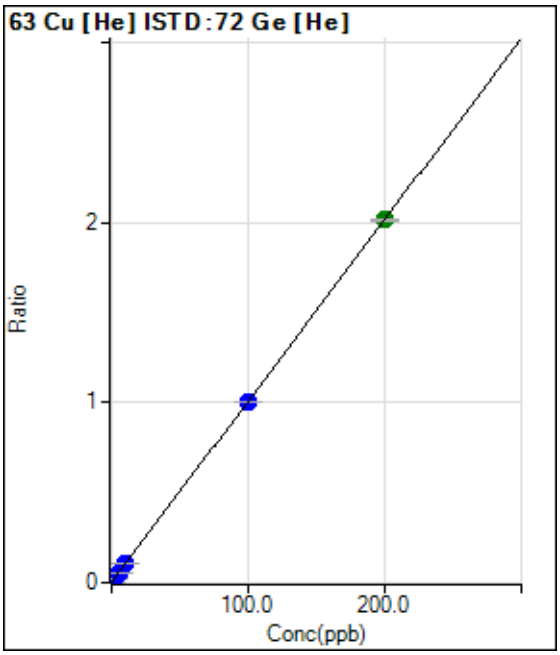
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2083.55	0.0009	P	10.2
2	☐	2.000	2.118	26472.68	0.0120	P	0.9
3	☐	5.000	5.188	62215.50	0.0280	P	0.7
4	☐	10.000	10.315	119768.31	0.0548	P	1.0
5	☐	100.000	100.813	1144347.64	0.5273	A	2.2
6	☐	200.000	199.572	2216957.05	1.0430	A	1.5

y = 0.0052 * x + 9.1709E-004
R = 1.0000
DL = 0.05364
BEC = 0.1756

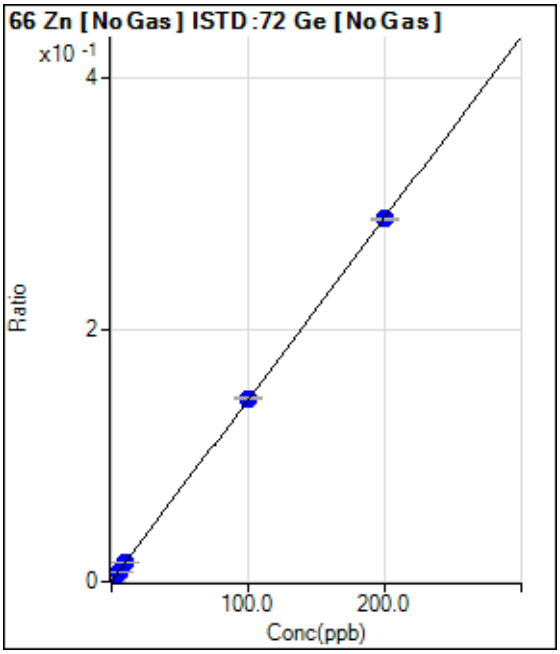
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1020.06	0.0016	P	1.9
2	☐	2.000	2.053	14271.06	0.0223	P	3.8
3	☐	5.000	5.204	34537.62	0.0540	P	1.0
4	☐	10.000	10.126	65809.19	0.1035	P	1.9
5	☐	100.000	99.984	638221.49	1.0082	P	0.2
6	☐	200.000	199.996	1240269.96	2.0150	A	0.5

y = 0.0101 * x + 0.0016
R = 1.0000
DL = 0.008798
BEC = 0.1583

Weight: <None>
Min Conc: <None>

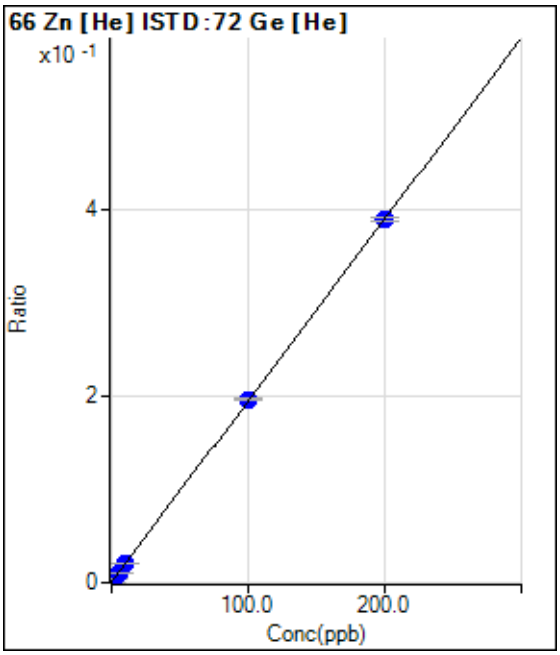


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1003.39	0.0004	P	5.3
2	☐	2.000	2.230	8065.86	0.0037	P	3.1
3	☐	5.000	5.170	17501.46	0.0079	P	4.4
4	☐	10.000	10.147	32883.56	0.0150	P	1.5
5	☐	100.000	100.800	315694.41	0.1455	P	1.7
6	☐	200.000	199.586	611311.95	0.2876	P	0.6

y = 0.0014 * x + 4.4174E-004
R = 1.0000
DL = 0.04897
BEC = 0.307

Weight: <None>
Min Conc: <None>

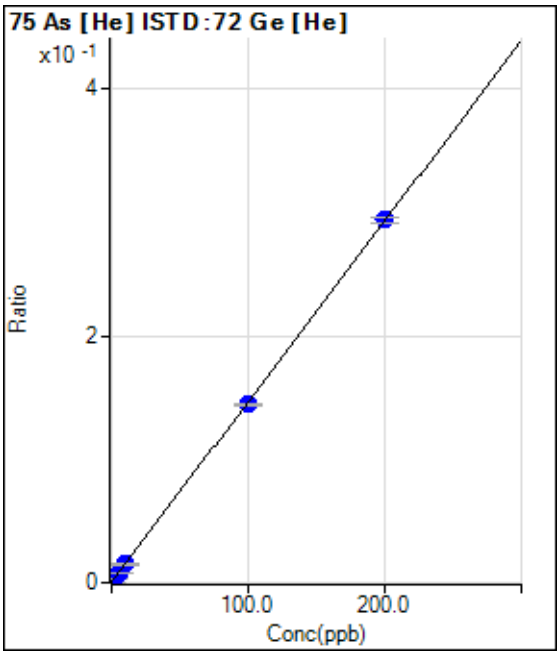
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	386.68	0.0006	P	12.2
2	☐	2.000	2.178	3097.08	0.0048	P	2.7
3	☐	5.000	5.119	6745.12	0.0105	P	1.6
4	☐	10.000	9.928	12636.10	0.0199	P	2.3
5	☐	100.000	100.550	123952.96	0.1958	P	1.2
6	☐	200.000	199.724	239018.89	0.3884	P	1.2

y = 0.0019 * x + 6.0378E-004
R = 1.0000
DL = 0.1137
BEC = 0.311

Weight: <None>
Min Conc: <None>

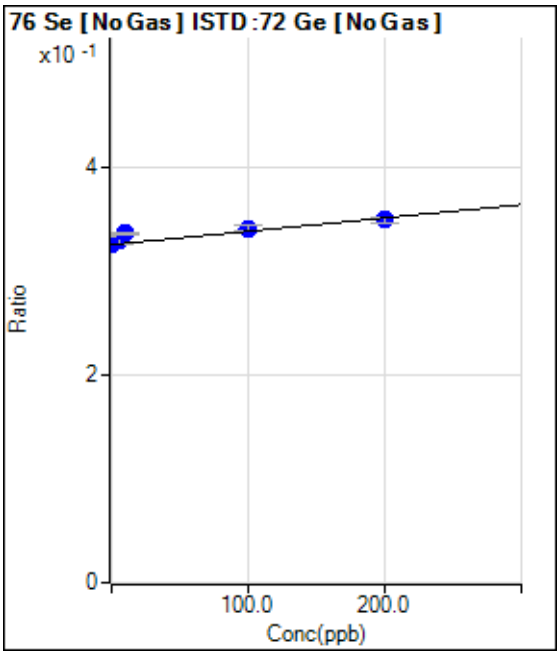


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	206.67	0.0003	P	0.8
2	☐	2.000	2.065	2143.52	0.0033	P	4.5
3	☐	5.000	4.872	4767.54	0.0075	P	4.4
4	☐	10.000	9.902	9414.43	0.0148	P	0.7
5	☐	100.000	98.562	91497.80	0.1445	P	1.3
6	☐	200.000	200.727	180971.35	0.2940	P	1.4

y = 0.0015 * x + 3.2291E-004
R = 1.0000
DL = 0.005068
BEC = 0.2207

Weight: <None>
Min Conc: <None>

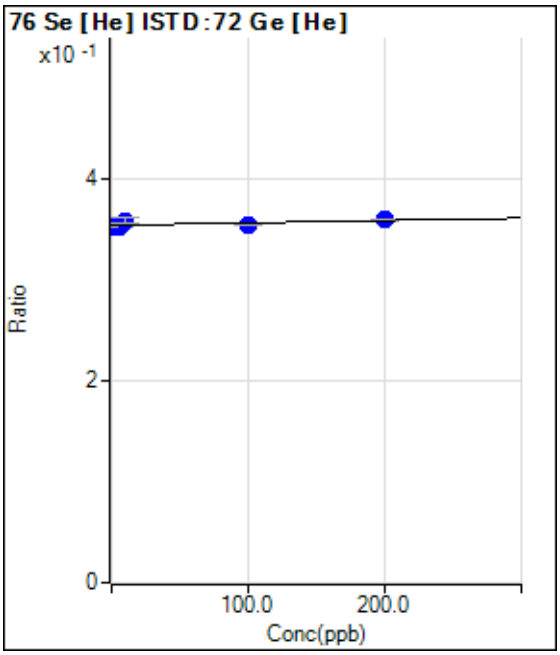
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	740927.67	0.3262	P	1.1
2	☐	2.000	33.635	730556.00	0.3306	P	0.9
3	☐	5.000	27.309	732391.57	0.3297	P	2.0
4	☐	10.000	84.187	736904.28	0.3371	P	0.9
5	☐	100.000	121.060	741799.44	0.3418	P	1.5
6	☐	200.000	184.887	744005.69	0.3500	P	1.5

y = 1.2883E-004 * x + 0.3262
R = 0.9312
DL = 80.84
BEC = 2532

Weight: <None>
Min Conc: <None>

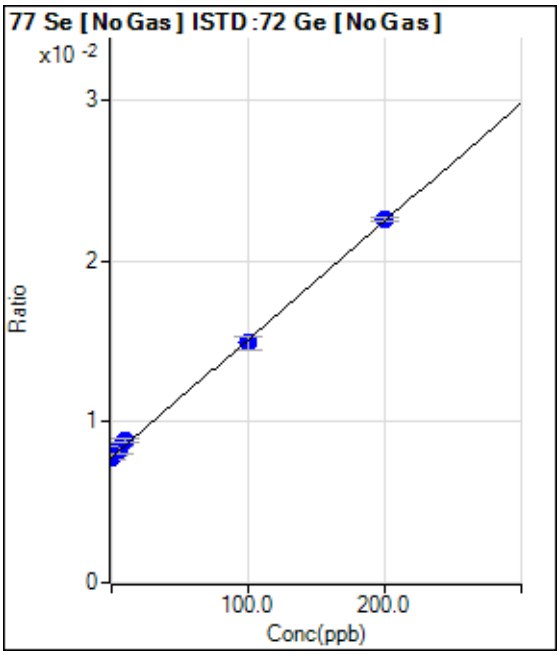


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226980.31	0.3547	P	0.9
2	☐	2.000	-57.573	226427.92	0.3533	P	1.2
3	☐	5.000	-48.630	226173.09	0.3535	P	0.8
4	☐	10.000	192.514	228311.90	0.3592	P	1.6
5	☐	100.000	41.881	225153.53	0.3557	P	0.6
6	☐	200.000	221.871	221516.23	0.3599	P	0.3

y = 2.3588E-005 * x + 0.3547
R = 0.6395
DL = 390.6
BEC = 1.504E+04

Weight: <None>
Min Conc: <None>

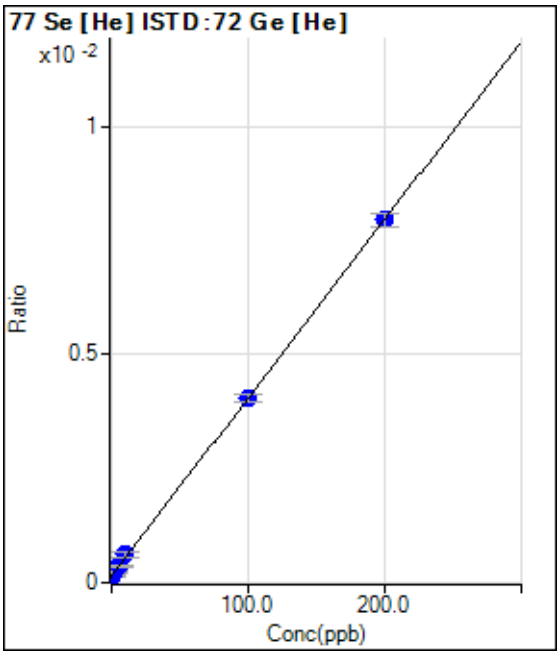
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17685.21	0.0078	P	4.1
2	☐	2.000	3.872	17835.41	0.0081	P	3.8
3	☐	5.000	6.251	18316.05	0.0082	P	5.5
4	☐	10.000	14.557	19360.83	0.0089	P	3.0
5	☐	100.000	97.334	32382.52	0.0149	P	5.6
6	☐	200.000	201.055	47898.69	0.0225	P	1.0

y = 7.3345E-005 * x + 0.0078
R = 0.9996
DL = 12.92
BEC = 106.2

Weight: <None>
Min Conc: <None>

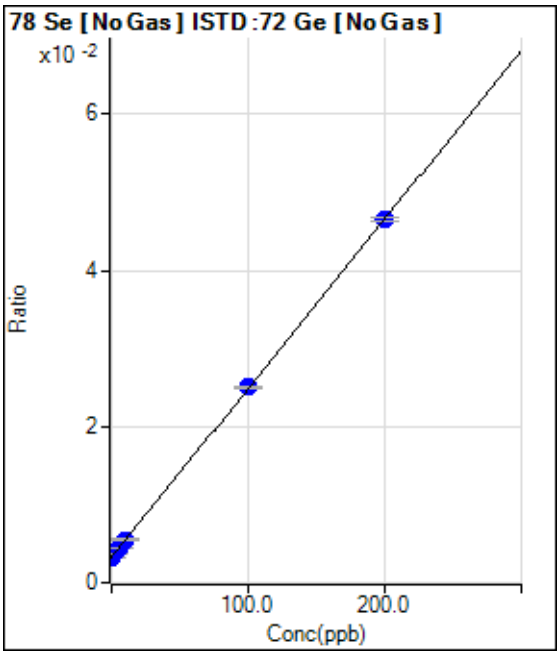


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.33	0.0001	P	49.6
2	☐	2.000	2.129	146.67	0.0002	P	24.2
3	☐	5.000	5.474	230.01	0.0004	P	11.4
4	☐	10.000	12.129	393.35	0.0006	P	16.5
5	☐	100.000	99.922	2560.29	0.0040	P	4.1
6	☐	200.000	199.919	4890.98	0.0079	P	4.0

y = 3.9016E-005 * x + 1.4592E-004
R = 1.0000
DL = 5.564
BEC = 3.74

Weight: <None>
Min Conc: <None>

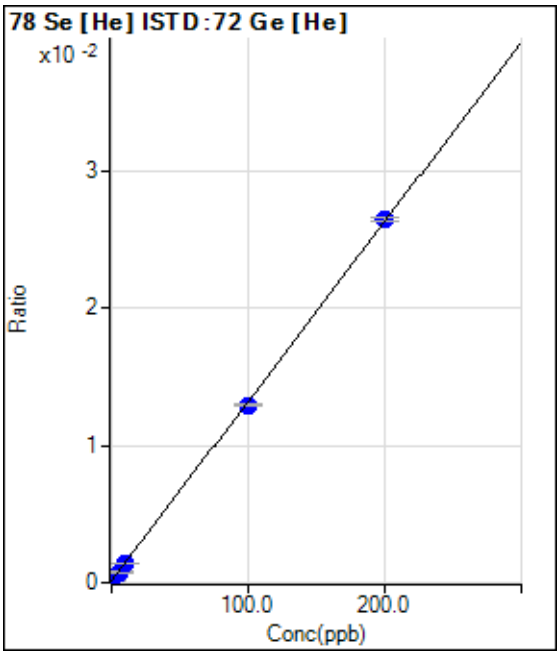
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7428.84	0.0033	P	1.9
2	☐	2.000	2.428	8389.41	0.0038	P	3.7
3	☐	5.000	5.221	9773.72	0.0044	P	2.1
4	☐	10.000	10.250	11998.91	0.0055	P	3.6
5	☐	100.000	100.541	54306.32	0.0250	P	1.5
6	☐	200.000	199.707	98780.18	0.0465	P	1.2

y = 2.1633E-004 * x + 0.0033
R = 1.0000
DL = 0.8491
BEC = 15.12

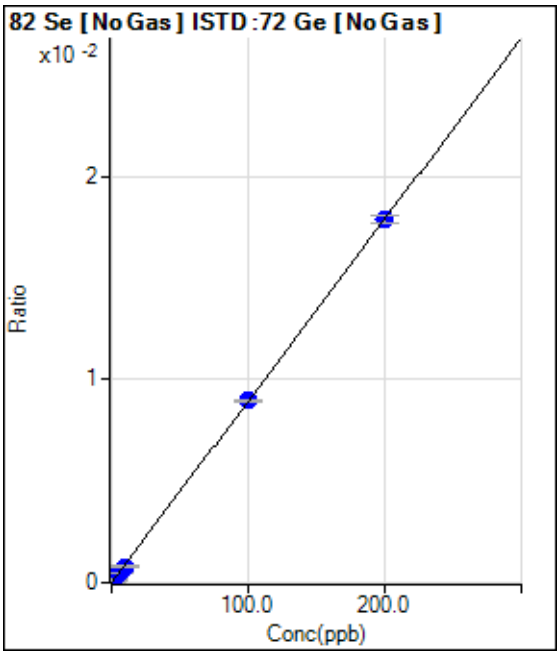
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0001	P	26.9
2	☐	2.000	2.083	258.00	0.0004	P	4.1
3	☐	5.000	4.662	473.34	0.0007	P	9.6
4	☐	10.000	9.826	899.36	0.0014	P	5.0
5	☐	100.000	97.873	8183.83	0.0129	P	0.7
6	☐	200.000	201.080	16261.81	0.0264	P	0.9

y = 1.3075E-004 * x + 1.3037E-004
R = 0.9999
DL = 0.8037
BEC = 0.9971

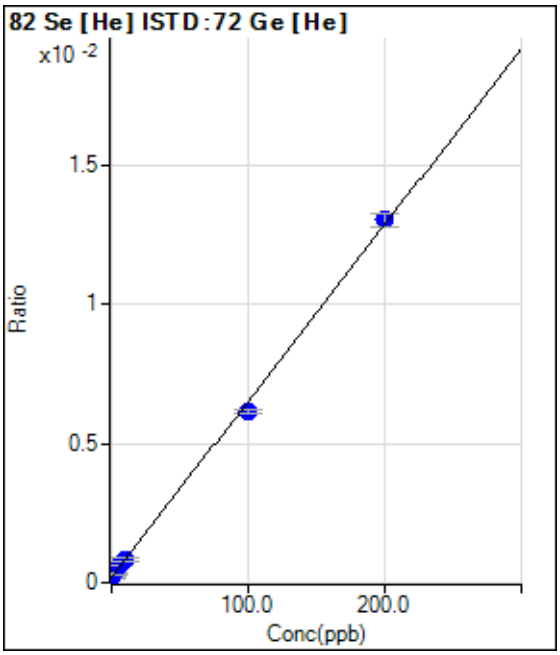
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-87.87	0.0000	P	-126.6
2	☐	2.000	2.015	312.16	0.0001	P	59.1
3	☐	5.000	5.346	976.36	0.0004	P	6.0
4	☐	10.000	8.818	1641.94	0.0008	P	17.0
5	☐	100.000	100.118	19360.86	0.0089	P	1.4
6	☐	200.000	199.991	37961.18	0.0179	P	2.0

y = 8.9490E-005 * x - 3.8770E-005
R = 1.0000
DL = 1.645
BEC = -0.4332

Weight: <None>
Min Conc: <None>

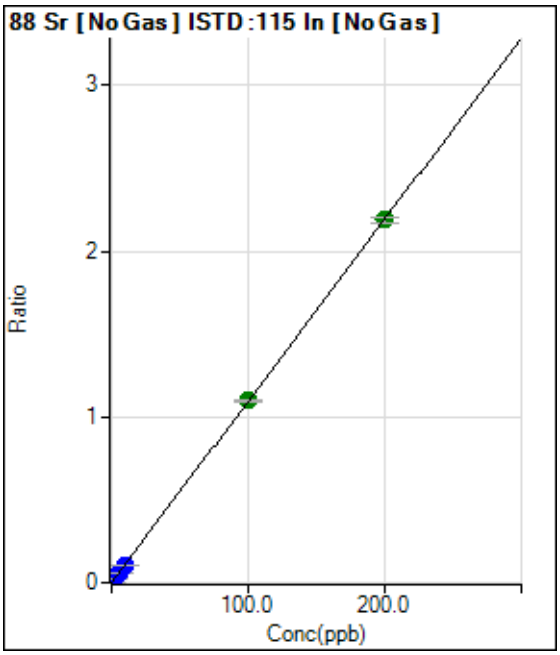


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	123.33	0.0002	P	32.5
2	☐	2.000	1.891	200.01	0.0003	P	26.9
3	☐	5.000	6.587	390.01	0.0006	P	2.5
4	☐	10.000	9.803	516.69	0.0008	P	21.5
5	☐	100.000	94.222	3897.31	0.0062	P	2.1
6	☐	200.000	202.860	8022.56	0.0130	P	3.6

y = 6.3298E-005 * x + 1.9265E-004
R = 0.9994
DL = 2.967
BEC = 3.044

Weight: <None>
Min Conc: <None>

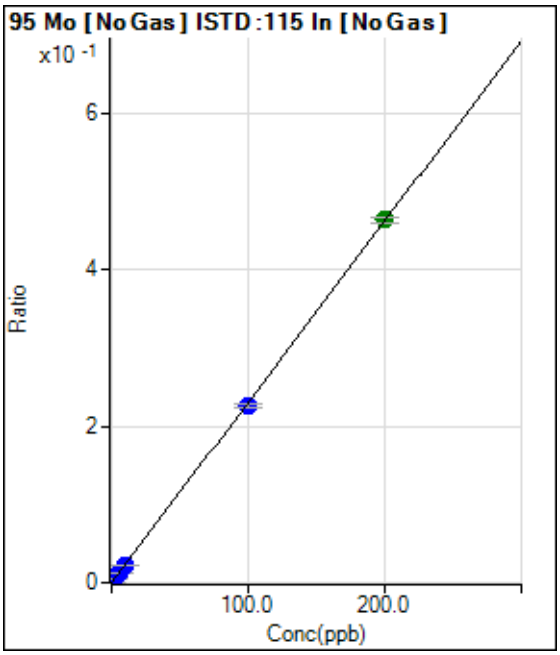
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	773.37	0.0003	P	7.1
2	☐	2.000	1.985	61102.76	0.0220	P	1.5
3	☐	5.000	4.946	150404.51	0.0544	P	1.7
4	☐	10.000	9.668	293825.98	0.1061	P	0.8
5	☐	100.000	100.251	2936487.25	1.0979	A	1.5
6	☐	200.000	199.893	5728334.92	2.1888	A	1.3

y = 0.0109 * x + 2.8175E-004
R = 1.0000
DL = 0.005487
BEC = 0.02573

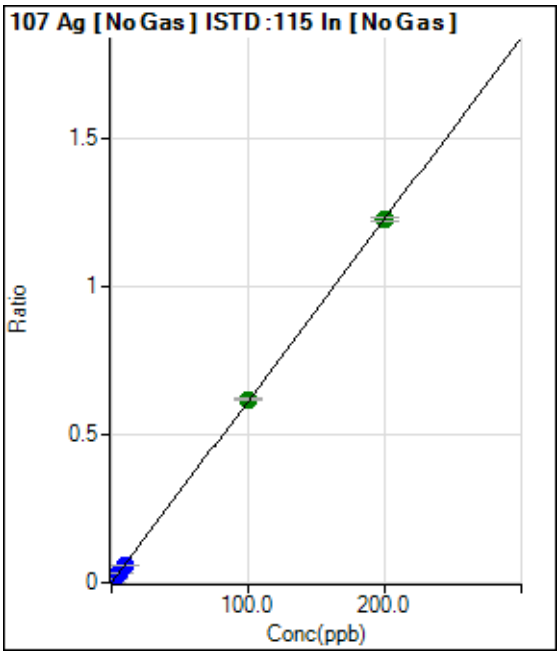
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	126.67	0.0000	P	35.3
2	☐	2.000	1.975	12772.98	0.0046	P	1.7
3	☐	5.000	4.930	31534.33	0.0114	P	3.1
4	☐	10.000	9.448	60443.71	0.0218	P	1.0
5	☐	100.000	98.243	606031.62	0.2266	P	1.8
6	☐	200.000	200.908	1212551.99	0.4633	A	1.4

y = 0.0023 * x + 4.6051E-005
R = 0.9999
DL = 0.02113
BEC = 0.01997

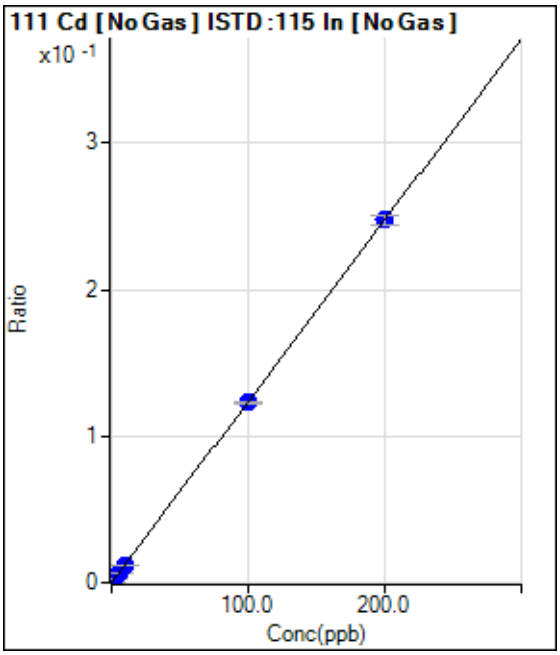
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	606.69	0.0002	P	21.5
2	☐	2.000	2.049	35528.01	0.0128	P	3.6
3	☐	5.000	4.985	85172.99	0.0308	P	2.3
4	☐	10.000	9.767	166643.77	0.0602	P	0.5
5	☐	100.000	100.722	1654933.47	0.6187	A	1.5
6	☐	200.000	199.650	3209075.78	1.2262	A	1.1

y = 0.0061 * x + 2.2092E-004
R = 1.0000
DL = 0.02322
BEC = 0.03598

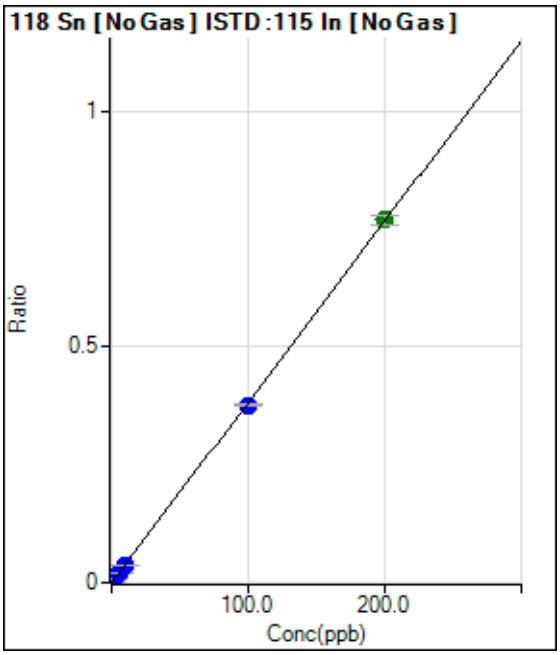
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	2.011	6911.93	0.0025	P	2.4
3	☐	5.000	5.115	17485.13	0.0063	P	0.9
4	☐	10.000	9.982	34184.59	0.0123	P	1.5
5	☐	100.000	99.459	329056.28	0.1230	P	1.5
6	☐	200.000	200.269	648102.18	0.2477	P	2.5

y = 0.0012 * x + 2.4084E-006
R = 1.0000
DL = 0.005059
BEC = 0.001947

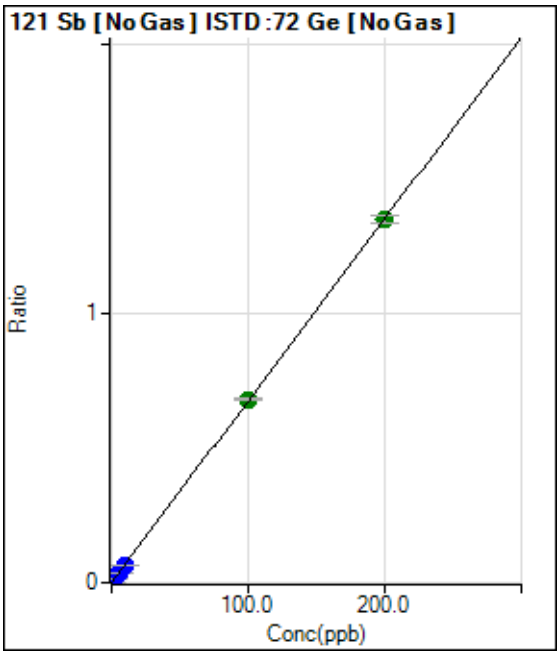
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1630.13	0.0006	P	3.9
2	☐	2.000	1.974	22599.78	0.0081	P	1.7
3	☐	5.000	4.980	54248.97	0.0196	P	1.8
4	☐	10.000	9.502	102232.54	0.0369	P	2.0
5	☐	100.000	98.042	1004328.55	0.3755	P	1.2
6	☐	200.000	201.005	2012759.04	0.7692	A	2.4

y = 0.0038 * x + 5.9405E-004
R = 0.9999
DL = 0.0183
BEC = 0.1554

Weight: <None>
Min Conc: <None>

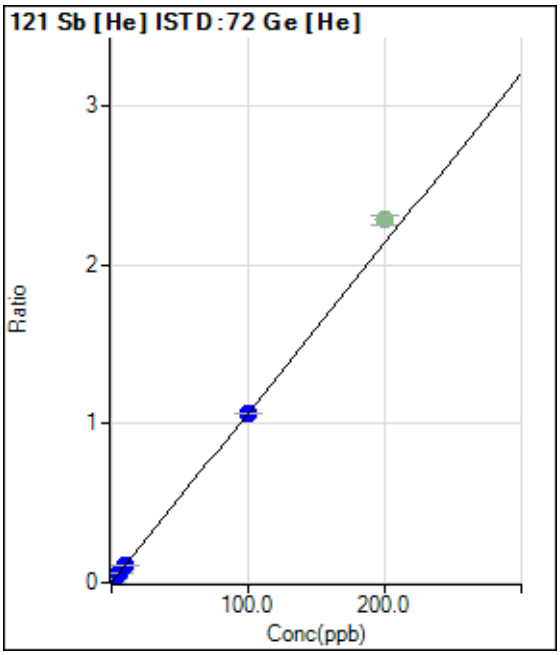


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1500.11	0.0007	P	2.6
2	☐	2.000	2.021	31581.58	0.0143	P	3.0
3	☐	5.000	4.896	74793.22	0.0337	P	2.7
4	☐	10.000	9.752	145221.82	0.0664	P	0.5
5	☐	100.000	100.831	1477120.03	0.6806	A	1.7
6	☐	200.000	199.599	2862292.46	1.3467	A	2.1

y = 0.0067 * x + 6.6050E-004
R = 1.0000
DL = 0.007728
BEC = 0.09794

Weight: <None>
Min Conc: <None>

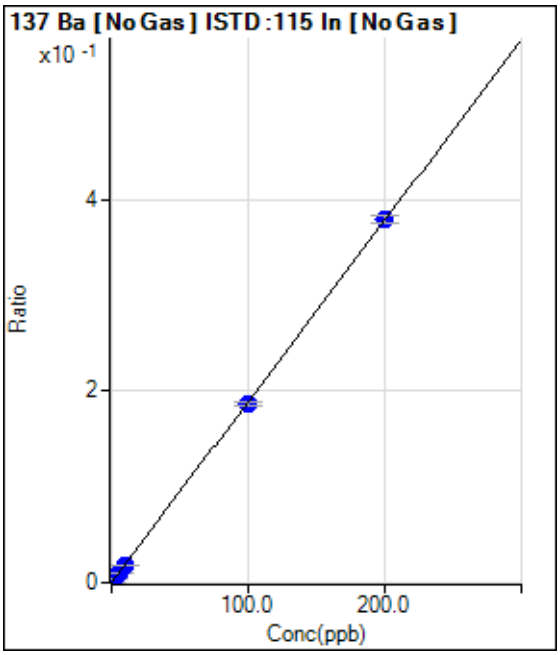
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	626.69	0.0010	P	9.5
2	☐	2.000	2.045	14618.34	0.0228	P	4.7
3	☐	5.000	5.105	35488.31	0.0555	P	2.0
4	☐	10.000	9.884	67684.31	0.1065	P	2.1
5	☐	100.000	100.005	676429.65	1.0685	P	0.4
6	☑	200.000		1404937.43	2.2828	A	2.7

y = 0.0107 * x + 9.7876E-004
R = 1.0000
DL = 0.02613
BEC = 0.09169

Weight: <None>
Min Conc: <None>

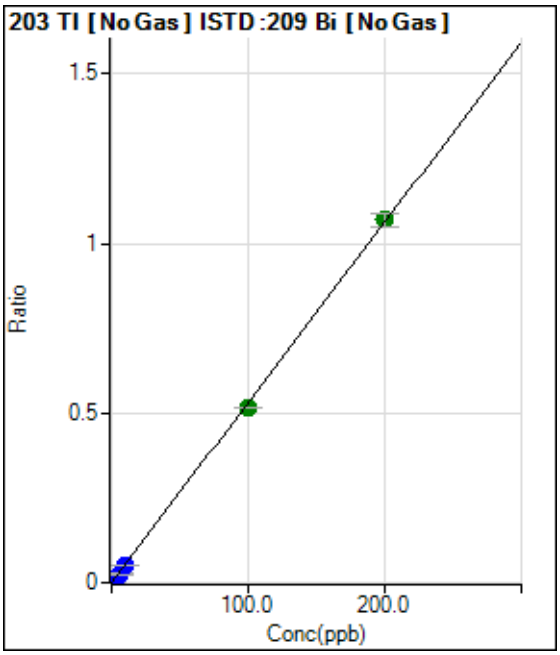


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	210.01	0.0001	P	22.4
2	☐	2.000	2.000	10687.89	0.0039	P	2.8
3	☐	5.000	4.927	25896.13	0.0094	P	1.8
4	☐	10.000	9.794	51378.48	0.0186	P	0.8
5	☐	100.000	99.164	500659.55	0.1872	P	2.3
6	☐	200.000	200.430	989926.52	0.3783	P	2.1

y = 0.0019 * x + 7.6363E-005
R = 1.0000
DL = 0.02722
BEC = 0.04047

Weight: <None>
Min Conc: <None>

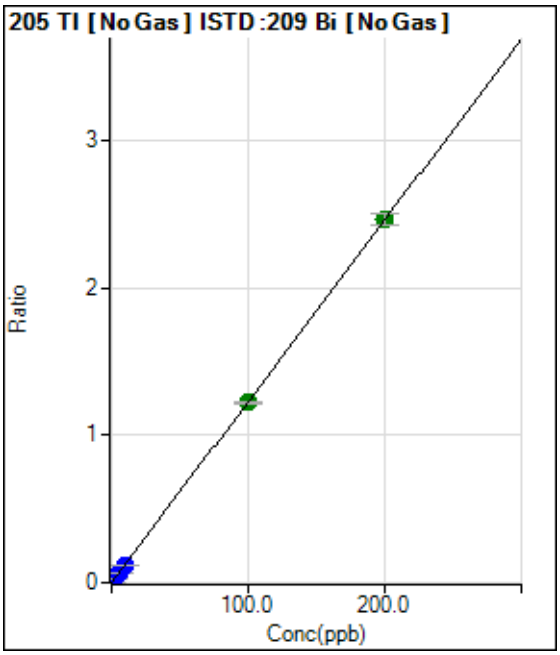
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	430.02	0.0001	P	7.7
2	☐	2.000	1.915	30758.23	0.0103	P	1.5
3	☐	5.000	4.732	76232.16	0.0253	P	2.1
4	☐	10.000	9.393	148755.23	0.0500	P	2.7
5	☐	100.000	97.288	1507683.88	0.5167	A	0.2
6	☐	200.000	201.394	3011145.06	1.0695	A	4.0

y = 0.0053 * x + 1.4568E-004
R = 0.9999
DL = 0.006343
BEC = 0.02743

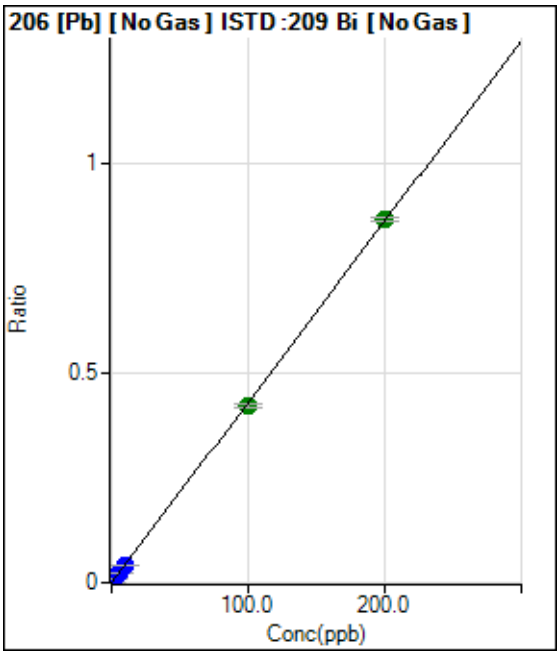
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	956.72	0.0003	P	9.9
2	☐	2.000	1.957	72580.89	0.0243	P	3.1
3	☐	5.000	4.881	181706.17	0.0602	P	1.0
4	☐	10.000	9.765	357306.51	0.1202	P	3.0
5	☐	100.000	99.378	3559750.99	1.2200	A	1.0
6	☐	200.000	200.326	6923610.94	2.4590	A	3.2

y = 0.0123 * x + 3.2388E-004
R = 1.0000
DL = 0.007844
BEC = 0.02639

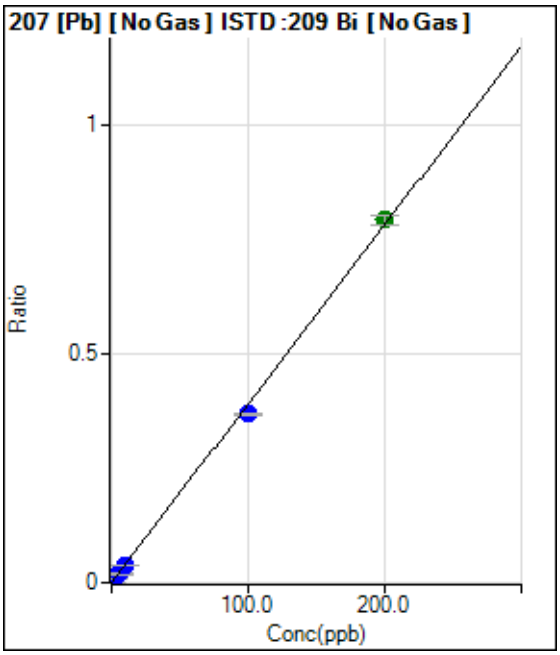
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	533.35	0.0002	P	7.2
2	☐	2.000	1.974	25847.16	0.0087	P	3.3
3	☐	5.000	4.873	63726.07	0.0211	P	2.4
4	☐	10.000	9.514	122144.75	0.0411	P	2.8
5	☐	100.000	98.097	1230665.92	0.4219	A	2.0
6	☐	200.000	200.979	2433813.40	0.8641	A	1.2

y = 0.0043 * x + 1.8072E-004
R = 0.9999
DL = 0.009087
BEC = 0.04204

Weight: <None>
Min Conc: <None>

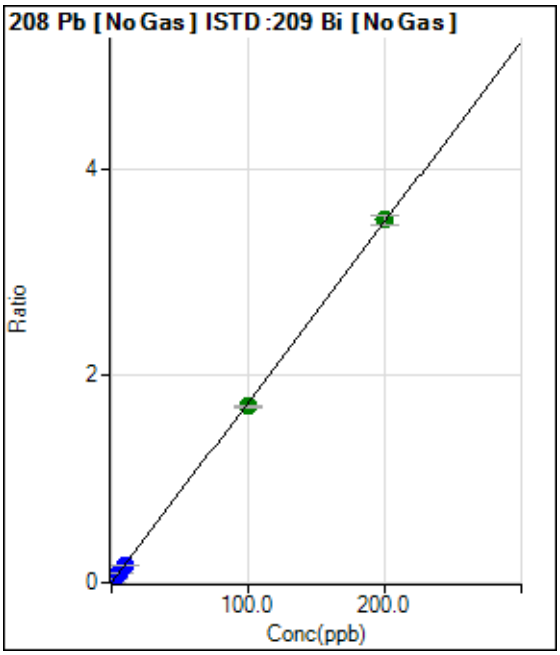


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	473.35	0.0002	P	19.0
2	☐	2.000	1.954	23282.08	0.0078	P	1.9
3	☐	5.000	4.813	57285.76	0.0190	P	2.0
4	☐	10.000	9.545	111519.91	0.0375	P	2.2
5	☐	100.000	94.176	1075299.96	0.3686	P	1.3
6	☐	200.000	202.940	2236128.72	0.7941	A	2.5

y = 0.0039 * x + 1.5986E-004
R = 0.9994
DL = 0.02326
BEC = 0.04086

Weight: <None>
Min Conc: <None>

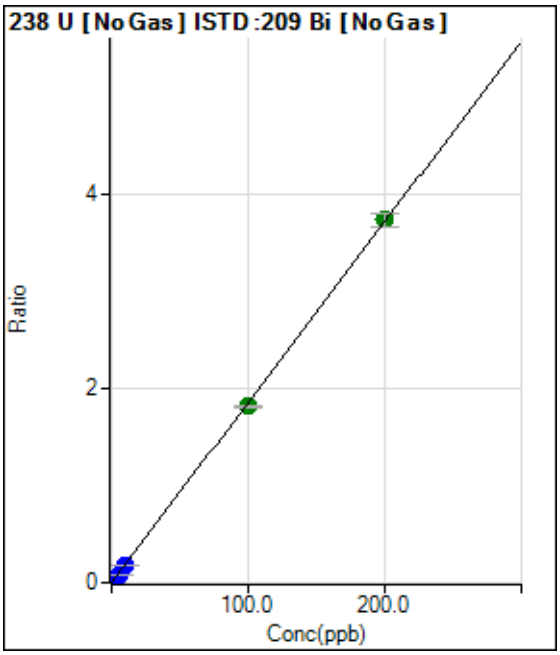
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1946.76	0.0007	P	4.2
2	☐	2.000	1.975	104629.87	0.0351	P	1.8
3	☐	5.000	4.875	258205.11	0.0856	P	1.2
4	☐	10.000	9.552	496806.38	0.1671	P	3.1
5	☐	100.000	97.667	4966476.25	1.7024	A	1.4
6	☐	200.000	201.192	9872900.16	3.5062	A	2.8

y = 0.0174 * x + 6.5936E-004
R = 0.9999
DL = 0.004747
BEC = 0.03784

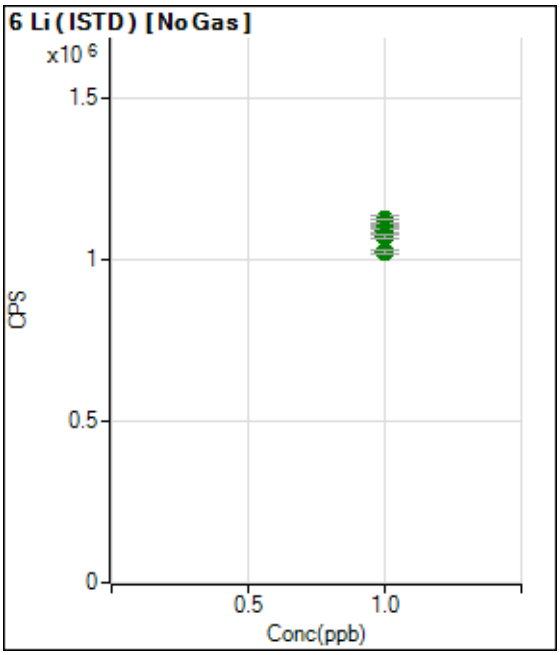
Weight: <None>
Min Conc: <None>



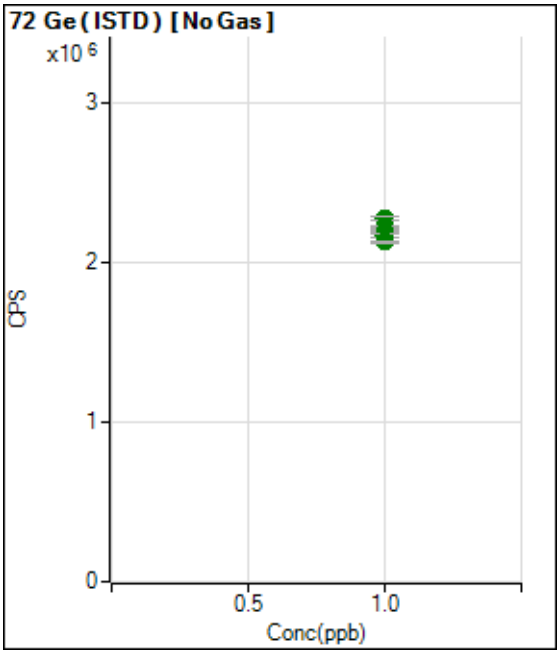
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	220.01	0.0001	P	30.7
2	☐	2.000	1.900	105565.98	0.0354	P	1.4
3	☐	5.000	4.733	265593.44	0.0880	P	1.4
4	☐	10.000	9.414	520504.33	0.1751	P	3.1
5	☐	100.000	97.697	5297871.80	1.8159	A	0.8
6	☐	200.000	201.188	10528030.26	3.7395	A	4.0

y = 0.0186 * x + 7.4272E-005
R = 0.9999
DL = 0.003679
BEC = 0.003996

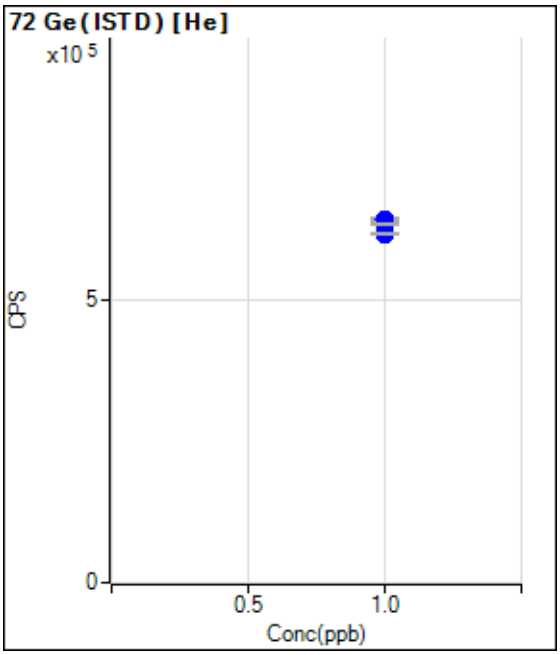
Weight: <None>
Min Conc: <None>



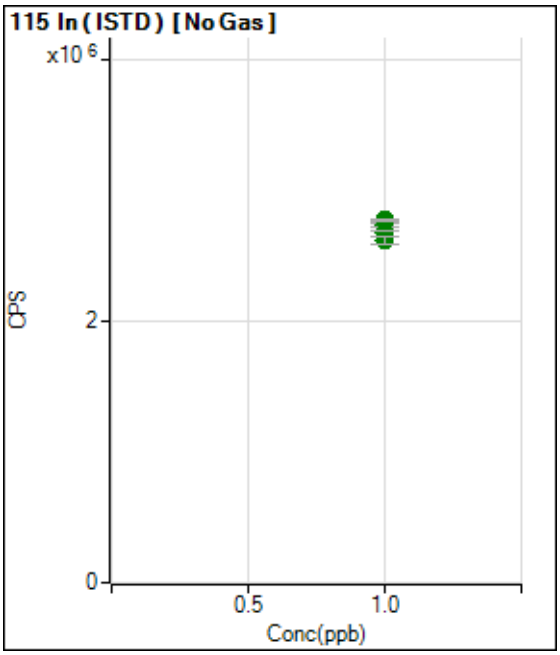
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1124338.69		A	2.8
2	☐	1.000		1112707.01		A	2.1
3	☐	1.000		1097742.66		A	2.8
4	☐	1.000		1090883.46		A	0.7
5	☐	1.000		1072999.98		A	1.4
6	☐	1.000		1027353.48		A	1.2



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2271364.39		A	0.9
2	☐	1.000		2210080.70		A	1.1
3	☐	1.000		2221295.91		A	0.7
4	☐	1.000		2186300.96		A	0.7
5	☐	1.000		2170417.73		A	1.3
6	☐	1.000		2125537.00		A	0.5

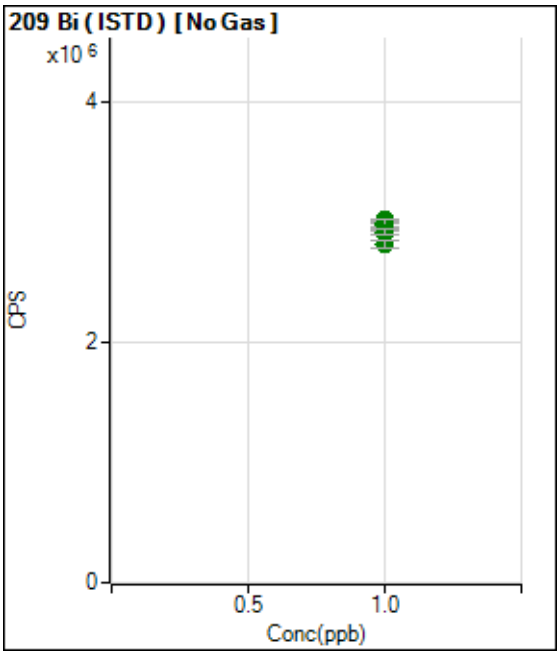


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		639996.29		P	0.9
2	☐	1.000		640908.11		P	1.0
3	☐	1.000		639771.59		P	0.1
4	☐	1.000		635624.74		P	0.5
5	☐	1.000		633049.86		P	0.8
6	☐	1.000		615494.31		P	0.7



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2743963.49		A	1.6
2	☐	1.000		2775854.60		A	0.8
3	☐	1.000		2763083.39		A	1.3
4	☐	1.000		2768474.85		A	0.4
5	☐	1.000		2675134.46		A	1.8
6	☐	1.000		2617459.25		A	1.9

Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2953474.12		A	2.1
2	☐	1.000		2983294.12		A	1.8
3	☐	1.000		3016542.14		A	0.3
4	☐	1.000		2975062.56		A	2.8
5	☐	1.000		2917707.98		A	1.6
6	☐	1.000		2816965.69		A	2.2

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	009CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:38:04-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	70983	0.00
Be	9	1	No Gas	33	181.87
V	51	2	He	3755	0.02
Cr	52	2	He	1180	0.94
Fe	56	2	He	11622	0.03
Se	78	2	He	83	31.59
As	75	2	He	207	0.78
Ca	44	2	He	500	4.40
Na	23	2	He	68032	0.00
Mg	24	2	He	307	5.86
K	39	2	He	51138	0.00
Mn	55	2	He	340	2.29
Co	59	2	He	23	212.09
Ni	60	2	He	160	3.91
Cu	63	2	He	1020	0.10
Zn	66	2	He	387	3.37
Al	27	2	He	650	2.49
B	11	1	No Gas	43425	0.01
Al	27	1	No Gas	26759	0.00
Si	28	1	No Gas	223673	0.00
Ag	107	1	No Gas	607	3.65
Cd	111	1	No Gas	7	1299.04
Sr	88	1	No Gas	773	1.02
Mo	95	1	No Gas	127	28.79
Sn	118	1	No Gas	1630	0.27
Sb	121	1	No Gas	1500	0.15
Ba	137	1	No Gas	210	11.34
Tl	205	1	No Gas	957	1.09
Tl	203	1	No Gas	430	1.62
Pb	208	1	No Gas	1947	0.18
U	238	1	No Gas	220	14.46
Ca	43	2	He	20	500.00
Sb	121	2	He	627	1.64
Ti	47	2	He	3	5196.15
Cu	63	1	No Gas	2084	0.51

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	1124339	2.76
Ge	72	2	He	639996	0.88
Ge	72	1	No Gas	2271364	0.90
In	115	1	No Gas	2743963	1.57

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	2953474	2.12

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	010CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:40:06-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7474	0.03
V	51	2	He	14577	0.01
Cr	52	2	He	14278	0.01
Fe	56	2	He	1245912	0.00
Se	78	2	He	258	1.20
As	75	2	He	2144	0.23
Ca	44	2	He	7319	0.08
Na	23	2	He	269951	0.00
Mg	24	2	He	122024	0.00
K	39	2	He	175498	0.00
Mn	55	2	He	10000	0.03
Co	59	2	He	20125	0.01
Ni	60	2	He	5121	0.13
Cu	63	2	He	14271	0.03
Zn	66	2	He	3097	0.09
Al	27	2	He	1293	0.71
B	11	1	No Gas	62187	0.00
Al	27	1	No Gas	55748	0.00
Si	28	1	No Gas	324074	0.01
Ag	107	1	No Gas	35528	0.01
Cd	111	1	No Gas	6912	0.04
Sr	88	1	No Gas	61103	0.00
Mo	95	1	No Gas	12773	0.02
Sn	118	1	No Gas	22600	0.00
Sb	121	1	No Gas	31582	0.01
Ba	137	1	No Gas	10688	0.02
Tl	205	1	No Gas	72581	0.00
Tl	203	1	No Gas	30758	0.00
Pb	208	1	No Gas	104630	0.00
U	238	1	No Gas	105566	0.00
Ca	43	2	He	387	3.16
Sb	121	2	He	14618	0.03
Cu	63	1	No Gas	26473	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1112707	2.06	1124339	98.97	70	120	
Ge	72	2	He	640908	0.97	639996	100.14	70	120	
Ge	72	1	No Gas	2210081	1.09	2271364	97.30	70	120	

Calibration Standard Report

In	115	1	No Gas	2775855	0.82	2743963	101.16	70	120	
Bi	209	1	No Gas	2983294	1.78	2953474	101.01	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	011CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:42:04-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	18746	0.01
V	51	2	He	30561	0.01
Cr	52	2	He	34390	0.00
Fe	56	2	He	3108892	0.00
Se	78	2	He	473	1.99
As	75	2	He	4768	0.09
Ca	44	2	He	17208	0.02
Na	23	2	He	572969	0.00
Mg	24	2	He	306580	0.00
K	39	2	He	362418	0.00
Mn	55	2	He	24309	0.01
Co	59	2	He	49932	0.00
Ni	60	2	He	12729	0.01
Cu	63	2	He	34538	0.00
Zn	66	2	He	6745	0.03
Al	27	2	He	2284	0.56
B	11	1	No Gas	92883	0.00
Al	27	1	No Gas	99951	0.00
Si	28	1	No Gas	392663	0.00
Ag	107	1	No Gas	85173	0.00
Cd	111	1	No Gas	17485	0.01
Sr	88	1	No Gas	150405	0.00
Mo	95	1	No Gas	31534	0.01
Sn	118	1	No Gas	54249	0.00
Sb	121	1	No Gas	74793	0.00
Ba	137	1	No Gas	25896	0.00
Tl	205	1	No Gas	181706	0.00
Tl	203	1	No Gas	76232	0.00
Pb	208	1	No Gas	258205	0.00
U	238	1	No Gas	265593	0.00
Ca	43	2	He	987	0.62
Sb	121	2	He	35488	0.01
Cu	63	1	No Gas	62216	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1097743	2.80	1124339	97.63	70	120	
Ge	72	2	He	639772	0.13	639996	99.96	70	120	
Ge	72	1	No Gas	2221296	0.69	2271364	97.80	70	120	

Calibration Standard Report

In	115	1	No Gas	2763083	1.30	2743963	100.70	70	120	
Bi	209	1	No Gas	3016542	0.31	2953474	102.14	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	012CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:44:03-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	36599	0.00
V	51	2	He	56822	0.00
Cr	52	2	He	65493	0.00
Fe	56	2	He	5904217	0.00
Se	78	2	He	899	0.51
As	75	2	He	9414	0.01
Ca	44	2	He	33565	0.00
Na	23	2	He	1029505	0.00
Mg	24	2	He	588260	0.00
K	39	2	He	659625	0.00
Mn	55	2	He	47513	0.00
Co	59	2	He	96325	0.00
Ni	60	2	He	24646	0.00
Cu	63	2	He	65809	0.00
Zn	66	2	He	12636	0.02
Al	27	2	He	3881	0.09
B	11	1	No Gas	141978	0.00
Al	27	1	No Gas	169361	0.00
Si	28	1	No Gas	548741	0.00
Ag	107	1	No Gas	166644	0.00
Cd	111	1	No Gas	34185	0.00
Sr	88	1	No Gas	293826	0.00
Mo	95	1	No Gas	60444	0.00
Sn	118	1	No Gas	102233	0.00
Sb	121	1	No Gas	145222	0.00
Ba	137	1	No Gas	51378	0.00
Tl	205	1	No Gas	357307	0.00
Tl	203	1	No Gas	148755	0.00
Pb	208	1	No Gas	496806	0.00
U	238	1	No Gas	520504	0.00
Ca	43	2	He	1897	0.83
Sb	121	2	He	67684	0.00
Cu	63	1	No Gas	119768	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1090883	0.71	1124339	97.02	70	120	
Ge	72	2	He	635625	0.47	639996	99.32	70	120	
Ge	72	1	No Gas	2186301	0.75	2271364	96.25	70	120	

Calibration Standard Report

In	115	1	No Gas	2768475	0.41	2743963	100.89	70	120	
Bi	209	1	No Gas	2975063	2.82	2953474	100.73	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	013CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:46:03-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	366732	0.00
V	51	2	He	533377	0.00
Cr	52	2	He	636292	0.00
Fe	56	2	He	57812967	0.00
Se	78	2	He	8184	0.02
As	75	2	He	91498	0.00
Ca	44	2	He	329394	0.00
Na	23	2	He	9465099	0.00
Mg	24	2	He	5623690	0.00
K	39	2	He	5954092	0.00
Mn	55	2	He	457372	0.00
Co	59	2	He	943598	0.00
Ni	60	2	He	237049	0.00
Cu	63	2	He	638221	0.00
Zn	66	2	He	123953	0.00
Al	27	2	He	32532	0.00
B	11	1	No Gas	1083428	0.00
Al	27	1	No Gas	1431846	0.00
Si	28	1	No Gas	3451798	0.00
Ag	107	1	No Gas	1654933	0.00
Cd	111	1	No Gas	329056	0.00
Sr	88	1	No Gas	2936487	0.00
Mo	95	1	No Gas	606032	0.00
Sn	118	1	No Gas	1004329	0.00
Sb	121	1	No Gas	1477120	0.00
Ba	137	1	No Gas	500660	0.00
Tl	205	1	No Gas	3559751	0.00
Tl	203	1	No Gas	1507684	0.00
Pb	208	1	No Gas	4966476	0.00
U	238	1	No Gas	5297872	0.00
Ca	43	2	He	19144	0.01
Sb	121	2	He	676430	0.00
Cu	63	1	No Gas	1144348	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1073000	1.44	1124339	95.43	70	120	
Ge	72	2	He	633050	0.76	639996	98.91	70	120	
Ge	72	1	No Gas	2170418	1.25	2271364	95.56	70	120	

Calibration Standard Report

In	115	1	No Gas	2675134	1.82	2743963	97.49	70	120	
Bi	209	1	No Gas	2917708	1.64	2953474	98.79	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	014CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:47:56-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	723543	0.00
V	51	2	He	1056843	0.00
Cr	52	2	He	1292725	0.00
Fe	56	2	He	114286558	0.00
Se	78	2	He	16262	0.00
As	75	2	He	180971	0.00
Ca	44	2	He	647787	0.00
Na	23	2	He	18643862	0.00
Mg	24	2	He	10873092	0.00
K	39	2	He	11649136	0.00
Mn	55	2	He	899483	0.00
Co	59	2	He	1917306	0.00
Ni	60	2	He	457732	0.00
Cu	63	2	He	1240270	0.00
Zn	66	2	He	239019	0.00
Al	27	2	He	62430	0.00
B	11	1	No Gas	2090693	0.00
Al	27	1	No Gas	2711532	0.00
Si	28	1	No Gas	6431816	0.00
Ag	107	1	No Gas	3209076	0.00
Cd	111	1	No Gas	648102	0.00
Sr	88	1	No Gas	5728335	0.00
Mo	95	1	No Gas	1212552	0.00
Sn	118	1	No Gas	2012759	0.00
Sb	121	1	No Gas	2862292	0.00
Ba	137	1	No Gas	989927	0.00
Tl	205	1	No Gas	6923611	0.00
Tl	203	1	No Gas	3011145	0.00
Pb	208	1	No Gas	9872900	0.00
U	238	1	No Gas	10528030	0.00
Ca	43	2	He	37498	0.01
Sb	121	2	He	1404937	0.00
Cu	63	1	No Gas	2216957	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1027353	1.17	1124339	91.37	70	120	
Ge	72	2	He	615494	0.70	639996	96.17	70	120	
Ge	72	1	No Gas	2125537	0.46	2271364	93.58	70	120	

Calibration Standard Report

In	115	1	No Gas	2617459	1.92	2743963	95.39	70	120	
Bi	209	1	No Gas	2816966	2.22	2953474	95.38	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	016_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:51:45-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	103.881	1.601	1597036	2.31	100	103.9	90	110	
Be	9	1	No Gas	102.227	3.900	370626	1.05	100	102.2	90	110	
V	51	2	He	99.691	0.427	547886	0.50	100	99.7	90	110	
Cr	52	2	He	97.444	1.200	650549	0.87	100	97.4	90	110	
Fe	56	2	He	10194.350	1.199	60457681	0.94	10000	101.9	90	110	
Se	78	2	He	98.027	0.412	8297	0.22	100	98.0	90	110	
As	75	2	He	97.853	0.933	91954	0.71	100	97.9	90	110	
Ca	44	2	He	10265.401	0.784	345586	0.55	10000	102.7	90	110	
Na	23	2	He	10135.361	0.982	9838853	1.20	10000	101.4	90	110	
Mg	24	2	He	10370.068	0.753	5877440	0.95	10000	103.7	90	110	
K	39	2	He	10161.893	0.647	6175310	0.82	10000	101.6	90	110	
Mn	55	2	He	99.908	0.871	466929	0.63	100	99.9	90	110	
Co	59	2	He	98.618	0.533	975824	0.45	100	98.6	90	110	
Ni	60	2	He	103.086	0.715	246057	0.78	100	103.1	90	110	
Cu	63	2	He	100.318	0.460	648189	0.75	100	100.3	90	110	
Zn	66	2	He	100.936	0.774	125957	0.91	100	100.9	90	110	
Al	27	2	He	98.313	1.679	32301	1.41	100	98.3	90	110	
B	11	1	No Gas	514.747	4.296	1098091	1.23	500	102.9	90	110	
Al	27	1	No Gas	101.522	3.085	1452027	2.01	100	101.5	90	110	
Si	28	1	No Gas	508.300	2.143	3521525	0.94	500	101.7	90	110	
Ag	107	1	No Gas	101.697	1.346	1706004	1.58	100	101.7	90	110	
Cd	111	1	No Gas	100.765	1.303	340316	0.73	100	100.8	90	110	
Sr	88	1	No Gas	100.302	0.334	2999813	1.06	100	100.3	90	110	
Mo	95	1	No Gas	96.333	0.510	606775	1.12	100	96.3	90	110	
Sn	118	1	No Gas	99.025	0.594	1035656	0.64	100	99.0	90	110	
Sb	121	1	No Gas	100.454	0.658	1499711	1.65	100	100.5	90	110	
Ba	137	1	No Gas	101.517	0.789	523365	1.04	100	101.5	90	110	
Tl	205	1	No Gas	103.970	1.952	3697049	0.58	100	104.0	90	110	
Tl	203	1	No Gas	103.088	2.407	1585907	1.15	100	103.1	90	110	
Pb	208	1	No Gas	101.344	1.605	5116879	0.34	100	101.3	90	110	
U	238	1	No Gas	97.022	1.606	5223779	0.60	100	97.0	90	110	
Ca	43	2	He	10257.841	2.503	20001	2.20	10000	102.6	90	110	
Sb	121	2	He	95.789	1.092	691814	0.85	100	95.8	90	110	
Ti	47	2	He	99.427	3.069	20035	3.34	100	99.4	90	110	
Cu	63	1	No Gas	101.142	1.464	1170048	1.86	100	101.1	90	110	
Se	82	1	No Gas	98.746	3.447	19457	3.56	100	98.7	90	110	

QC ISTD Table

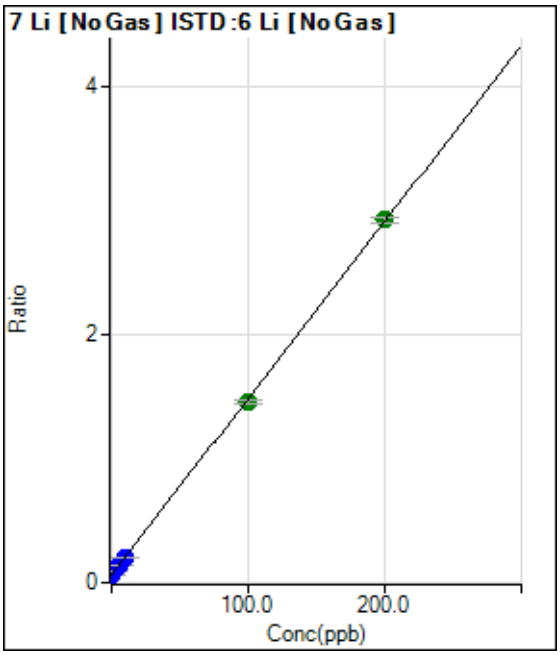
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1036489	3.32	1124339	92.19	70	120	
Ge	72	2	He	640791	0.33	639996	100.12	70	120	
Ge	72	1	No Gas	2211640	1.42	2271364	97.37	70	120	
In	115	1	No Gas	2730910	0.90	2743963	99.52	70	120	
Bi	209	1	No Gas	2897063	1.39	2953474	98.09	70	120	

Calibration for 016_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\061821A.b\
Analysis File: 061821A.batch.bin
DA Date-Time: 6/18/2021 8:46:11 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	6/18/2021 10:38:04 AM
2	010CALS.d	2/10/200	6/18/2021 10:40:06 AM
3	011CALS.d	5/25/500	6/18/2021 10:42:04 AM
4	012CALS.d	10/50/100	6/18/2021 10:44:03 AM
5	013CALS.d	100/500/10K	6/18/2021 10:46:03 AM
6	014CALS.d	200/1000/20K	6/18/2021 10:47:56 AM

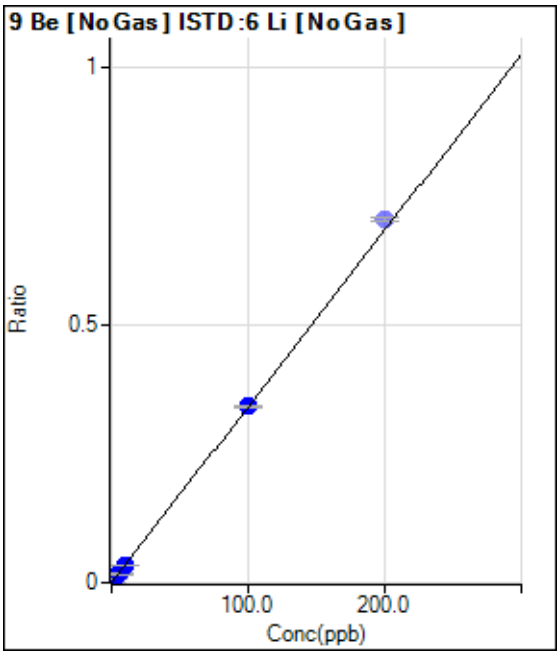
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70982.82	0.0632	P	2.4
2	☐	2.000	2.009	102083.37	0.0917	P	1.1
3	☐	5.000	5.204	150525.11	0.1372	P	3.3
4	☐	10.000	10.061	225055.59	0.2063	P	1.6
5	☐	100.000	97.704	1559133.52	1.4533	A	2.0
6	☐	200.000	201.140	3004927.25	2.9251	A	1.3

y = 0.0142 * x + 0.0632
R = 0.9999
DL = 0.3256
BEC = 4.439

Weight: <None>
Min Conc: <None>

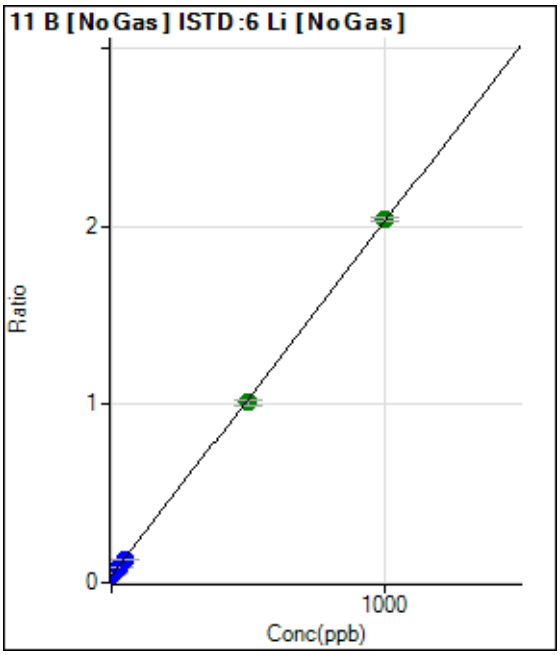


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	61.9
2	☐	2.000	1.958	7473.71	0.0067	P	3.9
3	☐	5.000	4.991	18745.89	0.0171	P	3.5
4	☐	10.000	9.809	36599.16	0.0336	P	1.0
5	☐	100.000	100.020	366732.15	0.3418	P	1.7
6	☑	200.000		723542.83	0.7043	P	1.2

y = 0.0034 * x + 2.9716E-005
R = 1.0000
DL = 0.01615
BEC = 0.008696

Weight: <None>
Min Conc: <None>

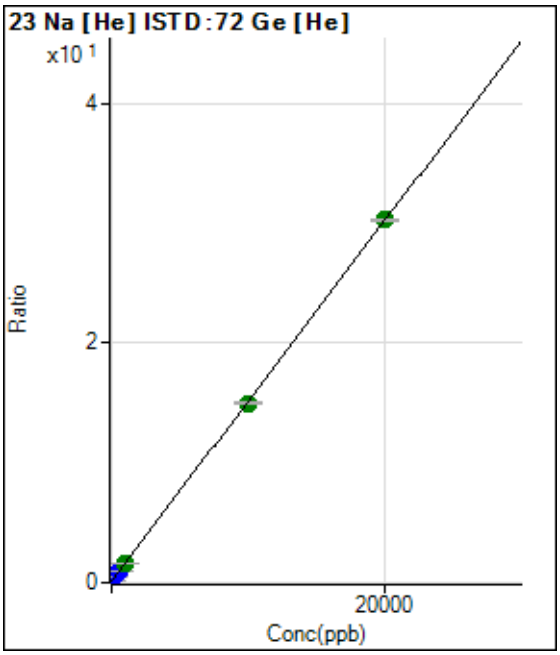
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43425.19	0.0386	P	0.7
2	☐	10.000	8.699	62186.87	0.0559	P	1.1
3	☐	25.000	23.195	92882.75	0.0847	P	3.5
4	☐	50.000	46.112	141978.08	0.1302	P	1.4
5	☐	500.000	489.125	1083427.69	1.0095	A	3.6
6	☐	1000.000	1005.690	2090693.30	2.0349	A	1.1

y = 0.0020 * x + 0.0386
R = 0.9999
DL = 0.4315
BEC = 19.46

Weight: <None>
Min Conc: <None>

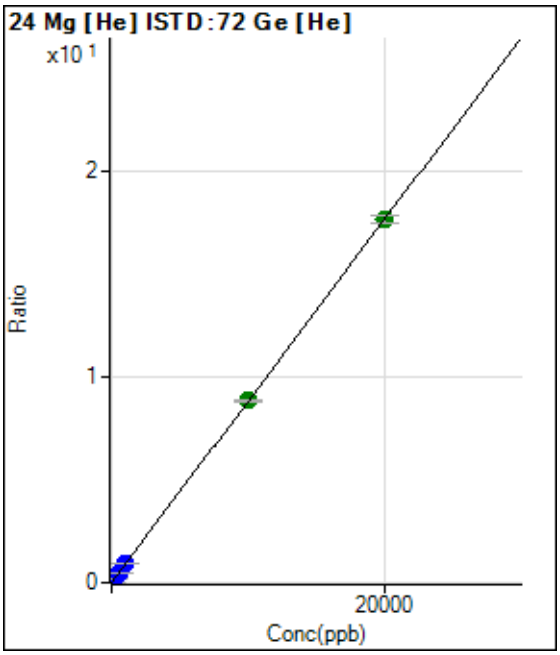


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68031.98	0.1063	P	1.2
2	☐	200.000	209.327	269950.63	0.4212	P	0.8
3	☐	500.000	524.640	572969.01	0.8956	P	0.8
4	☐	1000.000	1005.993	1029505.22	1.6197	A	1.9
5	☐	10000.00	9868.436	9465099.44	14.9525	A	1.3
6	☐	20000.00	20064.77	18643861.80	30.2919	A	0.8

y = 0.0015 * x + 0.1063
R = 1.0000
DL = 2.469
BEC = 70.66

Weight: <None>
Min Conc: <None>

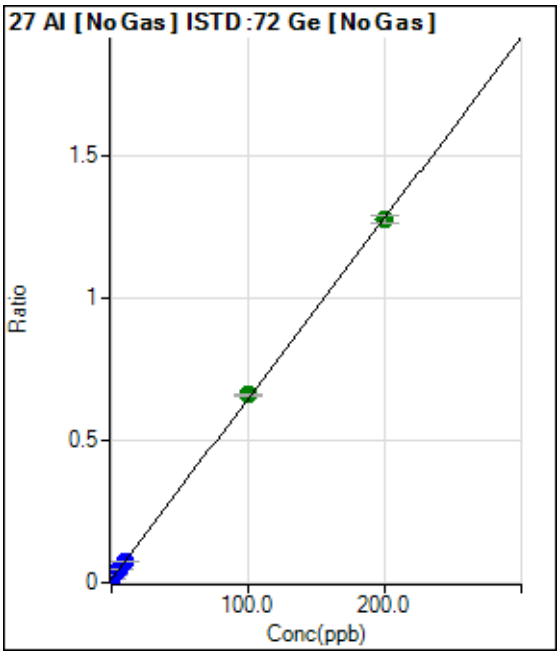
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	306.68	0.0005	P	17.7
2	☐	200.000	214.742	122023.76	0.1904	P	1.3
3	☐	500.000	541.277	306580.03	0.4792	P	1.6
4	☐	1000.000	1045.896	588260.29	0.9255	P	1.2
5	☐	10000.00	10043.70	5623690.12	8.8834	A	1.0
6	☐	20000.00	19974.67	10873091.92	17.6667	A	2.0

y = 8.8443E-004 * x + 4.7907E-004
R = 1.0000
DL = 0.2882
BEC = 0.5417

Weight: <None>
Min Conc: <None>

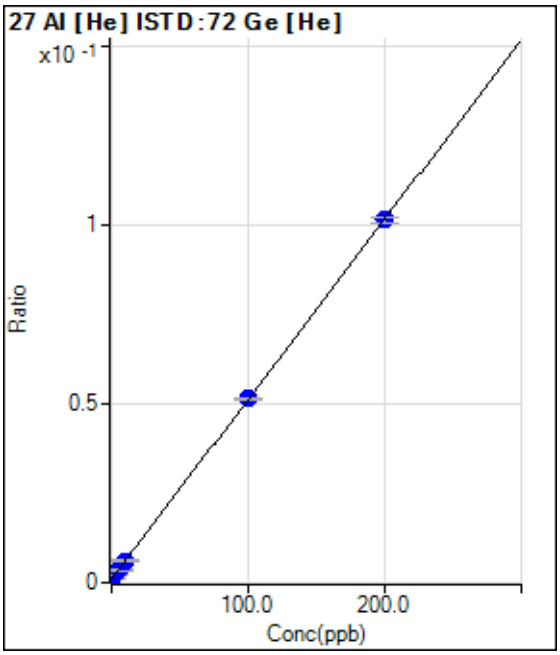


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26759.28	0.0118	P	0.5
2	☐	2.000	2.116	55748.45	0.0252	P	0.3
3	☐	5.000	5.229	99951.14	0.0450	P	1.5
4	☐	10.000	10.340	169360.63	0.0775	P	0.6
5	☐	100.000	101.997	1431846.28	0.6597	A	0.8
6	☐	200.000	198.977	2711531.73	1.2758	A	2.0

y = 0.0064 * x + 0.0118
R = 0.9999
DL = 0.02886
BEC = 1.855

Weight: <None>
Min Conc: <None>

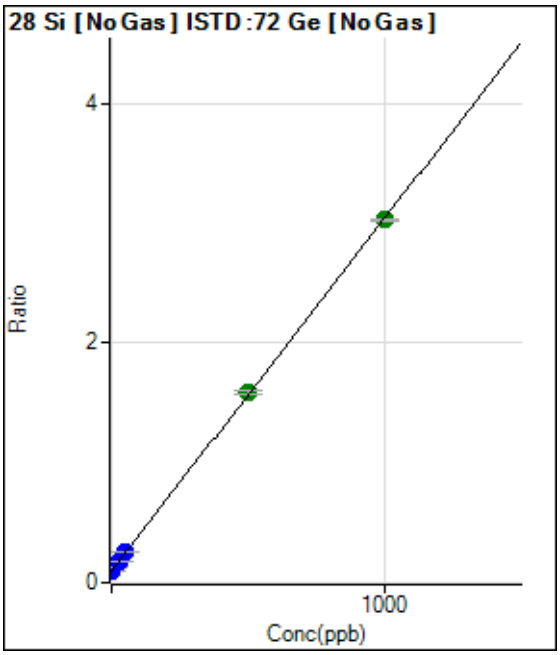
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	650.03	0.0010	P	15.9
2	☐	2.000	1.998	1293.42	0.0020	P	10.2
3	☐	5.000	5.083	2283.58	0.0036	P	12.6
4	☐	10.000	10.129	3880.61	0.0061	P	2.9
5	☐	100.000	100.269	32531.62	0.0514	P	1.8
6	☐	200.000	199.857	62429.94	0.1014	P	1.7

y = 5.0241E-004 * x + 0.0010
R = 1.0000
DL = 0.9669
BEC = 2.021

Weight: <None>
Min Conc: <None>

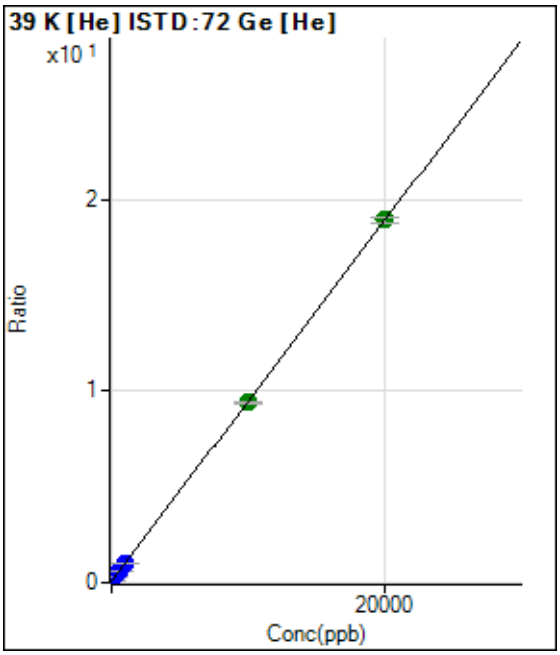


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	223672.53	0.0985	P	1.5
2	☐	10.000	16.390	324074.29	0.1467	P	16.8
3	☐	25.000	26.635	392662.74	0.1768	P	0.8
4	☐	50.000	51.886	548740.56	0.2510	P	0.6
5	☐	500.000	507.632	3451797.66	1.5906	A	1.6
6	☐	1000.000	995.985	6431816.15	3.0260	A	0.4

y = 0.0029 * x + 0.0985
R = 1.0000
DL = 1.536
BEC = 33.51

Weight: <None>
Min Conc: <None>

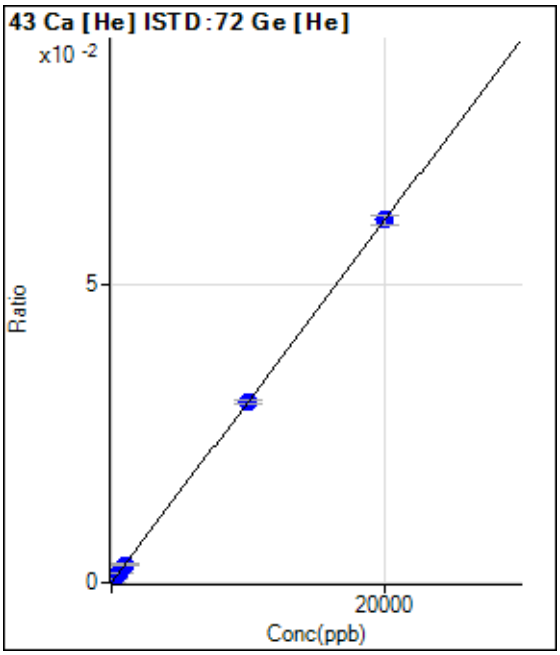
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51138.14	0.0799	P	0.9
2	☐	200.000	206.203	175498.06	0.2738	P	0.8
3	☐	500.000	517.366	362417.94	0.5665	P	1.2
4	☐	1000.000	1018.485	659624.70	1.0378	P	0.5
5	☐	10000.00	9916.345	5954092.00	9.4060	A	1.5
6	☐	20000.00	20040.40	11649136.08	18.9275	A	1.7

y = 9.4048E-004 * x + 0.0799
R = 1.0000
DL = 2.369
BEC = 84.96

Weight: <None>
Min Conc: <None>

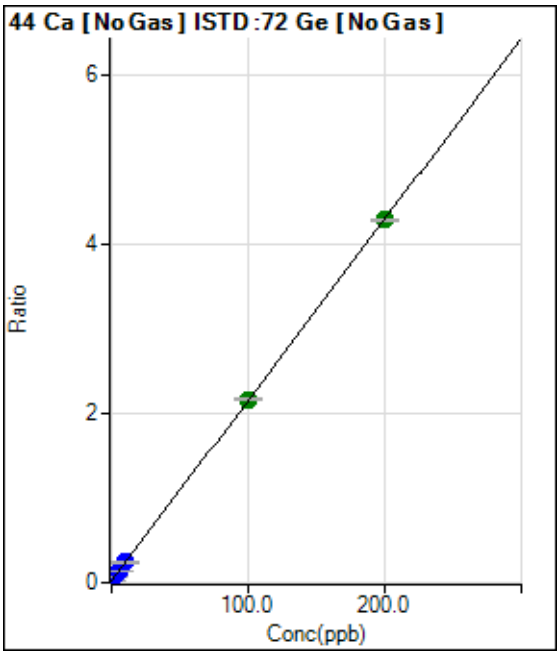


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.00	0.0000	P	100.6
2	☐	200.000	188.314	386.68	0.0006	P	13.2
3	☐	500.000	497.009	986.72	0.0015	P	6.1
4	☐	1000.000	971.503	1896.83	0.0030	P	15.9
5	☐	10000.00	9937.903	19143.50	0.0302	P	1.9
6	☐	20000.00	20032.66	37498.06	0.0609	P	2.6

y = 3.0400E-006 * x + 3.1371E-005
R = 1.0000
DL = 31.14
BEC = 10.32

Weight: <None>
Min Conc: <None>

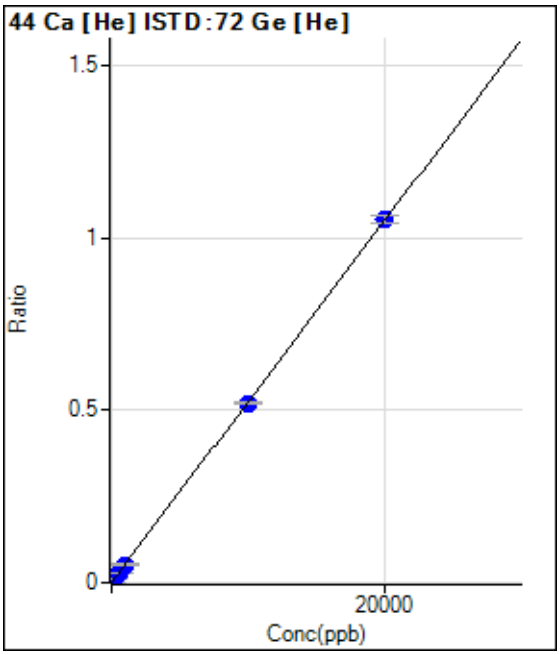
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46140.80	0.0203	P	1.6
2	☐	2.000	2.149	146377.95	0.0662	P	1.8
3	☐	5.000	5.191	291526.36	0.1312	P	0.6
4	☐	10.000	10.250	523242.70	0.2393	P	1.6
5	☐	100.000	100.474	4704023.37	2.1674	A	0.5
6	☐	200.000	199.744	9116122.37	4.2888	A	0.6

y = 0.0214 * x + 0.0203
R = 1.0000
DL = 0.04678
BEC = 0.9507

Weight: <None>
Min Conc: <None>

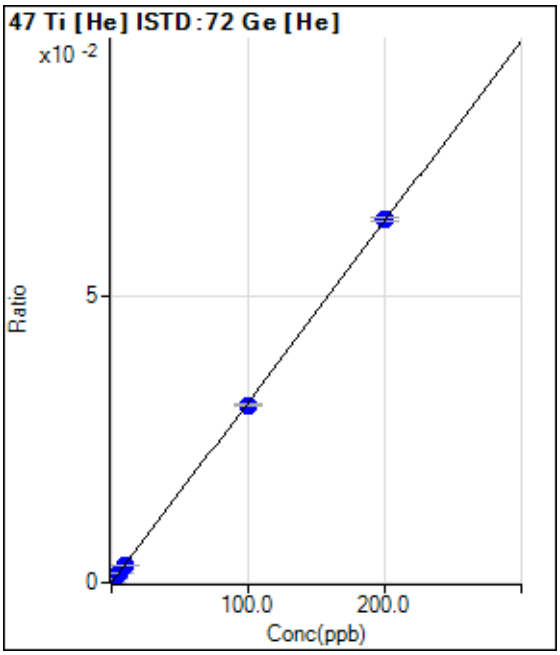


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	500.02	0.0008	P	21.2
2	☐	200.000	202.889	7318.70	0.0114	P	6.7
3	☐	500.000	497.804	17207.65	0.0269	P	3.7
4	☐	1000.000	991.718	33564.65	0.0528	P	1.0
5	☐	10000.00	9903.763	329394.23	0.5203	P	0.9
6	☐	20000.00	20048.55	647786.67	1.0526	P	2.0

y = 5.2462E-005 * x + 7.8034E-004
R = 1.0000
DL = 9.454
BEC = 14.87

Weight: <None>
Min Conc: <None>

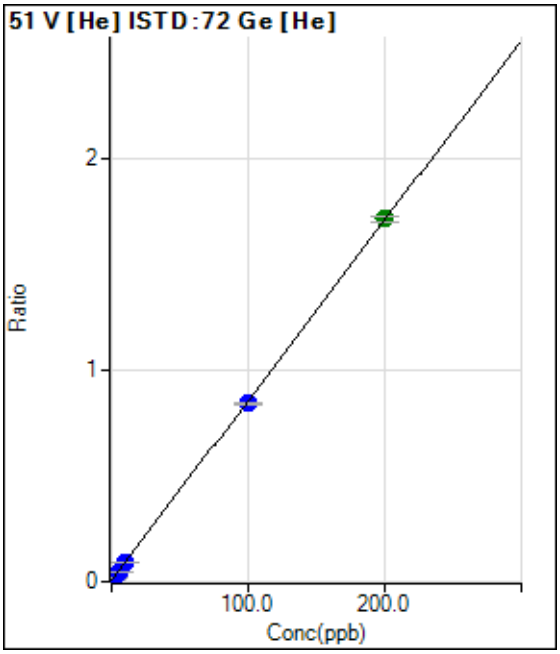
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.33	0.0000	P	173.2
2	☐	2.000	2.066	420.02	0.0007	P	18.6
3	☐	5.000	5.453	1100.06	0.0017	P	4.8
4	☐	10.000	9.477	1896.83	0.0030	P	6.7
5	☐	100.000	98.315	19570.90	0.0309	P	0.9
6	☐	200.000	200.856	38868.57	0.0632	P	1.0

y = 3.1439E-004 * x + 5.1686E-006
R = 0.9999
DL = 0.08542
BEC = 0.01644

Weight: <None>
Min Conc: <None>

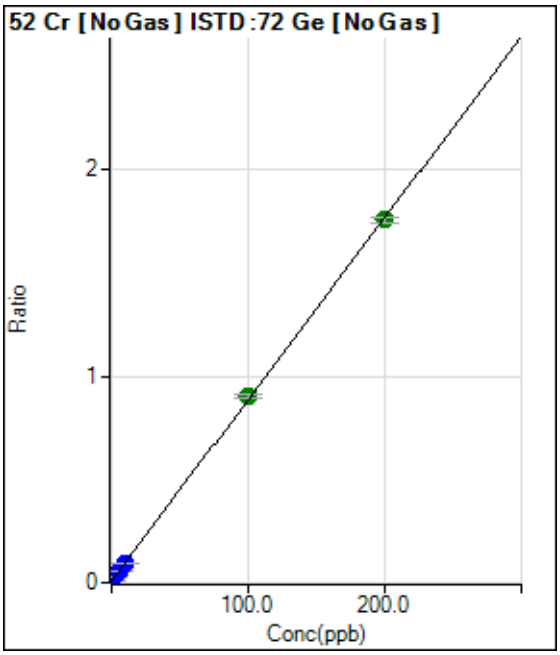


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3754.98	0.0059	P	1.7
2	☐	2.000	1.981	14576.70	0.0227	P	1.5
3	☐	5.000	4.919	30560.66	0.0478	P	1.5
4	☐	10.000	9.807	56821.58	0.0894	P	1.2
5	☐	100.000	98.230	533376.94	0.8426	P	0.6
6	☐	200.000	200.897	1056843.12	1.7171	A	1.8

y = 0.0085 * x + 0.0059
R = 0.9999
DL = 0.03445
BEC = 0.6889

Weight: <None>
Min Conc: <None>

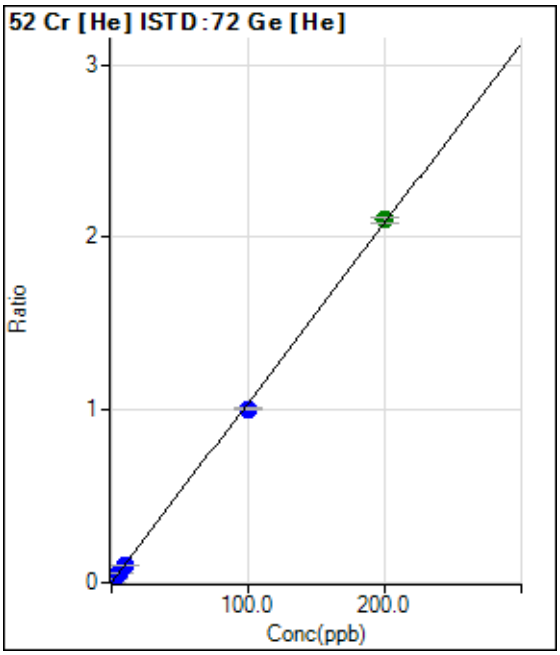
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19160.31	0.0084	P	3.1
2	☐	2.000	2.120	59793.85	0.0271	P	2.3
3	☐	5.000	5.132	118885.59	0.0535	P	1.3
4	☐	10.000	10.101	212456.24	0.0972	P	0.6
5	☐	100.000	101.936	1961607.83	0.9039	A	1.9
6	☐	200.000	199.023	3734120.36	1.7568	A	1.7

y = 0.0088 * x + 0.0084
R = 0.9999
DL = 0.09052
BEC = 0.9604

Weight: <None>
Min Conc: <None>

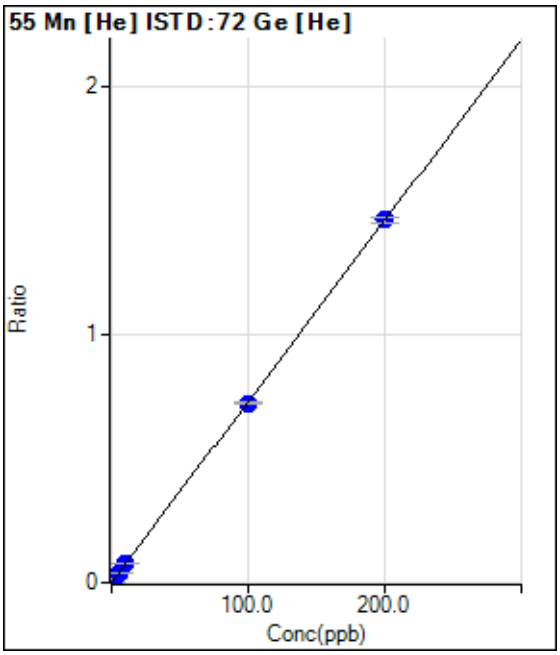


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1180.07	0.0018	P	10.9
2	☐	2.000	1.965	14277.67	0.0223	P	2.2
3	☐	5.000	4.991	34390.08	0.0538	P	0.7
4	☐	10.000	9.730	65492.87	0.1030	P	1.3
5	☐	100.000	96.473	636291.88	1.0052	P	1.0
6	☐	200.000	201.777	1292724.70	2.1003	A	1.5

y = 0.0104 * x + 0.0018
R = 0.9998
DL = 0.05812
BEC = 0.1773

Weight: <None>
Min Conc: <None>

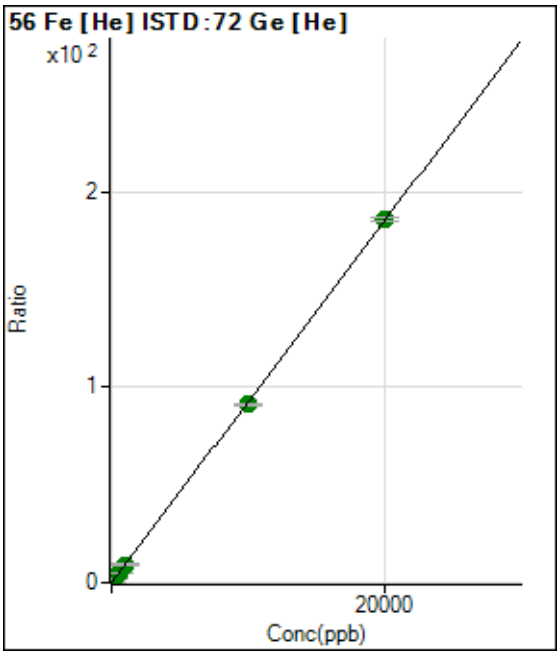
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	340.01	0.0005	P	7.8
2	☐	2.000	2.068	10000.48	0.0156	P	2.6
3	☐	5.000	5.140	24308.59	0.0380	P	2.4
4	☐	10.000	10.183	47513.05	0.0748	P	1.7
5	☐	100.000	99.062	457372.08	0.7225	P	0.9
6	☐	200.000	200.456	899482.95	1.4615	P	1.6

y = 0.0073 * x + 5.3130E-004
R = 1.0000
DL = 0.01708
BEC = 0.0729

Weight: <None>
Min Conc: <None>

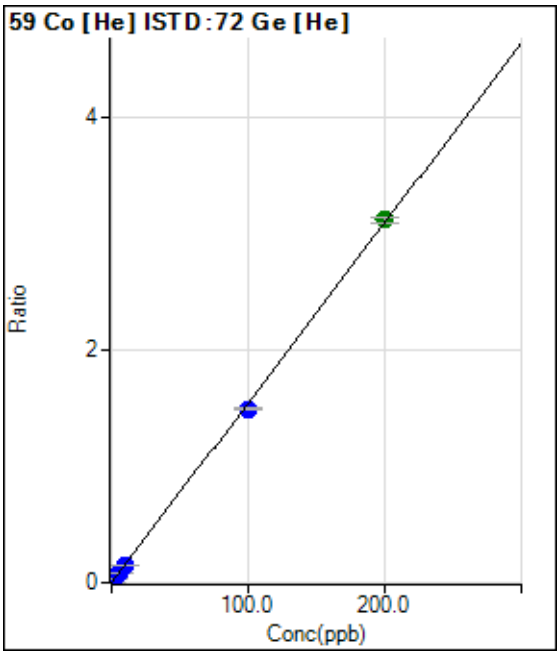


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11621.82	0.0182	P	2.9
2	☐	200.000	208.113	1245911.67	1.9439	A	0.5
3	☐	500.000	523.179	3108891.83	4.8593	A	1.5
4	☐	1000.000	1001.916	5904216.99	9.2893	A	1.8
5	☐	10000.00	9867.858	57812967.47	91.3295	A	1.2
6	☐	20000.00	20065.31	114286558.3	185.690	A	0.9

y = 0.0093 * x + 0.0182
R = 1.0000
DL = 0.1696
BEC = 1.962

Weight: <None>
Min Conc: <None>

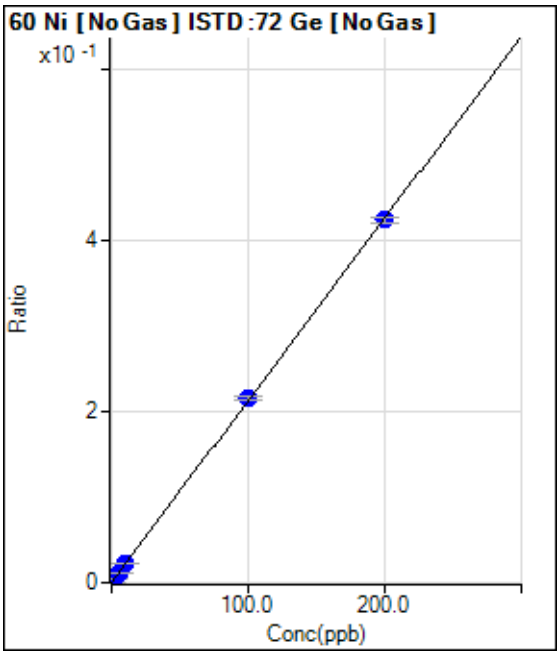
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23.33	0.0000	P	49.9
2	☐	2.000	2.031	20125.04	0.0314	P	3.1
3	☐	5.000	5.052	49931.76	0.0780	P	2.0
4	☐	10.000	9.812	96325.08	0.1515	P	1.5
5	☐	100.000	96.531	943598.42	1.4906	P	1.2
6	☐	200.000	201.742	1917306.43	3.1152	A	1.2

y = 0.0154 * x + 3.6540E-005
R = 0.9998
DL = 0.00354
BEC = 0.002366

Weight: <None>
Min Conc: <None>

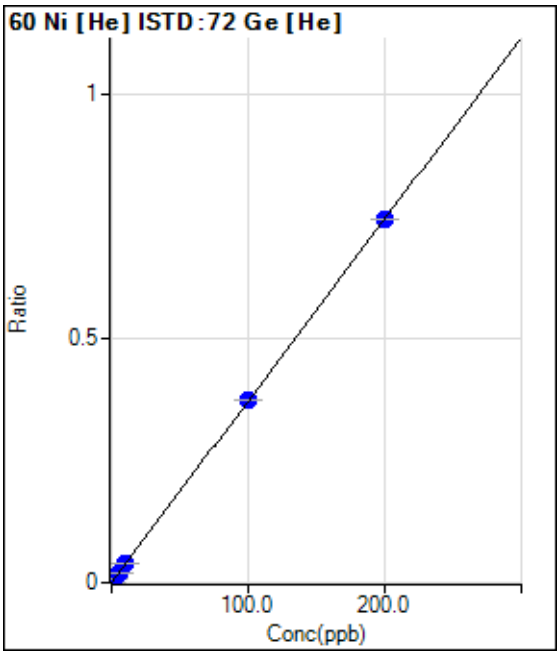


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	456.69	0.0002	P	9.2
2	☐	2.000	2.206	10807.81	0.0049	P	0.4
3	☐	5.000	5.168	24846.29	0.0112	P	0.9
4	☐	10.000	10.246	48051.62	0.0220	P	0.9
5	☐	100.000	101.426	468310.57	0.2158	P	1.2
6	☐	200.000	199.268	900668.50	0.4238	P	1.6

y = 0.0021 * x + 2.0108E-004
R = 1.0000
DL = 0.02623
BEC = 0.0946

Weight: <None>
Min Conc: <None>

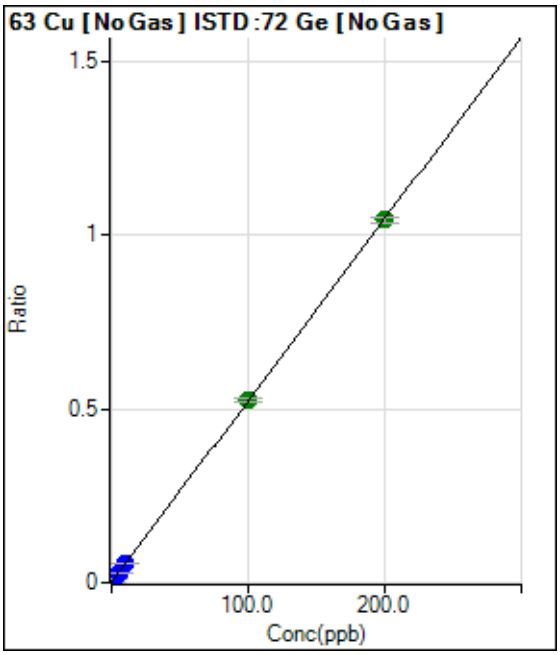
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	160.00	0.0002	P	6.0
2	☐	2.000	2.079	5121.05	0.0080	P	5.9
3	☐	5.000	5.278	12729.42	0.0199	P	0.7
4	☐	10.000	10.349	24645.97	0.0388	P	0.5
5	☐	100.000	100.525	237049.15	0.3745	P	0.3
6	☐	200.000	199.712	457731.56	0.7437	P	0.2

y = 0.0037 * x + 2.4998E-004
R = 1.0000
DL = 0.01207
BEC = 0.06715

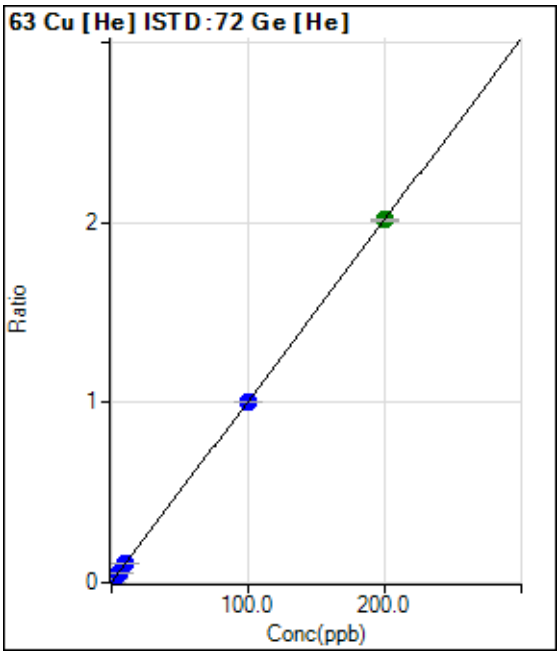
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2083.55	0.0009	P	10.2
2	☐	2.000	2.118	26472.68	0.0120	P	0.9
3	☐	5.000	5.188	62215.50	0.0280	P	0.7
4	☐	10.000	10.315	119768.31	0.0548	P	1.0
5	☐	100.000	100.813	1144347.64	0.5273	A	2.2
6	☐	200.000	199.572	2216957.05	1.0430	A	1.5

y = 0.0052 * x + 9.1709E-004
R = 1.0000
DL = 0.05364
BEC = 0.1756

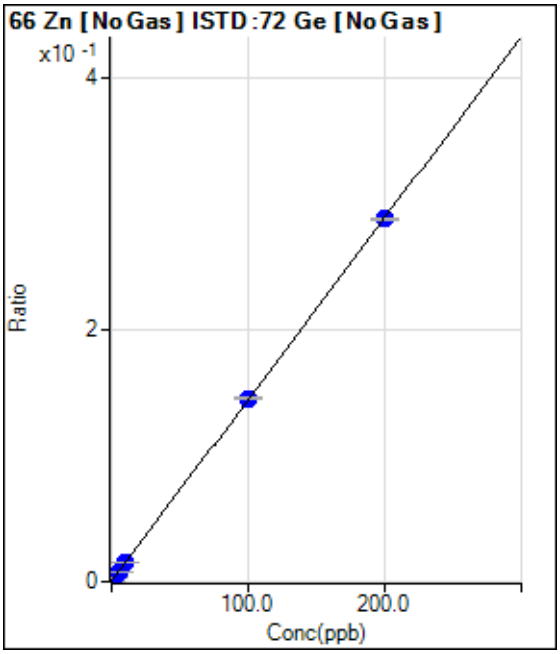
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1020.06	0.0016	P	1.9
2	☐	2.000	2.053	14271.06	0.0223	P	3.8
3	☐	5.000	5.204	34537.62	0.0540	P	1.0
4	☐	10.000	10.126	65809.19	0.1035	P	1.9
5	☐	100.000	99.984	638221.49	1.0082	P	0.2
6	☐	200.000	199.996	1240269.96	2.0150	A	0.5

y = 0.0101 * x + 0.0016
R = 1.0000
DL = 0.008798
BEC = 0.1583

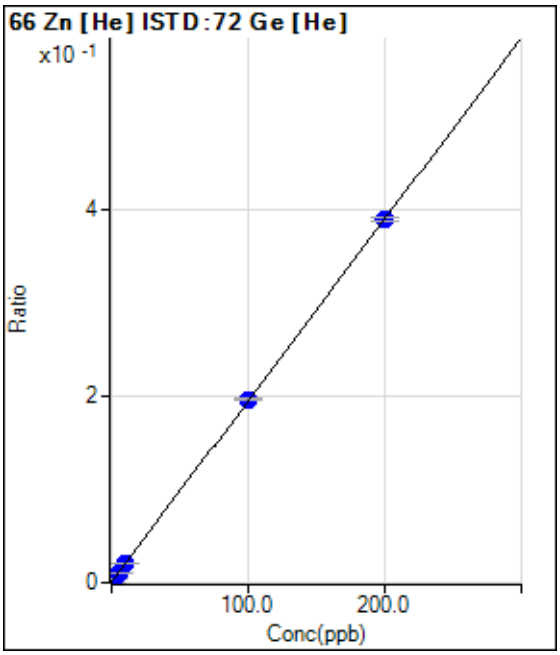
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1003.39	0.0004	P	5.3
2	☐	2.000	2.230	8065.86	0.0037	P	3.1
3	☐	5.000	5.170	17501.46	0.0079	P	4.4
4	☐	10.000	10.147	32883.56	0.0150	P	1.5
5	☐	100.000	100.800	315694.41	0.1455	P	1.7
6	☐	200.000	199.586	611311.95	0.2876	P	0.6

y = 0.0014 * x + 4.4174E-004
R = 1.0000
DL = 0.04897
BEC = 0.307

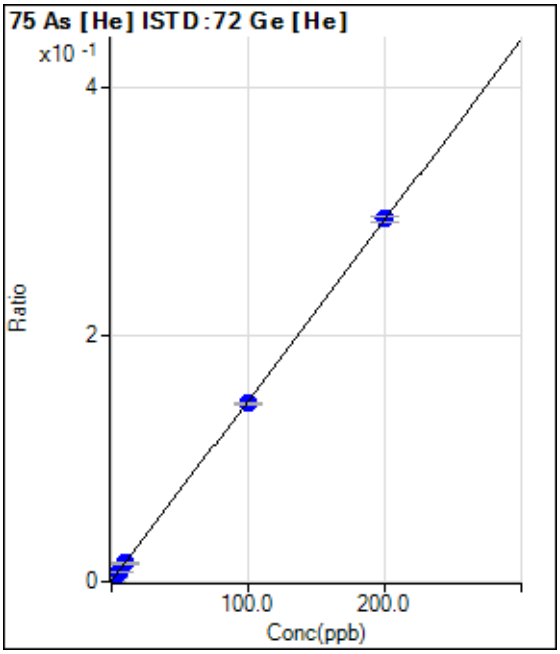
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	386.68	0.0006	P	12.2
2	☐	2.000	2.178	3097.08	0.0048	P	2.7
3	☐	5.000	5.119	6745.12	0.0105	P	1.6
4	☐	10.000	9.928	12636.10	0.0199	P	2.3
5	☐	100.000	100.550	123952.96	0.1958	P	1.2
6	☐	200.000	199.724	239018.89	0.3884	P	1.2

y = 0.0019 * x + 6.0378E-004
R = 1.0000
DL = 0.1137
BEC = 0.311

Weight: <None>
Min Conc: <None>

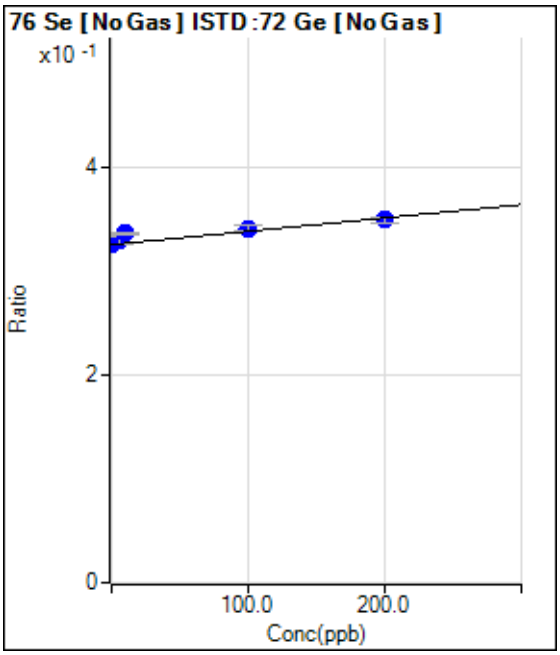


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	206.67	0.0003	P	0.8
2	☐	2.000	2.065	2143.52	0.0033	P	4.5
3	☐	5.000	4.872	4767.54	0.0075	P	4.4
4	☐	10.000	9.902	9414.43	0.0148	P	0.7
5	☐	100.000	98.562	91497.80	0.1445	P	1.3
6	☐	200.000	200.727	180971.35	0.2940	P	1.4

y = 0.0015 * x + 3.2291E-004
R = 1.0000
DL = 0.005068
BEC = 0.2207

Weight: <None>
Min Conc: <None>

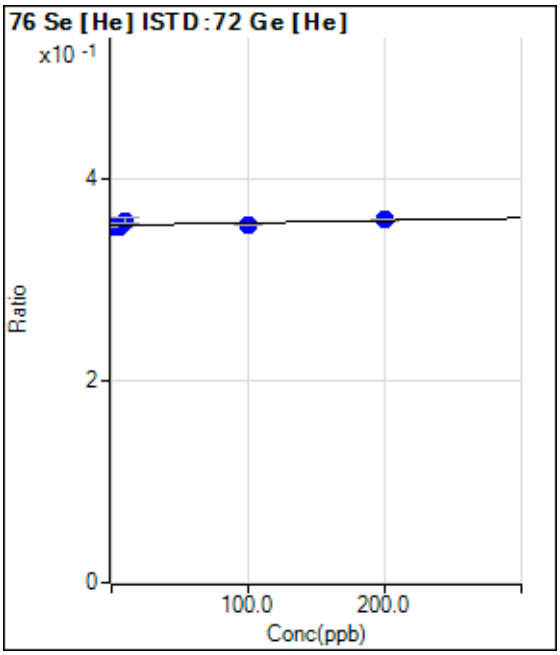
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	740927.67	0.3262	P	1.1
2	☐	2.000	33.635	730556.00	0.3306	P	0.9
3	☐	5.000	27.309	732391.57	0.3297	P	2.0
4	☐	10.000	84.187	736904.28	0.3371	P	0.9
5	☐	100.000	121.060	741799.44	0.3418	P	1.5
6	☐	200.000	184.887	744005.69	0.3500	P	1.5

y = 1.2883E-004 * x + 0.3262
R = 0.9312
DL = 80.84
BEC = 2532

Weight: <None>
Min Conc: <None>

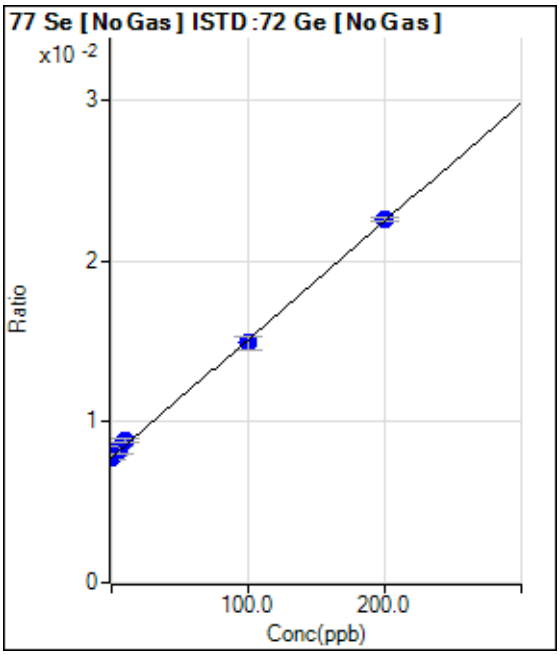


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226980.31	0.3547	P	0.9
2	☐	2.000	-57.573	226427.92	0.3533	P	1.2
3	☐	5.000	-48.630	226173.09	0.3535	P	0.8
4	☐	10.000	192.514	228311.90	0.3592	P	1.6
5	☐	100.000	41.881	225153.53	0.3557	P	0.6
6	☐	200.000	221.871	221516.23	0.3599	P	0.3

y = 2.3588E-005 * x + 0.3547
R = 0.6395
DL = 390.6
BEC = 1.504E+04

Weight: <None>
Min Conc: <None>

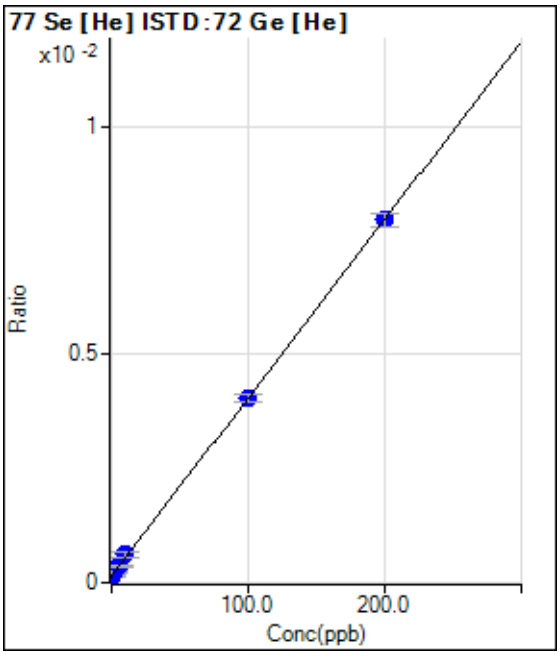
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17685.21	0.0078	P	4.1
2	☐	2.000	3.872	17835.41	0.0081	P	3.8
3	☐	5.000	6.251	18316.05	0.0082	P	5.5
4	☐	10.000	14.557	19360.83	0.0089	P	3.0
5	☐	100.000	97.334	32382.52	0.0149	P	5.6
6	☐	200.000	201.055	47898.69	0.0225	P	1.0

y = 7.3345E-005 * x + 0.0078
R = 0.9996
DL = 12.92
BEC = 106.2

Weight: <None>
Min Conc: <None>

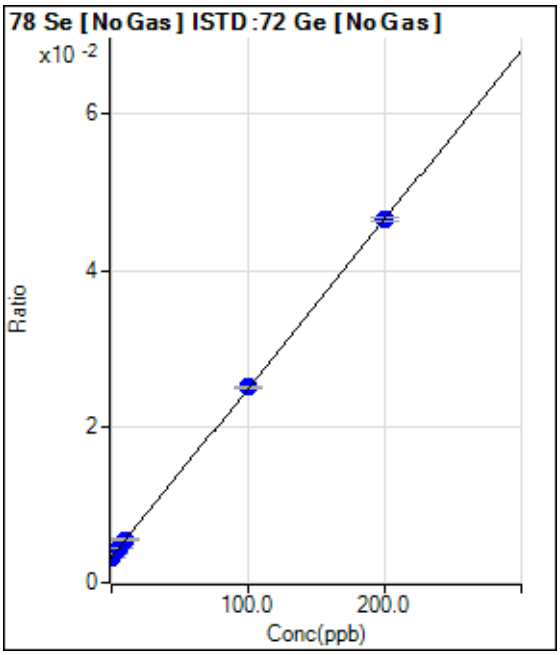


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.33	0.0001	P	49.6
2	☐	2.000	2.129	146.67	0.0002	P	24.2
3	☐	5.000	5.474	230.01	0.0004	P	11.4
4	☐	10.000	12.129	393.35	0.0006	P	16.5
5	☐	100.000	99.922	2560.29	0.0040	P	4.1
6	☐	200.000	199.919	4890.98	0.0079	P	4.0

y = 3.9016E-005 * x + 1.4592E-004
R = 1.0000
DL = 5.564
BEC = 3.74

Weight: <None>
Min Conc: <None>

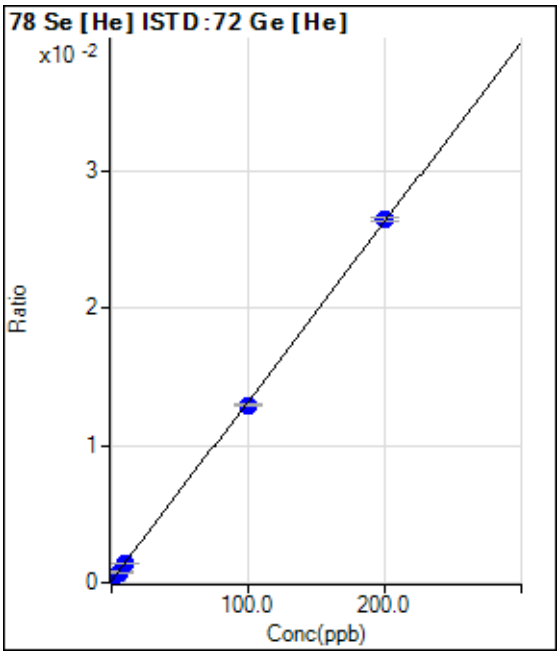
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7428.84	0.0033	P	1.9
2	☐	2.000	2.428	8389.41	0.0038	P	3.7
3	☐	5.000	5.221	9773.72	0.0044	P	2.1
4	☐	10.000	10.250	11998.91	0.0055	P	3.6
5	☐	100.000	100.541	54306.32	0.0250	P	1.5
6	☐	200.000	199.707	98780.18	0.0465	P	1.2

y = 2.1633E-004 * x + 0.0033
R = 1.0000
DL = 0.8491
BEC = 15.12

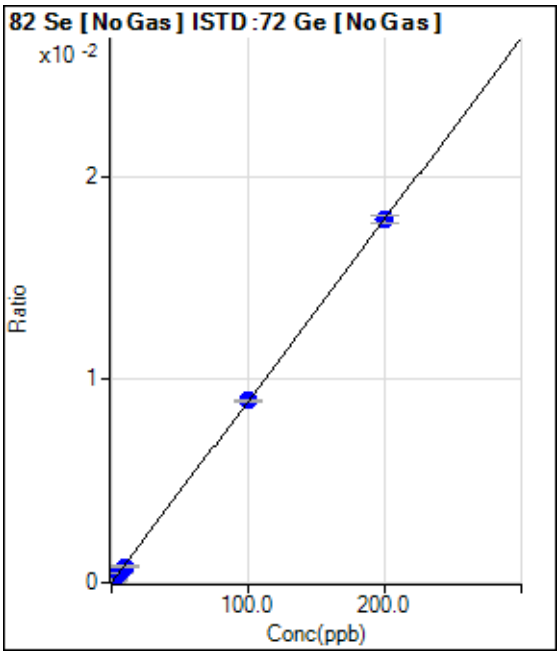
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0001	P	26.9
2	☐	2.000	2.083	258.00	0.0004	P	4.1
3	☐	5.000	4.662	473.34	0.0007	P	9.6
4	☐	10.000	9.826	899.36	0.0014	P	5.0
5	☐	100.000	97.873	8183.83	0.0129	P	0.7
6	☐	200.000	201.080	16261.81	0.0264	P	0.9

y = 1.3075E-004 * x + 1.3037E-004
R = 0.9999
DL = 0.8037
BEC = 0.9971

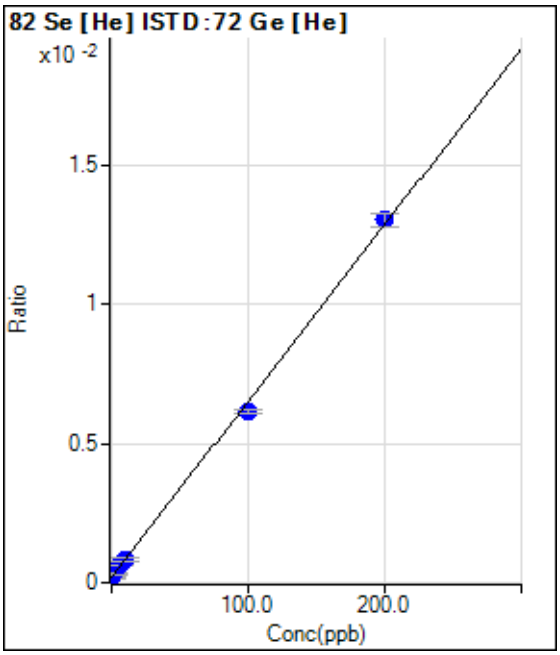
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-87.87	0.0000	P	-126.6
2	☐	2.000	2.015	312.16	0.0001	P	59.1
3	☐	5.000	5.346	976.36	0.0004	P	6.0
4	☐	10.000	8.818	1641.94	0.0008	P	17.0
5	☐	100.000	100.118	19360.86	0.0089	P	1.4
6	☐	200.000	199.991	37961.18	0.0179	P	2.0

y = 8.9490E-005 * x - 3.8770E-005
R = 1.0000
DL = 1.645
BEC = -0.4332

Weight: <None>
Min Conc: <None>

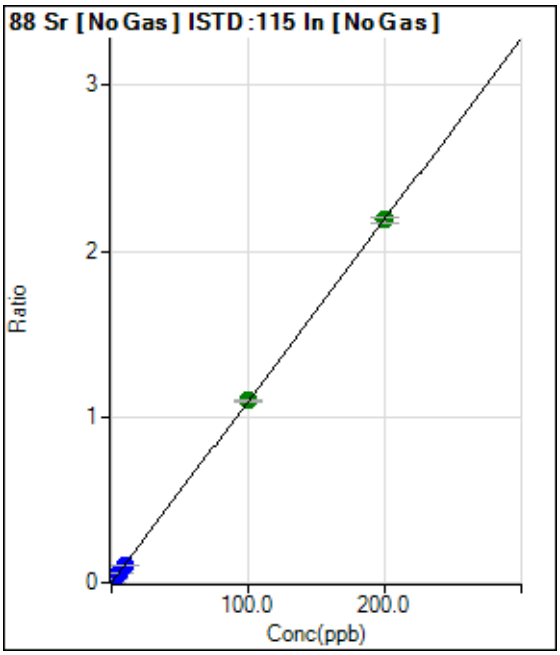


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	123.33	0.0002	P	32.5
2	☐	2.000	1.891	200.01	0.0003	P	26.9
3	☐	5.000	6.587	390.01	0.0006	P	2.5
4	☐	10.000	9.803	516.69	0.0008	P	21.5
5	☐	100.000	94.222	3897.31	0.0062	P	2.1
6	☐	200.000	202.860	8022.56	0.0130	P	3.6

y = 6.3298E-005 * x + 1.9265E-004
R = 0.9994
DL = 2.967
BEC = 3.044

Weight: <None>
Min Conc: <None>

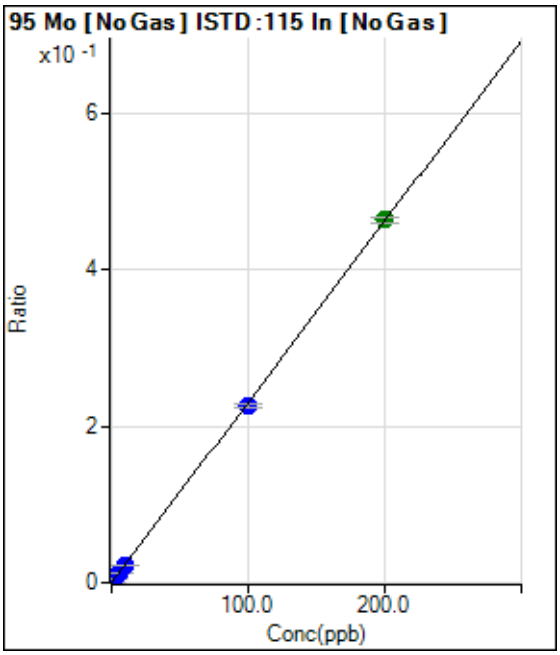
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	773.37	0.0003	P	7.1
2	☐	2.000	1.985	61102.76	0.0220	P	1.5
3	☐	5.000	4.946	150404.51	0.0544	P	1.7
4	☐	10.000	9.668	293825.98	0.1061	P	0.8
5	☐	100.000	100.251	2936487.25	1.0979	A	1.5
6	☐	200.000	199.893	5728334.92	2.1888	A	1.3

y = 0.0109 * x + 2.8175E-004
R = 1.0000
DL = 0.005487
BEC = 0.02573

Weight: <None>
Min Conc: <None>

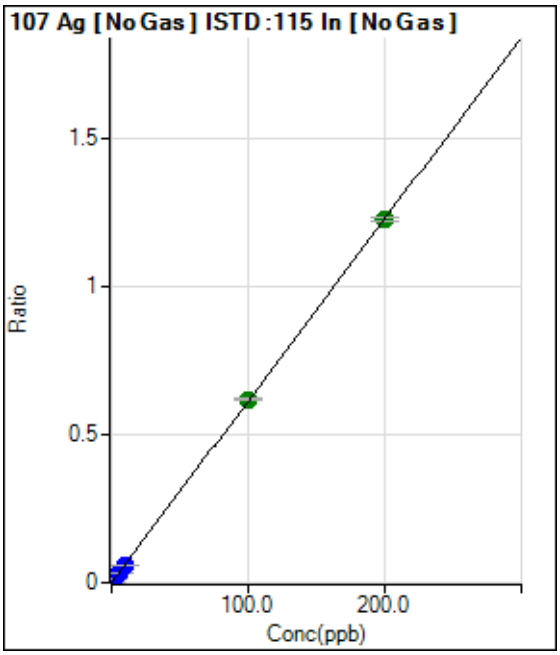


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	126.67	0.0000	P	35.3
2	☐	2.000	1.975	12772.98	0.0046	P	1.7
3	☐	5.000	4.930	31534.33	0.0114	P	3.1
4	☐	10.000	9.448	60443.71	0.0218	P	1.0
5	☐	100.000	98.243	606031.62	0.2266	P	1.8
6	☐	200.000	200.908	1212551.99	0.4633	A	1.4

y = 0.0023 * x + 4.6051E-005
R = 0.9999
DL = 0.02113
BEC = 0.01997

Weight: <None>
Min Conc: <None>

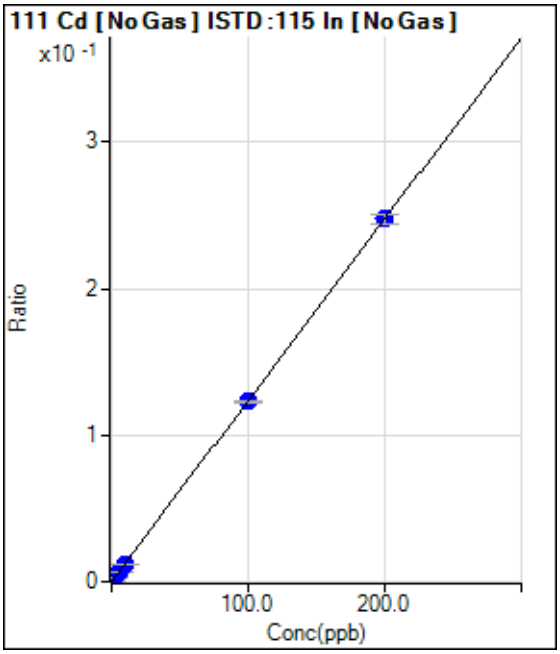
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	606.69	0.0002	P	21.5
2	☐	2.000	2.049	35528.01	0.0128	P	3.6
3	☐	5.000	4.985	85172.99	0.0308	P	2.3
4	☐	10.000	9.767	166643.77	0.0602	P	0.5
5	☐	100.000	100.722	1654933.47	0.6187	A	1.5
6	☐	200.000	199.650	3209075.78	1.2262	A	1.1

y = 0.0061 * x + 2.2092E-004
R = 1.0000
DL = 0.02322
BEC = 0.03598

Weight: <None>
Min Conc: <None>

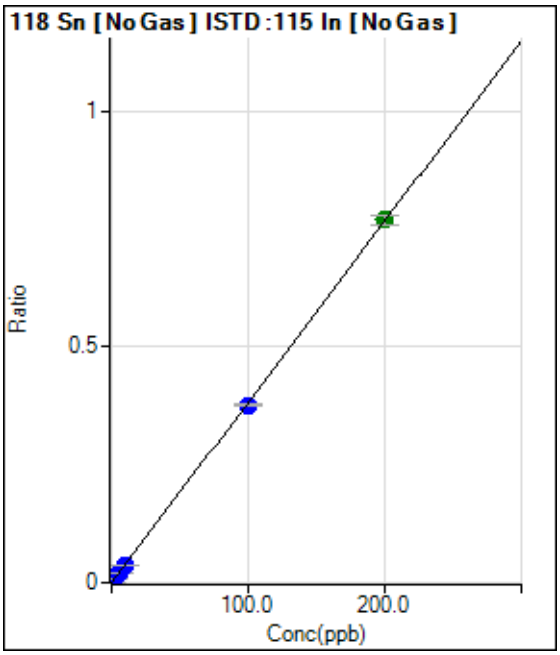


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	2.011	6911.93	0.0025	P	2.4
3	☐	5.000	5.115	17485.13	0.0063	P	0.9
4	☐	10.000	9.982	34184.59	0.0123	P	1.5
5	☐	100.000	99.459	329056.28	0.1230	P	1.5
6	☐	200.000	200.269	648102.18	0.2477	P	2.5

y = 0.0012 * x + 2.4084E-006
R = 1.0000
DL = 0.005059
BEC = 0.001947

Weight: <None>
Min Conc: <None>

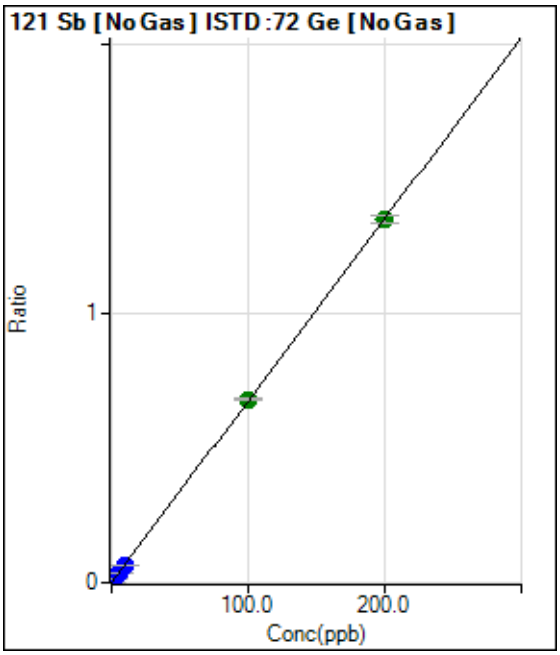
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1630.13	0.0006	P	3.9
2	☐	2.000	1.974	22599.78	0.0081	P	1.7
3	☐	5.000	4.980	54248.97	0.0196	P	1.8
4	☐	10.000	9.502	102232.54	0.0369	P	2.0
5	☐	100.000	98.042	1004328.55	0.3755	P	1.2
6	☐	200.000	201.005	2012759.04	0.7692	A	2.4

y = 0.0038 * x + 5.9405E-004
R = 0.9999
DL = 0.0183
BEC = 0.1554

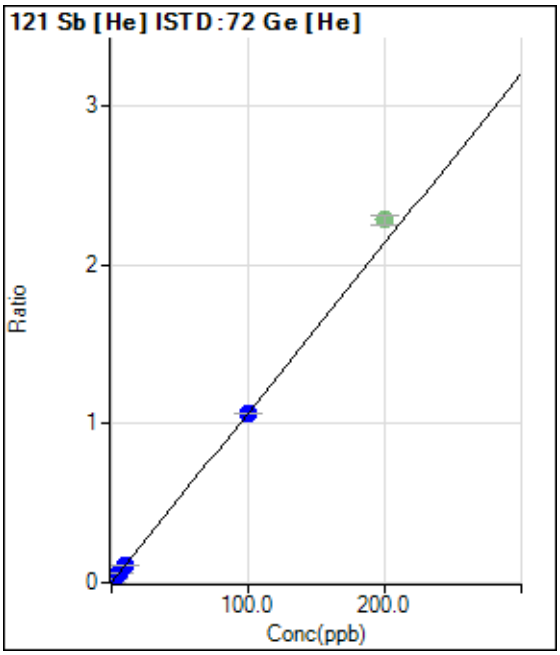
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1500.11	0.0007	P	2.6
2	☐	2.000	2.021	31581.58	0.0143	P	3.0
3	☐	5.000	4.896	74793.22	0.0337	P	2.7
4	☐	10.000	9.752	145221.82	0.0664	P	0.5
5	☐	100.000	100.831	1477120.03	0.6806	A	1.7
6	☐	200.000	199.599	2862292.46	1.3467	A	2.1

y = 0.0067 * x + 6.6050E-004
R = 1.0000
DL = 0.007728
BEC = 0.09794

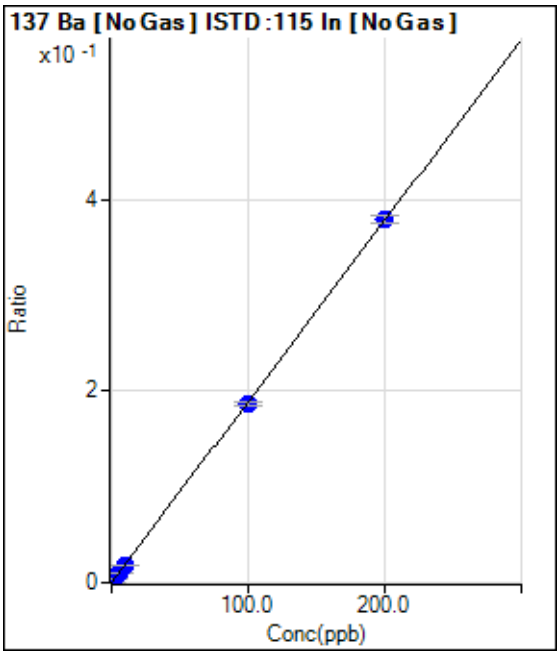
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	626.69	0.0010	P	9.5
2	☐	2.000	2.045	14618.34	0.0228	P	4.7
3	☐	5.000	5.105	35488.31	0.0555	P	2.0
4	☐	10.000	9.884	67684.31	0.1065	P	2.1
5	☐	100.000	100.005	676429.65	1.0685	P	0.4
6	☑	200.000		1404937.43	2.2828	A	2.7

y = 0.0107 * x + 9.7876E-004
R = 1.0000
DL = 0.02613
BEC = 0.09169

Weight: <None>
Min Conc: <None>

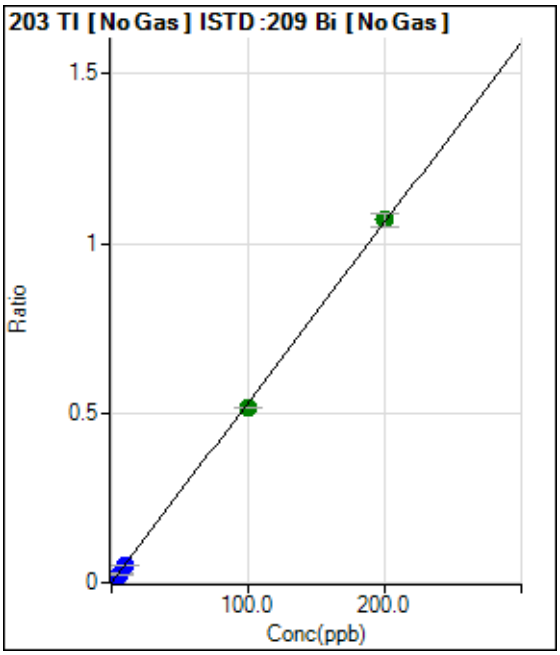


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	210.01	0.0001	P	22.4
2	☐	2.000	2.000	10687.89	0.0039	P	2.8
3	☐	5.000	4.927	25896.13	0.0094	P	1.8
4	☐	10.000	9.794	51378.48	0.0186	P	0.8
5	☐	100.000	99.164	500659.55	0.1872	P	2.3
6	☐	200.000	200.430	989926.52	0.3783	P	2.1

y = 0.0019 * x + 7.6363E-005
R = 1.0000
DL = 0.02722
BEC = 0.04047

Weight: <None>
Min Conc: <None>

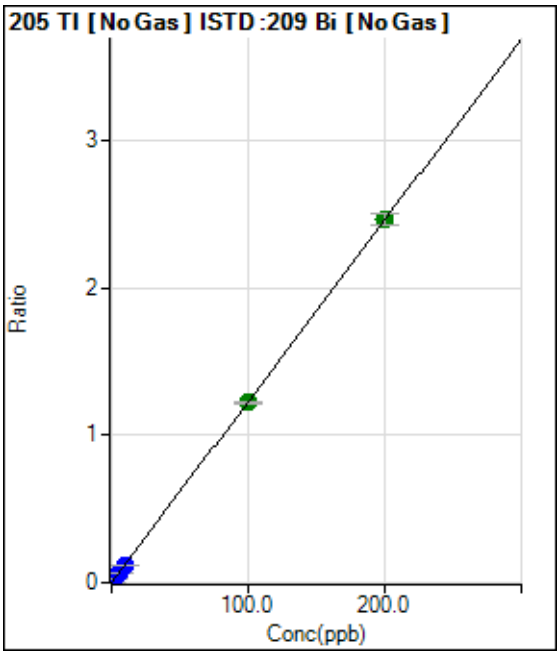
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	430.02	0.0001	P	7.7
2	☐	2.000	1.915	30758.23	0.0103	P	1.5
3	☐	5.000	4.732	76232.16	0.0253	P	2.1
4	☐	10.000	9.393	148755.23	0.0500	P	2.7
5	☐	100.000	97.288	1507683.88	0.5167	A	0.2
6	☐	200.000	201.394	3011145.06	1.0695	A	4.0

y = 0.0053 * x + 1.4568E-004
R = 0.9999
DL = 0.006343
BEC = 0.02743

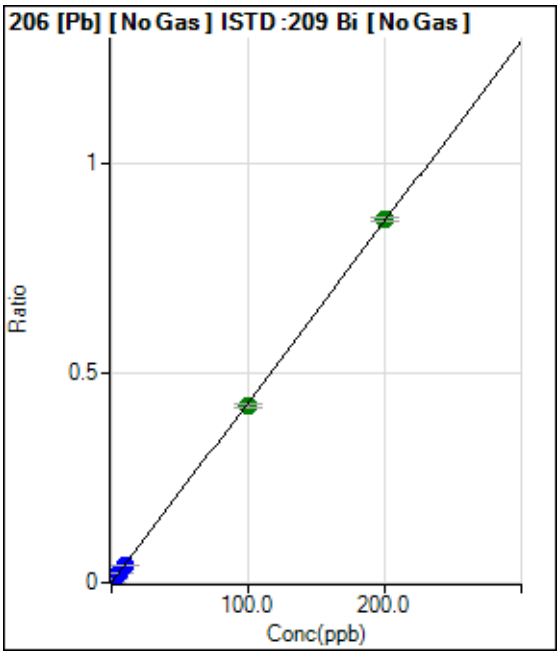
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	956.72	0.0003	P	9.9
2	☐	2.000	1.957	72580.89	0.0243	P	3.1
3	☐	5.000	4.881	181706.17	0.0602	P	1.0
4	☐	10.000	9.765	357306.51	0.1202	P	3.0
5	☐	100.000	99.378	3559750.99	1.2200	A	1.0
6	☐	200.000	200.326	6923610.94	2.4590	A	3.2

y = 0.0123 * x + 3.2388E-004
R = 1.0000
DL = 0.007844
BEC = 0.02639

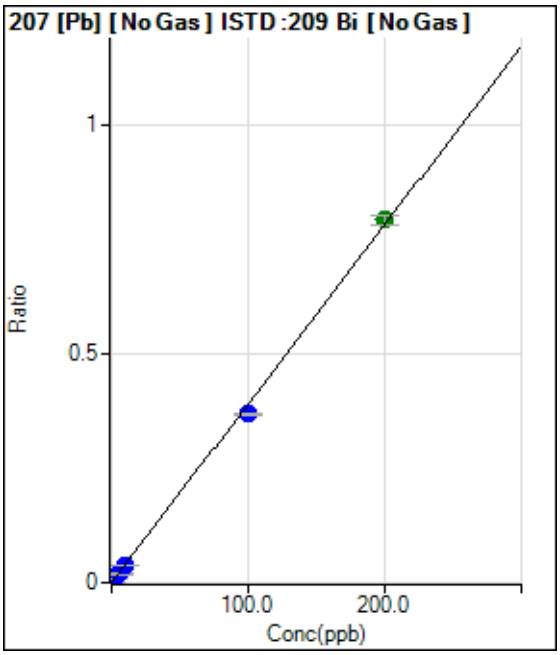
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	533.35	0.0002	P	7.2
2	☐	2.000	1.974	25847.16	0.0087	P	3.3
3	☐	5.000	4.873	63726.07	0.0211	P	2.4
4	☐	10.000	9.514	122144.75	0.0411	P	2.8
5	☐	100.000	98.097	1230665.92	0.4219	A	2.0
6	☐	200.000	200.979	2433813.40	0.8641	A	1.2

y = 0.0043 * x + 1.8072E-004
R = 0.9999
DL = 0.009087
BEC = 0.04204

Weight: <None>
Min Conc: <None>

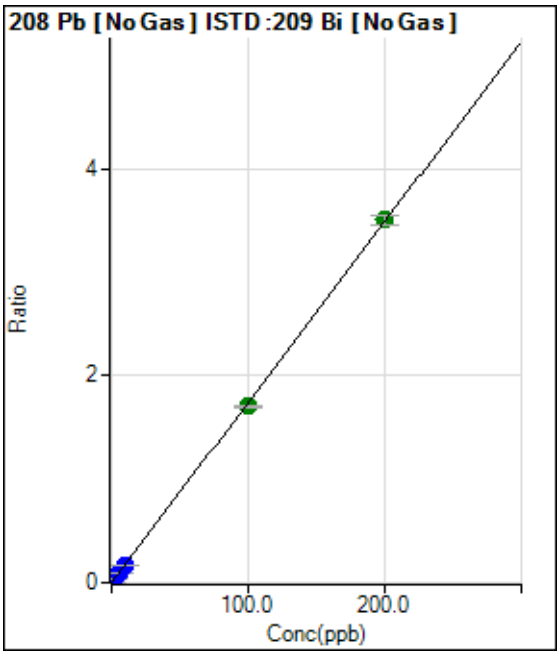


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	473.35	0.0002	P	19.0
2	☐	2.000	1.954	23282.08	0.0078	P	1.9
3	☐	5.000	4.813	57285.76	0.0190	P	2.0
4	☐	10.000	9.545	111519.91	0.0375	P	2.2
5	☐	100.000	94.176	1075299.96	0.3686	P	1.3
6	☐	200.000	202.940	2236128.72	0.7941	A	2.5

y = 0.0039 * x + 1.5986E-004
R = 0.9994
DL = 0.02326
BEC = 0.04086

Weight: <None>
Min Conc: <None>

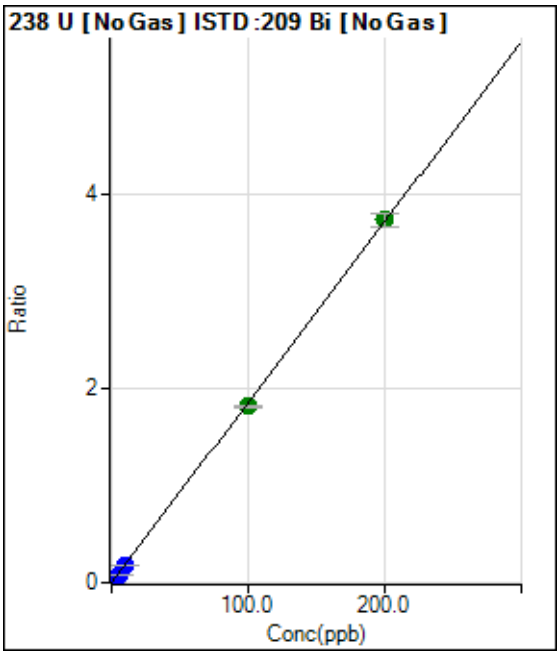
Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1946.76	0.0007	P	4.2
2	☐	2.000	1.975	104629.87	0.0351	P	1.8
3	☐	5.000	4.875	258205.11	0.0856	P	1.2
4	☐	10.000	9.552	496806.38	0.1671	P	3.1
5	☐	100.000	97.667	4966476.25	1.7024	A	1.4
6	☐	200.000	201.192	9872900.16	3.5062	A	2.8

y = 0.0174 * x + 6.5936E-004
R = 0.9999
DL = 0.004747
BEC = 0.03784

Weight: <None>
Min Conc: <None>

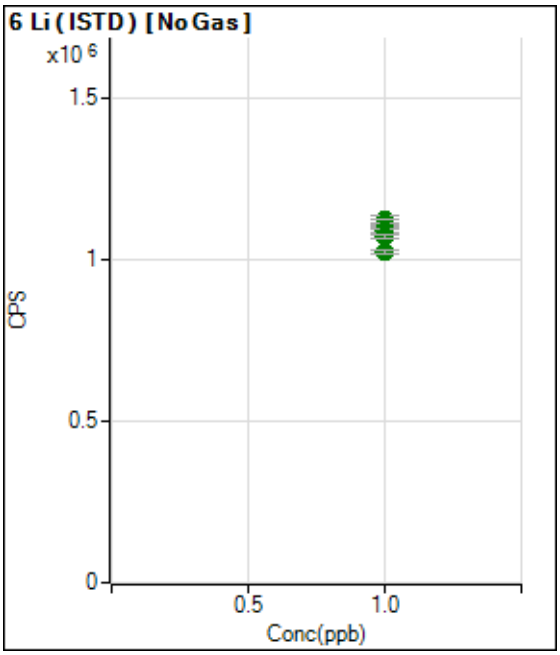


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	220.01	0.0001	P	30.7
2	☐	2.000	1.900	105565.98	0.0354	P	1.4
3	☐	5.000	4.733	265593.44	0.0880	P	1.4
4	☐	10.000	9.414	520504.33	0.1751	P	3.1
5	☐	100.000	97.697	5297871.80	1.8159	A	0.8
6	☐	200.000	201.188	10528030.26	3.7395	A	4.0

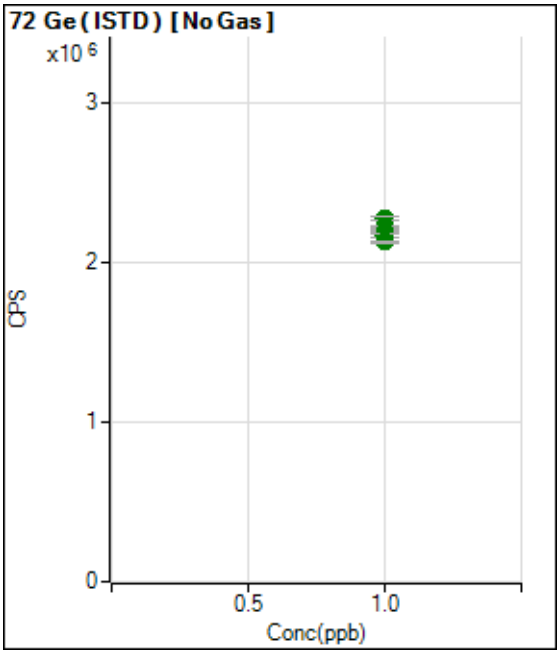
y = 0.0186 * x + 7.4272E-005
R = 0.9999
DL = 0.003679
BEC = 0.003996

Weight: <None>
Min Conc: <None>

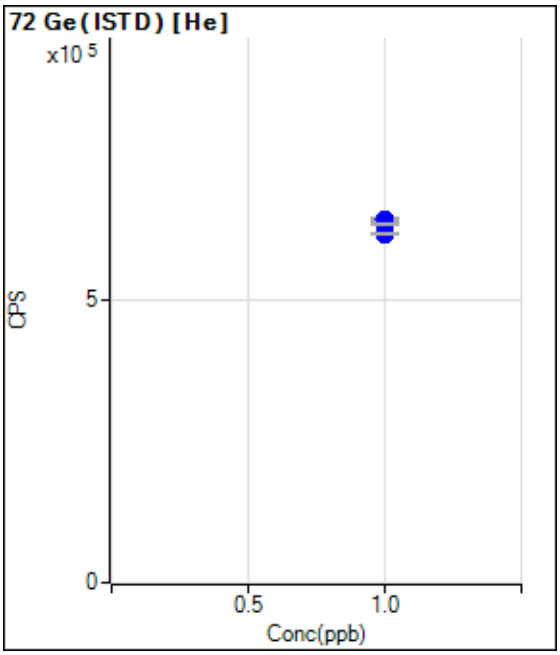
Calibration for 016_ICV.d



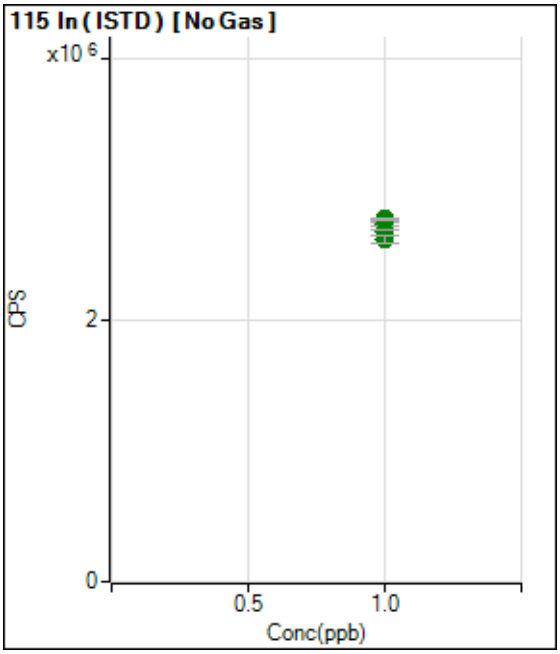
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1124338.69		A	2.8
2	☐	1.000		1112707.01		A	2.1
3	☐	1.000		1097742.66		A	2.8
4	☐	1.000		1090883.46		A	0.7
5	☐	1.000		1072999.98		A	1.4
6	☐	1.000		1027353.48		A	1.2



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2271364.39		A	0.9
2	☐	1.000		2210080.70		A	1.1
3	☐	1.000		2221295.91		A	0.7
4	☐	1.000		2186300.96		A	0.7
5	☐	1.000		2170417.73		A	1.3
6	☐	1.000		2125537.00		A	0.5

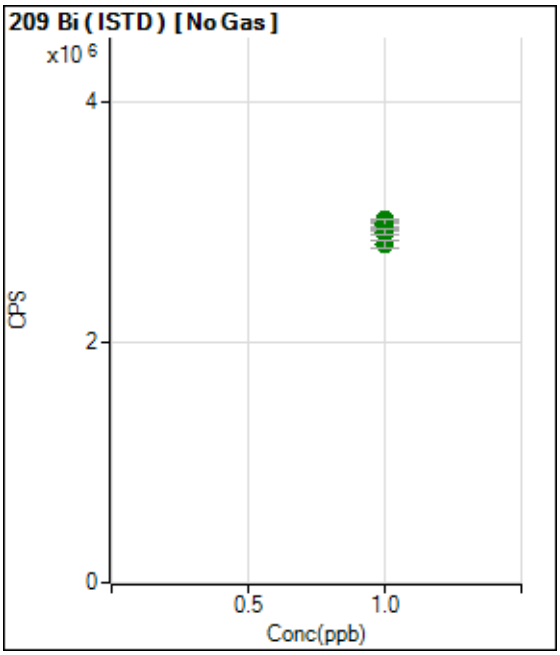


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		639996.29		P	0.9
2	☐	1.000		640908.11		P	1.0
3	☐	1.000		639771.59		P	0.1
4	☐	1.000		635624.74		P	0.5
5	☐	1.000		633049.86		P	0.8
6	☐	1.000		615494.31		P	0.7



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2743963.49		A	1.6
2	☐	1.000		2775854.60		A	0.8
3	☐	1.000		2763083.39		A	1.3
4	☐	1.000		2768474.85		A	0.4
5	☐	1.000		2675134.46		A	1.8
6	☐	1.000		2617459.25		A	1.9

Calibration for 016_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2953474.12		A	2.1
2	☐	1.000		2983294.12		A	1.8
3	☐	1.000		3016542.14		A	0.3
4	☐	1.000		2975062.56		A	2.8
5	☐	1.000		2917707.98		A	1.6
6	☐	1.000		2816965.69		A	2.2

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	017_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:53:38-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.053	150.8	70520	0.7	0.5	
Be	9	1	No Gas	0.007	61.6	60	28.9	0.5	
V	51	2	He	-0.007	-288.7	3713	2.3	2.5	
Cr	52	2	He	0.026	54.4	1353	7.3	2.5	
Fe	56	2	He	0.983	10.0	17425	3.5	100	
Se	78	2	He	-0.007	-1908.1	83	13.8	1	
As	75	2	He	-0.001	-3786.7	206	14.7	2.5	
Ca	44	2	He	0.838	284.0	527	14.5	100	
Na	23	2	He	-0.197	-485.7	67778	1.3	100	
Mg	24	2	He	0.336	15.5	497	6.5	100	
K	39	2	He	-0.198	-622.4	50967	0.8	100	
Mn	55	2	He	0.009	115.6	383	12.9	2.5	
Co	59	2	He	0.000	-528.5	20	86.6	2.5	
Ni	60	2	He	-0.007	-123.5	143	14.5	2.5	
Cu	63	2	He	0.026	24.2	1187	3.2	1	
Zn	66	2	He	-0.005	-1199.2	380	19.0	2.5	
Al	27	2	He	0.043	917.1	663	19.4	5	
B	11	1	No Gas	13.028	16.8	71160	7.0	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	0.230	22.3	29291	1.9	5	
Si	28	1	No Gas	4.625	44.5	247856	4.6	10	
Ag	107	1	No Gas	-0.009	-29.9	470	9.3	2.5	
Cd	111	1	No Gas	0.002	88.0	13	43.3	1	
Sr	88	1	No Gas	0.010	21.4	1083	7.5	2.5	
Mo	95	1	No Gas	0.067	29.3	563	24.2	2.5	
Sn	118	1	No Gas	0.060	16.1	2300	4.6	5	
Sb	121	1	No Gas	0.014	49.7	1663	6.5	2.5	
Ba	137	1	No Gas	0.013	62.7	280	14.3	2.5	
Tl	205	1	No Gas	0.219	74.4	8871	67.5	1	
Tl	203	1	No Gas	0.209	76.1	3708	68.4	1	
Pb	208	1	No Gas	0.026	35.2	3280	15.7	2.5	
U	238	1	No Gas	0.019	53.9	1250	45.7	2.5	
Ca	43	2	He	-5.145	-174.2	10	173.2	100	
Sb	121	2	He	0.014	39.1	727	4.8	2.5	
Ti	47	2	He	0.050	152.0	13	114.6	2.5	
Se	82	1	No Gas	0.298	79.8	-27	-174.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1103430	1.30	1124339	98.14	70	120	
Ge	72	2	He	639367	0.75	639996	99.90	70	120	
Ge	72	1	No Gas	2212240	1.45	2271364	97.40	70	120	
In	115	1	No Gas	2791939	1.61	2743963	101.75	70	120	
Bi	209	1	No Gas	2935513	1.28	2953474	99.39	70	120	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	018LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:55:37-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.991	1.991	3.36	102020	0.00	2	
Be	9	1	No Gas	1.972	1.972	2.11	7732	0.03	2	
V	51	2	He	1.976	1.976	2.56	14567	0.01	2	
Cr	52	2	He	1.975	1.975	4.83	14364	0.01	2	
Fe	56	2	He	207.103	207.103	1.75	1241360	0.02	200	
Se	78	2	He	1.832	1.832	14.30	237	0.77	2	
As	75	2	He	1.985	1.985	2.52	2071	0.10	2	
Ca	44	2	He	200.158	200.158	3.23	7239	2.77	200	
Na	23	2	He	208.081	208.081	0.95	269088	0.08	200	
Mg	24	2	He	216.207	216.207	1.30	123006	0.18	200	
K	39	2	He	203.897	203.897	0.83	174323	0.12	200	
Mn	55	2	He	2.069	2.069	3.21	10017	0.02	2	
Co	59	2	He	2.038	2.038	3.39	20212	0.01	2	
Ni	60	2	He	2.184	2.184	3.66	5378	0.04	2	
Cu	63	2	He	2.123	2.123	1.30	14735	0.01	2	
Zn	66	2	He	2.285	2.285	5.53	3234	0.07	2	
Al	27	2	He	1.991	1.991	19.14	1293	0.15	2	
B	11	1	No Gas	11.098	11.098	5.49	67632	0.02	10	
Al	27	1	No Gas	2.196	2.196	2.32	56923	0.00	2	
Si	28	1	No Gas	11.537	11.537	1.77	292914	0.00	10	
Ag	107	1	No Gas	2.002	2.002	1.47	34749	0.01	2	
Cd	111	1	No Gas	2.056	2.056	2.65	7065	0.03	2	
Sr	88	1	No Gas	1.983	1.983	1.28	61083	0.00	2	
Mo	95	1	No Gas	2.020	2.020	1.68	13060	0.02	2	
Sn	118	1	No Gas	1.974	1.974	2.62	22606	0.01	2	
Sb	121	1	No Gas	2.036	2.036	2.81	31842	0.01	2	
Ba	137	1	No Gas	1.982	1.982	4.70	10591	0.02	2	
Tl	205	1	No Gas	2.035	2.035	1.97	74804	0.00	2	
Tl	203	1	No Gas	1.967	1.967	0.48	31303	0.01	2	
Pb	208	1	No Gas	2.007	2.007	2.23	105296	0.00	2	
U	238	1	No Gas	1.947	1.947	1.36	107218	0.00	2	
Ca	43	2	He	172.468	172.468	16.56	357	48.35	200	
Sb	121	2	He	1.933	1.933	3.23	14598	0.01	2	
Ti	47	2	He	2.098	2.098	11.42	427	0.49	200	
Cu	63	1	No Gas	2.136	2.136	3.07	26707	0.01	2	
Se	82	1	No Gas	1.271	1.271	46.53	165	0.77	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1115071	0.84	1124339	99.18	70	120	
Ge	72	2	He	641677	0.30	639996	100.26	70	120	
Ge	72	1	No Gas	2212500	0.99	2271364	97.41	70	120	
In	115	1	No Gas	2776470	1.26	2743963	101.18	70	120	
Bi	209	1	No Gas	2955948	0.31	2953474	100.08	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	019LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T10:57:36-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.876	4.876	2.58	148031	0.00	5	
Be	9	1	No Gas	4.872	4.872	2.93	19078	0.03	5	
V	51	2	He	4.849	4.849	1.56	30164	0.02	5	
Cr	52	2	He	4.931	4.931	2.51	33976	0.01	5	
Fe	56	2	He	518.069	518.069	0.81	3077468	0.02	500	
Se	78	2	He	4.886	4.886	5.54	492	0.99	5	
As	75	2	He	5.087	5.087	2.96	4967	0.10	5	
Ca	44	2	He	494.585	494.585	2.99	17091	2.89	500	
Na	23	2	He	518.109	518.109	0.95	566461	0.09	500	
Mg	24	2	He	532.163	532.163	1.07	301302	0.18	500	
K	39	2	He	507.440	507.440	1.57	356298	0.14	500	
Mn	55	2	He	5.158	5.158	0.34	24382	0.02	5	
Co	59	2	He	5.038	5.038	1.55	49775	0.01	5	
Ni	60	2	He	5.044	5.044	3.11	12166	0.04	5	
Cu	63	2	He	5.166	5.166	1.49	34277	0.02	5	
Zn	66	2	He	5.142	5.142	2.31	6772	0.08	5	
Al	27	2	He	4.914	4.914	18.62	2227	0.22	5	
B	11	1	No Gas	22.418	22.418	3.96	92836	0.02	25	
Al	27	1	No Gas	5.287	5.287	2.40	99571	0.01	5	
Si	28	1	No Gas	27.416	27.416	5.20	393005	0.01	25	
Ag	107	1	No Gas	4.988	4.988	0.80	85750	0.01	5	
Cd	111	1	No Gas	5.054	5.054	3.39	17385	0.03	5	
Sr	88	1	No Gas	4.889	4.889	3.30	149518	0.00	5	
Mo	95	1	No Gas	4.912	4.912	3.19	31601	0.02	5	
Sn	118	1	No Gas	4.945	4.945	2.36	54202	0.01	5	
Sb	121	1	No Gas	5.026	5.026	1.43	75845	0.01	5	
Ba	137	1	No Gas	4.957	4.957	1.43	26210	0.02	5	
Tl	205	1	No Gas	4.962	4.962	1.23	184055	0.00	5	
Tl	203	1	No Gas	4.792	4.792	1.06	76933	0.01	5	
Pb	208	1	No Gas	4.829	4.829	0.94	254924	0.00	5	
U	238	1	No Gas	4.745	4.745	1.05	265376	0.00	5	
Ca	43	2	He	500.274	500.274	15.83	993	50.36	500	
Sb	121	2	He	4.791	4.791	4.55	35124	0.01	5	
Ti	47	2	He	4.858	4.858	13.31	980	0.50	5	
Cu	63	1	No Gas	5.305	5.305	2.10	62819	0.01	5	
Se	82	1	No Gas	5.341	5.341	16.12	966	0.55	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1117113	2.01	1124339	99.36	70	120	
Ge	72	2	He	639550	0.77	639996	99.93	70	120	
Ge	72	1	No Gas	2195297	1.78	2271364	96.65	70	120	

Sample Report

In	115	1	No Gas	2779829	1.84	2743963	101.31	70	120	
Bi	209	1	No Gas	3006580	1.22	2953474	101.80	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	021ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T11:06:05-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.567	18.5	73829	2.3	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.006	33.1	53	14.3	0	ICSA Main CR1 Failed
V	51	2	He	0.215	7.3	4676	3.0	0	ICSA Main CR1 Failed
Cr	52	2	He	2.114	0.8	14478	1.6	0	ICSA Main CR1 Failed
Fe	56	2	He	102475.200	0.6	576177991	0.8	0	
Se	78	2	He	0.044	497.7	83	20.6	0	ICSA Main CR1 Failed
As	75	2	He	0.176	39.7	353	18.1	0	ICSA Main CR1 Failed
Ca	44	2	He	104051.111	1.7	3316913	0.4	0	
Na	23	2	He	103461.812	0.6	94638945	0.8	0	
Mg	24	2	He	104328.704	1.9	56059486	0.7	0	
K	39	2	He	104925.190	1.3	60005771	0.9	0	
Mn	55	2	He	40.356	1.2	179028	0.5	0	
Co	59	2	He	0.104	15.5	997	14.1	0	ICSA Main CR1 Failed
Ni	60	2	He	0.197	8.4	597	7.0	0	ICSA Main CR1 Failed
Cu	63	2	He	0.234	15.7	2400	9.2	0	ICSA Main CR1 Failed
Zn	66	2	He	1.176	10.8	1753	7.8	0	ICSA Main CR1 Failed
Al	27	2	He	101889.411	2.0	31101080	1.0	0	
B	11	1	No Gas	-0.509	-75.6	38988	1.5	0	ICSA Main CR1 Failed
Al	27	1	No Gas	97646.546	0.4	1294103154	0.7	0	
Si	28	1	No Gas	30.634	3.3	393323	1.9	0	
Ag	107	1	No Gas	0.285	2.3	5018	4.3	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.854	5.6	5841	7.7	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	1.413	2.2	40037	0.6	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	1996.300	2.4	11702565	0.7	0	
Sn	118	1	No Gas	0.086	26.5	2340	8.1	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.122	6.7	3090	3.9	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.484	4.7	2514	2.4	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.005	66.3	1007	9.5	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.000	-809.5	380	13.9	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.089	1.6	5854	1.1	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.004	7.1	410	4.2	0	ICSA Main CR1 Failed
Ca	43	2	He	102659.869	2.0	189625	0.8	0	
Sb	121	2	He	0.115	12.6	1340	6.0	0	ICSA Main CR1 Failed
Ti	47	2	He	2090.091	2.5	399210	1.4	0	
Se	82	1	No Gas	-0.345	-150.5	-145	-66.4	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1036564	0.60	1124339	92.19	70	120	
Ge	72	2	He	607640	1.28	639996	94.94	70	120	
Ge	72	1	No Gas	2086234	0.31	2271364	91.85	70	120	
In	115	1	No Gas	2543169	2.64	2743963	92.68	70	120	
Bi	209	1	No Gas	2650515	0.55	2953474	89.74	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	022ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T11:08:06-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	106.159	3.590	1648143	1.07	100	106.2	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	108.428	3.167	388121	0.12	100	108.4	80	120	
V	51	2	He	108.297	0.670	567724	0.86	100	108.3	80	120	
Cr	52	2	He	106.073	0.629	675763	0.57	100	106.1	80	120	
Fe	56	2	He	116488.336	0.821	659274710	1.86	100	116488.3	80	120	ICSB Main CR1 Failed
Se	78	2	He	112.739	2.846	9093	1.83	100	112.7	80	120	
As	75	2	He	109.691	0.759	98352	0.29	100	109.7	80	120	
Ca	44	2	He	116732.950	0.516	3745802	1.28	100	116732.9	80	120	ICSB Main CR1 Failed
Na	23	2	He	117290.367	0.185	107979202	1.04	100	117290.4	80	120	ICSB Main CR1 Failed
Mg	24	2	He	120510.953	1.237	65179502	0.62	100	120511.0	80	120	ICSB Main CR1 Failed
K	39	2	He	120563.936	0.965	69389629	0.10	100	120563.9	80	120	ICSB Main CR1 Failed
Mn	55	2	He	108.622	0.724	484489	1.25	100	108.6	80	120	ICSB Main CR1 Failed
Co	59	2	He	104.656	1.139	988309	0.97	100	104.7	80	120	
Ni	60	2	He	106.539	0.614	242693	0.63	100	106.5	80	120	
Cu	63	2	He	104.092	1.422	641815	0.80	100	104.1	80	120	
Zn	66	2	He	106.811	1.656	127185	1.69	100	106.8	80	120	
Al	27	2	He	105169.817	1.056	32313530	0.53	100	105169.8	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	562.192	2.966	1209330	0.50	100	562.2	80	120	
Al	27	1	No Gas	100344.275	0.677	1356049153	0.89	100	100344.3	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	614.801	0.816	4053791	0.85	100	614.8	80	120	
Ag	107	1	No Gas	104.703	0.842	1630506	2.02	100	104.7	80	120	
Cd	111	1	No Gas	107.594	0.498	337326	1.11	100	107.6	80	120	
Sr	88	1	No Gas	112.759	1.033	3130232	1.32	100	112.8	80	120	
Mo	95	1	No Gas	2210.324	1.609	12919626	1.17	100	2210.3	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	107.894	1.054	1047268	0.14	100	107.9	80	120	
Sb	121	1	No Gas	104.114	0.954	1494984	0.19	100	104.1	80	120	
Ba	137	1	No Gas	108.647	0.895	519896	0.58	100	108.6	80	120	
Tl	205	1	No Gas	109.168	1.461	3564482	1.65	100	109.2	80	120	
Tl	203	1	No Gas	108.043	3.250	1525737	0.69	100	108.0	80	120	
Pb	208	1	No Gas	107.671	2.032	4990897	0.88	100	107.7	80	120	
U	238	1	No Gas	110.837	4.283	5476823	2.17	100	110.8	80	120	
Ca	43	2	He	116553.321	1.202	216697	0.30	100	116553.3	80	120	ICSB Main CR1 Failed
Sb	121	2	He	107.141	0.472	700076	1.09	100	107.1	80	120	
Ti	47	2	He	2266.755	0.663	435825	0.55	100	2266.8	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	104.172	0.859	1159102	0.51	100	104.2	80	120	
Se	82	1	No Gas	108.659	2.142	20601	1.35	100	108.7	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1048106	3.31	1124339	93.22	70	120	
Ge	72	2	He	611576	1.04	639996	95.56	70	120	
Ge	72	1	No Gas	2127356	0.79	2271364	93.66	70	120	
In	115	1	No Gas	2534985	1.18	2743963	92.38	70	120	
Bi	209	1	No Gas	2660411	2.89	2953474	90.08	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	092_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:32:55-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	95.166	3.481	1492529	2.08	100	95.2	90	110	
Be	9	1	No Gas	96.588	1.177	347713	0.63	100	96.6	90	110	
V	51	2	He	98.144	0.779	534212	0.58	100	98.1	90	110	
Cr	52	2	He	94.917	0.132	627609	0.99	100	94.9	90	110	
Fe	56	2	He	9919.187	3.227	58254054	2.91	10000	99.2	90	110	
Se	78	2	He	93.043	0.537	7803	0.94	100	93.0	90	110	
As	75	2	He	94.574	0.732	88024	1.21	100	94.6	90	110	
Ca	44	2	He	9616.421	0.928	320631	0.38	10000	96.2	90	110	
Na	23	2	He	9965.295	0.545	9581145	0.67	10000	99.7	90	110	
Mg	24	2	He	9982.812	2.560	5602725	2.09	10000	99.8	90	110	
K	39	2	He	9728.162	1.631	5856226	0.77	10000	97.3	90	110	
Mn	55	2	He	96.789	0.967	447984	0.80	100	96.8	90	110	
Co	59	2	He	96.665	1.280	947222	0.96	100	96.7	90	110	
Ni	60	2	He	100.716	1.027	238075	1.01	100	100.7	90	110	
Cu	63	2	He	98.286	0.486	628922	0.37	100	98.3	90	110	
Zn	66	2	He	98.565	0.549	121820	1.21	100	98.6	90	110	
Al	27	2	He	106.021	2.172	34443	1.33	100	106.0	90	110	
B	11	1	No Gas	510.998	2.857	1108947	1.67	500	102.2	90	110	
Al	27	1	No Gas	109.371	1.351	1629920	0.92	100	109.4	90	110	
Si	28	1	No Gas	690.607	1.388	4910101	1.29	5000	13.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.396	0.304	1729153	2.05	100	98.4	90	110	
Cd	111	1	No Gas	98.899	1.453	349857	0.70	100	98.9	90	110	
Sr	88	1	No Gas	99.241	1.722	3108518	0.45	100	99.2	90	110	
Mo	95	1	No Gas	94.272	1.401	621921	0.84	100	94.3	90	110	
Sn	118	1	No Gas	99.925	1.938	1094915	3.37	100	99.9	90	110	
Sb	121	1	No Gas	102.168	1.136	1590990	1.05	100	102.2	90	110	
Ba	137	1	No Gas	100.018	0.696	540130	1.58	100	100.0	90	110	
Tl	205	1	No Gas	101.080	3.663	3962912	2.32	100	101.1	90	110	
Tl	203	1	No Gas	98.449	1.778	1670341	1.51	100	98.4	90	110	
Pb	208	1	No Gas	97.909	1.649	5451527	1.24	100	97.9	90	110	
U	238	1	No Gas	92.733	2.708	5505140	1.41	100	92.7	90	110	
Ca	43	2	He	9750.968	2.468	18830	2.09	10000	97.5	90	110	
Sb	121	2	He	101.463	0.927	687932	0.17	100	101.5	90	110	
Ti	47	2	He	96.321	0.620	19220	0.89	100	96.3	90	110	
Cu	63	1	No Gas	93.160	1.390	1124311	0.99	100	93.2	90	110	
Se	82	1	No Gas	95.712	3.213	19671	3.38	100	95.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1053444	1.49	1124339	93.69	70	120	
Ge	72	2	He	634601	0.85	639996	99.16	70	120	
Ge	72	1	No Gas	2306959	0.44	2271364	101.57	70	120	
In	115	1	No Gas	2860847	2.14	2743963	104.26	70	120	
Bi	209	1	No Gas	3194685	1.51	2953474	108.17	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	093_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:34:49-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.055	-20.7	70356	0.8	0.5	
Be	9	1	No Gas	-0.003	-160.7	23	68.9	0.5	
V	51	2	He	0.345	4.0	5688	0.2	2.5	
Cr	52	2	He	-0.035	-40.7	953	9.0	2.5	
Fe	56	2	He	0.256	51.4	13257	4.7	100	
Se	78	2	He	-0.064	-236.5	79	14.9	2	
As	75	2	He	0.079	28.9	283	6.2	2.5	
Ca	44	2	He	3.222	281.3	614	50.6	100	
Na	23	2	He	36.958	2.8	104596	0.4	100	
Mg	24	2	He	0.997	21.3	880	15.0	100	
K	39	2	He	-3.684	-70.4	49375	2.0	100	
Mn	55	2	He	-0.006	-50.9	313	4.9	2.5	
Co	59	2	He	0.002	3.4	40	0.0	2.5	
Ni	60	2	He	-0.028	-32.9	93	24.7	2.5	
Cu	63	2	He	0.010	98.5	1097	6.6	2	
Zn	66	2	He	0.011	431.7	403	14.1	2.5	
Al	27	2	He	0.103	1016.7	687	48.2	5	
B	11	1	No Gas	0.048	2859.1	43685	7.7	0.5	
Al	27	1	No Gas	-0.228	-52.4	23788	7.5	5	
Si	28	1	No Gas	0.156	195.2	227814	0.7	10	
Ag	107	1	No Gas	-0.025	-2.4	197	5.9	2.5	
Cd	111	1	No Gas	0.004	70.4	23	49.5	1	
Sr	88	1	No Gas	0.010	18.7	1133	5.9	2.5	
Mo	95	1	No Gas	0.066	42.1	583	32.7	2.5	
Sn	118	1	No Gas	0.022	272.9	1985	32.9	5	
Sb	121	1	No Gas	0.033	3.0	2030	0.5	2.5	
Ba	137	1	No Gas	-0.006	-40.8	193	6.0	2.5	
Tl	205	1	No Gas	0.255	83.3	10941	75.9	1	
Tl	203	1	No Gas	0.244	88.4	4565	79.8	1	
Pb	208	1	No Gas	0.015	45.4	2897	13.0	2.5	
U	238	1	No Gas	0.016	58.6	1167	47.1	2.5	
Ca	43	2	He	3.274	92.7	27	21.7	100	
Sb	121	2	He	0.022	43.6	787	9.2	2.5	
Ti	47	2	He	0.049	115.4	13	86.6	2.5	
Cu	63	1	No Gas	0.058	9.1	2814	3.0	2.5	
Se	82	1	No Gas	-0.320	-123.3	-155	-51.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Continuing Calibration Blank (CCB) Report

Li	6	1	No Gas	1127831	0.89	1124339	100.31	70	120	
Ge	72	2	He	646079	1.38	639996	100.95	70	120	
Ge	72	1	No Gas	2302581	0.77	2271364	101.37	70	120	
In	115	1	No Gas	2932575	0.87	2743963	106.87	70	120	
Bi	209	1	No Gas	3168282	0.65	2953474	107.27	70	120	

Sample Report

Sample Table

Sample Name	MBLK-166932
Data File Name	094SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:37:20-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.100	0.100	55.16	71564	0.00	2000	
Be	9	1	No Gas	-0.003	-0.003	-78.19	23	-0.01	2000	
V	51	2	He	0.417	0.417	1.88	6148	0.01	2000	
Cr	52	2	He	0.041	0.041	55.11	1480	0.00	2000	
Fe	56	2	He	0.872	0.872	2.75	17118	0.01	200000	
Se	78	2	He	-0.075	-0.075	-140.36	79	-0.10	2000	
As	75	2	He	0.098	0.098	14.68	304	0.03	2000	
Ca	44	2	He	-3.290	-3.290	-97.49	397	-0.83	200000	
Na	23	2	He	35.535	35.535	4.04	104278	0.03	200000	
Mg	24	2	He	5.239	5.239	4.61	3337	0.16	200000	
K	39	2	He	-3.066	-3.066	-24.29	50272	-0.01	200000	
Mn	55	2	He	0.035	0.035	50.76	513	0.01	2000	
Co	59	2	He	0.001	0.001	60.89	33	0.00	2000	
Ni	60	2	He	0.029	0.029	13.79	233	0.01	2000	
Cu	63	2	He	0.089	0.089	24.73	1623	0.01	2000	
Zn	66	2	He	0.139	0.139	34.86	570	0.02	2000	
Al	27	2	He	1.773	1.773	23.69	1243	0.14	2000	
B	11	1	No Gas	-7.444	-7.444	-1.44	26433	-0.03	2000	
Al	27	1	No Gas	2.527	2.527	14.86	65659	0.00	2000	
Si	28	1	No Gas	21.214	21.214	5.04	379113	0.01	2000	
Ag	107	1	No Gas	-0.027	-0.027	-9.12	170	-0.02	2000	
Cd	111	1	No Gas	0.004	0.004	128.22	23	0.02	2000	
Sr	88	1	No Gas	0.014	0.014	16.14	1303	0.00	2000	
Mo	95	1	No Gas	0.004	0.004	140.14	163	0.00	2000	
Sn	118	1	No Gas	-0.044	-0.044	-18.84	1267	0.00	2000	
Sb	121	1	No Gas	-0.002	-0.002	-720.57	1523	0.00	2000	
Ba	137	1	No Gas	-0.003	-0.003	-194.44	210	0.00	2000	
Tl	205	1	No Gas	-0.013	-0.013	-7.32	547	0.00	2000	
Tl	203	1	No Gas	-0.014	-0.014	-18.12	233	-0.01	2000	
Pb	208	1	No Gas	-0.009	-0.009	-12.46	1630	0.00	2000	
U	238	1	No Gas	-0.002	-0.002	-56.54	137	0.00	2000	
Ca	43	2	He	3.137	3.137	95.93	27	11.76	200000	
Sb	121	2	He	0.008	0.008	129.11	697	0.00	2000	
Ti	47	2	He	0.000	0.000	-14210.30	3	-0.01	2000	
Cu	63	1	No Gas	0.109	0.109	9.06	3507	0.00	2000	
Zn	66	1	No Gas	0.198	0.198	5.36	1713	0.01	2000	
Se	82	1	No Gas	0.339	0.339	186.62	-21	-1.64	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1108232	0.53	1124339	98.57	70	120	
Ge	72	2	He	652695	0.98	639996	101.98	70	120	

Sample Report

Ge	72	1	No Gas	2357417	1.05	2271364	103.79	70	120	
In	115	1	No Gas	2980793	1.22	2743963	108.63	70	120	
Bi	209	1	No Gas	3293730	1.34	2953474	111.52	70	120	

Sample Report

Sample Table

Sample Name	LCS-166932
Data File Name	095SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:39:20-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	94.344	94.344	0.27	1557215	0.01	2000	
Be	9	1	No Gas	46.306	46.306	1.89	175337	0.03	2000	
V	51	2	He	47.447	47.447	1.96	273467	0.02	2000	
Cr	52	2	He	46.120	46.120	1.44	321158	0.01	2000	
Fe	56	2	He	4666.096	4666.096	0.42	28814677	0.02	200000	
Se	78	2	He	47.200	47.200	1.90	4203	1.12	2000	
As	75	2	He	44.764	44.764	1.65	43906	0.10	2000	
Ca	44	2	He	4691.448	4691.448	2.10	164677	2.85	200000	
Na	23	2	He	4828.267	4828.267	1.75	4915717	0.10	200000	
Mg	24	2	He	4862.143	4862.143	1.45	2868821	0.17	200000	
K	39	2	He	4727.912	4727.912	1.03	3019241	0.16	200000	
Mn	55	2	He	46.279	46.279	0.75	225345	0.02	2000	
Co	59	2	He	46.963	46.963	0.67	483749	0.01	2000	
Ni	60	2	He	49.737	49.737	1.15	123678	0.04	2000	
Cu	63	2	He	48.978	48.978	1.05	329968	0.01	2000	
Zn	66	2	He	49.981	49.981	2.12	65123	0.08	2000	
Al	27	2	He	99.210	99.210	2.35	33922	0.29	2000	
B	11	1	No Gas	270.242	270.242	2.49	637028	0.04	2000	
Al	27	1	No Gas	106.611	106.611	3.30	1654826	0.01	2000	
Si	28	1	No Gas	345.596	345.596	2.37	2676568	0.01	2000	
Ag	107	1	No Gas	48.169	48.169	2.30	875473	0.01	2000	
Cd	111	1	No Gas	49.658	49.658	2.46	181638	0.03	2000	
Sr	88	1	No Gas	97.622	97.622	2.93	3162030	0.00	2000	
Mo	95	1	No Gas	46.818	46.818	3.66	319360	0.01	2000	
Sn	118	1	No Gas	99.673	99.673	2.93	1129367	0.01	2000	
Sb	121	1	No Gas	48.676	48.676	2.38	790027	0.01	2000	
Ba	137	1	No Gas	48.918	48.918	3.03	273209	0.02	2000	
Tl	205	1	No Gas	49.183	49.183	1.43	1975132	0.00	2000	
Tl	203	1	No Gas	45.232	45.232	0.75	785935	0.01	2000	
Pb	208	1	No Gas	46.769	46.769	2.48	2666793	0.00	2000	
U	238	1	No Gas	88.867	88.867	1.07	5401643	0.00	2000	
Ca	43	2	He	4814.941	4814.941	4.76	9784	49.21	200000	
Sb	121	2	He	49.622	49.622	1.10	353984	0.01	2000	
Ti	47	2	He	136.461	136.461	4.10	28613	0.48	2000	
Cu	63	1	No Gas	46.718	46.718	1.35	588239	0.01	2000	
Zn	66	1	No Gas	49.968	49.968	0.58	173785	0.03	2000	
Se	82	1	No Gas	45.934	45.934	2.38	9786	0.47	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1107913	0.73	1124339	98.54	70	120	
Ge	72	2	He	667080	1.19	639996	104.23	70	120	
Ge	72	1	No Gas	2402608	1.84	2271364	105.78	70	120	
In	115	1	No Gas	2958660	2.52	2743963	107.82	70	120	

Sample Report

Bi	209	1	No Gas	3270300	0.81	2953474	110.73	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-12
Data File Name	096SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:41:17-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	27.075	27.075	3.56	466551	0.01	2000	
Be	9	1	No Gas	1.441	1.441	4.16	5154	0.03	2000	
V	51	2	He	11.609	11.609	1.68	65579	0.02	2000	
Cr	52	2	He	304.398	304.398	3.80	1982504	0.02	2000	
Fe	56	2	He	39937.155	39937.155	0.62	231354530	0.02	200000	
Se	78	2	He	2.125	2.125	15.36	255	0.83	2000	
As	75	2	He	17.795	17.795	0.53	16502	0.11	2000	
Ca	44	2	He	21897.678	21897.678	1.25	719610	3.04	200000	
Na	23	2	He	218668.526	218668.526	0.73	206003624	0.11	200000	>LDR
Mg	24	2	He	17264.899	17264.899	0.95	9558792	0.18	200000	
K	39	2	He	1137.196	1137.196	0.80	719526	0.16	200000	
Mn	55	2	He	987.093	987.093	1.32	4503750	0.02	2000	
Co	59	2	He	22.663	22.663	1.85	219071	0.01	2000	
Ni	60	2	He	87.241	87.241	1.22	203445	0.04	2000	
Cu	63	2	He	3769.993	3769.993	1.26	23758850	0.02	2000	>LDR
Zn	66	2	He	196.823	196.823	0.29	239588	0.08	2000	
Al	27	2	He	1411.860	1411.860	1.94	444647	0.32	2000	
B	11	1	No Gas	13.204	13.204	7.01	67481	0.02	2000	
Al	27	1	No Gas	1433.568	1433.568	3.72	20514696	0.01	2000	
Si	28	1	No Gas	19831.213	19831.213	0.49	131356608	0.02	2000	>LDR
Ag	107	1	No Gas	0.118	0.118	11.98	2647	0.00	2000	
Cd	111	1	No Gas	0.480	0.480	8.51	1670	0.03	2000	
Sr	88	1	No Gas	503.269	503.269	0.87	15447604	0.00	2000	
Mo	95	1	No Gas	4.972	4.972	0.60	32273	0.02	2000	
Sn	118	1	No Gas	3.660	3.660	2.39	40898	0.01	2000	
Sb	121	1	No Gas	0.360	0.360	7.54	6945	0.01	2000	
Ba	137	1	No Gas	632.485	632.485	1.76	3345839	0.02	2000	
Tl	205	1	No Gas	0.300	0.300	65.16	11954	0.00	2000	
Tl	203	1	No Gas	0.295	0.295	69.91	5115	0.01	2000	
Pb	208	1	No Gas	81.826	81.826	2.45	4248287	0.00	2000	
U	238	1	No Gas	1.322	1.322	3.14	73396	0.00	2000	
Ca	43	2	He	22244.053	22244.053	1.74	42349	52.53	200000	
Sb	121	2	He	0.363	0.363	0.81	3040	0.01	2000	
Ti	47	2	He	7.311	7.311	20.44	1440	0.51	2000	
Cu	63	1	No Gas	3557.160	3557.160	1.25	41785921	0.01	2000	>LDR
Zn	66	1	No Gas	195.565	195.565	1.16	633969	0.03	2000	
Se	82	1	No Gas	1.963	1.963	38.03	308	0.64	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1041080	2.88	1124339	92.59	70	120	
Ge	72	2	He	626018	1.03	639996	97.82	70	120	
Ge	72	1	No Gas	2249644	0.70	2271364	99.04	70	120	
In	115	1	No Gas	2803281	0.55	2743963	102.16	70	120	
Bi	209	1	No Gas	2979056	1.51	2953474	100.87	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-13
Data File Name	097SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:43:19-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	26.570	26.570	1.61	459841	0.01	2000	
Be	9	1	No Gas	0.804	0.804	4.38	2895	0.03	2000	
V	51	2	He	1.228	1.228	1.43	10186	0.01	2000	
Cr	52	2	He	148.151	148.151	0.70	962252	0.02	2000	
Fe	56	2	He	2698.894	2698.894	2.41	15587661	0.02	200000	
Se	78	2	He	1.316	1.316	13.11	189	0.70	2000	
As	75	2	He	1.372	1.372	6.71	1455	0.09	2000	
Ca	44	2	He	21582.156	21582.156	2.20	706674	3.05	200000	
Na	23	2	He	212767.417	212767.417	1.52	199724890	0.11	200000	>LDR
Mg	24	2	He	17006.483	17006.483	1.11	9382322	0.18	200000	
K	39	2	He	1330.460	1330.460	1.01	830360	0.16	200000	
Mn	55	2	He	893.368	893.368	2.41	4061382	0.02	2000	
Co	59	2	He	23.999	23.999	2.12	231164	0.01	2000	
Ni	60	2	He	85.974	85.974	0.96	199797	0.04	2000	
Cu	63	2	He	138.798	138.798	0.31	872638	0.02	2000	
Zn	66	2	He	233.634	233.634	0.63	283336	0.08	2000	
Al	27	2	He	225.898	225.898	0.38	71433	0.32	2000	
B	11	1	No Gas	7.279	7.279	1.27	55324	0.01	2000	
Al	27	1	No Gas	226.868	226.868	0.97	3286979	0.01	2000	
Si	28	1	No Gas	17043.793	17043.793	0.78	113557288	0.02	2000	>LDR
Ag	107	1	No Gas	-0.013	-0.013	-33.28	393	0.00	2000	
Cd	111	1	No Gas	0.427	0.427	3.40	1483	0.03	2000	
Sr	88	1	No Gas	459.345	459.345	0.89	14070082	0.00	2000	
Mo	95	1	No Gas	1.636	1.636	2.74	10681	0.02	2000	
Sn	118	1	No Gas	1.857	1.857	2.00	21535	0.01	2000	
Sb	121	1	No Gas	0.086	0.086	9.64	2804	0.00	2000	
Ba	137	1	No Gas	357.448	357.448	2.00	1887104	0.02	2000	
Tl	205	1	No Gas	0.002	0.002	188.02	1073	0.00	2000	
Tl	203	1	No Gas	-0.002	-0.002	-253.14	417	0.00	2000	
Pb	208	1	No Gas	1.768	1.768	0.32	96702	0.00	2000	
U	238	1	No Gas	0.158	0.158	2.50	9247	0.00	2000	
Ca	43	2	He	21672.866	21672.866	0.36	41118	52.71	200000	
Sb	121	2	He	0.118	0.118	8.75	1393	0.01	2000	
Ti	47	2	He	0.188	0.188	47.35	40	0.47	2000	
Cu	63	1	No Gas	135.198	135.198	1.36	1599081	0.01	2000	
Zn	66	1	No Gas	229.869	229.869	0.45	749202	0.03	2000	
Se	82	1	No Gas	1.442	1.442	42.59	205	0.70	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1042355	1.50	1124339	92.71	70	120	
Ge	72	2	He	623803	1.01	639996	97.47	70	120	
Ge	72	1	No Gas	2262238	0.58	2271364	99.60	70	120	
In	115	1	No Gas	2797648	0.87	2743963	101.96	70	120	
Bi	209	1	No Gas	3072976	0.76	2953474	104.05	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-14
Data File Name	098SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:45:18-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.577	4.577	3.79	140032	0.00	2000	
Be	9	1	No Gas	0.191	0.191	6.58	745	0.03	2000	
V	51	2	He	11.333	11.333	0.78	66514	0.02	2000	
Cr	52	2	He	148.206	148.206	5.69	1002603	0.01	2000	
Fe	56	2	He	15885.501	15885.501	0.68	95495609	0.02	200000	
Se	78	2	He	0.605	0.605	18.47	136	0.44	2000	
As	75	2	He	4.766	4.766	2.42	4740	0.10	2000	
Ca	44	2	He	2739.633	2739.633	0.69	93863	2.92	200000	
Na	23	2	He	28370.400	28370.400	1.17	27793450	0.10	200000	
Mg	24	2	He	1859.768	1859.768	2.76	1068823	0.17	200000	
K	39	2	He	373.450	373.450	0.94	280050	0.13	200000	
Mn	55	2	He	71.118	71.118	1.97	337002	0.02	2000	
Co	59	2	He	5.760	5.760	0.71	57800	0.01	2000	
Ni	60	2	He	128.003	128.003	0.69	309667	0.04	2000	
Cu	63	2	He	84.631	84.631	0.29	554471	0.02	2000	
Zn	66	2	He	477.816	477.816	1.03	602926	0.08	2000	
Al	27	2	He	302.087	302.087	0.52	99246	0.30	2000	
B	11	1	No Gas	20.792	20.792	3.75	87210	0.02	2000	
Al	27	1	No Gas	288.741	288.741	3.87	4337162	0.01	2000	
Si	28	1	No Gas	13669.409	13669.409	1.49	94646449	0.01	2000	>LDR
Ag	107	1	No Gas	0.011	0.011	58.48	860	0.00	2000	
Cd	111	1	No Gas	0.056	0.056	13.31	213	0.03	2000	
Sr	88	1	No Gas	77.309	77.309	0.77	2538584	0.00	2000	
Mo	95	1	No Gas	2.843	2.843	2.98	19789	0.01	2000	
Sn	118	1	No Gas	11.423	11.423	2.95	132740	0.01	2000	
Sb	121	1	No Gas	0.445	0.445	8.99	8606	0.01	2000	
Ba	137	1	No Gas	143.298	143.298	1.48	810885	0.02	2000	
Tl	205	1	No Gas	-0.006	-0.006	-72.53	860	0.00	2000	
Tl	203	1	No Gas	-0.009	-0.009	-18.11	333	0.00	2000	
Pb	208	1	No Gas	3.233	3.233	1.09	191566	0.00	2000	
U	238	1	No Gas	0.409	0.409	0.38	25828	0.00	2000	
Ca	43	2	He	2868.608	2868.608	4.13	5685	50.46	200000	
Sb	121	2	He	0.480	0.480	1.18	3964	0.01	2000	
Ti	47	2	He	4.737	4.737	18.77	970	0.49	2000	
Cu	63	1	No Gas	80.674	80.674	1.06	992088	0.01	2000	
Zn	66	1	No Gas	474.107	474.107	0.43	1604106	0.03	2000	
Se	82	1	No Gas	0.376	0.376	175.02	-11	-3.27	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1091723	1.66	1124339	97.10	70	120	
Ge	72	2	He	649554	0.59	639996	101.49	70	120	
Ge	72	1	No Gas	2350091	0.98	2271364	103.47	70	120	
In	115	1	No Gas	2998214	1.33	2743963	109.27	70	120	

Sample Report

Bi	209	1	No Gas	3361857	1.07	2953474	113.83	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-14SD
Data File Name	099SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:47:15-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.969	4.844	17.67	80874	0.00	2000	
Be	9	1	No Gas	0.040	0.199	24.67	175	0.02	2000	
V	51	2	He	2.369	11.844	0.51	16603	0.01	2000	
Cr	52	2	He	29.340	146.699	1.85	195695	0.01	2000	
Fe	56	2	He	3368.782	16843.911	0.47	19884364	0.02	200000	
Se	78	2	He	-0.046	-0.228	-231.15	79	-0.06	2000	
As	75	2	He	0.942	4.709	1.65	1084	0.09	2000	
Ca	44	2	He	556.622	2783.109	0.32	19113	2.91	200000	
Na	23	2	He	5913.496	29567.482	1.90	5739103	0.10	200000	
Mg	24	2	He	386.740	1933.701	0.75	218360	0.18	200000	
K	39	2	He	69.998	349.988	3.20	92908	0.08	200000	
Mn	55	2	He	14.809	74.046	2.23	69145	0.02	2000	
Co	59	2	He	1.218	6.092	2.38	12019	0.01	2000	
Ni	60	2	He	27.315	136.575	1.17	64982	0.04	2000	
Cu	63	2	He	17.868	89.340	0.97	115693	0.02	2000	
Zn	66	2	He	97.467	487.333	0.74	121017	0.08	2000	
Al	27	2	He	53.740	268.698	6.29	17860	0.30	2000	
B	11	1	No Gas	-2.578	-12.888	-14.52	35229	-0.01	2000	
Al	27	1	No Gas	55.261	276.303	7.70	829369	0.01	2000	
Si	28	1	No Gas	2791.218	13956.092	1.28	18972908	0.01	2000	>LDR
Ag	107	1	No Gas	-0.019	-0.094	-19.71	317	-0.01	2000	
Cd	111	1	No Gas	0.021	0.103	33.69	83	0.02	2000	
Sr	88	1	No Gas	15.747	78.733	1.07	517414	0.00	2000	
Mo	95	1	No Gas	0.572	2.862	4.30	4094	0.01	2000	
Sn	118	1	No Gas	2.283	11.417	3.49	27944	0.01	2000	
Sb	121	1	No Gas	0.147	0.737	2.78	3781	0.00	2000	
Ba	137	1	No Gas	29.309	146.547	0.60	165953	0.02	2000	
Tl	205	1	No Gas	-0.017	-0.087	-6.09	367	0.00	2000	
Tl	203	1	No Gas	-0.019	-0.095	-7.52	147	-0.01	2000	
Pb	208	1	No Gas	0.667	3.336	2.20	40477	0.00	2000	
U	238	1	No Gas	0.082	0.410	3.97	5261	0.00	2000	
Ca	43	2	He	545.131	2725.656	11.04	1077	50.63	200000	
Sb	121	2	He	0.165	0.827	11.19	1750	0.01	2000	
Ti	47	2	He	0.699	3.495	47.70	143	0.49	2000	
Cu	63	1	No Gas	17.063	85.317	1.25	205702	0.01	2000	
Zn	66	1	No Gas	97.282	486.410	1.76	320847	0.03	2000	
Se	82	1	No Gas	-0.016	-0.079	-2034.09	-91	0.02	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1051665	2.84	1124339	93.54	70	120	
Ge	72	2	He	637511	0.34	639996	99.61	70	120	
Ge	72	1	No Gas	2285338	1.13	2271364	100.62	70	120	
In	115	1	No Gas	2996368	0.65	2743963	109.20	70	120	

Sample Report

Bi	209	1	No Gas	3295084	0.85	2953474	111.57	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-14MS
Data File Name	100SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:49:15-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	95.897	95.897	1.13	1481744	0.01	2000	
Be	9	1	No Gas	46.143	46.143	1.92	163669	0.03	2000	
V	51	2	He	57.211	57.211	0.83	318180	0.02	2000	
Cr	52	2	He	227.046	227.046	17.54	1524251	0.01	2000	
Fe	56	2	He	20481.100	20481.100	0.68	122287078	0.02	200000	
Se	78	2	He	44.943	44.943	3.24	3875	1.16	2000	
As	75	2	He	48.900	48.900	1.14	46369	0.11	2000	
Ca	44	2	He	7268.117	7268.117	0.11	246510	2.95	200000	
Na	23	2	He	32892.566	32892.566	1.87	31991944	0.10	200000	
Mg	24	2	He	6389.349	6389.349	1.28	3645950	0.18	200000	
K	39	2	He	4950.129	4950.129	1.32	3055456	0.16	200000	
Mn	55	2	He	116.198	116.198	0.63	546730	0.02	2000	
Co	59	2	He	51.550	51.550	0.69	513600	0.01	2000	
Ni	60	2	He	175.464	175.464	1.10	421548	0.04	2000	
Cu	63	2	He	131.568	131.568	1.08	855556	0.02	2000	
Zn	66	2	He	523.318	523.318	1.86	655814	0.08	2000	
Al	27	2	He	412.190	412.190	2.82	134287	0.31	2000	
B	11	1	No Gas	310.640	310.640	2.48	679977	0.05	2000	
Al	27	1	No Gas	424.899	424.899	2.95	6324962	0.01	2000	
Si	28	1	No Gas	14035.478	14035.478	0.04	96493029	0.01	2000	>LDR
Ag	107	1	No Gas	45.237	45.237	1.11	821426	0.01	2000	
Cd	111	1	No Gas	46.893	46.893	2.18	171349	0.03	2000	
Sr	88	1	No Gas	169.766	169.766	2.71	5492050	0.00	2000	
Mo	95	1	No Gas	46.869	46.869	2.31	319450	0.01	2000	
Sn	118	1	No Gas	111.177	111.177	2.11	1257756	0.01	2000	
Sb	121	1	No Gas	48.582	48.582	1.23	765973	0.01	2000	
Ba	137	1	No Gas	190.534	190.534	1.31	1062594	0.02	2000	
Tl	205	1	No Gas	44.834	44.834	3.14	1868764	0.00	2000	
Tl	203	1	No Gas	41.551	41.551	2.40	749426	0.01	2000	
Pb	208	1	No Gas	46.822	46.822	2.20	2771614	0.00	2000	
U	238	1	No Gas	81.524	81.524	1.62	5144142	0.00	2000	
Ca	43	2	He	7562.796	7562.796	1.96	14855	50.91	200000	
Sb	121	2	He	49.465	49.465	0.93	341303	0.01	2000	
Ti	47	2	He	138.328	138.328	3.33	28059	0.49	2000	
Cu	63	1	No Gas	125.092	125.092	1.57	1526228	0.01	2000	
Zn	66	1	No Gas	522.085	522.085	0.51	1753843	0.03	2000	
Se	82	1	No Gas	47.531	47.531	1.63	9835	0.48	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1038009	2.09	1124339	92.32	70	120	
Ge	72	2	He	645184	0.93	639996	100.81	70	120	
Ge	72	1	No Gas	2333378	0.59	2271364	102.73	70	120	
In	115	1	No Gas	2955100	1.56	2743963	107.69	70	120	

Sample Report

Bi	209	1	No Gas	3395304	1.60	2953474	114.96	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-14MSD
Data File Name	101SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:51:11-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	97.445	97.445	3.53	1493725	0.01	2000	
Be	9	1	No Gas	46.791	46.791	2.72	164809	0.03	2000	
V	51	2	He	57.217	57.217	0.78	319475	0.02	2000	
Cr	52	2	He	190.331	190.331	4.74	1283253	0.01	2000	
Fe	56	2	He	20361.248	20361.248	0.03	122050018	0.02	200000	
Se	78	2	He	45.484	45.484	2.09	3937	1.16	2000	
As	75	2	He	49.344	49.344	0.92	46976	0.11	2000	
Ca	44	2	He	7225.889	7225.889	1.45	246045	2.94	200000	
Na	23	2	He	32826.674	32826.674	0.38	32056350	0.10	200000	
Mg	24	2	He	6395.655	6395.655	1.04	3664113	0.17	200000	
K	39	2	He	4961.910	4961.910	1.03	3074442	0.16	200000	
Mn	55	2	He	116.013	116.013	0.30	548015	0.02	2000	
Co	59	2	He	51.340	51.340	1.26	513513	0.01	2000	
Ni	60	2	He	175.071	175.071	0.45	422284	0.04	2000	
Cu	63	2	He	130.831	130.831	1.62	854137	0.02	2000	
Zn	66	2	He	521.778	521.778	0.49	656527	0.08	2000	
Al	27	2	He	382.628	382.628	4.19	125186	0.31	2000	
B	11	1	No Gas	305.219	305.219	3.03	664114	0.05	2000	
Al	27	1	No Gas	388.815	388.815	2.44	5747427	0.01	2000	
Si	28	1	No Gas	14097.102	14097.102	1.38	96186569	0.01	2000	>LDR
Ag	107	1	No Gas	45.614	45.614	0.68	826270	0.01	2000	
Cd	111	1	No Gas	47.704	47.704	0.06	173916	0.03	2000	
Sr	88	1	No Gas	169.470	169.470	1.42	5469925	0.00	2000	
Mo	95	1	No Gas	48.351	48.351	1.57	328774	0.01	2000	
Sn	118	1	No Gas	109.917	109.917	2.40	1240613	0.01	2000	
Sb	121	1	No Gas	48.828	48.828	1.36	764059	0.01	2000	
Ba	137	1	No Gas	193.036	193.036	0.89	1073958	0.02	2000	
Tl	205	1	No Gas	45.944	45.944	3.69	1887533	0.00	2000	
Tl	203	1	No Gas	42.781	42.781	1.93	760566	0.01	2000	
Pb	208	1	No Gas	47.606	47.606	1.41	2777759	0.00	2000	
U	238	1	No Gas	84.350	84.350	1.73	5246068	0.00	2000	
Ca	43	2	He	7505.117	7505.117	1.13	14798	50.72	200000	
Sb	121	2	He	49.342	49.342	1.05	341808	0.01	2000	
Ti	47	2	He	138.269	138.269	1.75	28159	0.49	2000	
Cu	63	1	No Gas	128.494	128.494	1.19	1555971	0.01	2000	
Zn	66	1	No Gas	528.712	528.712	1.99	1762577	0.03	2000	
Se	82	1	No Gas	47.602	47.602	2.84	9776	0.49	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1030891	2.12	1124339	91.69	70	120	
Ge	72	2	He	647724	0.33	639996	101.21	70	120	
Ge	72	1	No Gas	2315985	1.27	2271364	101.96	70	120	
In	115	1	No Gas	2947684	0.50	2743963	107.42	70	120	

Sample Report

Bi	209	1	No Gas	3346581	1.54	2953474	113.31	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-14PDS
Data File Name	102SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T14:53:07-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.766	4.766	1.82	135707	0.00	2000	
Be	9	1	No Gas	114.630	114.630	2.34	405916	0.03	2000	
V	51	2	He	129.220	129.220	0.48	704492	0.02	2000	
Cr	52	2	He	293.796	293.796	17.18	1946226	0.02	2000	
Fe	56	2	He	27414.716	27414.716	0.15	161521321	0.02	200000	
Se	78	2	He	114.873	114.873	2.53	9645	1.19	2000	
As	75	2	He	118.872	118.872	0.67	110944	0.11	2000	
Ca	44	2	He	14003.940	14003.940	1.74	468216	2.99	200000	
Na	23	2	He	39707.497	39707.497	0.29	38099759	0.10	200000	
Mg	24	2	He	13579.239	13579.239	0.97	7646425	0.18	200000	
K	39	2	He	11804.878	11804.878	1.55	7119063	0.17	200000	
Mn	55	2	He	185.110	185.110	0.33	859283	0.02	2000	
Co	59	2	He	122.297	122.297	1.31	1202298	0.01	2000	
Ni	60	2	He	248.097	248.097	1.25	588133	0.04	2000	
Cu	63	2	He	207.677	207.677	3.31	1332060	0.02	2000	
Zn	66	2	He	595.942	595.942	0.54	737012	0.08	2000	
Al	27	2	He	387.601	387.601	3.34	124643	0.31	2000	
B	11	1	No Gas	26.885	26.885	1.59	95319	0.03	2000	
Al	27	1	No Gas	408.917	408.917	5.67	5983241	0.01	2000	
Si	28	1	No Gas	13780.416	13780.416	1.13	93117439	0.01	2000	>LDR
Ag	107	1	No Gas	115.846	115.846	3.33	2038108	0.01	2000	
Cd	111	1	No Gas	119.226	119.226	2.10	422409	0.03	2000	
Sr	88	1	No Gas	82.038	82.038	2.29	2574369	0.00	2000	
Mo	95	1	No Gas	117.466	117.466	2.76	776014	0.02	2000	
Sn	118	1	No Gas	10.282	10.282	0.98	114352	0.01	2000	
Sb	121	1	No Gas	120.272	120.272	1.02	1861623	0.01	2000	
Ba	137	1	No Gas	271.976	271.976	1.14	1470949	0.02	2000	
Tl	205	1	No Gas	113.143	113.143	1.28	4651238	0.00	2000	
Tl	203	1	No Gas	110.186	110.186	1.27	1959752	0.01	2000	
Pb	208	1	No Gas	114.479	114.479	1.88	6681361	0.00	2000	
U	238	1	No Gas	0.435	0.435	0.78	27327	0.00	2000	
Ca	43	2	He	13774.596	13774.596	1.67	26680	51.63	200000	
Sb	121	2	He	122.599	122.599	1.44	833831	0.01	2000	
Ti	47	2	He	119.481	119.481	3.81	23919	0.50	2000	
Cu	63	1	No Gas	193.188	193.188	2.17	2315566	0.01	2000	
Zn	66	1	No Gas	592.099	592.099	2.86	1954599	0.03	2000	
Se	82	1	No Gas	116.058	116.058	4.40	23727	0.49	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1036240	1.26	1124339	92.16	70	120	
Ge	72	2	He	636671	0.51	639996	99.48	70	120	
Ge	72	1	No Gas	2293415	0.58	2271364	100.97	70	120	
In	115	1	No Gas	2865549	2.37	2743963	104.43	70	120	

Sample Report

Bi	209	1	No Gas	3349210	1.80	2953474	113.40	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	104_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:05:06-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	94.281	0.505	1415793	0.95	100	94.3	90	110	
Be	9	1	No Gas	94.744	1.413	326351	0.78	100	94.7	90	110	
V	51	2	He	98.054	0.900	526130	0.30	100	98.1	90	110	
Cr	52	2	He	95.523	0.667	622604	0.69	100	95.5	90	110	
Fe	56	2	He	9832.069	0.518	56924891	0.53	10000	98.3	90	110	
Se	78	2	He	94.275	1.957	7792	1.61	100	94.3	90	110	
As	75	2	He	95.686	0.221	87788	0.73	100	95.7	90	110	
Ca	44	2	He	9511.187	1.067	312622	0.92	10000	95.1	90	110	
Na	23	2	He	9825.322	0.610	9313269	0.97	10000	98.3	90	110	
Mg	24	2	He	9818.000	0.162	5432317	0.62	10000	98.2	90	110	
K	39	2	He	9549.074	2.580	5667885	2.48	10000	95.5	90	110	
Mn	55	2	He	97.432	0.510	444552	0.54	100	97.4	90	110	
Co	59	2	He	97.163	0.325	938587	0.46	100	97.2	90	110	
Ni	60	2	He	101.441	0.725	236388	1.33	100	101.4	90	110	
Cu	63	2	He	98.463	0.527	621118	1.18	100	98.5	90	110	
Zn	66	2	He	98.630	1.071	120169	1.69	100	98.6	90	110	
Al	27	2	He	102.447	1.505	32832	1.14	100	102.4	90	110	
B	11	1	No Gas	500.258	3.214	1039588	2.01	500	100.1	90	110	
Al	27	1	No Gas	106.978	1.590	1572815	1.14	100	107.0	90	110	
Si	28	1	No Gas	670.230	0.981	4706413	1.79	5000	13.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.947	2.316	1731257	0.83	100	99.9	90	110	
Cd	111	1	No Gas	99.492	1.552	347010	0.44	100	99.5	90	110	
Sr	88	1	No Gas	99.592	1.043	3076150	1.50	100	99.6	90	110	
Mo	95	1	No Gas	94.047	1.876	611700	0.75	100	94.0	90	110	
Sn	118	1	No Gas	99.691	0.746	1076809	1.34	100	99.7	90	110	
Sb	121	1	No Gas	102.864	1.152	1579635	0.24	100	102.9	90	110	
Ba	137	1	No Gas	100.530	1.753	535195	0.50	100	100.5	90	110	
Tl	205	1	No Gas	103.495	1.843	3948518	0.84	100	103.5	90	110	
Tl	203	1	No Gas	102.892	1.639	1698404	0.65	100	102.9	90	110	
Pb	208	1	No Gas	100.686	0.833	5454683	0.88	100	100.7	90	110	
U	238	1	No Gas	94.984	2.623	5486265	1.26	100	95.0	90	110	
Ca	43	2	He	9614.292	2.840	18306	3.49	10000	96.1	90	110	
Sb	121	2	He	102.871	0.553	687578	0.84	100	102.9	90	110	
Ti	47	2	He	95.744	1.053	18833	0.91	100	95.7	90	110	
Cu	63	1	No Gas	94.410	2.171	1123569	1.45	100	94.4	90	110	
Se	82	1	No Gas	94.610	3.128	19173	2.98	100	94.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1007953	1.08	1124339	89.65	70	120	
Ge	72	2	He	625570	0.72	639996	97.75	70	120	
Ge	72	1	No Gas	2275203	1.23	2271364	100.17	70	120	
In	115	1	No Gas	2820496	1.49	2743963	102.79	70	120	
Bi	209	1	No Gas	3108287	1.57	2953474	105.24	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	105_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:07:00-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.058	238.6	67494	0.4	0.5	
Be	9	1	No Gas	0.007	64.5	58	30.1	0.5	
V	51	2	He	0.070	34.6	4083	2.4	2.5	
Cr	52	2	He	-0.031	-41.0	960	9.3	2.5	
Fe	56	2	He	0.669	20.5	15389	5.9	100	
Se	78	2	He	-0.062	-348.0	77	23.5	2	
As	75	2	He	0.027	153.5	229	16.0	2.5	
Ca	44	2	He	-5.229	-35.0	320	19.5	100	
Na	23	2	He	25.089	2.1	91022	0.9	100	
Mg	24	2	He	0.430	55.5	543	25.1	100	
K	39	2	He	-5.613	-11.1	47158	1.5	100	
Mn	55	2	He	-0.011	-157.8	287	26.4	2.5	
Co	59	2	He	0.004	27.7	63	18.2	2.5	
Ni	60	2	He	-0.002	-1031.9	153	33.5	2.5	
Cu	63	2	He	0.052	29.8	1337	7.2	2	
Zn	66	2	He	0.016	619.8	400	28.8	2.5	
Al	27	2	He	-0.288	-86.5	550	13.7	5	
B	11	1	No Gas	0.007	33606.2	40687	9.5	0.5	
Al	27	1	No Gas	-0.287	-5.0	22522	1.3	5	
Si	28	1	No Gas	0.242	181.7	224393	1.0	10	
Ag	107	1	No Gas	-0.022	-5.9	247	8.4	2.5	
Cd	111	1	No Gas	0.001	3.1	10	0.0	1	
Sr	88	1	No Gas	0.009	36.7	1100	10.2	2.5	
Mo	95	1	No Gas	0.083	33.5	687	27.5	2.5	
Sn	118	1	No Gas	0.003	583.6	1754	8.8	5	
Sb	121	1	No Gas	0.108	10.3	3137	5.8	2.5	
Ba	137	1	No Gas	-0.008	-122.2	177	32.2	2.5	
Tl	205	1	No Gas	0.251	86.6	10981	79.1	1	
Tl	203	1	No Gas	0.245	85.0	4661	77.2	1	
Pb	208	1	No Gas	0.015	67.5	2937	19.9	2.5	
U	238	1	No Gas	0.015	46.2	1140	37.5	2.5	
Ca	43	2	He	0.102	5113.3	20	50.0	100	
Sb	121	2	He	0.116	8.5	1400	5.2	2.5	
Ti	47	2	He	-0.016	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	0.109	13.1	3364	5.0	2.5	
Se	82	1	No Gas	-0.152	-189.5	-118	-49.0	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Continuing Calibration Blank (CCB) Report

Li	6	1	No Gas	1055355	2.85	1124339	93.86	70	120	
Ge	72	2	He	631874	0.78	639996	98.73	70	120	
Ge	72	1	No Gas	2262188	0.52	2271364	99.60	70	120	
In	115	1	No Gas	2903897	0.93	2743963	105.83	70	120	
Bi	209	1	No Gas	3205346	1.16	2953474	108.53	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-15
Data File Name	106SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:09:00-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.293	3.293	1.50	116575	0.00	2000	
Be	9	1	No Gas	0.094	0.094	21.28	372	0.03	2000	
V	51	2	He	0.598	0.598	5.27	7072	0.01	2000	
Cr	52	2	He	0.894	0.894	2.19	7185	0.01	2000	
Fe	56	2	He	1703.582	1703.582	0.57	10178390	0.02	200000	
Se	78	2	He	0.070	0.070	177.62	90	0.08	2000	
As	75	2	He	1.421	1.421	7.49	1549	0.09	2000	
Ca	44	2	He	6536.405	6536.405	1.46	221657	2.95	200000	
Na	23	2	He	52255.259	52255.259	1.61	50769259	0.10	200000	
Mg	24	2	He	8396.884	8396.884	2.15	4789961	0.18	200000	
K	39	2	He	1208.445	1208.445	0.45	784517	0.15	200000	
Mn	55	2	He	209.121	209.121	1.62	983310	0.02	2000	
Co	59	2	He	6.641	6.641	2.59	66164	0.01	2000	
Ni	60	2	He	6.881	6.881	2.12	16680	0.04	2000	
Cu	63	2	He	6.230	6.230	2.21	41480	0.02	2000	
Zn	66	2	He	60.140	60.140	0.41	75691	0.08	2000	
Al	27	2	He	11.303	11.303	7.45	4317	0.26	2000	
B	11	1	No Gas	81.044	81.044	2.45	211357	0.04	2000	
Al	27	1	No Gas	12.601	12.601	0.87	212426	0.01	2000	
Si	28	1	No Gas	8634.870	8634.870	1.27	58939899	0.01	2000	>LDR
Ag	107	1	No Gas	-0.018	-0.018	-10.91	320	-0.01	2000	
Cd	111	1	No Gas	0.025	0.025	22.93	97	0.03	2000	
Sr	88	1	No Gas	175.583	175.583	1.38	5643974	0.00	2000	
Mo	95	1	No Gas	0.079	0.079	6.68	670	0.01	2000	
Sn	118	1	No Gas	0.007	0.007	343.53	1827	0.00	2000	
Sb	121	1	No Gas	0.125	0.125	18.71	3471	0.00	2000	
Ba	137	1	No Gas	117.954	117.954	0.20	653612	0.02	2000	
Tl	205	1	No Gas	0.003	0.003	82.26	1173	0.00	2000	
Tl	203	1	No Gas	0.001	0.001	767.07	477	0.00	2000	
Pb	208	1	No Gas	0.032	0.032	2.23	3914	0.00	2000	
U	238	1	No Gas	0.182	0.182	2.68	11079	0.00	2000	
Ca	43	2	He	6727.388	6727.388	2.83	13210	50.93	200000	
Sb	121	2	He	0.144	0.144	10.81	1623	0.01	2000	
Ti	47	2	He	0.066	0.066	43.22	17	0.39	2000	
Cu	63	1	No Gas	6.177	6.177	2.38	76733	0.01	2000	
Zn	66	1	No Gas	60.258	60.258	1.25	201580	0.03	2000	
Se	82	1	No Gas	0.122	0.122	599.01	-65	-0.19	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1059614	1.09	1124339	94.24	70	120	
Ge	72	2	He	644935	0.09	639996	100.77	70	120	
Ge	72	1	No Gas	2313546	1.49	2271364	101.86	70	120	
In	115	1	No Gas	2935423	0.26	2743963	106.98	70	120	

Sample Report

Bi	209	1	No Gas	3201874	1.90	2953474	108.41	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-16
Data File Name	107SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:10:59-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.350	0.350	35.94	73636	0.00	2000	
Be	9	1	No Gas	0.112	0.112	15.37	447	0.03	2000	
V	51	2	He	0.374	0.374	10.71	5902	0.01	2000	
Cr	52	2	He	7.323	7.323	3.47	50846	0.01	2000	
Fe	56	2	He	10818.247	10818.247	0.87	65278812	0.02	200000	
Se	78	2	He	-0.216	-0.216	-38.18	67	-0.32	2000	
As	75	2	He	7.488	7.488	1.98	7355	0.10	2000	
Ca	44	2	He	611.198	611.198	0.98	21414	2.85	200000	
Na	23	2	He	5028.891	5028.891	2.61	5001063	0.10	200000	
Mg	24	2	He	796.030	796.030	0.87	459297	0.17	200000	
K	39	2	He	118.636	118.636	2.37	124834	0.10	200000	
Mn	55	2	He	11.762	11.762	1.75	56236	0.02	2000	
Co	59	2	He	0.498	0.498	3.86	5034	0.01	2000	
Ni	60	2	He	3.640	3.640	4.69	9000	0.04	2000	
Cu	63	2	He	7.500	7.500	1.72	50263	0.01	2000	
Zn	66	2	He	53.171	53.171	1.94	67695	0.08	2000	
Al	27	2	He	164.266	164.266	2.14	54461	0.30	2000	
B	11	1	No Gas	-1.238	-1.238	-26.27	39091	0.00	2000	
Al	27	1	No Gas	171.517	171.517	2.42	2562171	0.01	2000	
Si	28	1	No Gas	2004.695	2004.695	0.78	13937648	0.01	2000	>LDR
Ag	107	1	No Gas	-0.023	-0.023	-4.35	230	-0.01	2000	
Cd	111	1	No Gas	0.013	0.013	24.57	57	0.02	2000	
Sr	88	1	No Gas	14.830	14.830	1.36	487000	0.00	2000	
Mo	95	1	No Gas	0.329	0.329	3.44	2410	0.01	2000	
Sn	118	1	No Gas	-0.010	-0.010	-10.38	1660	0.00	2000	
Sb	121	1	No Gas	0.069	0.069	9.03	2627	0.00	2000	
Ba	137	1	No Gas	13.839	13.839	0.47	78426	0.02	2000	
Tl	205	1	No Gas	-0.016	-0.016	-11.03	413	0.00	2000	
Tl	203	1	No Gas	-0.016	-0.016	-35.60	200	-0.01	2000	
Pb	208	1	No Gas	0.149	0.149	5.78	10549	0.00	2000	
U	238	1	No Gas	0.040	0.040	3.66	2674	0.00	2000	
Ca	43	2	He	635.107	635.107	9.31	1280	49.61	200000	
Sb	121	2	He	0.096	0.096	18.01	1303	0.01	2000	
Ti	47	2	He	3.305	3.305	18.85	680	0.49	2000	
Cu	63	1	No Gas	7.587	7.587	1.14	94296	0.01	2000	
Zn	66	1	No Gas	53.153	53.153	0.23	178948	0.03	2000	
Se	82	1	No Gas	-0.309	-0.309	-149.43	-155	0.20	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1081100	2.49	1124339	96.15	70	120	
Ge	72	2	He	651977	1.10	639996	101.87	70	120	
Ge	72	1	No Gas	2326451	0.08	2271364	102.43	70	120	
In	115	1	No Gas	2994368	0.98	2743963	109.13	70	120	

Sample Report

Bi	209	1	No Gas	3239260	0.60	2953474	109.68	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-17
Data File Name	108SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:12:59-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.165	5.165	0.73	144593	0.00	2000	
Be	9	1	No Gas	0.054	0.054	8.19	225	0.02	2000	
V	51	2	He	0.600	0.600	3.85	7034	0.01	2000	
Cr	52	2	He	0.911	0.911	3.63	7255	0.01	2000	
Fe	56	2	He	719.523	719.523	0.54	4279254	0.02	200000	
Se	78	2	He	-0.066	-0.066	-199.40	78	-0.09	2000	
As	75	2	He	0.483	0.483	1.71	660	0.07	2000	
Ca	44	2	He	2091.324	2091.324	1.83	70822	2.95	200000	
Na	23	2	He	29192.364	29192.364	1.41	28217044	0.10	200000	
Mg	24	2	He	2286.472	2286.472	1.59	1296460	0.18	200000	
K	39	2	He	555.905	555.905	0.36	386330	0.14	200000	
Mn	55	2	He	44.834	44.834	0.46	209789	0.02	2000	
Co	59	2	He	3.480	3.480	2.64	34471	0.01	2000	
Ni	60	2	He	8.667	8.667	2.34	20840	0.04	2000	
Cu	63	2	He	7.062	7.062	2.06	46594	0.02	2000	
Zn	66	2	He	31.479	31.479	2.36	39561	0.08	2000	
Al	27	2	He	15.742	15.742	16.76	5722	0.28	2000	
B	11	1	No Gas	23.697	23.697	1.13	90637	0.03	2000	
Al	27	1	No Gas	15.091	15.091	9.40	247586	0.01	2000	
Si	28	1	No Gas	10931.309	10931.309	0.97	74114737	0.01	2000	>LDR
Ag	107	1	No Gas	-0.021	-0.021	-3.49	263	-0.01	2000	
Cd	111	1	No Gas	0.072	0.072	7.20	267	0.03	2000	
Sr	88	1	No Gas	47.459	47.459	1.09	1520607	0.00	2000	
Mo	95	1	No Gas	0.032	0.032	17.19	350	0.01	2000	
Sn	118	1	No Gas	-0.012	-0.012	-73.45	1603	0.00	2000	
Sb	121	1	No Gas	0.054	0.054	8.31	2364	0.00	2000	
Ba	137	1	No Gas	82.762	82.762	0.54	457052	0.02	2000	
Tl	205	1	No Gas	-0.014	-0.014	-13.88	480	0.00	2000	
Tl	203	1	No Gas	-0.015	-0.015	-20.80	210	-0.01	2000	
Pb	208	1	No Gas	0.218	0.218	3.09	14530	0.00	2000	
U	238	1	No Gas	0.006	0.006	9.66	590	0.00	2000	
Ca	43	2	He	2244.845	2244.845	5.81	4394	51.09	200000	
Sb	121	2	He	0.074	0.074	23.68	1133	0.01	2000	
Ti	47	2	He	0.182	0.182	27.52	40	0.46	2000	
Cu	63	1	No Gas	6.797	6.797	1.18	83721	0.01	2000	
Zn	66	1	No Gas	31.388	31.388	1.75	104859	0.03	2000	
Se	82	1	No Gas	-0.290	-0.290	-196.57	-149	0.20	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1058063	1.15	1124339	94.11	70	120	
Ge	72	2	He	640971	0.30	639996	100.15	70	120	
Ge	72	1	No Gas	2299882	1.79	2271364	101.26	70	120	
In	115	1	No Gas	2924977	0.90	2743963	106.60	70	120	

Sample Report

Bi	209	1	No Gas	3257121	0.43	2953474	110.28	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-18
Data File Name	109SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:14:58-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.984	1.984	3.44	98716	0.00	2000	
Be	9	1	No Gas	0.369	0.369	2.66	1395	0.03	2000	
V	51	2	He	5.785	5.785	0.80	36136	0.02	2000	
Cr	52	2	He	9.485	9.485	0.62	65855	0.01	2000	
Fe	56	2	He	2394.713	2394.713	1.09	14533200	0.02	200000	
Se	78	2	He	0.208	0.208	82.20	103	0.20	2000	
As	75	2	He	1.072	1.072	7.10	1240	0.09	2000	
Ca	44	2	He	711.840	711.840	1.69	24983	2.85	200000	
Na	23	2	He	7125.148	7125.148	2.68	7093235	0.10	200000	
Mg	24	2	He	665.034	665.034	0.88	385772	0.17	200000	
K	39	2	He	812.540	812.540	1.02	553154	0.15	200000	
Mn	55	2	He	18.837	18.837	4.19	90294	0.02	2000	
Co	59	2	He	1.809	1.809	1.80	18326	0.01	2000	
Ni	60	2	He	26.653	26.653	2.52	65179	0.04	2000	
Cu	63	2	He	231.982	231.982	2.59	1531396	0.02	2000	
Zn	66	2	He	115.227	115.227	0.45	147003	0.08	2000	
Al	27	2	He	1479.288	1479.288	1.87	487678	0.30	2000	
B	11	1	No Gas	2.674	2.674	16.26	47453	0.01	2000	
Al	27	1	No Gas	1541.686	1541.686	0.38	22823477	0.01	2000	
Si	28	1	No Gas	8431.887	8431.887	1.04	57919039	0.01	2000	>LDR
Ag	107	1	No Gas	0.027	0.027	17.62	1150	0.00	2000	
Cd	111	1	No Gas	0.077	0.077	14.66	290	0.03	2000	
Sr	88	1	No Gas	14.470	14.470	0.98	472653	0.00	2000	
Mo	95	1	No Gas	0.112	0.112	13.61	903	0.01	2000	
Sn	118	1	No Gas	0.335	0.335	3.99	5588	0.01	2000	
Sb	121	1	No Gas	0.703	0.703	4.05	12580	0.01	2000	
Ba	137	1	No Gas	53.707	53.707	1.32	302034	0.02	2000	
Tl	205	1	No Gas	0.017	0.017	21.40	1723	0.00	2000	
Tl	203	1	No Gas	0.011	0.011	18.39	670	0.00	2000	
Pb	208	1	No Gas	4.225	4.225	2.70	241385	0.00	2000	
U	238	1	No Gas	0.205	0.205	4.37	12613	0.00	2000	
Ca	43	2	He	685.361	685.361	14.87	1387	49.42	200000	
Sb	121	2	He	0.764	0.764	4.22	5988	0.01	2000	
Ti	47	2	He	18.959	18.959	6.95	3911	0.48	2000	
Cu	63	1	No Gas	219.459	219.459	1.63	2669546	0.01	2000	
Zn	66	1	No Gas	114.281	114.281	0.57	383764	0.03	2000	
Se	82	1	No Gas	0.378	0.378	173.48	-11	-3.38	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1080242	1.20	1124339	96.08	70	120	
Ge	72	2	He	655362	1.09	639996	102.40	70	120	
Ge	72	1	No Gas	2327710	0.39	2271364	102.48	70	120	
In	115	1	No Gas	2978131	0.87	2743963	108.53	70	120	

Sample Report

Bi	209	1	No Gas	3250298	1.14	2953474	110.05	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-19
Data File Name	111SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:18:56-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.765	2.765	3.57	113429	0.00	2000	
Be	9	1	No Gas	0.382	0.382	5.57	1478	0.03	2000	
V	51	2	He	5.419	5.419	1.01	33925	0.02	2000	
Cr	52	2	He	4.029	4.029	3.45	28523	0.01	2000	
Fe	56	2	He	1860.162	1860.162	1.65	11235030	0.02	200000	
Se	78	2	He	0.223	0.223	9.49	104	0.21	2000	
As	75	2	He	0.792	0.792	8.42	966	0.08	2000	
Ca	44	2	He	644.791	644.791	4.71	22565	2.86	200000	
Na	23	2	He	5369.369	5369.369	1.73	5336311	0.10	200000	
Mg	24	2	He	668.344	668.344	0.16	385749	0.17	200000	
K	39	2	He	1027.358	1027.358	0.52	682137	0.15	200000	
Mn	55	2	He	21.218	21.218	0.80	101186	0.02	2000	
Co	59	2	He	2.665	2.665	2.19	26860	0.01	2000	
Ni	60	2	He	8.680	8.680	1.81	21234	0.04	2000	
Cu	63	2	He	58.306	58.306	1.08	383785	0.02	2000	
Zn	66	2	He	61.607	61.607	1.97	78379	0.08	2000	
Al	27	2	He	2191.789	2191.789	0.73	718725	0.30	2000	>LDR
B	11	1	No Gas	0.807	0.807	50.89	44514	0.00	2000	
Al	27	1	No Gas	2194.170	2194.170	1.65	33101900	0.01	2000	>LDR
Si	28	1	No Gas	12644.565	12644.565	2.51	88413389	0.01	2000	>LDR
Ag	107	1	No Gas	0.004	0.004	98.36	737	0.00	2000	
Cd	111	1	No Gas	0.075	0.075	23.45	287	0.03	2000	
Sr	88	1	No Gas	15.446	15.446	0.96	511726	0.00	2000	
Mo	95	1	No Gas	0.059	0.059	5.85	550	0.01	2000	
Sn	118	1	No Gas	0.049	0.049	45.29	2357	0.00	2000	
Sb	121	1	No Gas	0.358	0.358	3.33	7296	0.00	2000	
Ba	137	1	No Gas	66.806	66.806	1.20	381056	0.02	2000	
Tl	205	1	No Gas	0.008	0.008	14.19	1393	0.00	2000	
Tl	203	1	No Gas	0.003	0.003	158.90	543	0.00	2000	
Pb	208	1	No Gas	1.401	1.401	7.37	83631	0.00	2000	
U	238	1	No Gas	0.111	0.111	4.06	7149	0.00	2000	
Ca	43	2	He	638.863	638.863	3.87	1287	49.65	200000	
Sb	121	2	He	0.393	0.393	6.03	3374	0.01	2000	
Ti	47	2	He	46.596	46.596	5.57	9554	0.49	2000	
Cu	63	1	No Gas	55.832	55.832	2.30	693895	0.01	2000	
Zn	66	1	No Gas	60.492	60.492	2.53	207550	0.03	2000	
Se	82	1	No Gas	0.178	0.178	187.44	-55	-0.33	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1106755	1.91	1124339	98.44	70	120	
Ge	72	2	He	652064	0.55	639996	101.89	70	120	
Ge	72	1	No Gas	2373271	1.83	2271364	104.49	70	120	
In	115	1	No Gas	3020937	0.55	2743963	110.09	70	120	

Sample Report

Bi	209	1	No Gas	3335354	0.99	2953474	112.93	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-20
Data File Name	112SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:20:56-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.678	5.678	1.94	155073	0.00	2000	
Be	9	1	No Gas	0.360	0.360	6.54	1358	0.03	2000	
V	51	2	He	0.740	0.740	4.55	7809	0.01	2000	
Cr	52	2	He	2.195	2.195	1.83	15833	0.01	2000	
Fe	56	2	He	8233.781	8233.781	1.05	48911198	0.02	200000	
Se	78	2	He	0.084	0.084	347.96	91	0.09	2000	
As	75	2	He	0.280	0.280	15.03	470	0.06	2000	
Ca	44	2	He	2052.953	2052.953	0.44	69623	2.95	200000	
Na	23	2	He	17092.634	17092.634	1.09	16571368	0.10	200000	
Mg	24	2	He	1970.040	1970.040	2.71	1118460	0.18	200000	
K	39	2	He	529.661	529.661	0.78	370975	0.14	200000	
Mn	55	2	He	117.558	117.558	0.31	550224	0.02	2000	
Co	59	2	He	4.770	4.770	1.51	47292	0.01	2000	
Ni	60	2	He	14.946	14.946	1.01	35868	0.04	2000	
Cu	63	2	He	1.508	1.508	2.31	10768	0.01	2000	
Zn	66	2	He	2241.336	2241.336	1.54	2792996	0.08	2000	>LDR
Al	27	2	He	60.732	60.732	4.33	20236	0.30	2000	
B	11	1	No Gas	-3.448	-3.448	-3.28	34238	-0.01	2000	
Al	27	1	No Gas	65.161	65.161	1.57	991126	0.01	2000	
Si	28	1	No Gas	11153.815	11153.815	1.74	76556437	0.01	2000	>LDR
Ag	107	1	No Gas	-0.022	-0.022	-7.96	257	-0.01	2000	
Cd	111	1	No Gas	0.163	0.163	18.56	603	0.03	2000	
Sr	88	1	No Gas	44.576	44.576	1.85	1442974	0.00	2000	
Mo	95	1	No Gas	0.088	0.088	9.70	733	0.01	2000	
Sn	118	1	No Gas	-0.047	-0.047	-18.50	1220	0.00	2000	
Sb	121	1	No Gas	0.068	0.068	10.19	2600	0.00	2000	
Ba	137	1	No Gas	92.926	92.926	0.71	518414	0.02	2000	
Tl	205	1	No Gas	-0.010	-0.010	-7.09	653	0.00	2000	
Tl	203	1	No Gas	-0.007	-0.007	-80.91	340	0.00	2000	
Pb	208	1	No Gas	0.019	0.019	19.20	3200	0.00	2000	
U	238	1	No Gas	0.015	0.015	13.44	1127	0.00	2000	
Ca	43	2	He	1986.834	1986.834	7.35	3897	50.98	200000	
Sb	121	2	He	0.080	0.080	30.41	1173	0.01	2000	
Ti	47	2	He	0.860	0.860	24.26	177	0.49	2000	
Cu	63	1	No Gas	1.524	1.524	1.77	20659	0.01	2000	
Zn	66	1	No Gas	2146.428	2146.428	2.43	7190445	0.03	2000	>LDR
Se	82	1	No Gas	-0.240	-0.240	-228.59	-142	0.17	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1077277	0.53	1124339	95.81	70	120	
Ge	72	2	He	641788	0.41	639996	100.28	70	120	
Ge	72	1	No Gas	2328600	1.83	2271364	102.52	70	120	
In	115	1	No Gas	2955054	0.49	2743963	107.69	70	120	

Sample Report

Bi	209	1	No Gas	3210094	2.12	2953474	108.69	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-21
Data File Name	113SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:22:54-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.075	19.075	2.58	351648	0.01	2000	
Be	9	1	No Gas	0.146	0.146	6.75	557	0.03	2000	
V	51	2	He	1.667	1.667	3.35	12786	0.01	2000	
Cr	52	2	He	3.611	3.611	1.85	25110	0.01	2000	
Fe	56	2	He	84.928	84.928	1.19	512410	0.02	200000	
Se	78	2	He	0.172	0.172	144.39	97	0.18	2000	
As	75	2	He	0.464	0.464	9.86	639	0.07	2000	
Ca	44	2	He	6049.210	6049.210	0.94	202744	2.98	200000	
Na	23	2	He	63294.386	63294.386	0.82	60754551	0.10	200000	
Mg	24	2	He	5462.384	5462.384	0.81	3079206	0.18	200000	
K	39	2	He	324.698	324.698	1.63	245534	0.13	200000	
Mn	55	2	He	65.939	65.939	1.25	306610	0.02	2000	
Co	59	2	He	1.289	1.289	1.60	12713	0.01	2000	
Ni	60	2	He	23.536	23.536	0.94	55998	0.04	2000	
Cu	63	2	He	34.269	34.269	0.62	220887	0.02	2000	
Zn	66	2	He	786.351	786.351	0.44	973334	0.08	2000	
Al	27	2	He	11.157	11.157	7.76	4221	0.26	2000	
B	11	1	No Gas	-2.557	-2.557	-8.93	35266	-0.01	2000	
Al	27	1	No Gas	12.231	12.231	5.19	201981	0.01	2000	
Si	28	1	No Gas	22164.495	22164.495	0.41	147278451	0.02	2000	>LDR
Ag	107	1	No Gas	-0.019	-0.019	-8.33	297	-0.01	2000	
Cd	111	1	No Gas	0.093	0.093	33.76	333	0.03	2000	
Sr	88	1	No Gas	145.079	145.079	1.03	4502998	0.00	2000	
Mo	95	1	No Gas	0.120	0.120	14.35	913	0.01	2000	
Sn	118	1	No Gas	0.032	0.032	290.92	2032	0.00	2000	
Sb	121	1	No Gas	1.516	1.516	1.37	24573	0.01	2000	
Ba	137	1	No Gas	254.734	254.734	1.51	1362835	0.02	2000	
Tl	205	1	No Gas	-0.011	-0.011	-14.43	600	0.00	2000	
Tl	203	1	No Gas	-0.015	-0.015	-12.86	210	-0.01	2000	
Pb	208	1	No Gas	0.043	0.043	2.09	4430	0.00	2000	
U	238	1	No Gas	0.020	0.020	14.04	1403	0.00	2000	
Ca	43	2	He	6112.537	6112.537	4.35	11862	51.53	200000	
Sb	121	2	He	1.598	1.598	1.63	11499	0.01	2000	
Ti	47	2	He	0.233	0.233	56.43	50	0.47	2000	
Cu	63	1	No Gas	33.328	33.328	0.96	394894	0.01	2000	
Zn	66	1	No Gas	791.083	791.083	1.55	2570150	0.03	2000	
Se	82	1	No Gas	0.213	0.213	62.05	-45	-0.48	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1051218	1.35	1124339	93.50	70	120	
Ge	72	2	He	637322	0.62	639996	99.58	70	120	
Ge	72	1	No Gas	2257230	0.27	2271364	99.38	70	120	
In	115	1	No Gas	2834502	0.87	2743963	103.30	70	120	

Sample Report

Bi	209	1	No Gas	3158076	1.59	2953474	106.93	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-22
Data File Name	114SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:24:56-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	54.576	54.576	0.54	825746	0.01	2000	
Be	9	1	No Gas	0.125	0.125	5.56	448	0.03	2000	
V	51	2	He	0.407	0.407	12.71	5570	0.01	2000	
Cr	52	2	He	40.898	40.898	1.48	254802	0.02	2000	
Fe	56	2	He	67376.797	67376.797	0.48	371902901	0.02	200000	
Se	78	2	He	0.635	0.635	28.62	127	0.50	2000	
As	75	2	He	3.030	3.030	2.42	2837	0.11	2000	
Ca	44	2	He	111195.343	111195.343	0.98	3480154	3.20	200000	
Na	23	2	He	268030.467	268030.467	0.74	240592696	0.11	200000	>LDR
Mg	24	2	He	96892.546	96892.546	1.22	51118626	0.19	200000	
K	39	2	He	1018.724	1018.724	0.15	619160	0.16	200000	
Mn	55	2	He	4163.541	4163.541	0.80	18100759	0.02	2000	>LDR
Co	59	2	He	74.358	74.358	0.69	684908	0.01	2000	
Ni	60	2	He	779.100	779.100	0.32	1730141	0.05	2000	
Cu	63	2	He	11.185	11.185	1.25	68114	0.02	2000	
Zn	66	2	He	27.027	27.027	2.45	31657	0.09	2000	
Al	27	2	He	11.097	11.097	9.16	3931	0.28	2000	
B	11	1	No Gas	1.702	1.702	34.09	41287	0.00	2000	
Al	27	1	No Gas	11.771	11.771	1.20	187307	0.01	2000	
Si	28	1	No Gas	20324.031	20324.031	0.89	129486945	0.02	2000	>LDR
Ag	107	1	No Gas	-0.014	-0.014	-21.93	360	0.00	2000	
Cd	111	1	No Gas	0.665	0.665	6.82	2164	0.03	2000	
Sr	88	1	No Gas	2182.444	2182.444	1.40	62710894	0.00	2000	>LDR
Mo	95	1	No Gas	0.594	0.594	14.01	3714	0.02	2000	
Sn	118	1	No Gas	0.013	0.013	69.26	1690	0.00	2000	
Sb	121	1	No Gas	0.070	0.070	8.00	2447	0.00	2000	
Ba	137	1	No Gas	2487.703	2487.703	1.71	12319486	0.02	2000	>LDR
Tl	205	1	No Gas	-0.011	-0.011	-12.50	523	0.00	2000	
Tl	203	1	No Gas	-0.011	-0.011	-61.27	237	0.00	2000	
Pb	208	1	No Gas	0.012	0.012	18.94	2370	0.00	2000	
U	238	1	No Gas	0.243	0.243	1.60	12643	0.00	2000	
Ca	43	2	He	113117.241	113117.241	0.60	205138	55.14	200000	
Sb	121	2	He	0.097	0.097	19.08	1200	0.01	2000	
Ti	47	2	He	0.268	0.268	41.28	53	0.50	2000	
Cu	63	1	No Gas	14.073	14.073	1.06	161011	0.01	2000	
Zn	66	1	No Gas	26.353	26.353	1.51	83007	0.03	2000	
Se	82	1	No Gas	2.392	2.392	56.07	378	0.63	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	983293	2.68	1124339	87.46	70	120	
Ge	72	2	He	596497	0.45	639996	93.20	70	120	
Ge	72	1	No Gas	2164050	0.57	2271364	95.28	70	120	
In	115	1	No Gas	2624399	0.63	2743963	95.64	70	120	
Bi	209	1	No Gas	2752678	0.60	2953474	93.20	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	116_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:30:43-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	95.191	5.220	1420685	2.75	100	95.2	90	110	
Be	9	1	No Gas	96.033	2.846	329036	0.92	100	96.0	90	110	
V	51	2	He	96.755	0.794	518725	0.54	100	96.8	90	110	
Cr	52	2	He	94.696	1.809	616593	0.79	100	94.7	90	110	
Fe	56	2	He	9743.696	0.988	56366541	2.06	10000	97.4	90	110	
Se	78	2	He	91.306	2.719	7541	1.59	100	91.3	90	110	
As	75	2	He	94.693	0.205	86799	1.08	100	94.7	90	110	
Ca	44	2	He	9423.134	1.404	309425	0.36	10000	94.2	90	110	
Na	23	2	He	9688.597	0.706	9175690	0.39	10000	96.9	90	110	
Mg	24	2	He	9801.197	2.471	5417173	1.51	10000	98.0	90	110	
K	39	2	He	9403.622	2.610	5576886	2.32	10000	94.0	90	110	
Mn	55	2	He	96.868	0.094	441584	1.13	100	96.9	90	110	
Co	59	2	He	96.877	0.964	934908	0.14	100	96.9	90	110	
Ni	60	2	He	100.833	1.315	234730	0.29	100	100.8	90	110	
Cu	63	2	He	99.124	1.844	624620	0.92	100	99.1	90	110	
Zn	66	2	He	99.207	1.174	120744	0.23	100	99.2	90	110	
Al	27	2	He	103.453	1.230	33120	1.62	100	103.5	90	110	
B	11	1	No Gas	494.644	3.045	1023098	1.76	500	98.9	90	110	
Al	27	1	No Gas	109.219	2.366	1568130	2.61	100	109.2	90	110	
Si	28	1	No Gas	689.254	1.552	4721293	1.67	5000	13.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.407	0.836	1718077	0.84	100	98.4	90	110	
Cd	111	1	No Gas	98.011	1.137	344511	0.73	100	98.0	90	110	
Sr	88	1	No Gas	98.159	1.155	3055175	0.60	100	98.2	90	110	
Mo	95	1	No Gas	93.464	0.944	612698	1.33	100	93.5	90	110	
Sn	118	1	No Gas	97.860	0.750	1065234	1.05	100	97.9	90	110	
Sb	121	1	No Gas	102.360	1.871	1535539	1.96	100	102.4	90	110	
Ba	137	1	No Gas	100.138	0.912	537303	1.20	100	100.1	90	110	
Tl	205	1	No Gas	103.605	0.760	3861306	1.40	100	103.6	90	110	
Tl	203	1	No Gas	101.055	1.833	1629311	1.14	100	101.1	90	110	
Pb	208	1	No Gas	100.475	2.593	5315536	0.80	100	100.5	90	110	
U	238	1	No Gas	94.890	1.991	5353990	1.49	100	94.9	90	110	
Ca	43	2	He	9527.673	2.799	18119	1.85	10000	95.3	90	110	
Sb	121	2	He	101.373	0.241	676948	0.95	100	101.4	90	110	
Ti	47	2	He	94.341	0.922	18539	0.17	100	94.3	90	110	
Cu	63	1	No Gas	96.638	1.144	1123457	0.85	100	96.6	90	110	
Se	82	1	No Gas	95.799	1.813	18966	1.68	100	95.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1002929	2.23	1124339	89.20	70	120	
Ge	72	2	He	624997	1.08	639996	97.66	70	120	
Ge	72	1	No Gas	2222345	0.29	2271364	97.84	70	120	
In	115	1	No Gas	2842277	1.17	2743963	103.58	70	120	
Bi	209	1	No Gas	3036078	1.82	2953474	102.80	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	117_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:32:37-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.070	-9.0	66141	1.0	0.5	
Be	9	1	No Gas	0.008	57.7	62	28.5	0.5	
V	51	2	He	-0.050	-20.0	3445	1.6	2.5	
Cr	52	2	He	-0.047	-45.0	857	16.4	2.5	
Fe	56	2	He	0.935	10.1	16971	3.1	100	
Se	78	2	He	-0.159	-92.9	69	17.6	2	
As	75	2	He	-0.022	-107.8	184	12.0	2.5	
Ca	44	2	He	-5.238	-15.3	320	8.3	100	
Na	23	2	He	24.996	8.8	91096	2.0	100	
Mg	24	2	He	0.726	3.6	710	2.4	100	
K	39	2	He	-7.909	-18.5	45873	1.6	100	
Mn	55	2	He	-0.001	-1982.8	330	35.7	2.5	
Co	59	2	He	0.004	25.9	67	17.3	2.5	
Ni	60	2	He	-0.012	-234.3	130	50.4	2.5	
Cu	63	2	He	0.000	11906.9	1010	9.5	2	
Zn	66	2	He	-0.005	-1870.9	377	29.2	2.5	
Al	27	2	He	-0.585	-49.1	457	19.7	5	
B	11	1	No Gas	-2.074	-81.4	36737	10.7	0.5	
Al	27	1	No Gas	-0.315	-9.0	22165	3.5	5	
Si	28	1	No Gas	1.349	169.1	231945	4.7	10	
Ag	107	1	No Gas	-0.022	-5.8	240	11.0	2.5	
Cd	111	1	No Gas	0.001	328.0	10	100.0	1	
Sr	88	1	No Gas	0.010	45.7	1133	13.2	2.5	
Mo	95	1	No Gas	0.054	63.7	490	46.0	2.5	
Sn	118	1	No Gas	0.007	254.6	1790	10.2	5	
Sb	121	1	No Gas	0.019	24.3	1790	3.9	2.5	
Ba	137	1	No Gas	0.005	145.1	250	18.3	2.5	
Tl	205	1	No Gas	0.256	78.5	10974	72.5	1	
Tl	203	1	No Gas	0.258	89.0	4805	81.8	1	
Pb	208	1	No Gas	0.010	65.9	2647	15.4	2.5	
U	238	1	No Gas	0.011	52.9	900	40.6	2.5	
Ca	43	2	He	5.283	99.4	30	33.3	100	
Sb	121	2	He	0.030	1.3	823	0.7	2.5	
Ti	47	2	He	-0.016	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	0.088	9.0	3114	1.5	2.5	
Se	82	1	No Gas	0.015	2457.3	-85	-89.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Continuing Calibration Blank (CCB) Report

Li	6	1	No Gas	1063906	0.97	1124339	94.63	70	120	
Ge	72	2	He	633029	0.39	639996	98.91	70	120	
Ge	72	1	No Gas	2265817	1.82	2271364	99.76	70	120	
In	115	1	No Gas	2881237	1.30	2743963	105.00	70	120	
Bi	209	1	No Gas	3145263	1.35	2953474	106.49	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-23
Data File Name	118SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:34:38-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	15.619	15.619	1.95	295570	0.01	2000	
Be	9	1	No Gas	0.179	0.179	10.92	665	0.03	2000	
V	51	2	He	0.824	0.824	3.38	8104	0.01	2000	
Cr	52	2	He	69.701	69.701	0.76	456947	0.02	2000	
Fe	56	2	He	28751.225	28751.225	1.36	167288611	0.02	200000	
Se	78	2	He	0.114	0.114	49.53	91	0.12	2000	
As	75	2	He	12.677	12.677	2.48	11867	0.11	2000	
Ca	44	2	He	23291.873	23291.873	1.44	768779	3.03	200000	
Na	23	2	He	84731.247	84731.247	1.66	80213085	0.11	200000	
Mg	24	2	He	14886.854	14886.854	1.08	8278941	0.18	200000	
K	39	2	He	463.077	463.077	0.79	324087	0.14	200000	
Mn	55	2	He	1185.381	1185.381	0.45	5432522	0.02	2000	
Co	59	2	He	16.489	16.489	0.78	160115	0.01	2000	
Ni	60	2	He	193.378	193.378	0.71	452776	0.04	2000	
Cu	63	2	He	20.903	20.903	1.65	133316	0.02	2000	
Zn	66	2	He	90.475	90.475	0.68	110823	0.08	2000	
Al	27	2	He	29.182	29.182	1.51	9857	0.30	2000	
B	11	1	No Gas	-0.716	-0.716	-64.27	38529	0.00	2000	
Al	27	1	No Gas	32.092	32.092	3.01	494511	0.01	2000	
Si	28	1	No Gas	18884.520	18884.520	1.82	127524105	0.01	2000	>LDR
Ag	107	1	No Gas	0.051	0.051	13.71	1517	0.00	2000	
Cd	111	1	No Gas	0.073	0.073	16.35	263	0.03	2000	
Sr	88	1	No Gas	437.603	437.603	1.55	13624662	0.00	2000	
Mo	95	1	No Gas	1.258	1.258	3.17	8379	0.02	2000	
Sn	118	1	No Gas	0.135	0.135	5.64	3154	0.00	2000	
Sb	121	1	No Gas	0.290	0.290	2.61	6001	0.00	2000	
Ba	137	1	No Gas	762.733	762.733	1.35	4093115	0.02	2000	
Tl	205	1	No Gas	-0.010	-0.010	-26.23	610	0.00	2000	
Tl	203	1	No Gas	-0.013	-0.013	-23.58	227	-0.01	2000	
Pb	208	1	No Gas	0.736	0.736	3.37	40743	0.00	2000	
U	238	1	No Gas	0.072	0.072	4.55	4264	0.00	2000	
Ca	43	2	He	23546.775	23546.775	1.18	45027	52.29	200000	
Sb	121	2	He	0.322	0.322	6.56	2774	0.01	2000	
Ti	47	2	He	0.572	0.572	87.95	117	0.49	2000	
Cu	63	1	No Gas	19.908	19.908	1.33	240517	0.01	2000	
Zn	66	1	No Gas	88.185	88.185	0.47	292022	0.03	2000	
Se	82	1	No Gas	0.358	0.358	68.55	-15	-2.38	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1035753	1.03	1124339	92.12	70	120	
Ge	72	2	He	628781	0.58	639996	98.25	70	120	
Ge	72	1	No Gas	2293635	1.06	2271364	100.98	70	120	
In	115	1	No Gas	2843671	0.75	2743963	103.63	70	120	

Sample Report

Bi	209	1	No Gas	3022644	2.07	2953474	102.34	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-24
Data File Name	119SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:36:40-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 166932
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	13.204	13.204	0.70	256232	0.01	2000	
Be	9	1	No Gas	0.263	0.263	6.01	948	0.03	2000	
V	51	2	He	0.349	0.349	17.20	5523	0.01	2000	
Cr	52	2	He	18.594	18.594	1.74	121893	0.02	2000	
Fe	56	2	He	569.537	569.537	0.43	3302199	0.02	200000	
Se	78	2	He	0.073	0.073	157.58	87	0.08	2000	
As	75	2	He	0.193	0.193	7.23	378	0.05	2000	
Ca	44	2	He	18578.467	18578.467	0.46	609070	3.05	200000	
Na	23	2	He	82803.875	82803.875	0.87	77847997	0.11	200000	
Mg	24	2	He	15282.606	15282.606	0.52	8440343	0.18	200000	
K	39	2	He	639.468	639.468	0.58	425423	0.15	200000	
Mn	55	2	He	108.891	108.891	0.71	495882	0.02	2000	
Co	59	2	He	3.201	3.201	2.01	30882	0.01	2000	
Ni	60	2	He	72.726	72.726	0.68	169197	0.04	2000	
Cu	63	2	He	52.624	52.624	0.62	331796	0.02	2000	
Zn	66	2	He	208.082	208.082	2.28	252625	0.08	2000	
Al	27	2	He	33.362	33.362	4.86	11099	0.30	2000	
B	11	1	No Gas	-2.538	-2.538	-10.50	34283	-0.01	2000	
Al	27	1	No Gas	33.399	33.399	6.34	500207	0.01	2000	
Si	28	1	No Gas	9670.657	9670.657	1.70	63718947	0.02	2000	>LDR
Ag	107	1	No Gas	-0.014	-0.014	-6.89	373	0.00	2000	
Cd	111	1	No Gas	0.395	0.395	3.34	1383	0.03	2000	
Sr	88	1	No Gas	366.103	366.103	1.03	11301788	0.00	2000	
Mo	95	1	No Gas	0.209	0.209	7.97	1487	0.01	2000	
Sn	118	1	No Gas	0.882	0.882	6.06	11182	0.01	2000	
Sb	121	1	No Gas	0.149	0.149	6.38	3724	0.00	2000	
Ba	137	1	No Gas	649.228	649.228	0.42	3454482	0.02	2000	
Tl	205	1	No Gas	-0.010	-0.010	-18.76	620	0.00	2000	
Tl	203	1	No Gas	-0.010	-0.010	-37.89	280	0.00	2000	
Pb	208	1	No Gas	0.122	0.122	5.83	8445	0.00	2000	
U	238	1	No Gas	0.058	0.058	4.76	3504	0.00	2000	
Ca	43	2	He	19087.917	19087.917	1.09	36251	52.65	200000	
Sb	121	2	He	0.174	0.174	11.32	1773	0.01	2000	
Ti	47	2	He	0.289	0.289	46.66	60	0.48	2000	
Cu	63	1	No Gas	51.479	51.479	1.29	602510	0.01	2000	
Zn	66	1	No Gas	209.346	209.346	1.49	673812	0.03	2000	
Se	82	1	No Gas	0.612	0.612	43.66	36	1.72	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1020684	0.13	1124339	90.78	70	120	
Ge	72	2	He	624420	0.68	639996	97.57	70	120	
Ge	72	1	No Gas	2233900	0.71	2271364	98.35	70	120	
In	115	1	No Gas	2819571	1.04	2743963	102.76	70	120	

Sample Report

Bi	209	1	No Gas	3030553	1.78	2953474	102.61	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	128_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:54:27-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	96.923	1.781	1428969	1.08	100	96.9	90	110	
Be	9	1	No Gas	96.474	2.253	326658	0.87	100	96.5	90	110	
V	51	2	He	96.664	0.764	498188	1.06	100	96.7	90	110	
Cr	52	2	He	95.070	0.071	595112	0.68	100	95.1	90	110	
Fe	56	2	He	9847.804	0.189	54756896	0.57	10000	98.5	90	110	
Se	78	2	He	93.063	3.388	7388	3.03	100	93.1	90	110	
As	75	2	He	94.823	0.463	83549	0.34	100	94.8	90	110	
Ca	44	2	He	9530.538	1.170	300835	0.56	10000	95.3	90	110	
Na	23	2	He	9727.466	0.672	8855494	0.44	10000	97.3	90	110	
Mg	24	2	He	9742.161	2.627	5176186	2.03	10000	97.4	90	110	
K	39	2	He	9461.191	1.609	5393455	1.14	10000	94.6	90	110	
Mn	55	2	He	96.508	0.115	422888	0.55	100	96.5	90	110	
Co	59	2	He	96.463	0.031	894902	0.59	100	96.5	90	110	
Ni	60	2	He	100.683	0.697	225324	1.24	100	100.7	90	110	
Cu	63	2	He	98.488	0.668	596633	0.82	100	98.5	90	110	
Zn	66	2	He	99.907	0.870	116887	0.56	100	99.9	90	110	
Al	27	2	He	106.270	2.541	32689	2.93	100	106.3	90	110	
B	11	1	No Gas	489.423	2.977	1000727	1.93	500	97.9	90	110	
Al	27	1	No Gas	110.434	2.439	1529669	2.12	100	110.4	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	692.308	1.370	4575151	1.07	5000	13.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	97.779	1.695	1648948	1.26	100	97.8	90	110	
Cd	111	1	No Gas	97.461	0.561	330929	0.68	100	97.5	90	110	
Sr	88	1	No Gas	97.826	1.937	2941094	1.32	100	97.8	90	110	
Mo	95	1	No Gas	92.912	0.727	588340	0.83	100	92.9	90	110	
Sn	118	1	No Gas	97.331	1.920	1023340	1.33	100	97.3	90	110	
Sb	121	1	No Gas	104.523	1.849	1513017	1.53	100	104.5	90	110	
Ba	137	1	No Gas	99.386	0.292	515127	1.11	100	99.4	90	110	
Tl	205	1	No Gas	102.233	3.886	3831308	0.79	100	102.2	90	110	
Tl	203	1	No Gas	98.523	3.599	1597571	0.73	100	98.5	90	110	
Pb	208	1	No Gas	98.440	3.299	5238711	0.26	100	98.4	90	110	
U	238	1	No Gas	93.625	1.764	5314803	1.40	100	93.6	90	110	
Ca	43	2	He	9490.037	2.940	17351	3.02	10000	94.9	90	110	
Sb	121	2	He	102.114	0.450	655476	0.84	100	102.1	90	110	
Ti	47	2	He	95.830	2.996	18106	3.61	100	95.8	90	110	
Cu	63	1	No Gas	94.449	2.731	1059645	2.70	100	94.4	90	110	
Se	82	1	No Gas	95.068	0.622	18162	0.36	100	95.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	990953	1.64	1124339	88.14	70	120	
Ge	72	2	He	600776	0.61	639996	93.87	70	120	
Ge	72	1	No Gas	2144579	0.32	2271364	94.42	70	120	
In	115	1	No Gas	2745513	1.05	2743963	100.06	70	120	
Bi	209	1	No Gas	3055137	3.08	2953474	103.44	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	129_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-18T15:56:22-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.033	-375.1	64868	2.1	0.5	
Be	9	1	No Gas	0.007	51.7	55	24.1	0.5	
V	51	2	He	-0.009	-132.2	3525	2.1	2.5	
Cr	52	2	He	-0.032	-24.6	920	5.8	2.5	
Fe	56	2	He	0.501	12.9	13871	2.2	100	
Se	78	2	He	0.084	77.2	86	6.2	2	
As	75	2	He	0.059	74.9	249	15.6	2.5	
Ca	44	2	He	-6.204	-32.7	277	23.0	100	
Na	23	2	He	22.092	3.2	84927	0.3	100	
Mg	24	2	He	0.325	42.7	467	16.4	100	
K	39	2	He	-6.785	-12.5	44749	1.0	100	
Mn	55	2	He	-0.011	-193.3	277	32.6	2.5	
Co	59	2	He	0.005	81.1	73	56.8	2.5	
Ni	60	2	He	-0.014	-62.4	120	16.7	2.5	
Cu	63	2	He	0.023	73.5	1110	9.4	2	
Zn	66	2	He	-0.026	-105.0	337	9.5	2.5	
Al	27	2	He	-0.691	-29.4	407	15.0	5	
B	11	1	No Gas	2.612	83.5	45327	9.5	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.350	-21.2	21103	5.2	5	
Si	28	1	No Gas	1.162	67.9	225010	2.1	10	
Ag	107	1	No Gas	-0.025	-12.8	197	28.0	2.5	
Cd	111	1	No Gas	0.002	174.3	13	86.6	1	
Sr	88	1	No Gas	0.007	18.5	1010	4.0	2.5	
Mo	95	1	No Gas	0.065	59.8	550	46.1	2.5	
Sn	118	1	No Gas	-0.015	-74.8	1497	9.0	5	
Sb	121	1	No Gas	0.003	447.5	1510	15.3	2.5	
Ba	137	1	No Gas	0.001	756.6	217	10.7	2.5	
Tl	205	1	No Gas	0.246	79.9	10336	72.6	1	
Tl	203	1	No Gas	0.239	87.9	4388	79.3	1	
Pb	208	1	No Gas	0.011	92.4	2637	21.7	2.5	
U	238	1	No Gas	0.012	52.5	910	39.9	2.5	
Ca	43	2	He	-6.728	-92.5	7	173.2	100	
Sb	121	2	He	0.019	67.6	720	12.0	2.5	
Ti	47	2	He	0.001	3151.3	3	173.2	2.5	
Cu	63	1	No Gas	0.041	19.1	2504	4.0	2.5	
Se	82	1	No Gas	0.126	229.8	-61	-94.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1034936	2.09	1124339	92.05	70	120	
Ge	72	2	He	608623	0.40	639996	95.10	70	120	
Ge	72	1	No Gas	2208202	0.38	2271364	97.22	70	120	
In	115	1	No Gas	2796474	0.69	2743963	101.91	70	120	
Bi	209	1	No Gas	3085179	1.20	2953474	104.46	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	279_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-19T00:02:03-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.255	1.805	1569759	0.93	100	102.3	90	110	
Be	9	1	No Gas	101.601	0.898	359076	0.67	100	101.6	90	110	
V	51	2	He	102.594	0.532	544419	1.01	100	102.6	90	110	
Cr	52	2	He	100.375	0.758	647119	0.49	100	100.4	90	110	
Fe	56	2	He	10249.755	0.192	58704419	0.68	10000	102.5	90	110	
Se	78	2	He	98.441	2.542	8046	2.56	100	98.4	90	110	
As	75	2	He	99.267	1.150	90088	1.69	100	99.3	90	110	
Ca	44	2	He	10042.642	0.652	326507	0.08	10000	100.4	90	110	
Na	23	2	He	10772.115	0.821	10094641	1.38	10000	107.7	90	110	
Mg	24	2	He	10529.995	0.392	5763587	0.98	10000	105.3	90	110	
K	39	2	He	10176.153	0.985	5972112	1.47	10000	101.8	90	110	
Mn	55	2	He	101.810	0.372	459516	0.92	100	101.8	90	110	
Co	59	2	He	100.899	0.789	964190	1.07	100	100.9	90	110	
Ni	60	2	He	105.328	0.595	242789	0.70	100	105.3	90	110	
Cu	63	2	He	103.981	0.701	648779	0.51	100	104.0	90	110	
Zn	66	2	He	103.143	1.608	124285	1.19	100	103.1	90	110	
Al	27	2	He	103.875	1.322	32923	0.82	100	103.9	90	110	
B	11	1	No Gas	552.363	2.709	1173597	1.70	500	110.5	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	111.102	0.683	1607327	0.38	100	111.1	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	578.619	1.952	4030045	1.01	5000	11.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	103.915	2.436	1806674	1.49	100	103.9	90	110	
Cd	111	1	No Gas	102.740	2.007	359653	0.98	100	102.7	90	110	
Sr	88	1	No Gas	105.372	1.184	3266458	0.89	100	105.4	90	110	
Mo	95	1	No Gas	99.253	1.405	647965	0.38	100	99.3	90	110	
Sn	118	1	No Gas	105.033	2.946	1138379	1.91	100	105.0	90	110	
Sb	121	1	No Gas	108.916	0.821	1646844	1.26	100	108.9	90	110	
Ba	137	1	No Gas	105.320	0.602	562808	0.48	100	105.3	90	110	
Tl	205	1	No Gas	107.738	1.330	4018266	1.59	100	107.7	90	110	
Tl	203	1	No Gas	106.145	3.835	1711995	1.15	100	106.1	90	110	
Pb	208	1	No Gas	105.971	2.977	5610500	1.73	100	106.0	90	110	
U	238	1	No Gas	100.187	2.960	5655839	0.20	100	100.2	90	110	
Ca	43	2	He	9997.914	2.660	18830	3.22	10000	100.0	90	110	
Sb	121	2	He	107.305	1.156	709454	1.09	100	107.3	90	110	
Ti	47	2	He	101.348	5.078	19725	5.60	100	101.3	90	110	
Cu	63	1	No Gas	101.454	1.061	1188712	0.15	100	101.5	90	110	
Se	82	1	No Gas	100.866	2.264	20131	1.41	100	100.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1034165	1.30	1124339	91.98	70	120	
Ge	72	2	He	618830	0.59	639996	96.69	70	120	
Ge	72	1	No Gas	2240118	0.99	2271364	98.62	70	120	
In	115	1	No Gas	2830804	1.02	2743963	103.16	70	120	
Bi	209	1	No Gas	3038907	2.91	2953474	102.89	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	280_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-19T00:03:57-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.181	-27.2	65557	0.6	0.5	
Be	9	1	No Gas	0.004	48.7	47	16.4	0.5	
V	51	2	He	0.125	31.0	4248	3.7	2.5	
Cr	52	2	He	-0.059	-6.4	753	3.3	2.5	
Fe	56	2	He	1.474	9.2	19494	4.7	100	
Se	78	2	He	0.152	95.6	92	11.5	2	
As	75	2	He	0.022	100.4	218	8.4	2.5	
Ca	44	2	He	-6.173	-16.0	280	12.4	100	
Na	23	2	He	278.222	1.4	321703	2.0	100	CCB Main CR1 Failed
Mg	24	2	He	1.941	15.8	1347	13.1	100	
K	39	2	He	-1.417	-92.9	48154	1.2	100	
Mn	55	2	He	-0.009	-167.5	283	23.5	2.5	
Co	59	2	He	0.005	74.4	70	49.5	2.5	
Ni	60	2	He	0.009	219.0	173	26.0	2.5	
Cu	63	2	He	-0.002	-1636.9	967	15.9	2	
Zn	66	2	He	-0.023	-317.3	343	25.4	2.5	
Al	27	2	He	-0.721	-32.4	400	17.5	5	
B	11	1	No Gas	23.167	8.3	91563	4.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.762	-4.8	15723	3.2	5	
Si	28	1	No Gas	0.690	60.2	227592	1.1	10	
Ag	107	1	No Gas	-0.020	-16.8	280	21.4	2.5	
Cd	111	1	No Gas	0.007	86.1	30	66.7	1	
Sr	88	1	No Gas	0.012	14.5	1183	4.3	2.5	
Mo	95	1	No Gas	0.096	31.1	767	26.3	2.5	
Sn	118	1	No Gas	0.018	85.7	1897	9.6	5	
Sb	121	1	No Gas	-0.010	-103.3	1340	12.5	2.5	
Ba	137	1	No Gas	0.003	405.2	237	32.0	2.5	
Tl	205	1	No Gas	0.312	76.1	13260	71.8	1	
Tl	203	1	No Gas	0.300	78.3	5559	73.4	1	
Pb	208	1	No Gas	0.019	51.4	3167	19.3	2.5	
U	238	1	No Gas	0.022	47.5	1533	42.1	2.5	
Ca	43	2	He	-3.214	-253.0	13	114.6	100	
Sb	121	2	He	0.000	-2846.6	597	14.3	2.5	
Ti	47	2	He	0.070	112.6	17	91.7	2.5	
Cu	63	1	No Gas	0.333	5.8	6011	4.0	2.5	
Se	82	1	No Gas	-0.019	-1974.4	-91	-83.2	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1082236	1.23	1124339	96.26	70	120	
Ge	72	2	He	612892	1.09	639996	95.76	70	120	
Ge	72	1	No Gas	2264377	0.59	2271364	99.69	70	120	
In	115	1	No Gas	2854934	0.60	2743963	104.04	70	120	
Bi	209	1	No Gas	3166141	1.88	2953474	107.20	70	120	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	282LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-19T00:07:55-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.087	2.087	7.58	95699	0.00	2	
Be	9	1	No Gas	1.885	1.885	3.20	6673	0.03	2	
V	51	2	He	2.429	2.429	1.53	16048	0.02	2	
Cr	52	2	He	2.035	2.035	1.68	13901	0.01	2	
Fe	56	2	He	211.743	211.743	0.66	1194973	0.02	200	
Se	78	2	He	1.856	1.856	18.74	225	0.82	2	
As	75	2	He	2.056	2.056	1.62	2013	0.10	2	
Ca	44	2	He	198.444	198.444	4.02	6762	2.93	200	
Na	23	2	He	410.328	410.328	0.70	437262	0.09	200	NewName Main CR1 Failed
Mg	24	2	He	216.772	216.772	1.13	116151	0.19	200	
K	39	2	He	198.337	198.337	1.06	161007	0.12	200	
Mn	55	2	He	2.128	2.128	4.17	9694	0.02	2	
Co	59	2	He	2.098	2.098	1.27	19601	0.01	2	
Ni	60	2	He	2.226	2.226	5.97	5158	0.04	2	
Cu	63	2	He	2.144	2.144	2.23	14007	0.02	2	
Zn	66	2	He	2.232	2.232	11.12	2984	0.07	2	
Al	27	2	He	2.054	2.054	17.33	1237	0.17	2	
B	11	1	No Gas	22.024	22.024	2.70	84878	0.03	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.132	2.132	2.10	56113	0.00	2	
Si	28	1	No Gas	8.548	8.548	3.19	273831	0.00	10	
Ag	107	1	No Gas	2.021	2.021	1.17	35759	0.01	2	
Cd	111	1	No Gas	2.080	2.080	0.95	7289	0.03	2	
Sr	88	1	No Gas	2.053	2.053	2.78	64435	0.00	2	
Mo	95	1	No Gas	1.999	1.999	0.89	13180	0.02	2	
Sn	118	1	No Gas	2.067	2.067	2.08	24059	0.01	2	
Sb	121	1	No Gas	2.080	2.080	2.22	32537	0.01	2	
Ba	137	1	No Gas	2.081	2.081	2.88	11335	0.02	2	
Tl	205	1	No Gas	2.082	2.082	2.18	80865	0.00	2	
Tl	203	1	No Gas	1.989	1.989	3.45	33452	0.01	2	
Pb	208	1	No Gas	2.020	2.020	1.05	112027	0.00	2	
U	238	1	No Gas	1.961	1.961	1.07	114126	0.00	2	
Ca	43	2	He	200.208	200.208	18.27	387	51.78	200	
Sb	121	2	He	2.180	2.180	2.91	14655	0.01	2	
Ti	47	2	He	2.159	2.159	6.76	413	0.52	200	
Cu	63	1	No Gas	2.269	2.269	1.48	28273	0.01	2	
Se	82	1	No Gas	1.891	1.891	2.44	289	0.65	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1030853	1.65	1124339	91.69	70	120	
Ge	72	2	He	604297	0.70	639996	94.42	70	120	
Ge	72	1	No Gas	2215358	0.98	2271364	97.53	70	120	
In	115	1	No Gas	2831231	0.68	2743963	103.18	70	120	
Bi	209	1	No Gas	3124828	1.25	2953474	105.80	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	283LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-19T00:09:54-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.060	5.060	4.27	137869	0.00	5	
Be	9	1	No Gas	4.859	4.859	1.72	16970	0.03	5	
V	51	2	He	5.550	5.550	1.81	31807	0.02	5	
Cr	52	2	He	4.953	4.953	4.38	31934	0.02	5	
Fe	56	2	He	518.520	518.520	0.36	2882676	0.02	500	
Se	78	2	He	5.001	5.001	14.26	469	1.07	5	
As	75	2	He	5.125	5.125	4.06	4682	0.11	5	
Ca	44	2	He	488.307	488.307	2.96	15799	3.09	500	
Na	23	2	He	702.479	702.479	0.54	696164	0.10	500	NewName2 Main CR1 Failed
Mg	24	2	He	532.086	532.086	0.58	281950	0.19	500	
K	39	2	He	497.449	497.449	0.55	327847	0.15	500	
Mn	55	2	He	5.027	5.027	1.09	22248	0.02	5	
Co	59	2	He	5.091	5.091	2.90	47079	0.01	5	
Ni	60	2	He	5.466	5.466	2.37	12329	0.04	5	
Cu	63	2	He	5.383	5.383	1.56	33391	0.02	5	
Zn	66	2	He	4.977	4.977	2.08	6145	0.08	5	
Al	27	2	He	5.262	5.262	2.06	2190	0.24	5	
B	11	1	No Gas	35.658	35.658	5.40	111587	0.03	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	5.186	5.186	1.21	96711	0.01	5	
Si	28	1	No Gas	24.028	24.028	1.39	365655	0.01	25	
Ag	107	1	No Gas	4.868	4.868	1.26	85519	0.01	5	
Cd	111	1	No Gas	5.151	5.151	3.25	18096	0.03	5	
Sr	88	1	No Gas	5.045	5.045	2.21	157658	0.00	5	
Mo	95	1	No Gas	4.914	4.914	1.41	32310	0.02	5	
Sn	118	1	No Gas	5.022	5.022	1.64	56214	0.01	5	
Sb	121	1	No Gas	5.309	5.309	1.85	78830	0.01	5	
Ba	137	1	No Gas	5.144	5.144	1.57	27787	0.02	5	
Tl	205	1	No Gas	5.062	5.062	2.38	196718	0.00	5	
Tl	203	1	No Gas	5.010	5.010	2.85	84247	0.01	5	
Pb	208	1	No Gas	5.039	5.039	2.95	278580	0.00	5	
U	238	1	No Gas	4.886	4.886	2.22	286259	0.00	5	
Ca	43	2	He	537.439	537.439	13.11	997	53.92	500	
Sb	121	2	He	5.415	5.415	3.70	35184	0.02	5	
Ti	47	2	He	5.405	5.405	11.69	1020	0.53	5	
Cu	63	1	No Gas	5.412	5.412	0.95	63083	0.01	5	
Se	82	1	No Gas	5.469	5.469	25.39	976	0.56	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1020435	2.10	1124339	90.76	70	120	
Ge	72	2	He	598531	0.16	639996	93.52	70	120	
Ge	72	1	No Gas	2162341	1.29	2271364	95.20	70	120	
In	115	1	No Gas	2839997	0.93	2743963	103.50	70	120	
Bi	209	1	No Gas	3150832	2.42	2953474	106.68	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	284ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-19T00:11:53-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.678	16.7	63971	0.6	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.008	26.2	52	14.8	0	ICSA Main CR1 Failed
V	51	2	He	0.180	16.3	3995	4.4	0	ICSA Main CR1 Failed
Cr	52	2	He	2.061	3.0	12566	2.9	0	ICSA Main CR1 Failed
Fe	56	2	He	101841.257	1.5	508718739	0.4	0	
Se	78	2	He	0.157	152.8	81	19.7	0	ICSA Main CR1 Failed
As	75	2	He	0.142	20.7	287	7.1	0	ICSA Main CR1 Failed
Ca	44	2	He	100127.341	0.2	2836235	0.9	0	
Na	23	2	He	102311.616	1.5	83148360	1.3	0	
Mg	24	2	He	100884.203	1.2	48166229	0.2	0	
K	39	2	He	99999.106	0.3	50815231	0.8	0	
Mn	55	2	He	39.418	1.4	155369	0.5	0	
Co	59	2	He	0.096	12.7	823	13.4	0	ICSA Main CR1 Failed
Ni	60	2	He	0.175	14.9	487	11.3	0	ICSA Main CR1 Failed
Cu	63	2	He	0.210	11.3	2004	6.2	0	ICSA Main CR1 Failed
Zn	66	2	He	1.384	3.1	1777	3.1	0	ICSA Main CR1 Failed
Al	27	2	He	94153.481	2.1	25535348	1.4	0	
B	11	1	No Gas	16.997	4.0	63615	3.6	0	
Al	27	1	No Gas	93661.495	2.0	1163927396	1.0	0	
Si	28	1	No Gas	22.695	4.5	323225	2.7	0	
Ag	107	1	No Gas	0.272	4.7	4778	4.1	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.586	6.2	4961	6.3	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	1.411	1.1	39756	1.4	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	1959.176	0.2	11415122	0.4	0	
Sn	118	1	No Gas	0.096	30.7	2427	12.0	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.068	20.3	2194	8.1	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.564	3.0	2880	2.4	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.014	116.7	1367	41.5	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.013	137.2	603	46.9	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.089	4.0	6124	4.6	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.003	28.9	383	14.4	0	ICSA Main CR1 Failed
Ca	43	2	He	97735.130	0.5	160420	1.1	0	
Sb	121	2	He	0.080	20.6	990	10.5	0	ICSA Main CR1 Failed
Ti	47	2	He	1995.567	0.7	338705	1.0	0	
Se	82	1	No Gas	-0.627	-42.8	-185	-24.9	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	878921	1.91	1124339	78.17	70	120	
Ge	72	2	He	539868	1.04	639996	84.35	70	120	
Ge	72	1	No Gas	1956470	1.00	2271364	86.14	70	120	
In	115	1	No Gas	2526677	0.34	2743963	92.08	70	120	
Bi	209	1	No Gas	2770195	1.75	2953474	93.79	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	285ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq Date Time	2021-06-19T00:13:54-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	104.054	1.895	1339702	1.97	100	104.1	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	105.238	0.434	312130	0.21	100	105.2	80	120	
V	51	2	He	108.428	1.115	495823	0.29	100	108.4	80	120	
Cr	52	2	He	107.227	1.191	595883	0.55	100	107.2	80	120	
Fe	56	2	He	116625.533	1.829	575702965	1.14	100	116625.5	80	120	ICSB Main CR1 Failed
Se	78	2	He	108.237	1.146	7620	1.09	100	108.2	80	120	
As	75	2	He	108.536	0.740	84900	1.32	100	108.5	80	120	
Ca	44	2	He	113740.676	1.231	3183703	1.02	100	113740.7	80	120	ICSB Main CR1 Failed
Na	23	2	He	118498.754	0.694	95161002	0.35	100	118498.8	80	120	ICSB Main CR1 Failed
Mg	24	2	He	115838.015	1.131	54654919	0.59	100	115838.0	80	120	ICSB Main CR1 Failed
K	39	2	He	112779.906	1.051	56627436	0.79	100	112779.9	80	120	ICSB Main CR1 Failed
Mn	55	2	He	109.396	0.873	425631	0.38	100	109.4	80	120	ICSB Main CR1 Failed
Co	59	2	He	105.897	0.908	872395	1.04	100	105.9	80	120	
Ni	60	2	He	107.818	0.244	214258	0.98	100	107.8	80	120	
Cu	63	2	He	106.189	0.607	571167	0.24	100	106.2	80	120	
Zn	66	2	He	111.150	0.700	115442	0.21	100	111.1	80	120	
Al	27	2	He	96637.100	0.978	25901611	0.14	100	96637.1	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	601.458	1.498	1069619	1.60	100	601.5	80	120	
Al	27	1	No Gas	98437.519	2.303	1205109129	1.11	100	98437.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	573.610	1.567	3439331	0.79	100	573.6	80	120	
Ag	107	1	No Gas	101.473	1.018	1567380	1.19	100	101.5	80	120	
Cd	111	1	No Gas	108.896	0.403	338652	0.26	100	108.9	80	120	
Sr	88	1	No Gas	111.435	0.696	3068605	0.95	100	111.4	80	120	
Mo	95	1	No Gas	2158.164	0.753	12513848	0.64	100	2158.2	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	111.694	0.191	1075435	0.40	100	111.7	80	120	
Sb	121	1	No Gas	119.601	1.221	1555785	0.22	100	119.6	80	120	
Ba	137	1	No Gas	111.935	0.551	531331	0.58	100	111.9	80	120	
Tl	205	1	No Gas	114.648	3.092	3883535	1.69	100	114.6	80	120	
Tl	203	1	No Gas	112.095	2.815	1642848	1.44	100	112.1	80	120	
Pb	208	1	No Gas	113.356	2.938	5451884	1.48	100	113.4	80	120	
U	238	1	No Gas	115.872	2.508	5943162	0.98	100	115.9	80	120	
Ca	43	2	He	113353.858	0.183	183858	0.69	100	113353.9	80	120	ICSB Main CR1 Failed
Sb	121	2	He	117.054	0.955	667122	0.15	100	117.1	80	120	
Ti	47	2	He	2182.650	1.203	366073	0.58	100	2182.7	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	102.185	1.951	1030092	0.61	100	102.2	80	120	
Se	82	1	No Gas	113.974	2.951	19580	1.75	100	114.0	80	120	

QC ISTD Table

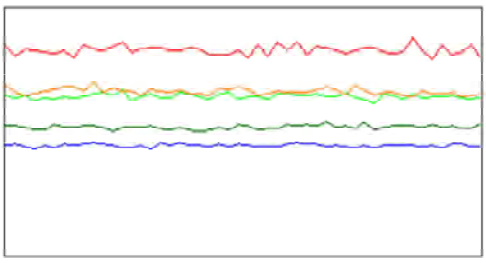
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	867840	0.22	1124339	77.19	70	120	
Ge	72	2	He	533502	0.84	639996	83.36	70	120	
Ge	72	1	No Gas	1927552	1.41	2271364	84.86	70	120	
In	115	1	No Gas	2514511	0.29	2743963	91.64	70	120	
Bi	209	1	No Gas	2760177	1.58	2953474	93.46	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\061821A.b
Acq. Date-Time	6/18/2021 9:47:15 AM
Report Comment	---
Instrument Name	G8421A SG18523544

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	5000	4160	41599.31		
24	20000	12895	128952.69		
59	50000	22254	222544.21		
115	50000	33235	332346.84		
208	50000	26030	260299.89		

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

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.207	5.000	
24	1.681	5.000	
59	1.560	5.000	
115	1.850	5.000	
208	1.781	5.000	

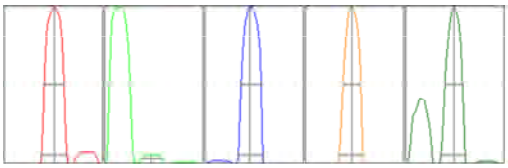
Mass	Background	Background (Required)	Background (Flag)
9	0.000		
24	0.200		
59	0.000		
115	0.600		
208	0.300		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.804 %
Doubly Charged	70 / 140 0.643 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4272.09	9.05	8.90 - 9.10	
24	12881.87	23.95	23.90 - 24.10	
59	22977.75	58.90	58.90 - 59.10	
115	34066.54	114.95	114.90 - 115.10	
208	25919.42	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.776		
24	0.66	0.778		
59	0.61	0.740		
115	0.54	0.726		
208	0.55	0.734		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.47 L/min	Dilution Gas	0.55 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.0 V	Deflect	14.0 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	135	Axis Gain	1.0003	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.11		

Hardware Settings

Torch

Torch H	1.3 mm	Torch V	-0.6 mm

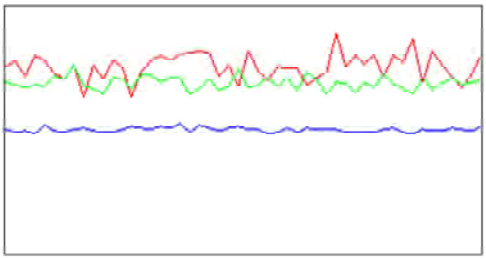
EM

Discriminator	4.5 mV	Analog HV	2542 V	Pulse HV	1305 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	200	151	1514.08		
24	1000	690	6903.90		
59	20000	10026	100256.73		

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

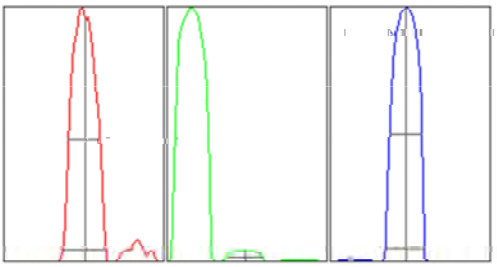
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	7.085	5.000	Fail
24	3.896	5.000	
59	1.860	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.100		
24	0.100		
59	0.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.435 %
Doubly Charged	70 / 140 0.684 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	155.01	9.05	8.90 - 9.10	
24	702.70	24.00	23.90 - 24.10	
59	10142.01	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.806		
24	0.66	0.777		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.61	0.738		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.47 L/min	Dilution Gas	0.55 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.0 V	Deflect	0.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.1 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	135	Axis Gain	1.0003	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.11		

Hardware Settings

Torch

Torch H	1.3 mm	Torch V	-0.6 mm

EM

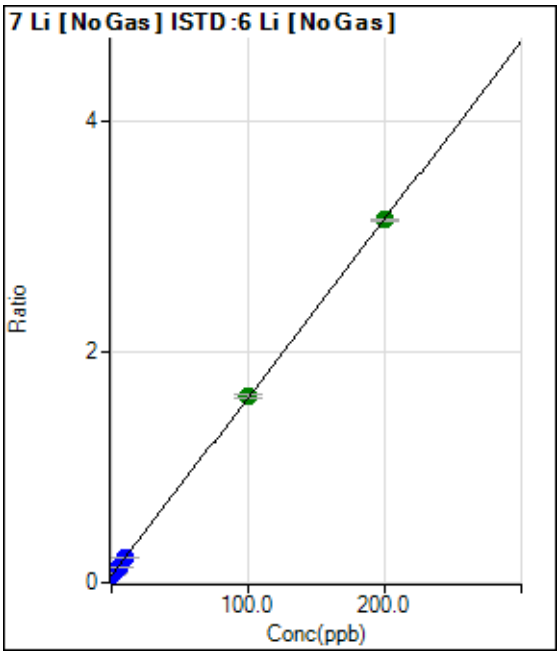
Discriminator	4.5 mV	Analog HV	2542 V	Pulse HV	1305 V

Calibration for 093_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\062121A.b\
Analysis File: 062121A.batch.bin
DA Date-Time: 6/21/2021 7:27:29 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	086CALB.d	CAL BLK	6/21/2021 3:37:22 PM
2	087CALS.d	2/10/200	6/21/2021 3:39:21 PM
3	088CALS.d	5/25/500	6/21/2021 3:41:20 PM
4	089CALS.d	10/50/100	6/21/2021 3:43:19 PM
5	090CALS.d	100/500/10K	6/21/2021 3:45:17 PM
6	091CALS.d	200/1000/20K	6/21/2021 3:47:10 PM

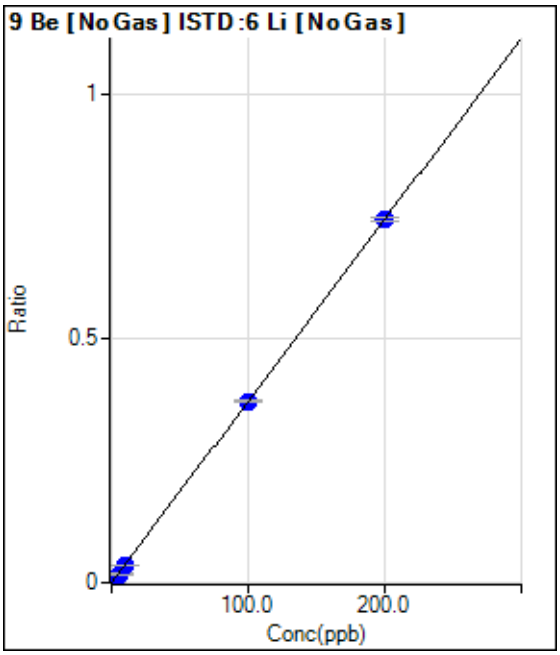
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68019.94	0.0615	P	0.6
2	☐	2.000	1.928	99162.50	0.0912	P	1.0
3	☐	5.000	4.699	145432.74	0.1339	P	2.6
4	☐	10.000	9.774	223636.70	0.2121	P	0.5
5	☐	100.000	100.639	1568590.91	1.6120	A	2.5
6	☐	200.000	199.700	2946313.18	3.1382	A	0.7

y = 0.0154 * x + 0.0615
R = 1.0000
DL = 0.07595
BEC = 3.994

Weight: <None>
Min Conc: <None>

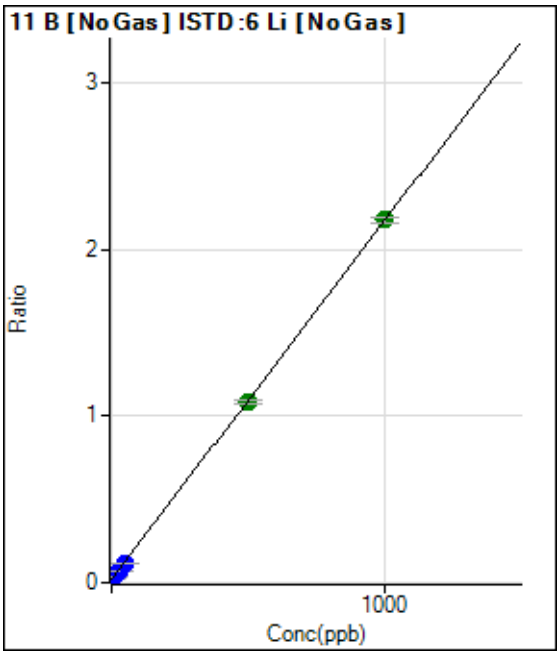


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	43.4
2	☐	2.000	1.856	7503.72	0.0069	P	2.9
3	☐	5.000	4.735	19114.70	0.0176	P	2.2
4	☐	10.000	9.428	36946.64	0.0350	P	0.6
5	☐	100.000	100.126	362133.63	0.3721	P	1.7
6	☐	200.000	199.973	697718.66	0.7432	P	0.9

y = 0.0037 * x + 6.0327E-006
R = 1.0000
DL = 0.002112
BEC = 0.001623

Weight: <None>
Min Conc: <None>

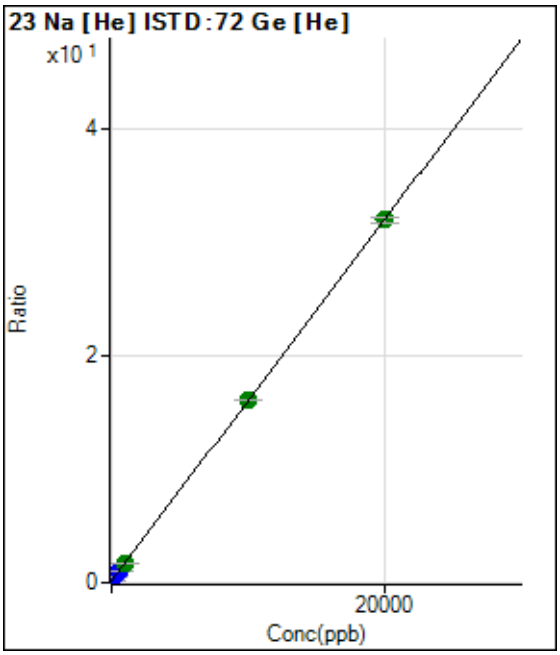
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	21484.82	0.0194	P	1.4
2	☐	10.000	8.167	40247.56	0.0370	P	2.6
3	☐	25.000	21.582	71599.83	0.0659	P	3.2
4	☐	50.000	45.066	122860.76	0.1165	P	1.5
5	☐	500.000	495.208	1057445.22	1.0865	A	1.8
6	☐	1000.000	1002.746	2046720.49	2.1801	A	1.4

y = 0.0022 * x + 0.0194
R = 1.0000
DL = 0.3809
BEC = 9.021

Weight: <None>
Min Conc: <None>

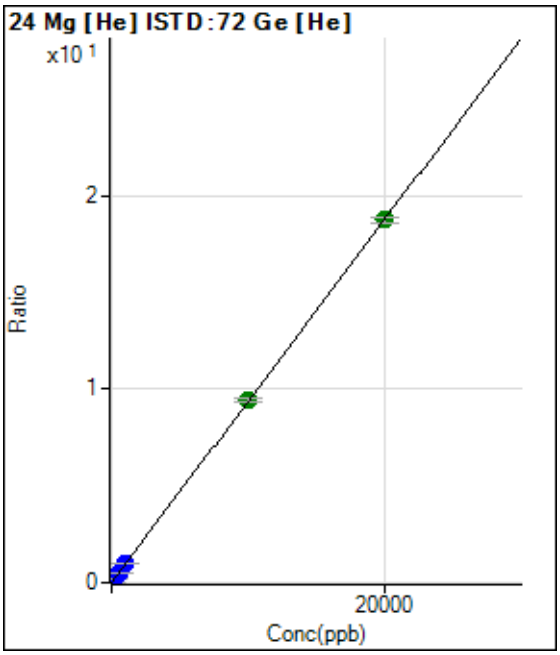


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92545.28	0.1455	P	1.6
2	☐	200.000	200.534	295422.15	0.4651	P	0.3
3	☐	500.000	500.253	596527.66	0.9426	P	1.0
4	☐	1000.000	990.476	1081174.52	1.7238	A	1.3
5	☐	10000.000	10008.556	9700740.27	16.0932	A	0.6
6	☐	20000.000	19996.187	18404037.64	32.0075	A	1.3

y = 0.0016 * x + 0.1455
R = 1.0000
DL = 4.384
BEC = 91.34

Weight: <None>
Min Conc: <None>

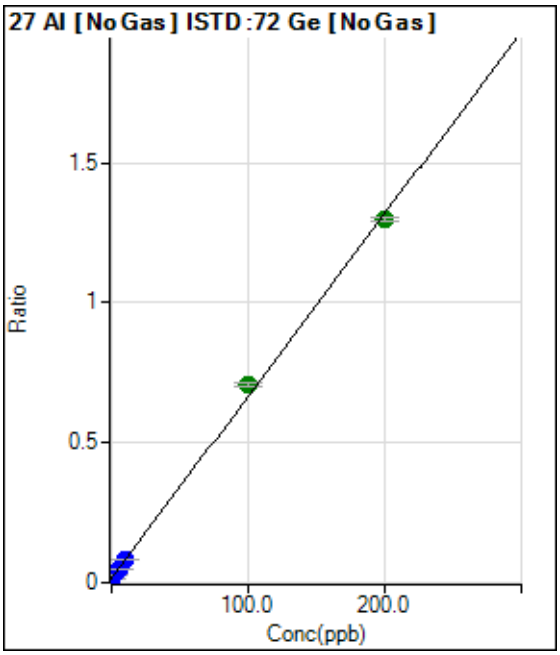
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	503.35	0.0008	P	11.9
2	☐	200.000	207.726	124344.32	0.1958	P	1.4
3	☐	500.000	516.337	307178.05	0.4854	P	1.4
4	☐	1000.000	1015.022	598052.74	0.9535	P	0.2
5	☐	10000.000	10014.329	5666488.87	9.4002	A	2.1
6	☐	20000.000	19991.599	10789586.92	18.7647	A	1.3

y = 9.3859E-004 * x + 7.9201E-004
R = 1.0000
DL = 0.3023
BEC = 0.8438

Weight: <None>
Min Conc: <None>

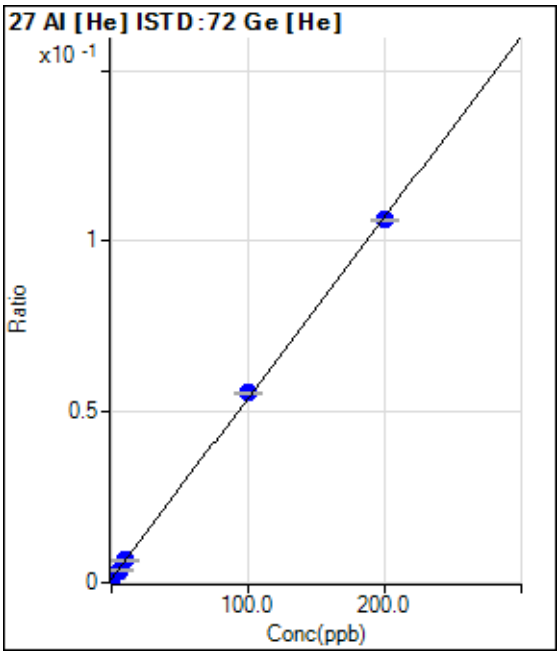


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36070.66	0.0156	P	3.0
2	☐	2.000	1.967	65423.44	0.0284	P	1.4
3	☐	5.000	4.979	108373.45	0.0480	P	1.2
4	☐	10.000	10.338	185657.82	0.0829	P	1.4
5	☐	100.000	106.455	1513402.69	0.7086	A	1.3
6	☐	200.000	196.757	2705259.02	1.2965	A	0.9

y = 0.0065 * x + 0.0156
R = 0.9993
DL = 0.215
BEC = 2.396

Weight: <None>
Min Conc: <None>

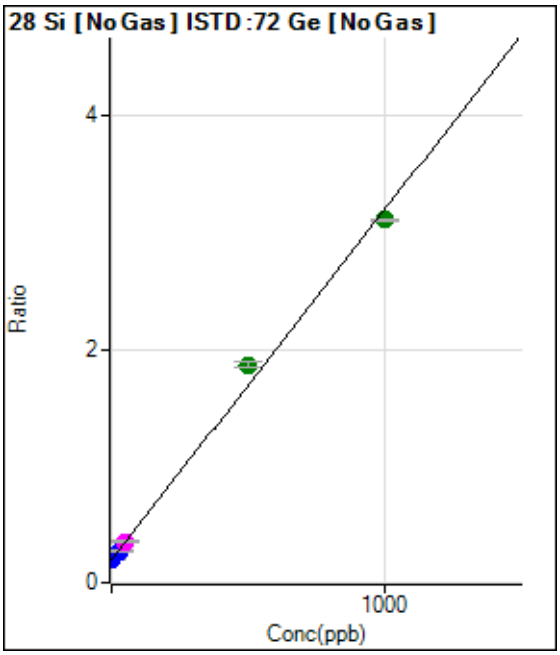
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	736.70	0.0012	P	12.1
2	☐	2.000	2.046	1423.44	0.0022	P	7.7
3	☐	5.000	4.459	2226.88	0.0035	P	12.9
4	☐	10.000	10.070	4070.67	0.0065	P	4.6
5	☐	100.000	102.918	33537.55	0.0556	P	1.1
6	☐	200.000	198.550	61100.94	0.1063	P	0.7

y = 5.2934E-004 * x + 0.0012
R = 0.9998
DL = 0.797
BEC = 2.189

Weight: <None>
Min Conc: <None>

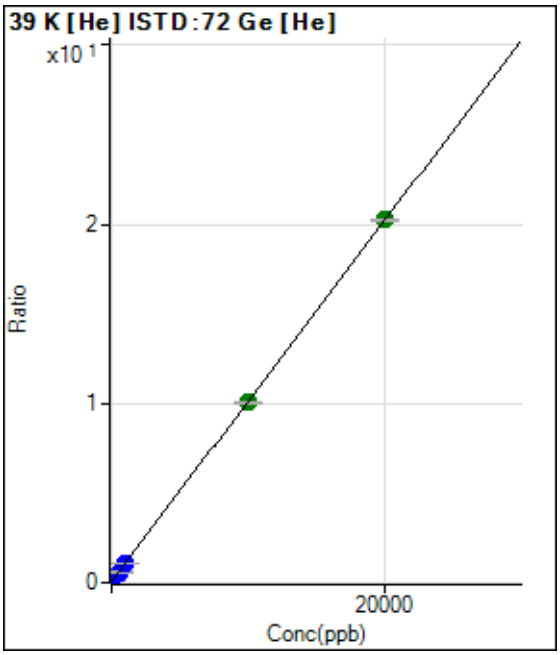


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	450649.43	0.1948	P	1.7
2	☐	10.000	9.732	516125.28	0.2240	P	0.9
3	☐	25.000	25.270	610965.65	0.2707	P	1.6
4	☐	50.000	51.852	784934.73	0.3504	M	3.0
5	☐	500.000	557.079	3986147.54	1.8666	A	3.0
6	☐	1000.000	971.364	6488457.19	3.1098	A	0.4

y = 0.0030 * x + 0.1948
R = 0.9977
DL = 3.25
BEC = 64.93

Weight: <None>
Min Conc: <None>

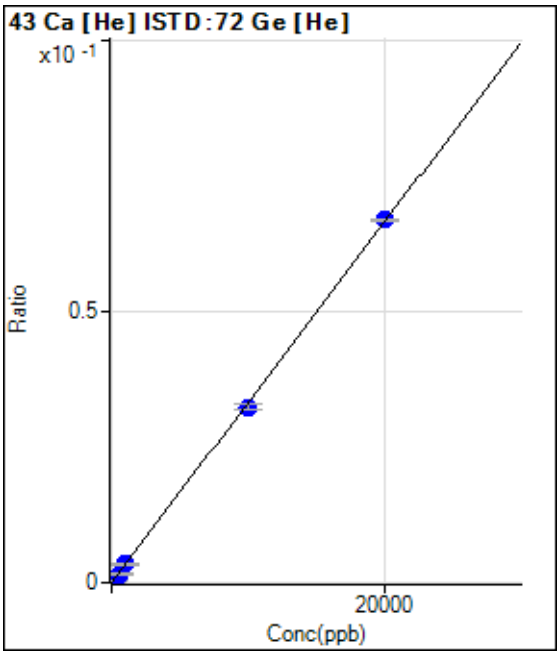
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55277.45	0.0869	P	1.2
2	☐	200.000	202.702	184698.28	0.2908	P	1.1
3	☐	500.000	498.213	372069.63	0.5880	P	1.1
4	☐	1000.000	984.264	675358.64	1.0767	P	0.7
5	☐	10000.000	9920.357	6065965.33	10.0631	A	0.8
6	☐	20000.000	20040.626	11637946.08	20.2403	A	0.9

y = 0.0010 * x + 0.0869
R = 1.0000
DL = 3.078
BEC = 86.45

Weight: <None>
Min Conc: <None>

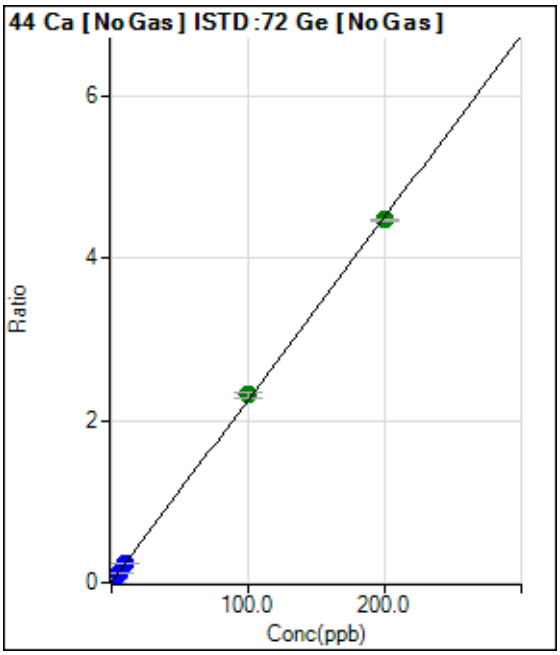


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	114.8
2	☐	200.000	164.713	360.01	0.0006	P	29.9
3	☐	500.000	457.006	973.39	0.0015	P	10.6
4	☐	1000.000	1020.353	2136.87	0.0034	P	6.4
5	☐	10000.000	9733.867	19480.81	0.0323	P	3.6
6	☐	20000.000	20133.477	38423.87	0.0668	P	0.8

y = 3.3181E-006 * x + 2.0927E-005
R = 0.9999
DL = 21.72
BEC = 6.307

Weight: <None>
Min Conc: <None>

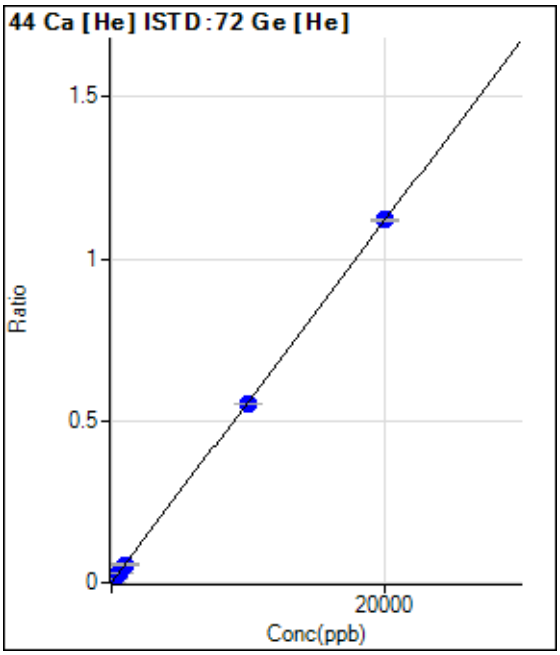
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15926.14	0.0069	P	1.2
2	☐	2.000	2.052	122138.11	0.0530	P	2.4
3	☐	5.000	5.128	275837.10	0.1222	P	0.9
4	☐	10.000	10.248	531489.09	0.2373	P	1.0
5	☐	100.000	102.756	4949187.11	2.3175	A	2.6
6	☐	200.000	198.606	9332433.61	4.4727	A	0.4

y = 0.0225 * x + 0.0069
R = 0.9999
DL = 0.0113
BEC = 0.3062

Weight: <None>
Min Conc: <None>

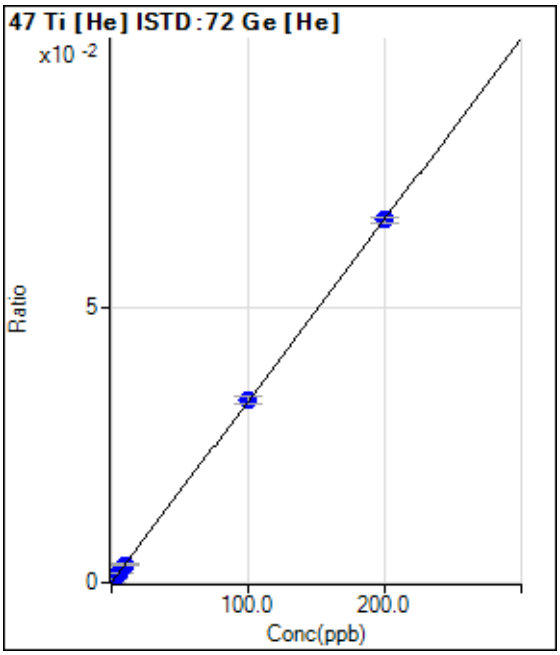


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490.07	0.0008	P	37.5
2	☐	200.000	189.515	7205.36	0.0113	P	3.2
3	☐	500.000	480.100	17434.63	0.0276	P	1.3
4	☐	1000.000	991.140	35161.85	0.0561	P	2.8
5	☐	10000.000	9876.690	332545.22	0.5517	P	0.2
6	☐	20000.000	20062.700	643932.63	1.1198	P	0.4

y = 5.5779E-005 * x + 7.7110E-004
R = 1.0000
DL = 15.55
BEC = 13.82

Weight: <None>
Min Conc: <None>

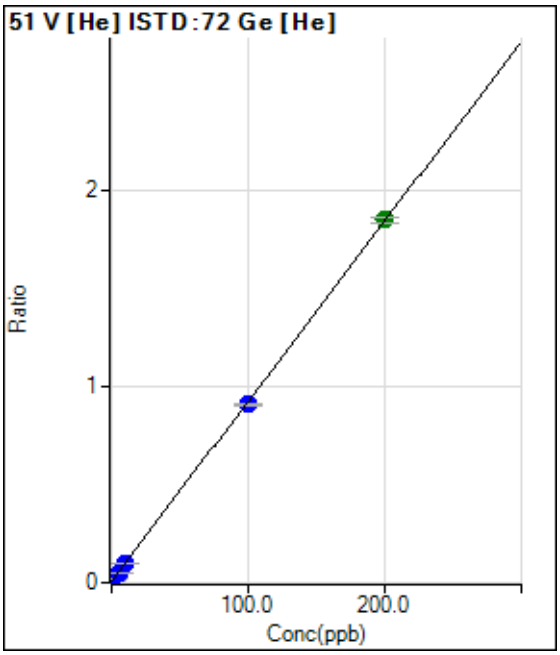
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	173.2
2	☐	2.000	1.730	373.34	0.0006	P	9.3
3	☐	5.000	5.223	1103.40	0.0017	P	16.1
4	☐	10.000	9.899	2063.53	0.0033	P	3.8
5	☐	100.000	100.251	19994.80	0.0332	P	4.3
6	☐	200.000	199.876	38019.82	0.0661	P	1.3

y = 3.3071E-004 * x + 1.5840E-005
R = 1.0000
DL = 0.2489
BEC = 0.0479

Weight: <None>
Min Conc: <None>

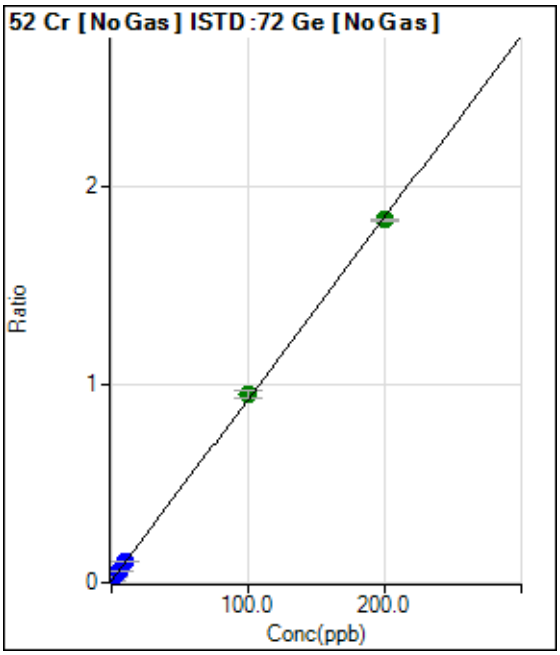


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4647.49	0.0073	P	4.8
2	☐	2.000	1.885	15611.15	0.0246	P	1.4
3	☐	5.000	4.821	32577.50	0.0515	P	2.0
4	☐	10.000	9.618	59856.56	0.0954	P	0.7
5	☐	100.000	98.322	547434.75	0.9082	P	0.6
6	☐	200.000	200.864	1062340.27	1.8477	A	1.7

y = 0.0092 * x + 0.0073
R = 1.0000
DL = 0.1145
BEC = 0.7978

Weight: <None>
Min Conc: <None>

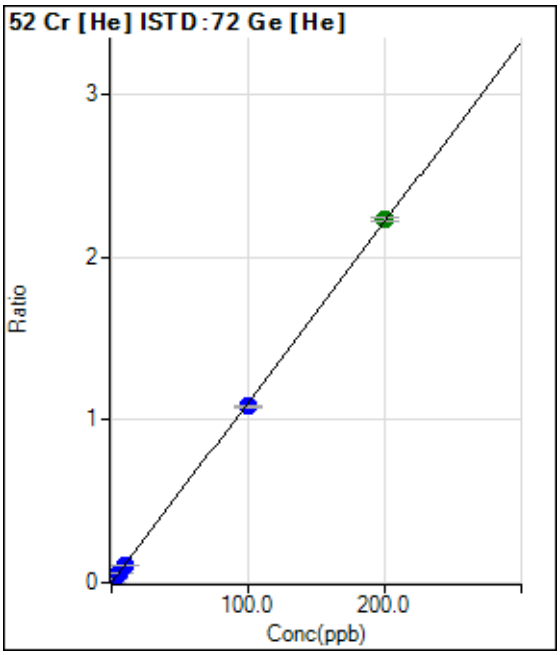
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20532.43	0.0089	P	1.6
2	☐	2.000	1.958	61782.61	0.0268	P	0.9
3	☐	5.000	5.018	123829.41	0.0549	P	0.2
4	☐	10.000	10.228	229763.48	0.1026	P	0.7
5	☐	100.000	102.744	2029420.59	0.9503	A	3.3
6	☐	200.000	198.616	3815426.51	1.8287	A	0.8

y = 0.0092 * x + 0.0089
R = 0.9999
DL = 0.04658
BEC = 0.9688

Weight: <None>
Min Conc: <None>

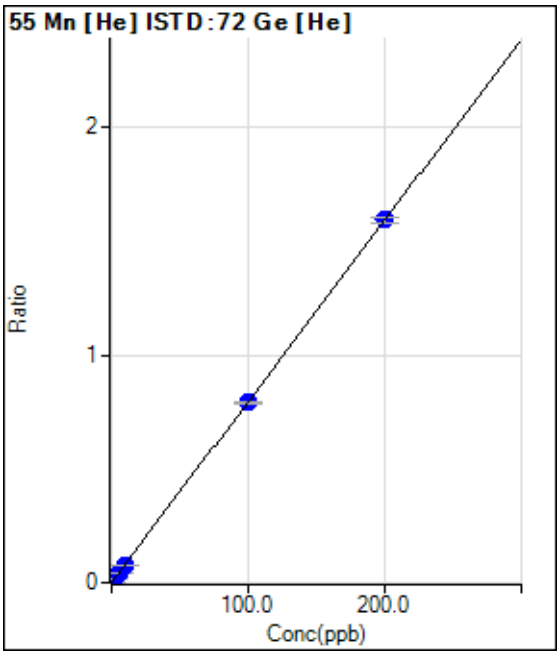


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1130.07	0.0018	P	15.5
2	☐	2.000	1.941	14784.81	0.0233	P	1.8
3	☐	5.000	4.786	34664.16	0.0548	P	1.6
4	☐	10.000	9.636	68039.09	0.1085	P	1.9
5	☐	100.000	97.728	653355.41	1.0839	P	1.5
6	☐	200.000	201.160	1281749.33	2.2292	A	1.0

y = 0.0111 * x + 0.0018
R = 0.9999
DL = 0.07458
BEC = 0.1606

Weight: <None>
Min Conc: <None>

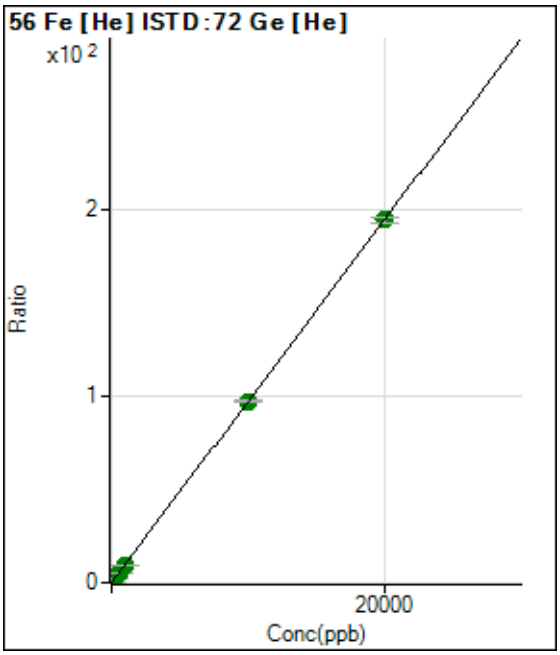
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	416.68	0.0007	P	18.6
2	☐	2.000	1.989	10457.54	0.0165	P	3.2
3	☐	5.000	5.037	25741.25	0.0407	P	2.6
4	☐	10.000	9.866	49573.72	0.0790	P	1.7
5	☐	100.000	99.277	475816.31	0.7894	P	1.2
6	☐	200.000	200.367	915619.67	1.5925	P	1.3

y = 0.0079 * x + 6.5573E-004
R = 1.0000
DL = 0.04613
BEC = 0.08254

Weight: <None>
Min Conc: <None>

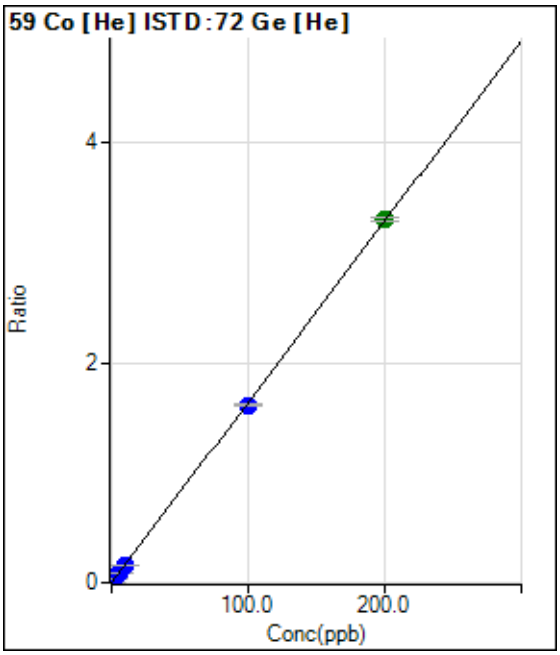


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14624.74	0.0230	P	1.2
2	☐	200.000	202.800	1265785.76	1.9927	A	1.3
3	☐	500.000	506.094	3125284.22	4.9385	A	1.0
4	☐	1000.000	966.068	5899880.54	9.4061	A	1.4
5	☐	10000.000	10004.367	58585329.13	97.1917	A	1.9
6	☐	20000.000	19999.333	111697575.00	194.2691	A	1.4

y = 0.0097 * x + 0.0230
R = 1.0000
DL = 0.08814
BEC = 2.368

Weight: <None>
Min Conc: <None>

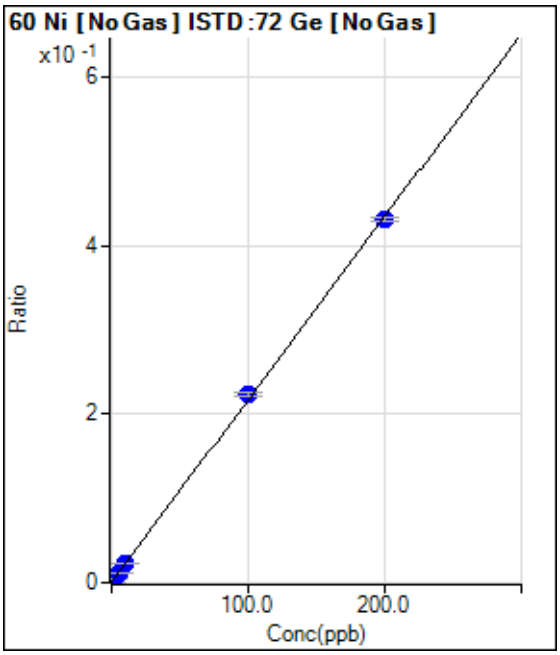
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	114.8
2	☐	2.000	1.991	20776.17	0.0327	P	2.2
3	☐	5.000	4.917	51079.51	0.0807	P	0.7
4	☐	10.000	9.822	101110.27	0.1612	P	0.7
5	☐	100.000	98.166	970912.12	1.6107	P	0.9
6	☐	200.000	200.928	1895620.08	3.2968	A	1.2

y = 0.0164 * x + 4.1855E-005
R = 0.9999
DL = 0.008785
BEC = 0.002551

Weight: <None>
Min Conc: <None>

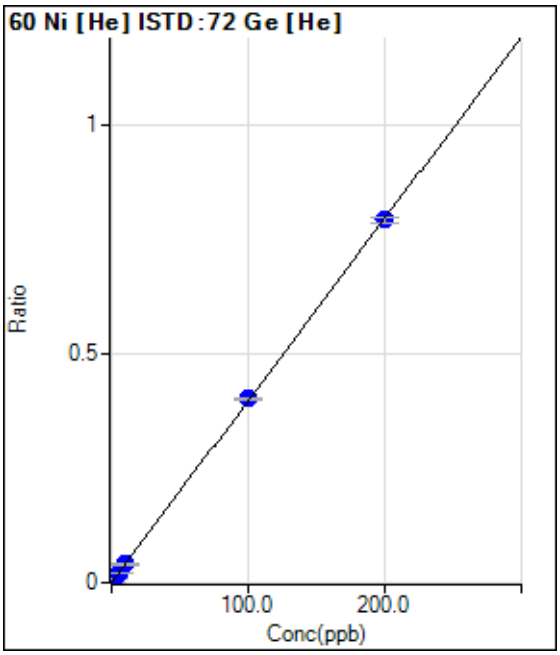


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	873.38	0.0004	P	17.0
2	☐	2.000	2.095	11338.19	0.0049	P	0.9
3	☐	5.000	5.060	25621.10	0.0113	P	1.4
4	☐	10.000	10.364	51172.97	0.0228	P	1.2
5	☐	100.000	103.306	479155.28	0.2244	P	1.9
6	☐	200.000	198.326	897961.76	0.4304	P	1.0

y = 0.0022 * x + 3.7795E-004
R = 0.9998
DL = 0.08882
BEC = 0.1743

Weight: <None>
Min Conc: <None>

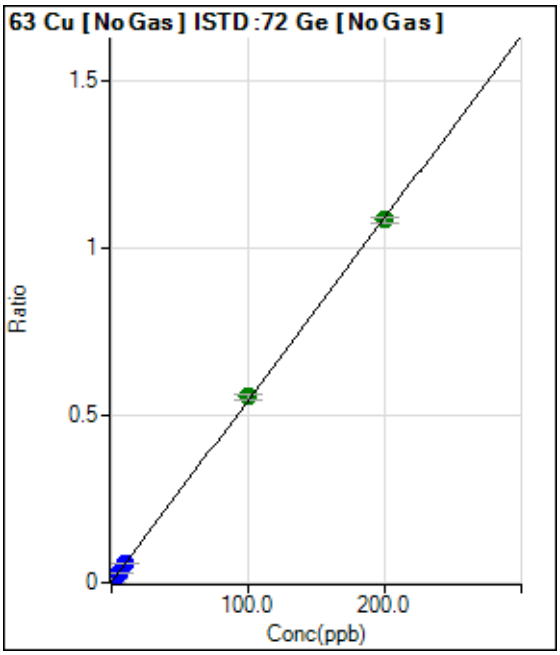
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	173.34	0.0003	P	19.2
2	☐	2.000	2.046	5334.50	0.0084	P	4.5
3	☐	5.000	4.975	12676.14	0.0200	P	1.9
4	☐	10.000	10.052	25210.28	0.0402	P	1.6
5	☐	100.000	101.157	242335.02	0.4020	P	1.0
6	☐	200.000	199.419	455527.21	0.7923	P	1.6

y = 0.0040 * x + 2.7280E-004
R = 1.0000
DL = 0.03952
BEC = 0.06869

Weight: <None>
Min Conc: <None>

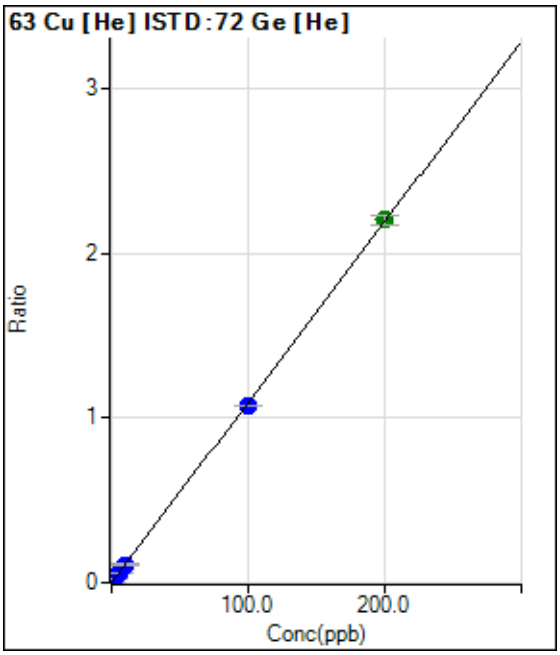


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3650.55	0.0016	P	6.7
2	☐	2.000	2.070	29632.58	0.0129	P	0.8
3	☐	5.000	5.187	67366.60	0.0298	P	2.6
4	☐	10.000	10.003	125636.78	0.0561	P	1.4
5	☐	100.000	101.976	1190283.76	0.5574	A	2.7
6	☐	200.000	199.007	2266410.96	1.0862	A	1.5

y = 0.0055 * x + 0.0016
R = 0.9999
DL = 0.05856
BEC = 0.2897

Weight: <None>
Min Conc: <None>

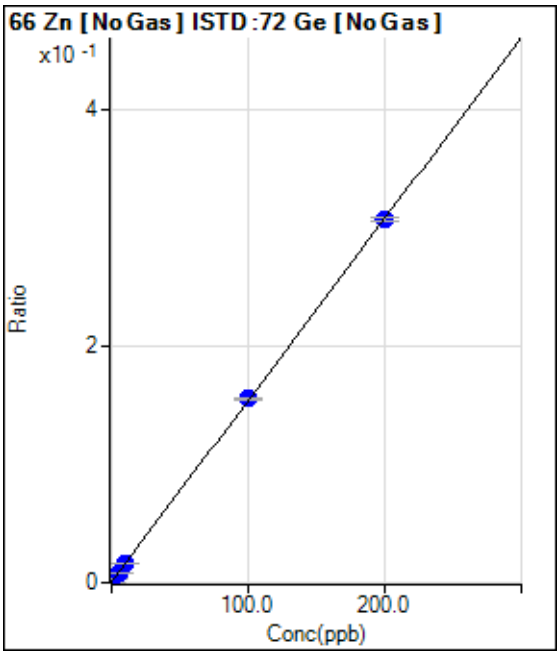
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1126.74	0.0018	P	8.6
2	☐	2.000	2.028	15242.11	0.0240	P	2.9
3	☐	5.000	5.107	36529.36	0.0577	P	1.4
4	☐	10.000	9.916	69249.38	0.1104	P	1.1
5	☐	100.000	97.937	647833.26	1.0747	P	0.5
6	☐	200.000	201.033	1267249.85	2.2042	A	2.5

y = 0.0110 * x + 0.0018
R = 0.9999
DL = 0.04186
BEC = 0.1618

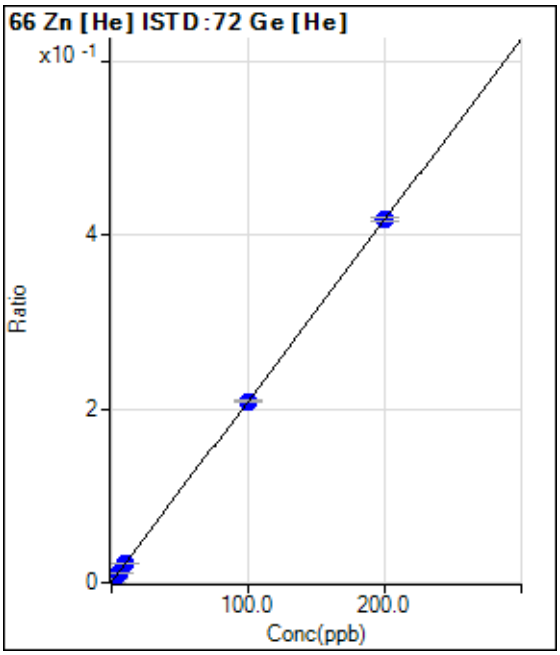
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1460.10	0.0006	P	11.4
2	☐	2.000	2.274	9483.48	0.0041	P	5.9
3	☐	5.000	5.064	18943.53	0.0084	P	3.4
4	☐	10.000	10.191	36395.79	0.0163	P	2.2
5	☐	100.000	100.981	331902.37	0.1554	P	1.5
6	☐	200.000	199.495	639284.05	0.3064	P	1.2

y = 0.0015 * x + 6.3158E-004
R = 1.0000
DL = 0.1405
BEC = 0.4121

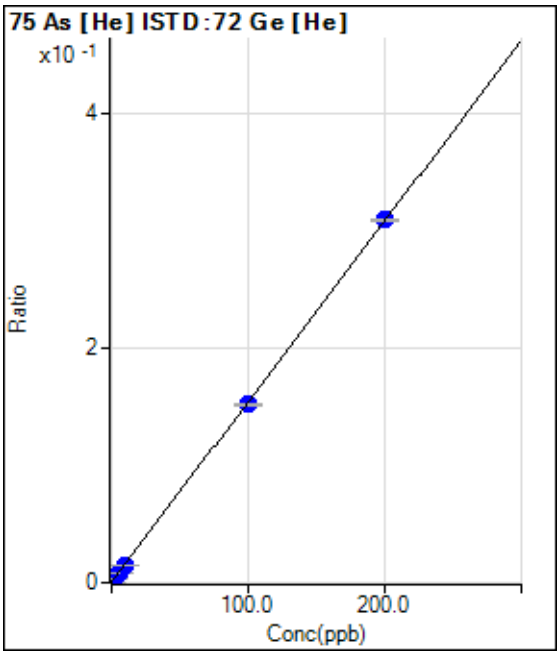
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490.02	0.0008	P	17.7
2	☐	2.000	2.176	3367.15	0.0053	P	1.4
3	☐	5.000	5.090	7195.36	0.0114	P	1.9
4	☐	10.000	10.005	13550.34	0.0216	P	1.9
5	☐	100.000	99.925	125882.67	0.2088	P	1.1
6	☐	200.000	200.033	239927.48	0.4173	P	1.2

y = 0.0021 * x + 7.7015E-004
R = 1.0000
DL = 0.1963
BEC = 0.3699

Weight: <None>
Min Conc: <None>

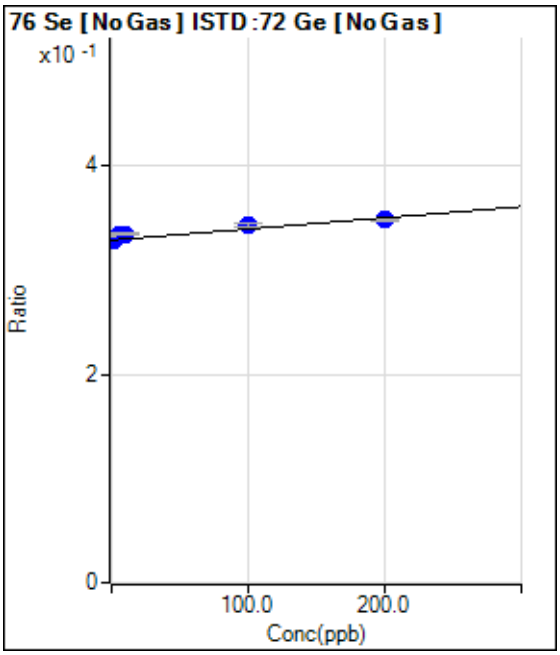


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	224.45	0.0004	P	19.1
2	☐	2.000	1.962	2141.29	0.0034	P	4.6
3	☐	5.000	4.771	4868.68	0.0077	P	1.5
4	☐	10.000	9.657	9541.19	0.0152	P	4.4
5	☐	100.000	98.610	91664.38	0.1521	P	0.7
6	☐	200.000	200.718	177763.01	0.3092	P	0.6

y = 0.0015 * x + 3.5327E-004
R = 1.0000
DL = 0.1318
BEC = 0.2296

Weight: <None>
Min Conc: <None>

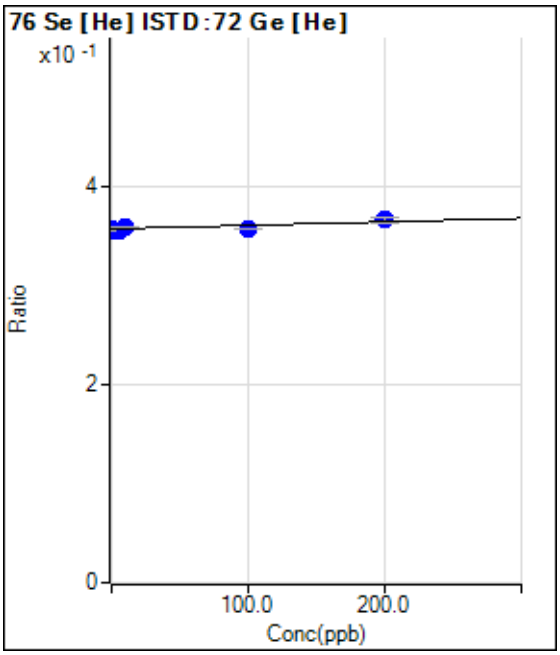
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	759892.25	0.3285	P	1.6
2	☐	2.000	3.485	757719.16	0.3289	P	0.8
3	☐	5.000	55.595	755046.91	0.3345	P	1.1
4	☐	10.000	53.494	748649.31	0.3343	P	0.3
5	☐	100.000	132.293	731964.05	0.3427	P	0.9
6	☐	200.000	180.399	725828.66	0.3479	P	0.8

y = 1.0722E-004 * x + 0.3285
R = 0.9413
DL = 146
BEC = 3064

Weight: <None>
Min Conc: <None>

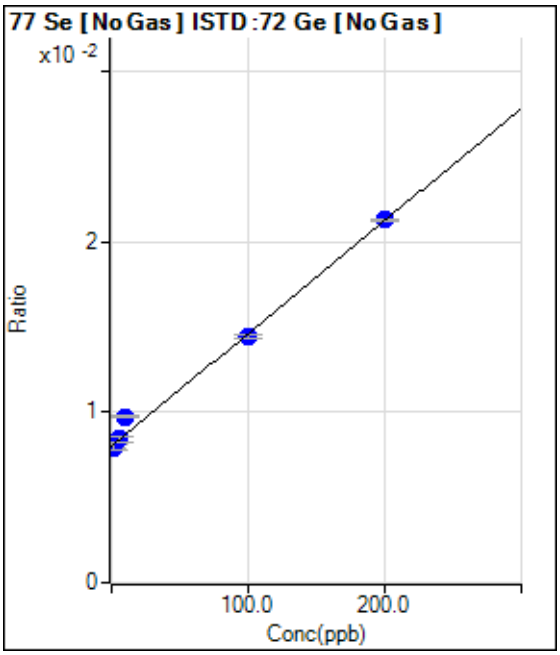


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226820.80	0.3567	P	1.7
2	☐	2.000	-58.971	225254.18	0.3546	P	1.4
3	☐	5.000	-44.110	224763.34	0.3552	P	0.2
4	☐	10.000	31.691	224463.04	0.3579	P	0.6
5	☐	100.000	-1.055	215013.82	0.3567	P	0.3
6	☐	200.000	251.280	210260.60	0.3657	P	1.3

y = 3.5645E-005 * x + 0.3567
R = 0.8785
DL = 509.4
BEC = 1.001E+04

Weight: <None>
Min Conc: <None>

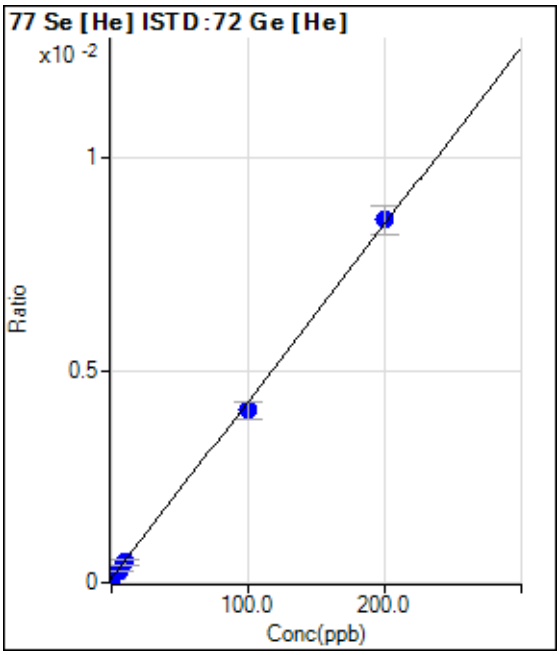
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18556.42	0.0080	P	2.2
2	☐	2.000	-1.668	18232.70	0.0079	P	4.3
3	☐	5.000	6.183	19037.14	0.0084	P	3.5
4	☐	10.000	25.700	21771.25	0.0097	P	1.1
5	☐	100.000	97.024	30825.70	0.0144	P	1.5
6	☐	200.000	200.710	44410.07	0.0213	P	0.8

y = 6.6074E-005 * x + 0.0080
R = 0.9963
DL = 8.149
BEC = 121.4

Weight: <None>
Min Conc: <None>

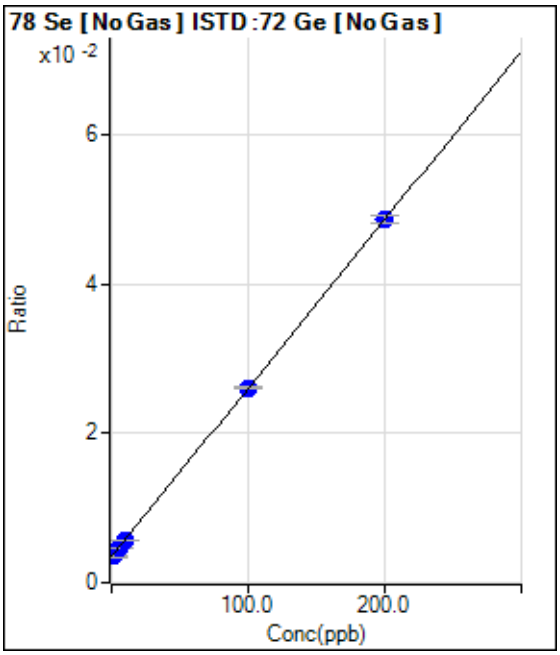


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.33	0.0001	P	33.1
2	☐	2.000	2.643	133.33	0.0002	P	17.1
3	☐	5.000	4.181	173.34	0.0003	P	7.3
4	☐	10.000	9.203	303.34	0.0005	P	22.1
5	☐	100.000	95.081	2450.27	0.0041	P	10.4
6	☐	200.000	202.513	4911.00	0.0085	P	8.0

y = 4.1698E-005 * x + 9.9648E-005
R = 0.9996
DL = 2.375
BEC = 2.39

Weight: <None>
Min Conc: <None>

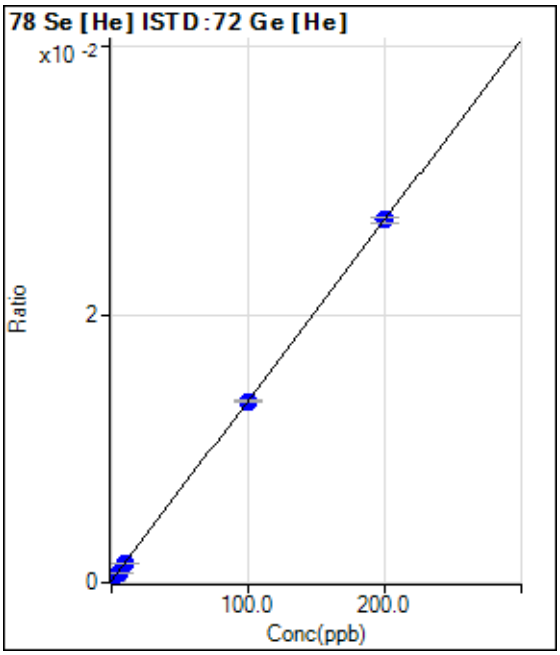
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8102.57	0.0035	P	8.5
2	☐	2.000	0.347	8252.64	0.0036	P	6.3
3	☐	5.000	4.710	10310.77	0.0046	P	0.1
4	☐	10.000	9.561	12682.82	0.0057	P	2.4
5	☐	100.000	100.210	55795.71	0.0261	P	1.3
6	☐	200.000	199.941	101463.98	0.0486	P	2.1

y = 2.2572E-004 * x + 0.0035
R = 1.0000
DL = 3.96
BEC = 15.53

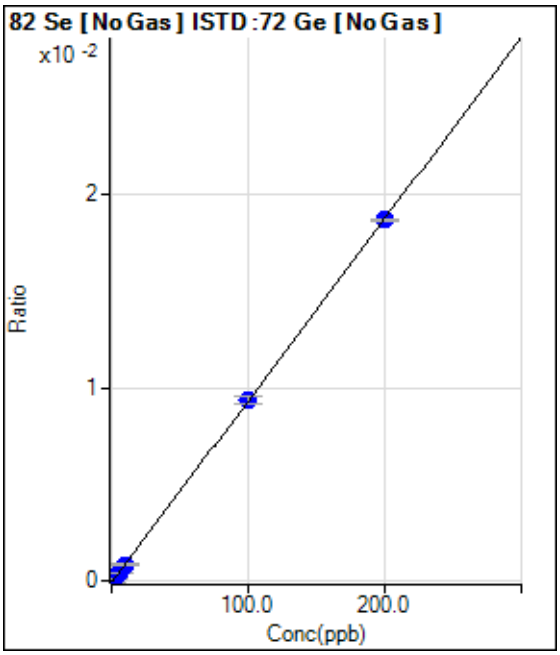
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.33	0.0001	P	2.4
2	☐	2.000	1.817	232.67	0.0004	P	1.1
3	☐	5.000	4.424	454.01	0.0007	P	13.1
4	☐	10.000	9.492	878.03	0.0014	P	3.9
5	☐	100.000	99.773	8171.83	0.0136	P	1.1
6	☐	200.000	200.155	15567.00	0.0271	P	1.6

y = 1.3466E-004 * x + 1.2161E-004
R = 1.0000
DL = 0.06546
BEC = 0.9031

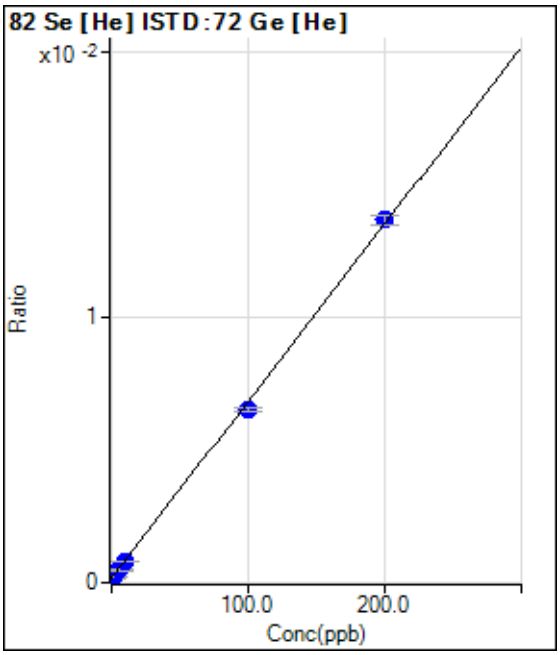
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.72	-0.0001	P	-36.1
2	☐	2.000	2.395	392.73	0.0002	P	18.9
3	☐	5.000	5.095	955.71	0.0004	P	6.6
4	☐	10.000	9.902	1956.13	0.0009	P	7.2
5	☐	100.000	100.459	19974.92	0.0094	P	3.7
6	☐	200.000	199.769	38920.62	0.0187	P	0.4

y = 9.3640E-005 * x - 5.3866E-005
R = 1.0000
DL = 0.6237
BEC = -0.5752

Weight: <None>
Min Conc: <None>

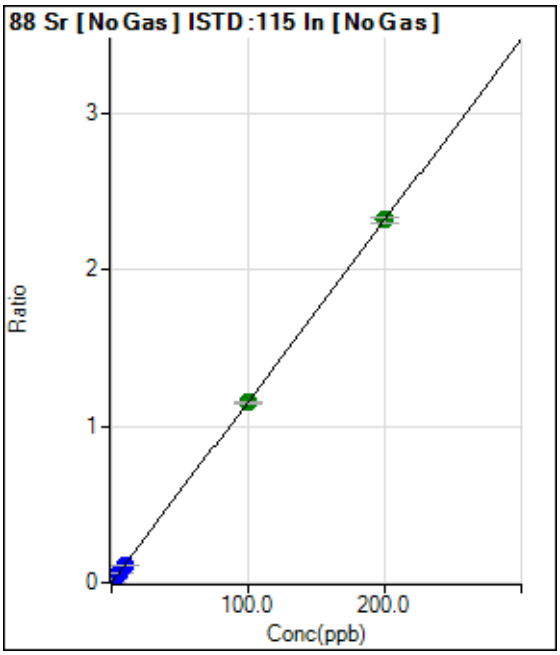


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	106.67	0.0002	P	33.6
2	☐	2.000	0.709	136.67	0.0002	P	9.1
3	☐	5.000	4.596	300.01	0.0005	P	15.8
4	☐	10.000	9.121	486.69	0.0008	P	2.1
5	☐	100.000	95.238	3927.31	0.0065	P	3.0
6	☐	200.000	202.448	7855.76	0.0137	P	2.5

y = 6.6649E-005 * x + 1.6801E-004
R = 0.9996
DL = 2.537
BEC = 2.521

Weight: <None>
Min Conc: <None>

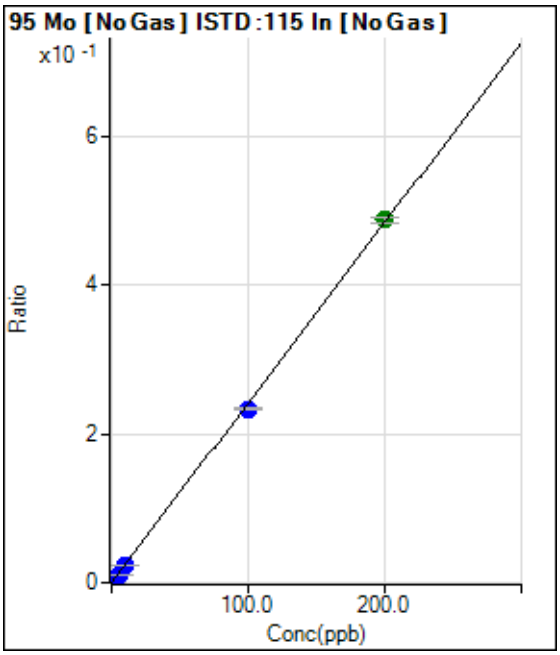
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1220.08	0.0004	P	7.0
2	☐	2.000	2.016	69945.82	0.0238	P	0.5
3	☐	5.000	4.823	167032.76	0.0563	P	1.5
4	☐	10.000	9.722	332754.19	0.1131	P	1.6
5	☐	100.000	99.457	3267674.95	1.1527	A	0.7
6	☐	200.000	200.289	6279673.86	2.3210	A	1.6

y = 0.0116 * x + 4.1073E-004
R = 1.0000
DL = 0.007457
BEC = 0.03545

Weight: <None>
Min Conc: <None>

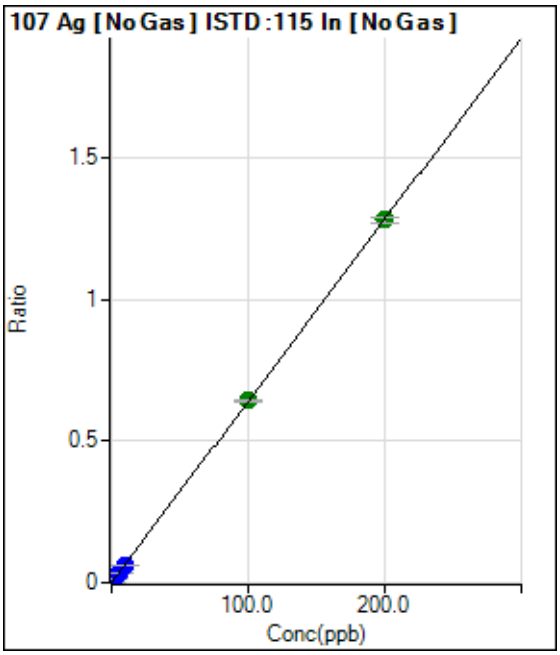


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0000	P	33.3
2	☐	2.000	1.976	14127.74	0.0048	P	5.4
3	☐	5.000	4.739	34083.94	0.0115	P	2.0
4	☐	10.000	9.502	67718.77	0.0230	P	2.5
5	☐	100.000	96.700	663338.90	0.2340	P	0.6
6	☐	200.000	201.682	1320406.49	0.4880	A	1.5

y = 0.0024 * x + 2.0202E-005
R = 0.9998
DL = 0.008351
BEC = 0.008349

Weight: <None>
Min Conc: <None>

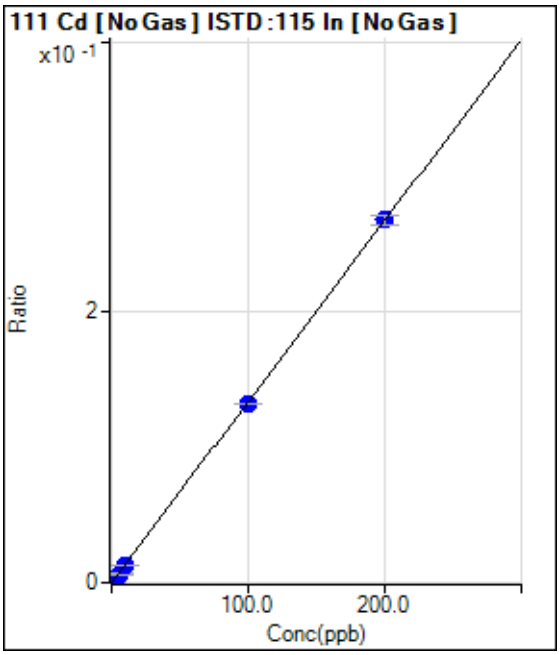
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	470.02	0.0002	P	14.6
2	☐	2.000	1.989	37978.09	0.0129	P	0.7
3	☐	5.000	4.920	94059.73	0.0317	P	0.9
4	☐	10.000	9.646	182491.79	0.0620	P	0.6
5	☐	100.000	100.196	1821248.36	0.6425	A	0.5
6	☐	200.000	199.922	3467939.53	1.2818	A	1.9

y = 0.0064 * x + 1.5802E-004
R = 1.0000
DL = 0.01076
BEC = 0.02465

Weight: <None>
Min Conc: <None>

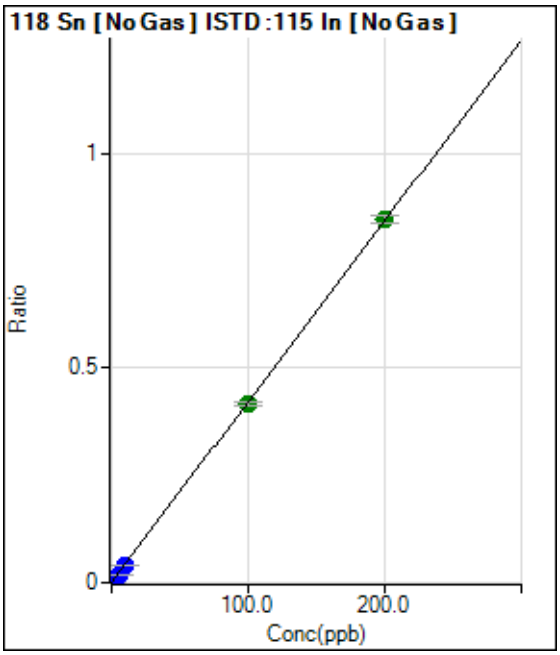


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	115.6
2	☐	2.000	1.990	7855.78	0.0027	P	2.1
3	☐	5.000	4.755	18900.49	0.0064	P	4.5
4	☐	10.000	9.624	37934.77	0.0129	P	2.2
5	☐	100.000	98.924	375455.28	0.1324	P	0.9
6	☐	200.000	200.563	726488.29	0.2685	P	2.4

y = 0.0013 * x + 4.5463E-006
R = 1.0000
DL = 0.01177
BEC = 0.003396

Weight: <None>
Min Conc: <None>

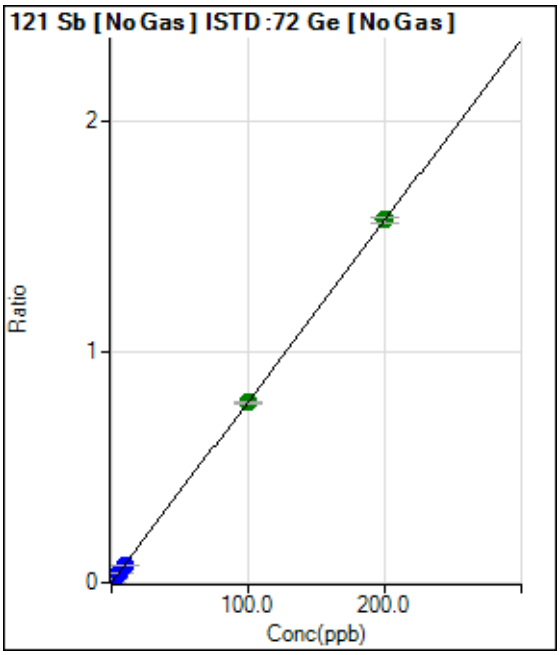
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2153.55	0.0007	P	4.1
2	☐	2.000	1.891	25558.46	0.0087	P	4.2
3	☐	5.000	4.569	59226.80	0.0200	P	0.9
4	☐	10.000	9.281	117158.76	0.0398	P	1.3
5	☐	100.000	98.769	1180849.41	0.4166	A	2.7
6	☐	200.000	200.663	2287697.00	0.8456	A	2.2

y = 0.0042 * x + 7.2409E-004
R = 1.0000
DL = 0.02125
BEC = 0.172

Weight: <None>
Min Conc: <None>

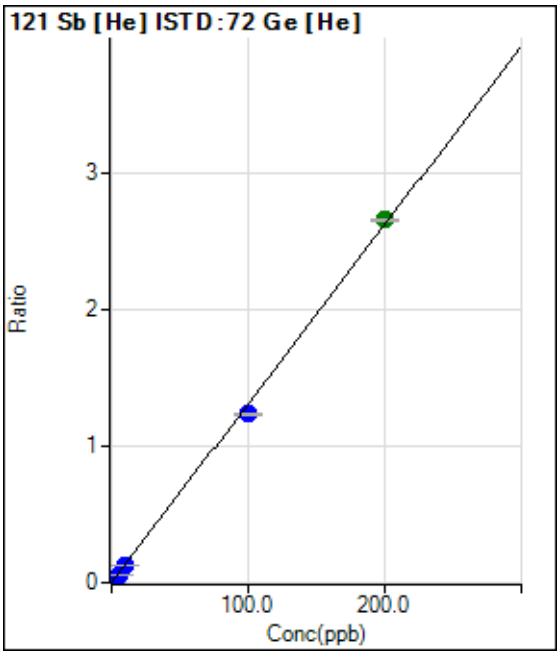


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1980.19	0.0009	P	6.8
2	☐	2.000	1.923	36742.01	0.0159	P	0.8
3	☐	5.000	4.718	85547.85	0.0379	P	1.0
4	☐	10.000	9.476	168532.25	0.0753	P	0.8
5	☐	100.000	99.360	1667848.62	0.7809	A	0.4
6	☐	200.000	200.354	3283169.12	1.5737	A	1.9

y = 0.0079 * x + 8.5584E-004
R = 1.0000
DL = 0.02224
BEC = 0.109

Weight: <None>
Min Conc: <None>

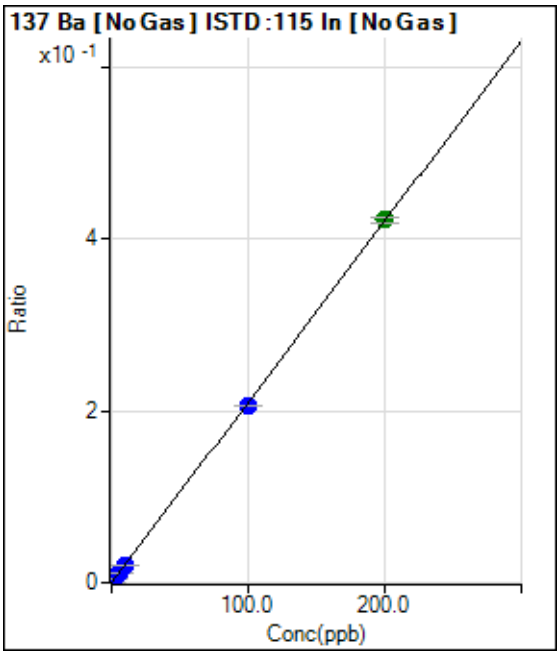
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1030.06	0.0016	P	12.4
2	☐	2.000	1.879	16620.80	0.0262	P	3.7
3	☐	5.000	4.575	38847.83	0.0614	P	1.1
4	☐	10.000	9.081	75423.56	0.1203	P	1.3
5	☐	100.000	94.356	744001.58	1.2343	P	0.9
6	☐	200.000	202.880	1524955.03	2.6520	A	0.4

y = 0.0131 * x + 0.0016
R = 0.9995
DL = 0.04613
BEC = 0.1241

Weight: <None>
Min Conc: <None>

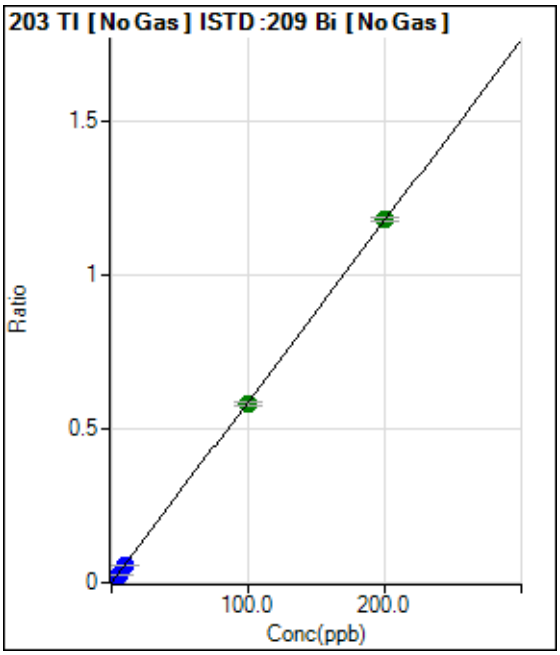


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	446.69	0.0001	P	21.0
2	☐	2.000	1.944	12459.53	0.0042	P	5.0
3	☐	5.000	4.806	30415.92	0.0103	P	0.9
4	☐	10.000	9.515	59302.14	0.0201	P	1.2
5	☐	100.000	98.148	585182.56	0.2064	P	0.4
6	☐	200.000	200.956	1143200.58	0.4225	A	1.5

y = 0.0021 * x + 1.4997E-004
R = 0.9999
DL = 0.04499
BEC = 0.07136

Weight: <None>
Min Conc: <None>

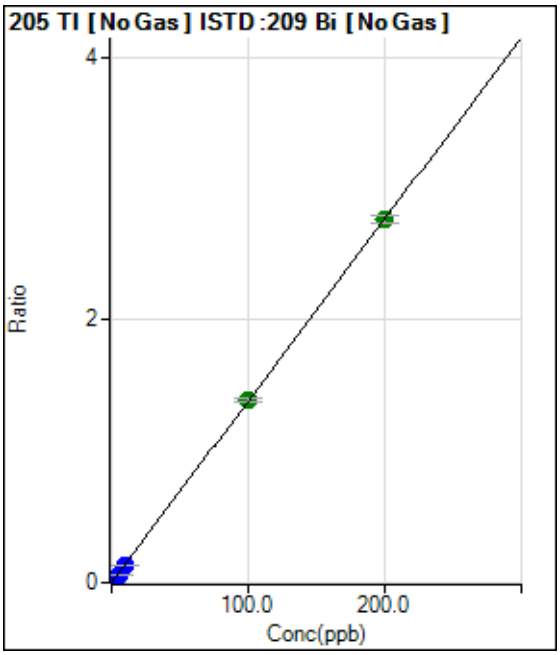
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	196.67	0.0001	P	17.8
2	☐	2.000	1.839	36293.18	0.0109	P	1.8
3	☐	5.000	4.633	91735.50	0.0273	P	1.9
4	☐	10.000	9.343	181127.12	0.0549	P	0.9
5	☐	100.000	99.089	1843440.55	0.5816	A	2.1
6	☐	200.000	200.499	3585575.57	1.1767	A	1.2

y = 0.0059 * x + 5.8922E-005
R = 1.0000
DL = 0.005373
BEC = 0.01004

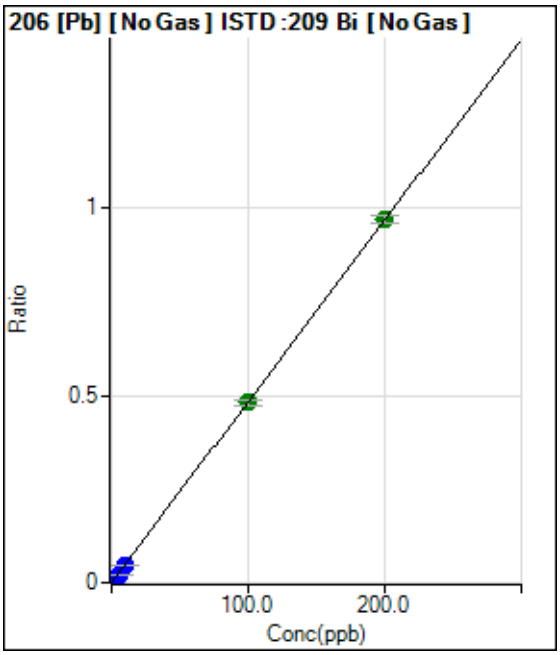
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	363.35	0.0001	P	22.2
2	☐	2.000	1.884	87526.30	0.0262	P	1.2
3	☐	5.000	4.640	216516.17	0.0643	P	2.3
4	☐	10.000	9.395	429380.98	0.1301	P	0.9
5	☐	100.000	100.667	4415650.56	1.3932	A	2.2
6	☐	200.000	199.707	8419942.59	2.7637	A	2.1

y = 0.0138 * x + 1.0909E-004
R = 1.0000
DL = 0.00525
BEC = 0.007883

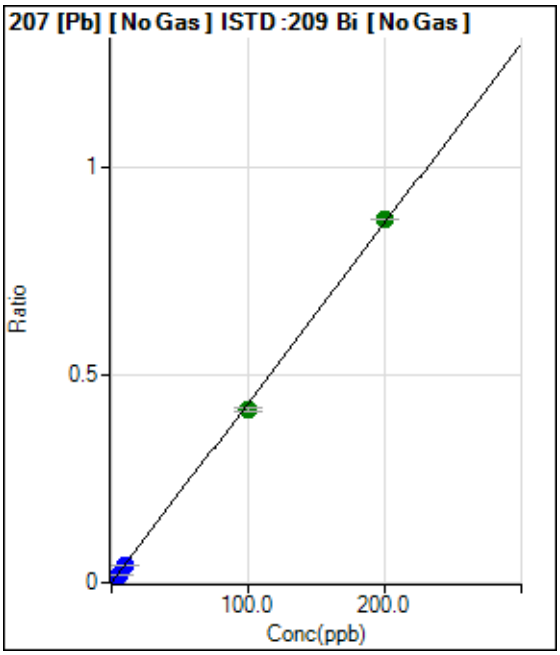
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	496.69	0.0001	P	17.4
2	☐	2.000	1.836	30193.59	0.0090	P	2.5
3	☐	5.000	4.548	74589.45	0.0222	P	0.4
4	☐	10.000	9.089	145586.92	0.0441	P	1.2
5	☐	100.000	99.411	1524685.39	0.4811	A	3.4
6	☐	200.000	200.353	2953588.18	0.9695	A	2.3

y = 0.0048 * x + 1.4901E-004
R = 1.0000
DL = 0.01612
BEC = 0.0308

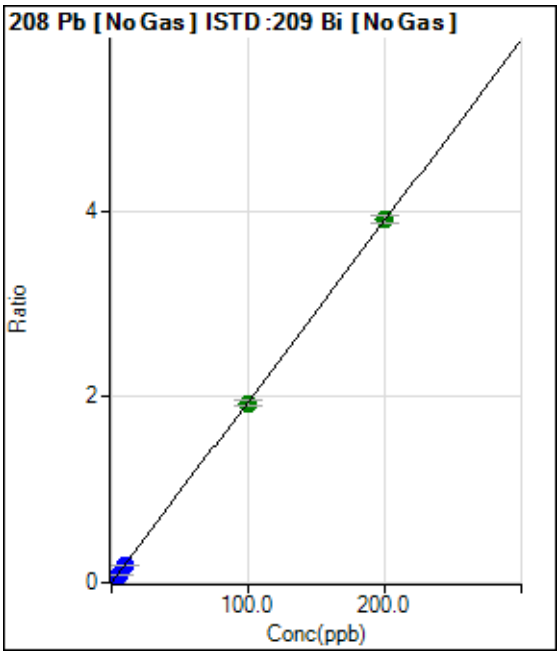
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	433.35	0.0001	P	26.7
2	☐	2.000	1.888	27704.64	0.0083	P	2.6
3	☐	5.000	4.658	68163.36	0.0202	P	1.8
4	☐	10.000	9.422	134690.11	0.0408	P	2.9
5	☐	100.000	96.366	1319571.23	0.4163	A	2.3
6	☐	200.000	201.855	2656844.75	0.8719	A	0.1

y = 0.0043 * x + 1.3015E-004
R = 0.9998
DL = 0.02413
BEC = 0.03013

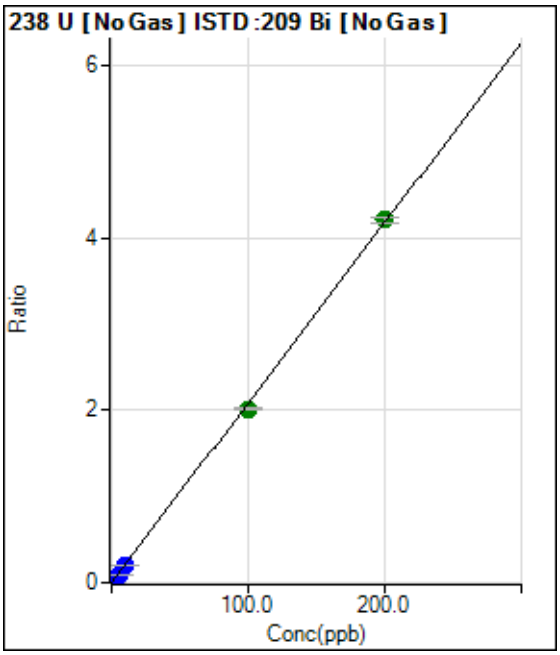
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2063.45	0.0006	P	8.4
2	☐	2.000	1.864	123497.54	0.0369	P	2.7
3	☐	5.000	4.628	305592.00	0.0908	P	0.7
4	☐	10.000	9.325	601416.78	0.1823	P	1.8
5	☐	100.000	99.051	6117185.85	1.9302	A	3.0
6	☐	200.000	200.519	11902870.34	3.9069	A	2.0

y = 0.0195 * x + 6.1871E-004
R = 1.0000
DL = 0.008047
BEC = 0.03176

Weight: <None>
Min Conc: <None>

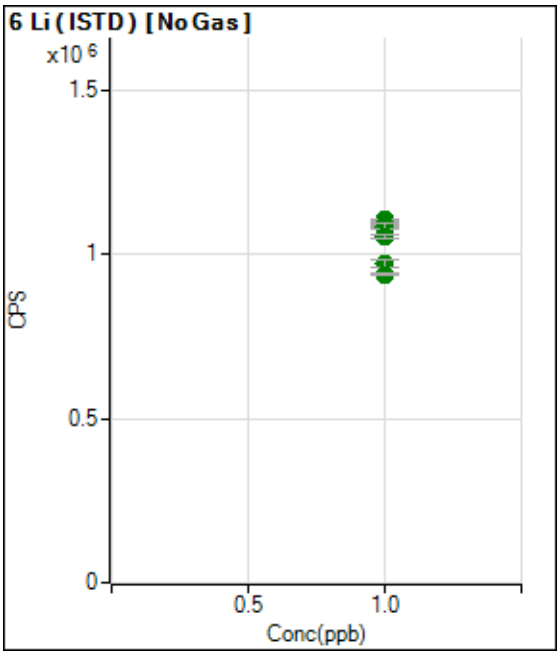


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.00	0.0000	P	23.6
2	☐	2.000	1.846	129068.74	0.0386	P	0.9
3	☐	5.000	4.598	323514.98	0.0961	P	1.1
4	☐	10.000	9.273	639417.11	0.1938	P	1.6
5	☐	100.000	96.695	6404183.44	2.0204	A	1.5
6	☐	200.000	201.701	12840393.98	4.2144	A	1.9

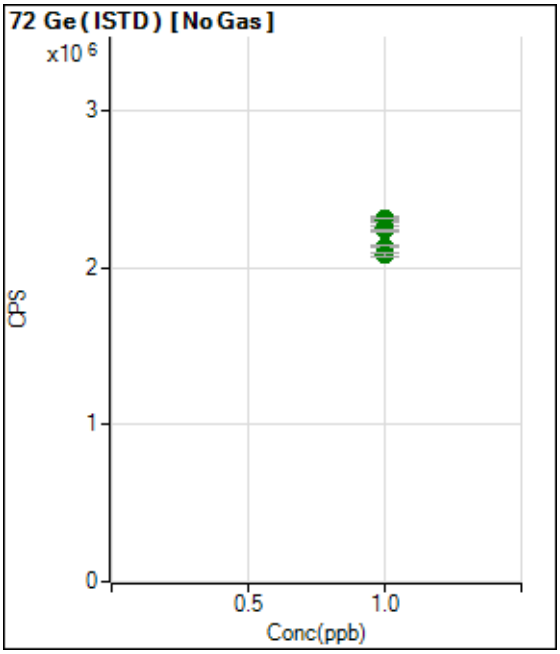
y = 0.0209 * x + 2.3920E-005
R = 0.9998
DL = 0.0008116
BEC = 0.001145

Weight: <None>
Min Conc: <None>

Calibration for 093_ICV.d

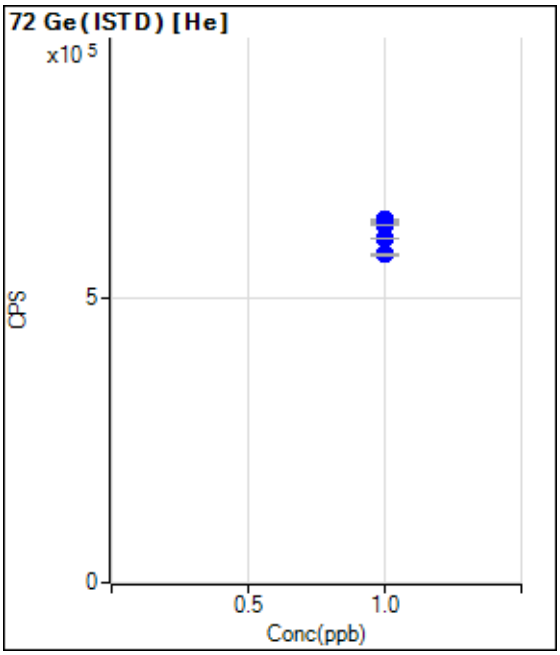


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1105284.62		A	0.3
2	☐	1.000		1086883.94		A	0.9
3	☐	1.000		1086097.11		A	1.3
4	☐	1.000		1054252.02		A	0.9
5	☐	1.000		973418.86		A	2.3
6	☐	1.000		938850.94		A	0.8

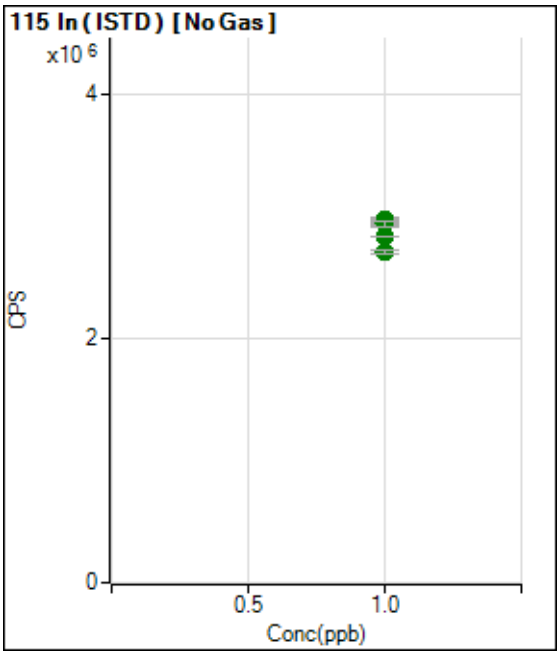


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2313189.29		A	0.9
2	☐	1.000		2303848.93		A	1.0
3	☐	1.000		2257446.63		A	1.0
4	☐	1.000		2239674.97		A	0.5
5	☐	1.000		2135861.79		A	0.8
6	☐	1.000		2086552.52		A	1.3

Calibration for 093_ICV.d

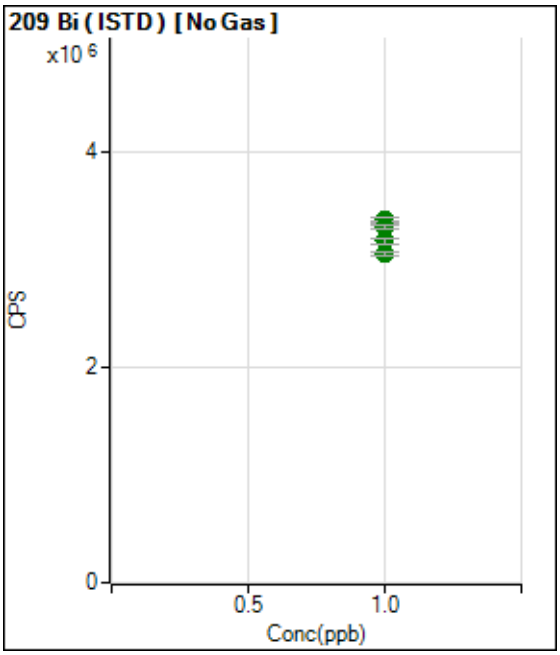


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		635873.70		P	0.7
2	☐	1.000		635211.97		P	0.7
3	☐	1.000		632849.34		P	0.7
4	☐	1.000		627231.06		P	0.3
5	☐	1.000		602788.31		P	0.2
6	☐	1.000		575008.43		P	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2972792.62		A	1.8
2	☐	1.000		2942607.76		A	0.7
3	☐	1.000		2967408.28		A	0.8
4	☐	1.000		2943756.09		A	1.7
5	☐	1.000		2834739.83		A	0.3
6	☐	1.000		2705982.31		A	1.3

Calibration for 093_ICV.d



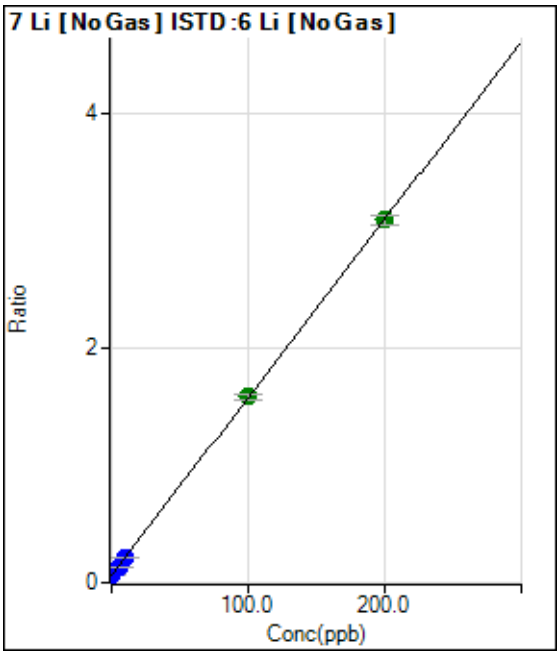
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3337430.68		A	1.5
2	☐	1.000		3344246.93		A	0.9
3	☐	1.000		3366726.30		A	1.1
4	☐	1.000		3299857.14		A	0.8
5	☐	1.000		3170301.83		A	1.8
6	☐	1.000		3047038.81		A	1.2

Calibration for 019_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\062121A.b\
Analysis File: 062121A.batch.bin
DA Date-Time: 6/21/2021 7:27:29 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	012CALB.d	CAL BLK	6/21/2021 12:01:09 PM
2	013CALS.d	2/10/200	6/21/2021 12:03:07 PM
3	014CALS.d	5/25/500	6/21/2021 12:05:06 PM
4	015CALS.d	10/50/100	6/21/2021 12:07:05 PM
5	016CALS.d	100/500/10K	6/21/2021 12:09:04 PM
6	017CALS.d	200/1000/20K	6/21/2021 12:10:57 PM

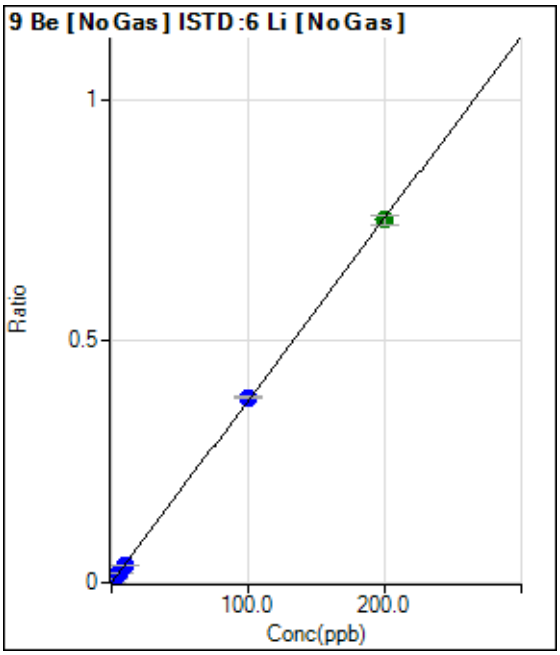
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71403.07	0.0632	P	1.8
2	☐	2.000	1.932	105541.67	0.0925	P	1.0
3	☐	5.000	4.942	153862.45	0.1382	P	0.5
4	☐	10.000	9.980	236639.63	0.2147	P	1.5
5	☐	100.000	100.382	1673464.14	1.5871	A	3.0
6	☐	200.000	199.812	3162766.62	3.0965	A	2.7

y = 0.0152 * x + 0.0632
R = 1.0000
DL = 0.2219
BEC = 4.162

Weight: <None>
Min Conc: <None>

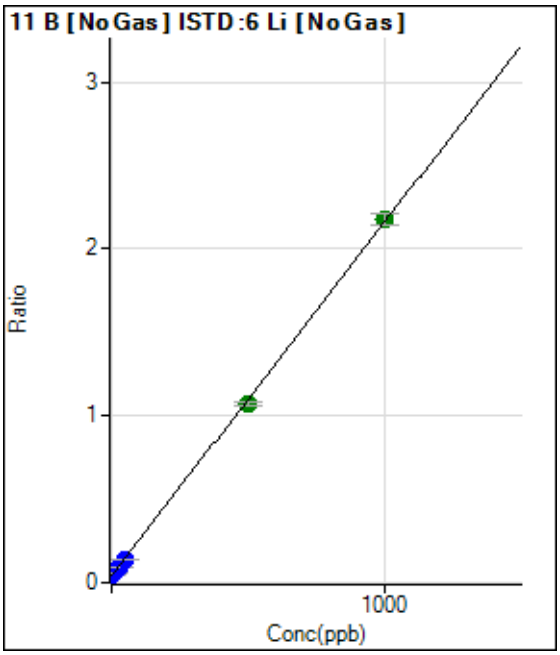


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	56.6
2	☐	2.000	1.951	8424.23	0.0074	P	2.5
3	☐	5.000	4.847	20381.52	0.0183	P	2.3
4	☐	10.000	9.622	40045.18	0.0363	P	0.8
5	☐	100.000	101.709	404747.44	0.3838	P	1.5
6	☐	200.000	199.169	767633.95	0.7515	A	2.5

y = 0.0038 * x + 2.3565E-005
R = 0.9999
DL = 0.01061
BEC = 0.006246

Weight: <None>
Min Conc: <None>

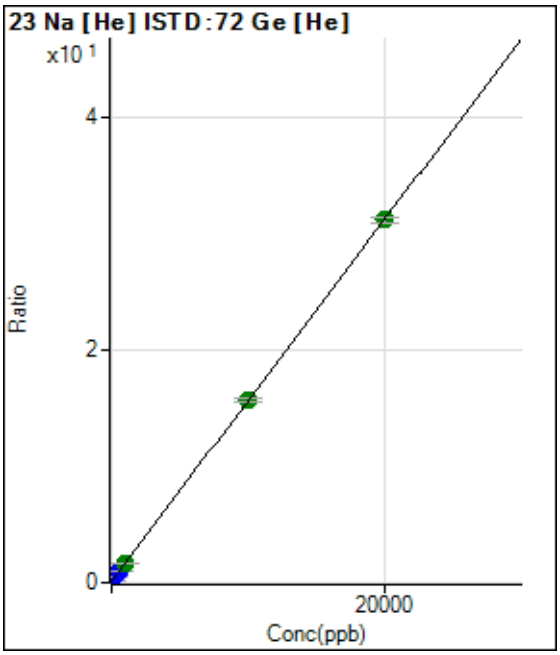
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46065.22	0.0408	P	1.1
2	☐	10.000	7.666	65031.33	0.0570	P	1.2
3	☐	25.000	21.956	97168.44	0.0873	P	1.7
4	☐	50.000	43.932	147585.34	0.1339	P	0.5
5	☐	500.000	487.574	1132877.25	1.0742	A	2.0
6	☐	1000.000	1006.616	2220538.87	2.1743	A	3.2

y = 0.0021 * x + 0.0408
R = 0.9999
DL = 0.6195
BEC = 19.23

Weight: <None>
Min Conc: <None>

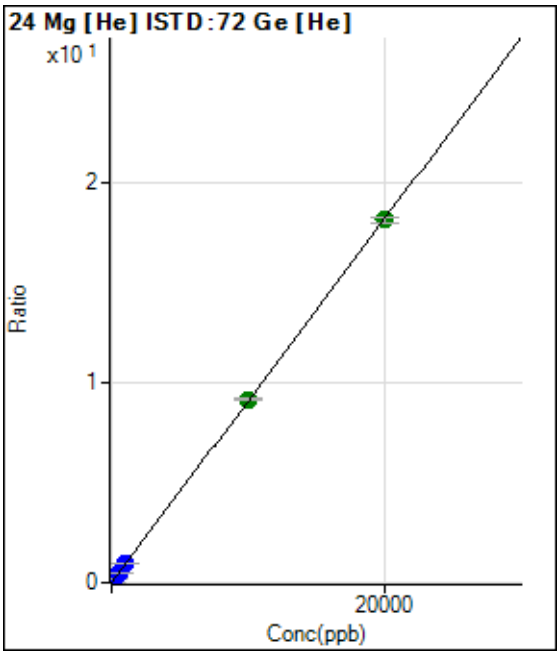


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	74618.81	0.1124	P	1.5
2	☐	200.000	212.243	294318.32	0.4430	P	1.0
3	☐	500.000	515.443	610324.60	0.9152	P	0.8
4	☐	1000.000	1010.204	1118386.31	1.6857	A	2.6
5	☐	10000.000	10017.244	10235226.52	15.7138	A	2.2
6	☐	20000.000	19990.359	19623714.71	31.2465	A	1.4

y = 0.0016 * x + 0.1124
R = 1.0000
DL = 3.148
BEC = 72.17

Weight: <None>
Min Conc: <None>

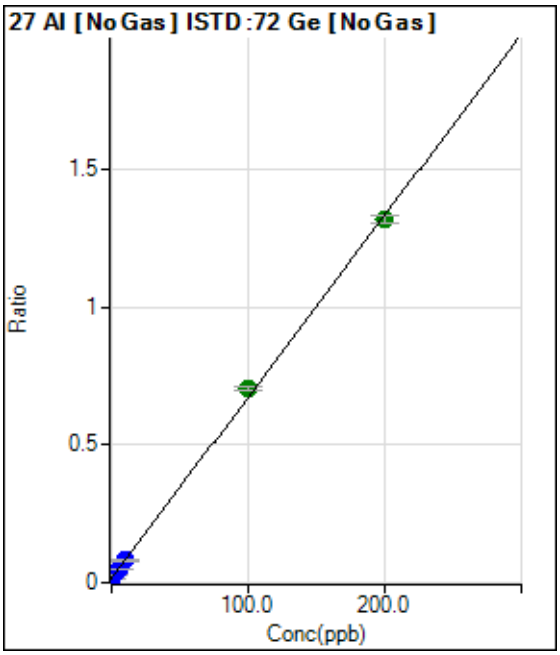
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	430.01	0.0006	P	15.7
2	☐	200.000	215.739	131011.02	0.1972	P	1.8
3	☐	500.000	521.205	317057.33	0.4754	P	2.1
4	☐	1000.000	1014.529	613594.69	0.9248	P	1.2
5	☐	10000.000	10085.687	5984802.21	9.1882	A	0.8
6	☐	20000.000	19955.742	11416426.91	18.1794	A	1.6

y = 9.1095E-004 * x + 6.4727E-004
R = 1.0000
DL = 0.3338
BEC = 0.7105

Weight: <None>
Min Conc: <None>

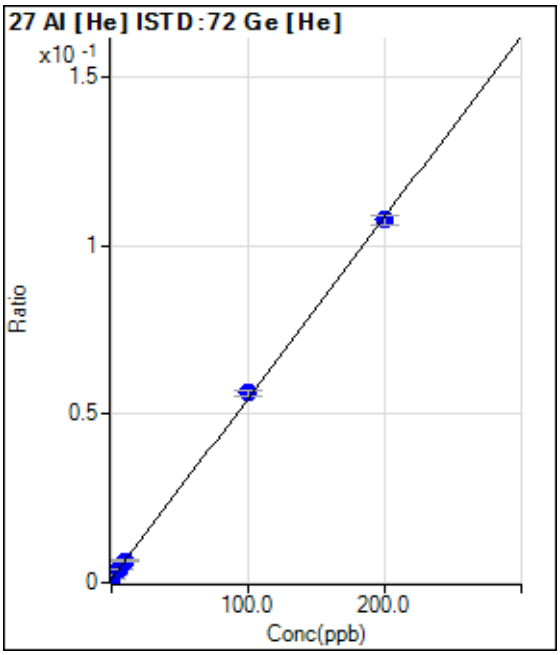


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36384.56	0.0154	P	2.2
2	☐	2.000	2.262	71128.31	0.0303	P	0.7
3	☐	5.000	5.012	112371.24	0.0484	P	1.0
4	☐	10.000	9.870	186183.93	0.0804	P	2.1
5	☐	100.000	104.669	1600201.17	0.7050	A	1.4
6	☐	200.000	197.669	2915353.92	1.3176	A	2.2

y = 0.0066 * x + 0.0154
R = 0.9996
DL = 0.156
BEC = 2.341

Weight: <None>
Min Conc: <None>

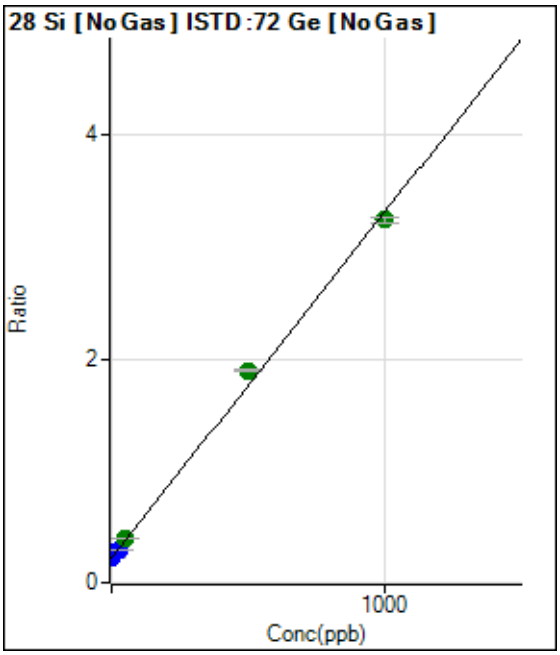
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	696.70	0.0010	P	3.9
2	☐	2.000	2.867	1720.14	0.0026	P	3.9
3	☐	5.000	5.262	2583.63	0.0039	P	3.6
4	☐	10.000	10.093	4290.74	0.0065	P	8.3
5	☐	100.000	102.866	36655.22	0.0563	P	2.4
6	☐	200.000	198.547	67590.87	0.1076	P	2.5

y = 5.3685E-004 * x + 0.0010
R = 0.9999
DL = 0.227
BEC = 1.955

Weight: <None>
Min Conc: <None>

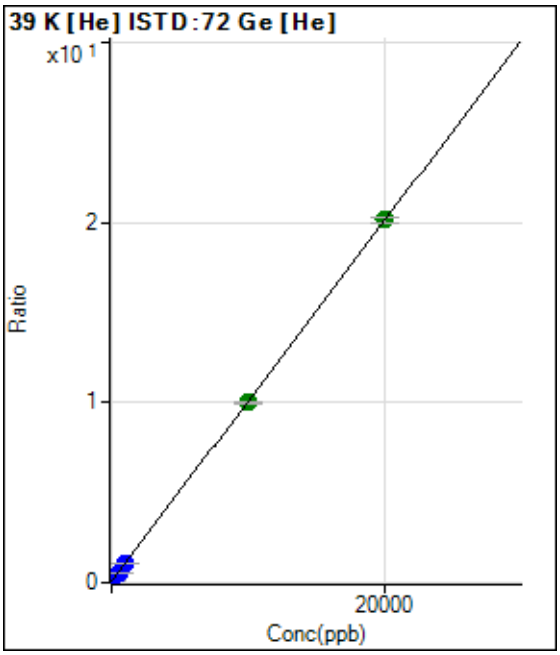


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	515829.63	0.2186	P	1.1
2	☐	10.000	16.666	633247.95	0.2701	P	13.4
3	☐	25.000	25.005	686286.03	0.2958	P	1.5
4	☐	50.000	57.134	914390.17	0.3951	A	1.7
5	☐	500.000	542.862	4302072.12	1.8953	A	0.6
6	☐	1000.000	978.145	7168607.60	3.2397	A	1.3

y = 0.0031 * x + 0.2186
R = 0.9987
DL = 2.318
BEC = 70.78

Weight: <None>
Min Conc: <None>

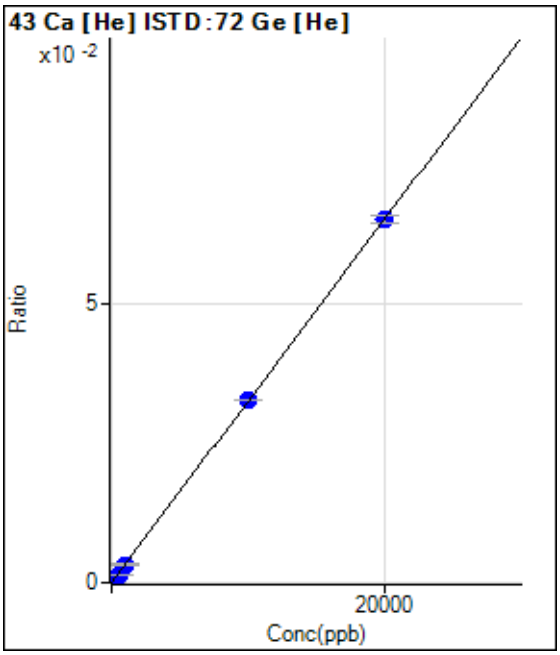
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51606.60	0.0777	P	0.0
2	☐	200.000	208.221	190256.20	0.2863	P	0.3
3	☐	500.000	499.787	385757.35	0.5784	P	1.0
4	☐	1000.000	983.829	705540.80	1.0634	P	0.8
5	☐	10000.000	9918.238	6522702.82	10.0144	A	1.6
6	☐	20000.000	20041.613	12657875.64	20.1566	A	1.9

y = 0.0010 * x + 0.0777
R = 1.0000
DL = 0.07267
BEC = 77.58

Weight: <None>
Min Conc: <None>

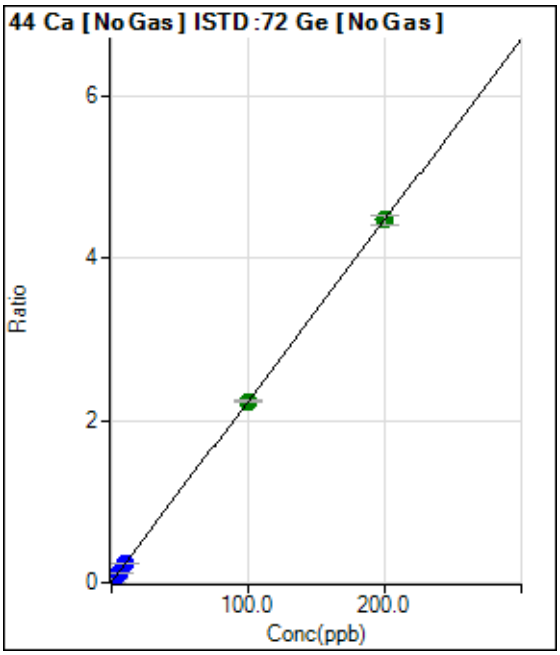


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	86.6
2	☐	200.000	229.584	510.02	0.0008	P	5.3
3	☐	500.000	458.937	1010.06	0.0015	P	2.2
4	☐	1000.000	996.699	2166.88	0.0033	P	9.8
5	☐	10000.000	10054.941	21336.81	0.0328	P	0.4
6	☐	20000.000	19973.425	40850.90	0.0651	P	2.2

y = 3.2559E-006 * x + 2.0099E-005
R = 1.0000
DL = 16.04
BEC = 6.173

Weight: <None>
Min Conc: <None>

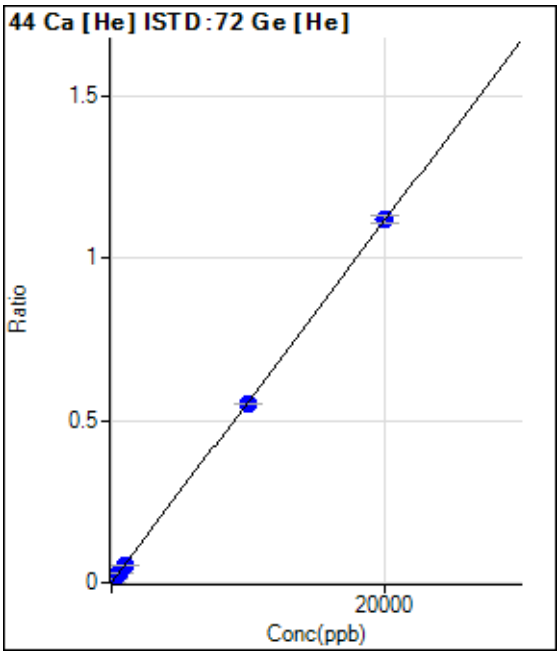
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22188.34	0.0094	P	1.6
2	☐	2.000	2.111	132361.74	0.0564	P	0.6
3	☐	5.000	5.097	285130.20	0.1229	P	2.3
4	☐	10.000	10.033	538975.36	0.2329	P	1.4
5	☐	100.000	99.832	5068782.95	2.2330	A	1.2
6	☐	200.000	200.079	9880839.23	4.4659	A	2.6

y = 0.0223 * x + 0.0094
R = 1.0000
DL = 0.02017
BEC = 0.4221

Weight: <None>
Min Conc: <None>

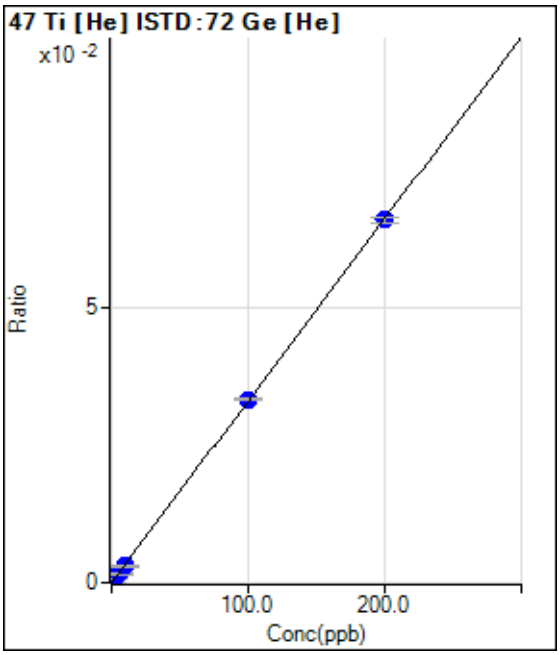


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	373.34	0.0006	P	8.6
2	☐	200.000	204.705	7959.15	0.0120	P	4.1
3	☐	500.000	501.188	19013.46	0.0285	P	2.4
4	☐	1000.000	960.392	35907.11	0.0541	P	0.3
5	☐	10000.000	9887.938	359524.77	0.5520	P	0.6
6	☐	20000.000	20057.935	702769.88	1.1191	P	1.9

y = 5.5766E-005 * x + 5.6232E-004
R = 1.0000
DL = 2.599
BEC = 10.08

Weight: <None>
Min Conc: <None>

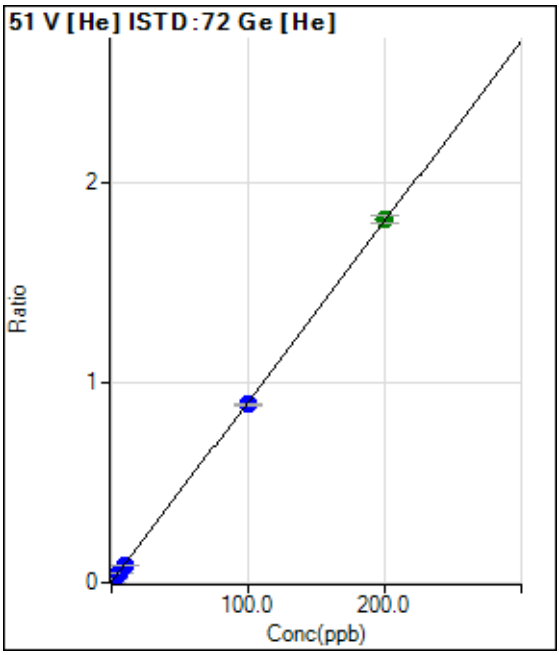
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	1.937	433.35	0.0007	P	15.8
3	☐	5.000	4.839	1076.73	0.0016	P	7.1
4	☐	10.000	9.186	2026.85	0.0031	P	5.7
5	☐	100.000	100.977	21807.60	0.0335	P	1.5
6	☐	200.000	199.557	41546.51	0.0662	P	1.7

y = 3.3148E-004 * x + 1.0072E-005
R = 1.0000
DL = 0.07895
BEC = 0.03039

Weight: <None>
Min Conc: <None>

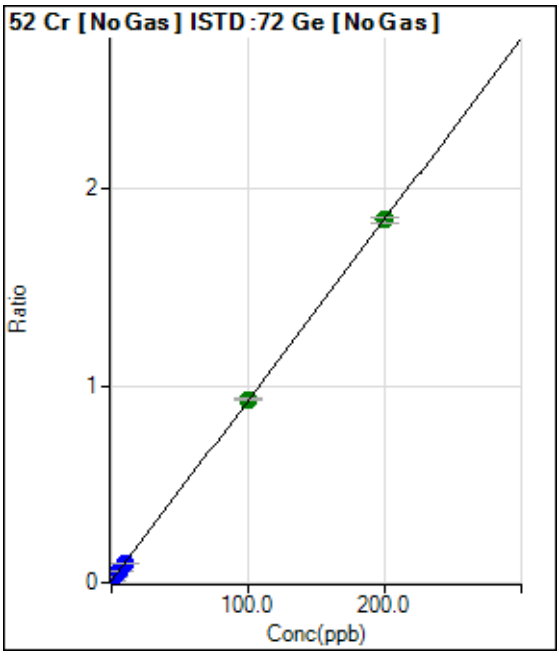


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3062.58	0.0046	P	1.2
2	☐	2.000	1.947	14712.39	0.0221	P	2.3
3	☐	5.000	4.815	31979.45	0.0480	P	0.5
4	☐	10.000	9.520	59913.56	0.0903	P	0.9
5	☐	100.000	98.315	579423.19	0.8896	P	0.4
6	☐	200.000	200.872	1138367.45	1.8127	A	2.0

y = 0.0090 * x + 0.0046
R = 1.0000
DL = 0.01914
BEC = 0.5125

Weight: <None>
Min Conc: <None>

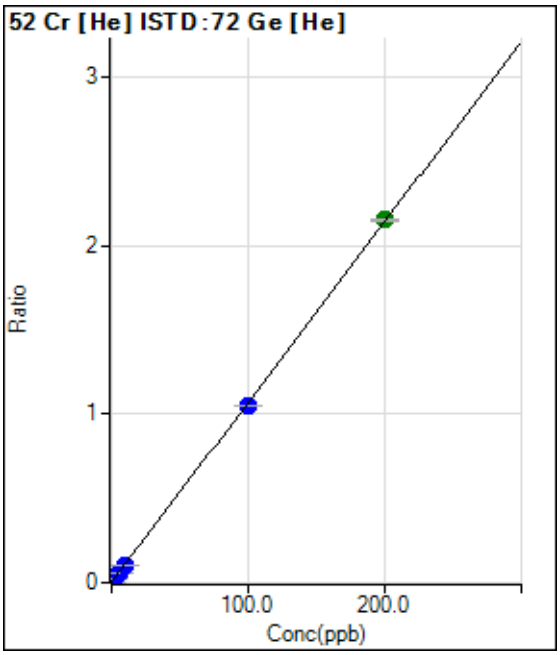
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20769.54	0.0088	P	3.1
2	☐	2.000	1.992	63627.85	0.0271	P	0.5
3	☐	5.000	5.052	128172.24	0.0553	P	2.0
4	☐	10.000	9.909	231250.89	0.0999	P	2.0
5	☐	100.000	100.595	2119603.20	0.9338	A	0.9
6	☐	200.000	199.706	4082660.67	1.8451	A	1.7

y = 0.0092 * x + 0.0088
R = 1.0000
DL = 0.08944
BEC = 0.9573

Weight: <None>
Min Conc: <None>

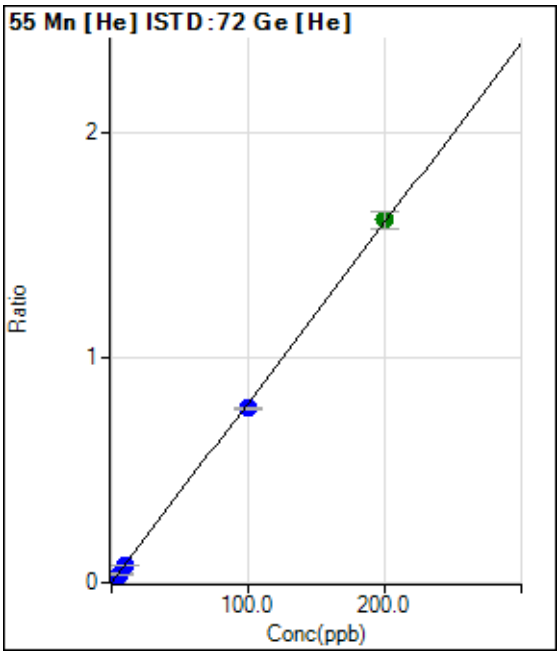


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1386.76	0.0021	P	3.0
2	☐	2.000	2.017	15722.65	0.0237	P	2.3
3	☐	5.000	4.829	35843.99	0.0537	P	1.8
4	☐	10.000	9.654	69904.76	0.1054	P	1.1
5	☐	100.000	97.740	682411.55	1.0477	P	0.5
6	☐	200.000	201.151	1352854.56	2.1540	A	0.5

y = 0.0107 * x + 0.0021
R = 0.9999
DL = 0.01755
BEC = 0.1952

Weight: <None>
Min Conc: <None>

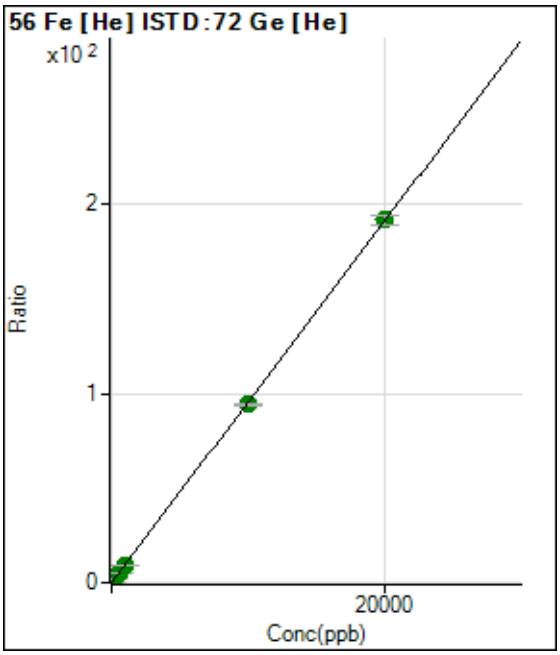
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	300.01	0.0005	P	9.5
2	☐	2.000	2.048	11181.39	0.0168	P	1.6
3	☐	5.000	4.748	25621.04	0.0384	P	1.8
4	☐	10.000	9.682	51654.45	0.0779	P	0.5
5	☐	100.000	96.754	504116.68	0.7740	P	0.5
6	☐	200.000	201.645	1012382.64	1.6125	A	4.5

y = 0.0080 * x + 4.5204E-004
R = 0.9998
DL = 0.01608
BEC = 0.05654

Weight: <None>
Min Conc: <None>

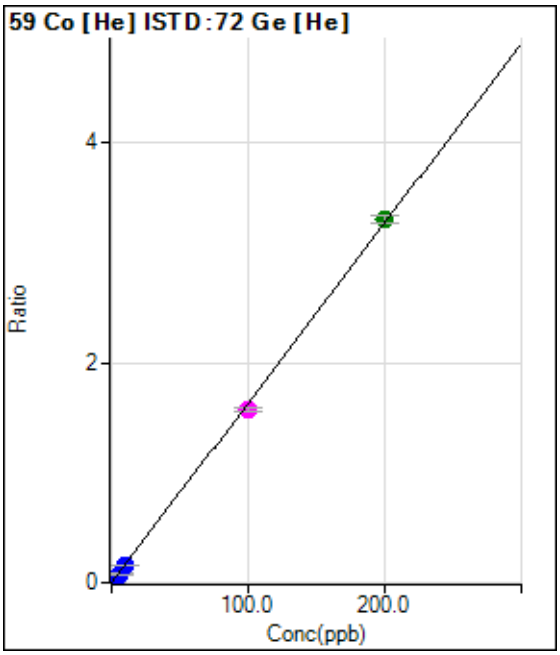


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11745.25	0.0177	P	1.8
2	☐	200.000	204.735	1312571.44	1.9754	A	1.0
3	☐	500.000	497.276	3183052.14	4.7727	A	0.2
4	☐	1000.000	965.122	6134556.99	9.2463	A	1.0
5	☐	10000.000	9856.614	61401754.09	94.2678	A	1.0
6	☐	20000.000	20073.458	120535231.54	191.9625	A	3.0

y = 0.0096 * x + 0.0177
R = 1.0000
DL = 0.1005
BEC = 1.85

Weight: <None>
Min Conc: <None>

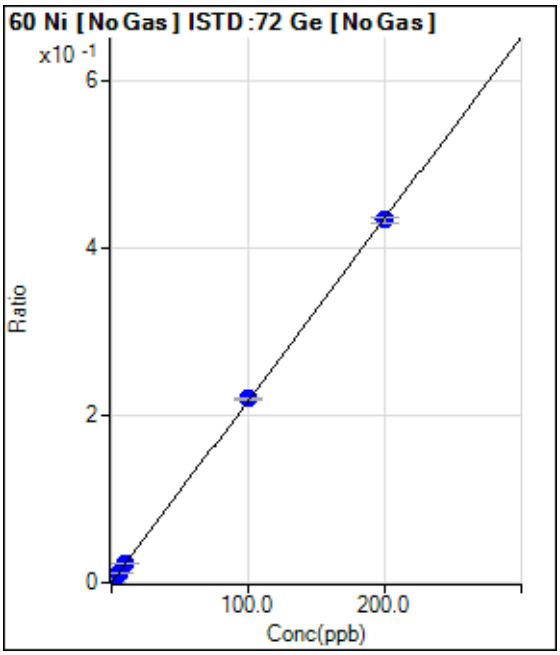
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43.33	0.0001	P	70.2
2	☐	2.000	1.985	21610.77	0.0325	P	3.7
3	☐	5.000	4.795	52333.91	0.0785	P	2.0
4	☐	10.000	9.247	100374.39	0.1513	P	0.6
5	☐	100.000	96.355	1026354.78	1.5758	M	2.1
6	☐	200.000	201.865	2073056.95	3.3012	A	2.2

y = 0.0164 * x + 6.5050E-005
R = 0.9998
DL = 0.008375
BEC = 0.003978

Weight: <None>
Min Conc: <None>

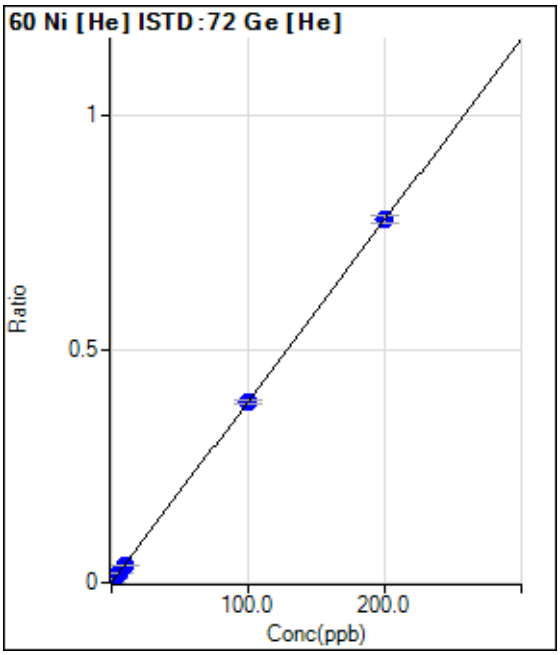


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490.02	0.0002	P	10.8
2	☐	2.000	2.131	11348.28	0.0048	P	0.9
3	☐	5.000	5.161	26475.99	0.0114	P	5.6
4	☐	10.000	10.129	51410.85	0.0222	P	2.0
5	☐	100.000	101.154	499276.48	0.2199	P	0.7
6	☐	200.000	199.411	958955.35	0.4334	P	1.7

y = 0.0022 * x + 2.0757E-004
R = 1.0000
DL = 0.03092
BEC = 0.09555

Weight: <None>
Min Conc: <None>

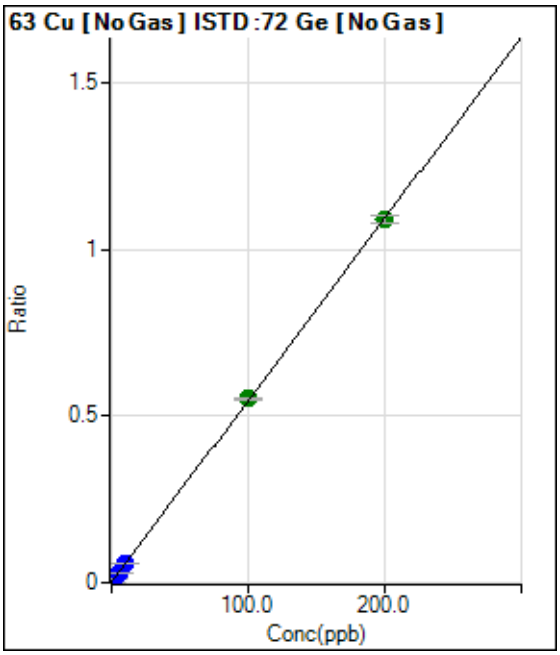
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	196.67	0.0003	P	25.7
2	☐	2.000	2.127	5684.61	0.0086	P	5.6
3	☐	5.000	5.050	13276.67	0.0199	P	2.9
4	☐	10.000	9.823	25504.12	0.0384	P	0.9
5	☐	100.000	99.673	252291.70	0.3873	P	1.3
6	☐	200.000	200.170	488287.75	0.7776	P	2.2

y = 0.0039 * x + 2.9630E-004
R = 1.0000
DL = 0.05873
BEC = 0.0763

Weight: <None>
Min Conc: <None>

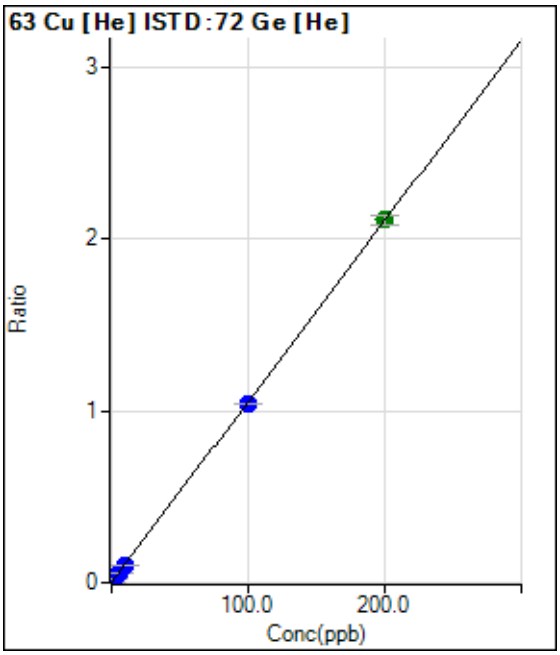


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2363.57	0.0010	P	8.0
2	☐	2.000	2.099	29241.69	0.0125	P	2.2
3	☐	5.000	5.171	67832.31	0.0292	P	3.0
4	☐	10.000	9.981	128499.07	0.0555	P	1.6
5	☐	100.000	101.272	1258002.64	0.5542	A	0.9
6	☐	200.000	199.360	2411592.98	1.0900	A	2.2

y = 0.0055 * x + 0.0010
R = 1.0000
DL = 0.04379
BEC = 0.1835

Weight: <None>
Min Conc: <None>

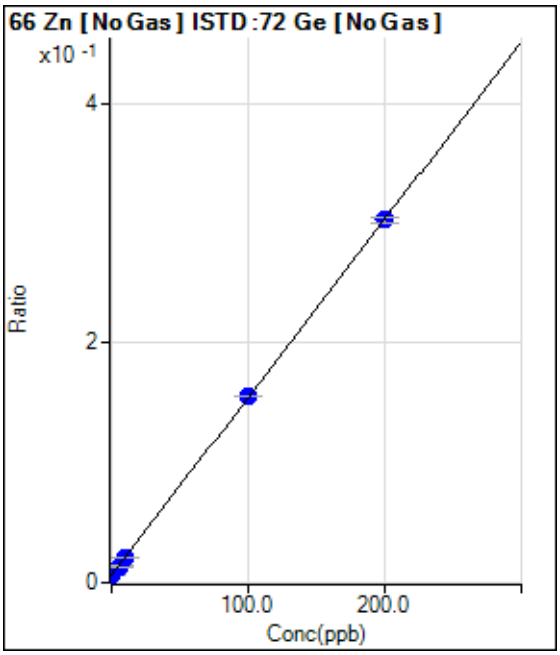
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1110.06	0.0017	P	8.8
2	☐	2.000	2.096	15736.10	0.0237	P	2.7
3	☐	5.000	5.250	37893.05	0.0568	P	1.7
4	☐	10.000	9.830	69614.58	0.1049	P	1.4
5	☐	100.000	98.744	676679.31	1.0389	P	0.5
6	☐	200.000	200.629	1324487.69	2.1091	A	2.9

y = 0.0105 * x + 0.0017
R = 1.0000
DL = 0.04206
BEC = 0.1591

Weight: <None>
Min Conc: <None>

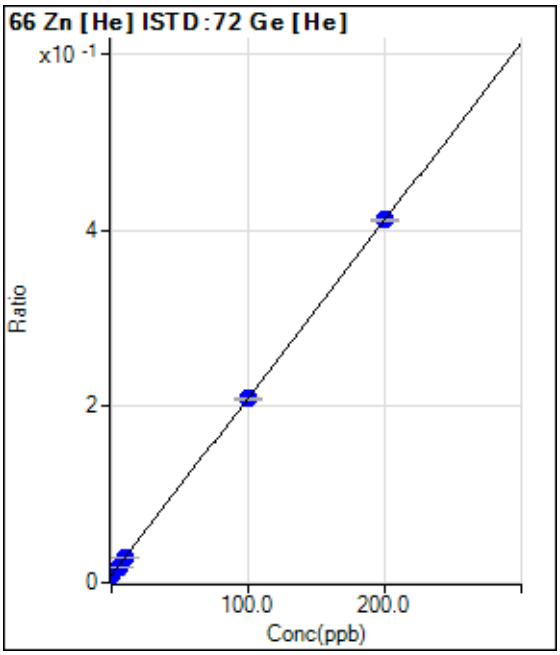


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14975.10	0.0063	P	1.3
2	☐	2.000	2.135	22322.06	0.0095	P	1.8
3	☐	5.000	4.901	31590.45	0.0136	P	3.2
4	☐	10.000	9.748	48179.18	0.0208	P	0.9
5	☐	100.000	100.353	352437.88	0.1553	P	0.1
6	☐	200.000	199.837	670224.78	0.3029	P	1.4

y = 0.0015 * x + 0.0063
R = 1.0000
DL = 0.1624
BEC = 4.277

Weight: <None>
Min Conc: <None>

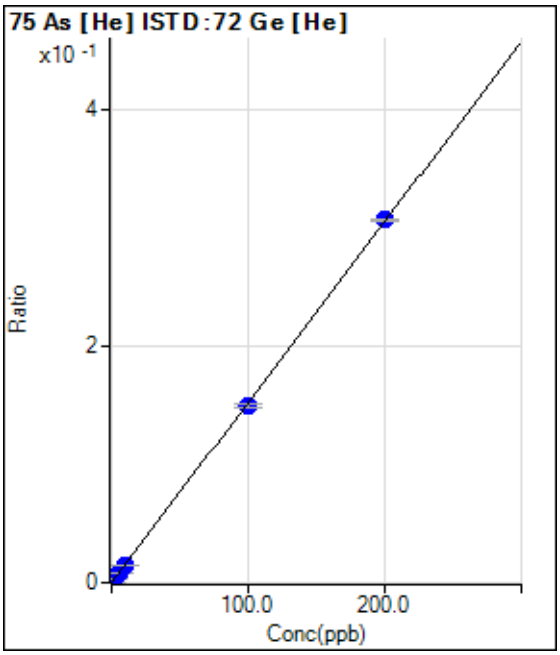
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5657.96	0.0085	P	3.1
2	☐	2.000	2.165	8556.19	0.0129	P	4.4
3	☐	5.000	4.368	11545.06	0.0173	P	0.5
4	☐	10.000	9.423	18232.48	0.0275	P	1.0
5	☐	100.000	99.430	135833.82	0.2085	P	1.2
6	☐	200.000	200.328	258463.69	0.4115	P	0.7

y = 0.0020 * x + 0.0085
R = 1.0000
DL = 0.3933
BEC = 4.237

Weight: <None>
Min Conc: <None>

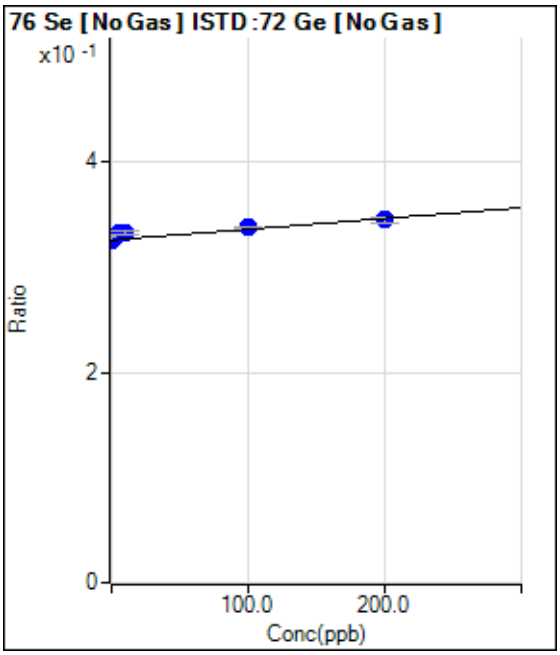


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	178.89	0.0003	P	17.3
2	☐	2.000	2.028	2230.19	0.0034	P	4.3
3	☐	5.000	4.841	5094.32	0.0076	P	2.5
4	☐	10.000	9.623	9898.10	0.0149	P	1.4
5	☐	100.000	97.741	97091.97	0.1491	P	1.7
6	☐	200.000	201.152	192495.53	0.3065	P	0.6

y = 0.0015 * x + 2.6929E-004
R = 0.9999
DL = 0.09178
BEC = 0.1769

Weight: <None>
Min Conc: <None>

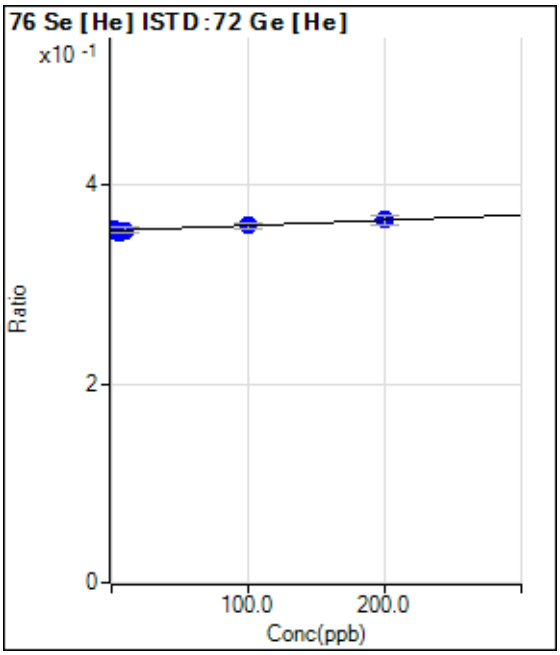
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	768843.45	0.3258	P	0.7
2	☐	2.000	22.260	769685.82	0.3281	P	0.5
3	☐	5.000	65.769	771475.25	0.3326	P	1.7
4	☐	10.000	66.123	769799.55	0.3326	P	1.4
5	☐	100.000	118.585	767190.56	0.3380	P	0.5
6	☐	200.000	186.180	763165.64	0.3449	P	1.8

y = 1.0254E-004 * x + 0.3258
R = 0.9378
DL = 65.7
BEC = 3178

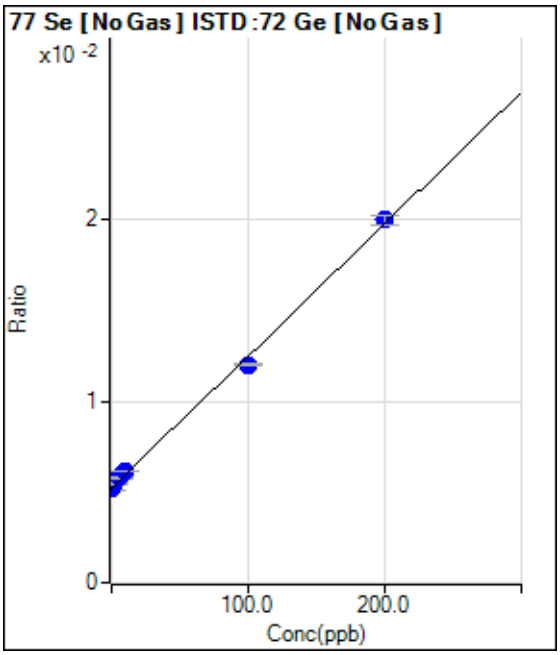
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	235279.33	0.3544	P	0.6
2	☐	2.000	21.464	236218.64	0.3555	P	1.5
3	☐	5.000	-31.631	235222.07	0.3527	P	0.4
4	☐	10.000	7.877	235384.97	0.3548	P	1.9
5	☐	100.000	91.550	233960.99	0.3592	P	1.9
6	☐	200.000	205.053	229325.80	0.3652	P	2.4

y = 5.2810E-005 * x + 0.3544
R = 0.9772
DL = 122.9
BEC = 6710

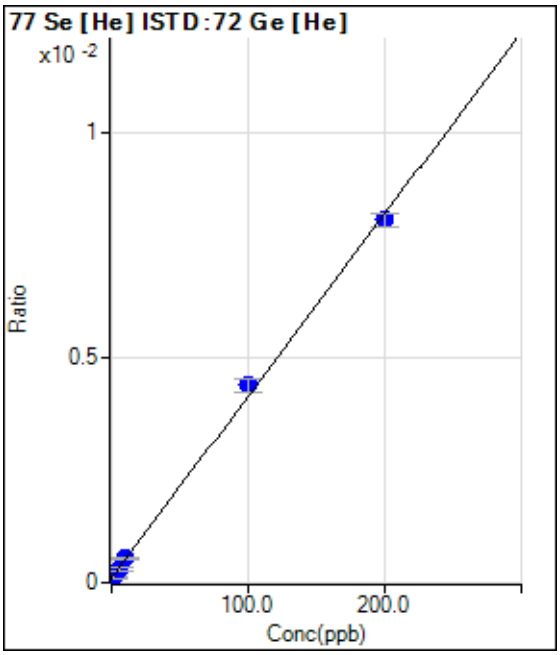
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12312.51	0.0052	P	5.5
2	☐	2.000	3.156	12782.99	0.0054	P	0.8
3	☐	5.000	7.978	13453.56	0.0058	P	2.2
4	☐	10.000	13.255	14314.47	0.0062	P	0.3
5	☐	100.000	93.440	27281.32	0.0120	P	0.7
6	☐	200.000	203.031	44236.35	0.0200	P	2.7

y = 7.2762E-005 * x + 0.0052
R = 0.9990
DL = 11.94
BEC = 71.73

Weight: <None>
Min Conc: <None>

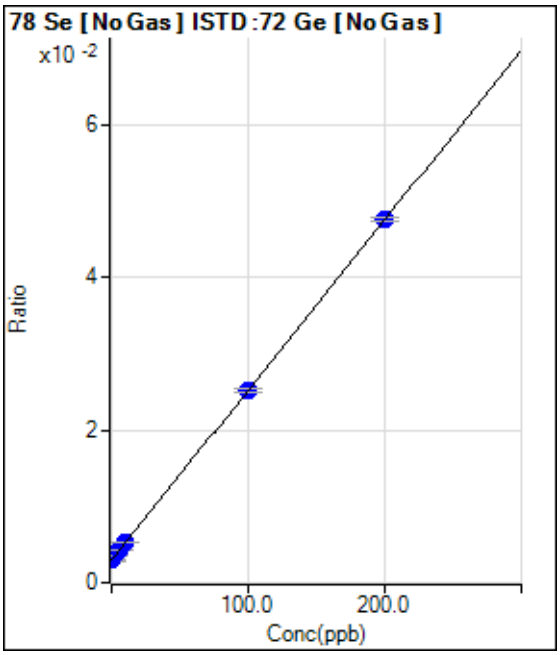


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.00	0.0001	P	37.4
2	☐	2.000	0.375	80.00	0.0001	P	37.6
3	☐	5.000	4.674	196.67	0.0003	P	22.3
4	☐	10.000	10.672	356.68	0.0005	P	14.3
5	☐	100.000	106.215	2870.36	0.0044	P	6.8
6	☐	200.000	196.883	5074.39	0.0081	P	3.5

y = 4.0504E-005 * x + 1.0527E-004
R = 0.9992
DL = 2.915
BEC = 2.599

Weight: <None>
Min Conc: <None>

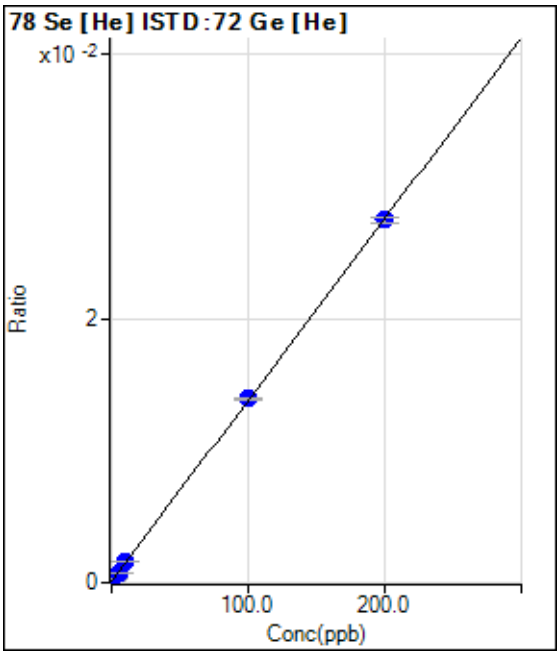
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6975.29	0.0030	P	7.8
2	☐	2.000	2.782	8392.74	0.0036	P	1.2
3	☐	5.000	5.971	9950.51	0.0043	P	4.9
4	☐	10.000	10.428	12225.73	0.0053	P	3.3
5	☐	100.000	99.638	57141.28	0.0252	P	1.6
6	☐	200.000	200.128	105286.33	0.0476	P	1.0

y = 2.2296E-004 * x + 0.0030
R = 1.0000
DL = 3.119
BEC = 13.26

Weight: <None>
Min Conc: <None>

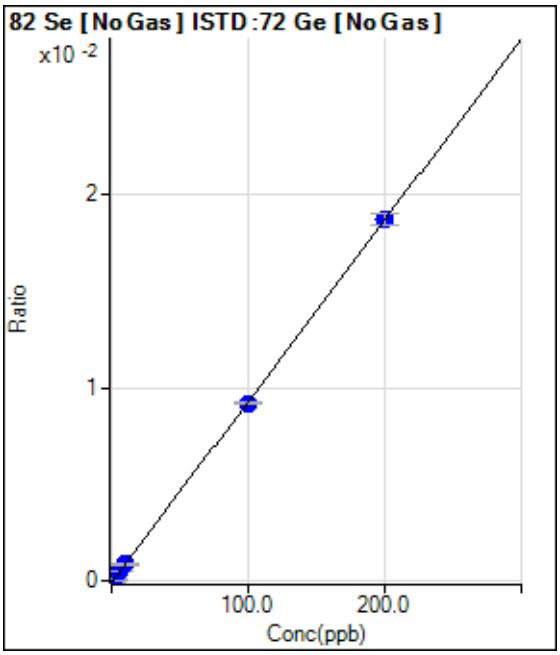


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.67	0.0001	P	7.5
2	☐	2.000	2.071	253.33	0.0004	P	15.7
3	☐	5.000	5.088	530.01	0.0008	P	0.8
4	☐	10.000	10.668	1034.71	0.0016	P	3.2
5	☐	100.000	100.717	9054.40	0.0139	P	1.2
6	☐	200.000	199.605	17240.35	0.0275	P	1.8

y = 1.3705E-004 * x + 9.7386E-005
R = 1.0000
DL = 0.1594
BEC = 0.7106

Weight: <None>
Min Conc: <None>

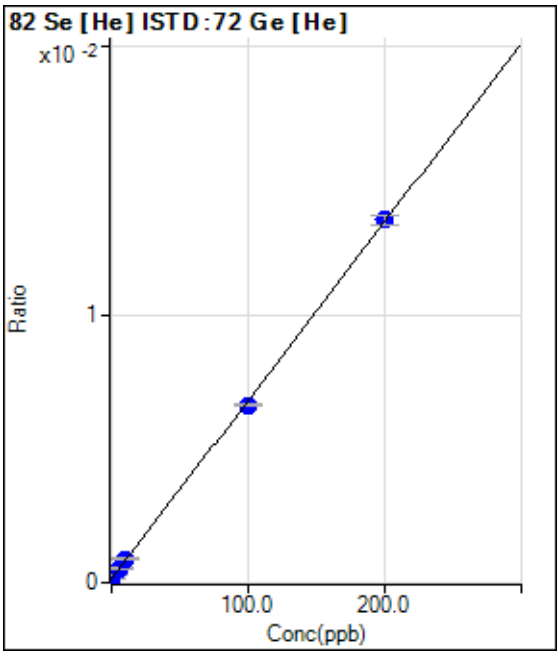
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.24	-0.0001	P	-36.9
2	☐	2.000	2.053	325.56	0.0001	P	62.2
3	☐	5.000	6.055	1189.79	0.0005	P	1.9
4	☐	10.000	10.280	2098.94	0.0009	P	8.0
5	☐	100.000	98.934	20853.11	0.0092	P	1.0
6	☐	200.000	200.492	41307.95	0.0187	P	3.2

y = 9.3385E-005 * x - 5.2653E-005
R = 1.0000
DL = 0.6242
BEC = -0.5638

Weight: <None>
Min Conc: <None>

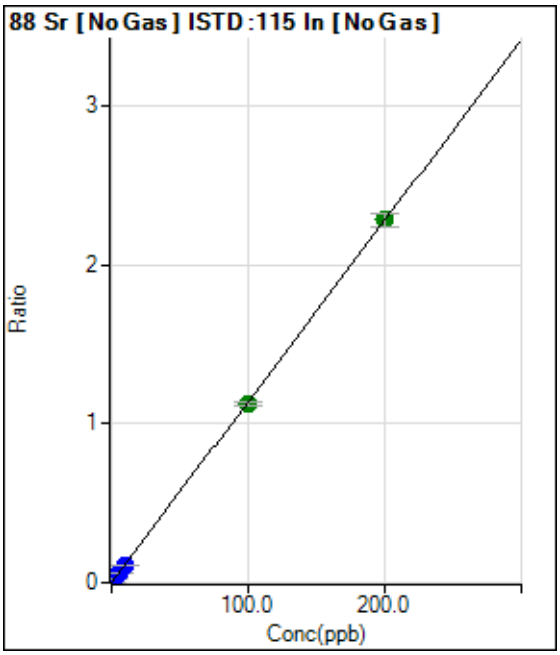


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.33	0.0001	P	16.1
2	☐	2.000	2.787	216.68	0.0003	P	6.9
3	☐	5.000	5.920	356.68	0.0005	P	20.0
4	☐	10.000	10.946	576.69	0.0009	P	8.4
5	☐	100.000	97.524	4320.78	0.0066	P	1.8
6	☐	200.000	201.160	8499.47	0.0135	P	2.4

y = 6.6576E-005 * x + 1.4052E-004
R = 0.9999
DL = 1.016
BEC = 2.111

Weight: <None>
Min Conc: <None>

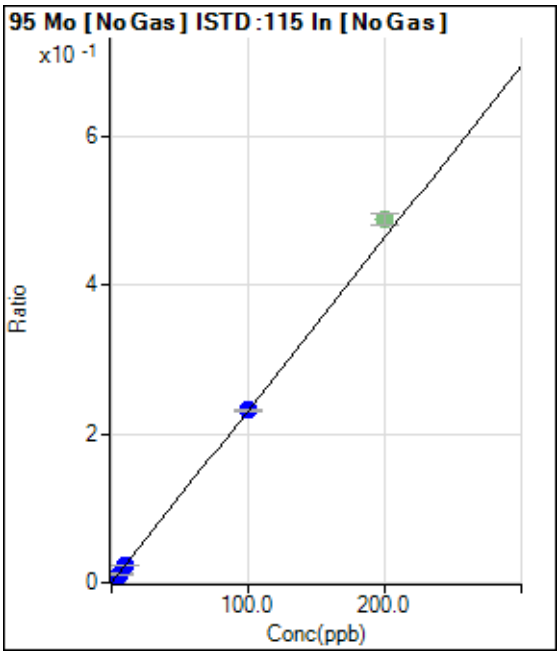
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1263.42	0.0004	P	7.6
2	☐	2.000	2.005	70200.48	0.0232	P	3.8
3	☐	5.000	4.892	169280.04	0.0561	P	1.6
4	☐	10.000	9.648	329324.79	0.1102	P	2.4
5	☐	100.000	99.089	3319436.72	1.1282	A	1.8
6	☐	200.000	200.476	6416875.53	2.2821	A	3.5

y = 0.0114 * x + 4.1950E-004
R = 1.0000
DL = 0.008429
BEC = 0.03686

Weight: <None>
Min Conc: <None>

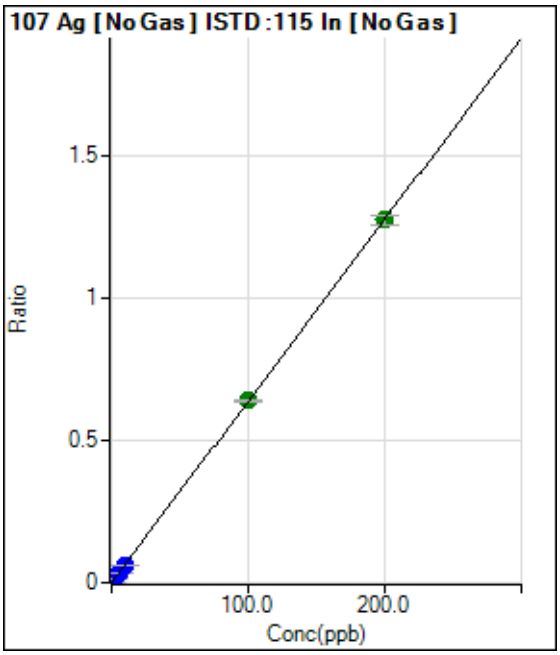


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	90.00	0.0000	P	23.2
2	☐	2.000	2.042	14367.94	0.0048	P	5.2
3	☐	5.000	5.007	35073.24	0.0116	P	2.1
4	☐	10.000	9.727	67373.69	0.0226	P	2.9
5	☐	100.000	100.026	681485.33	0.2316	P	0.7
6	☑	200.000		1371081.59	0.4876	A	3.3

y = 0.0023 * x + 2.9931E-005
R = 1.0000
DL = 0.008986
BEC = 0.01293

Weight: <None>
Min Conc: <None>

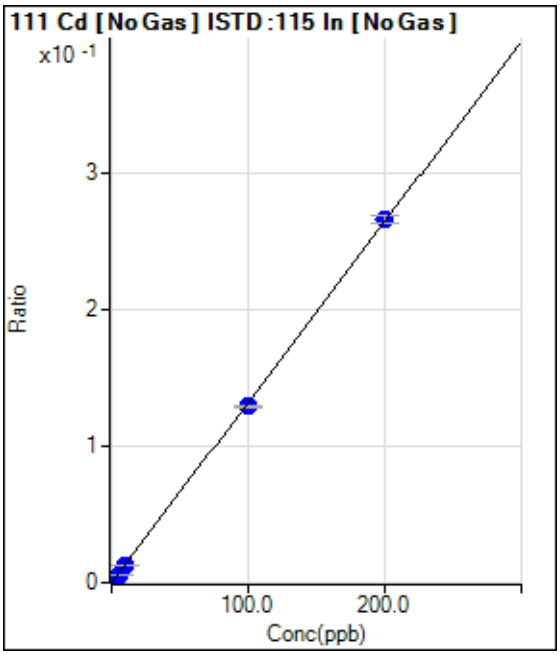
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	486.69	0.0002	P	17.3
2	☐	2.000	1.989	38787.36	0.0128	P	5.2
3	☐	5.000	4.892	94630.24	0.0314	P	1.3
4	☐	10.000	9.672	184745.35	0.0618	P	2.1
5	☐	100.000	100.172	1880044.61	0.6390	A	0.3
6	☐	200.000	199.933	3585750.57	1.2751	A	2.4

y = 0.0064 * x + 1.6154E-004
R = 1.0000
DL = 0.01314
BEC = 0.02533

Weight: <None>
Min Conc: <None>

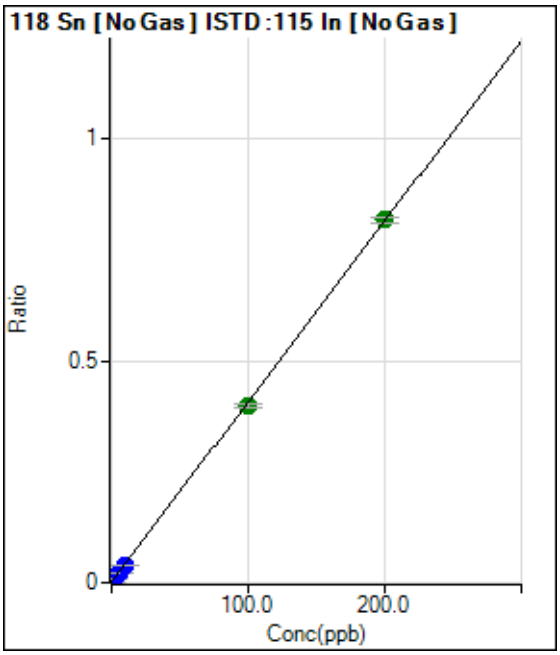


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	173.2
2	☐	2.000	1.957	7812.46	0.0026	P	1.8
3	☐	5.000	4.734	18867.23	0.0063	P	1.8
4	☐	10.000	9.733	38392.85	0.0129	P	3.2
5	☐	100.000	97.704	379569.72	0.1290	P	0.5
6	☐	200.000	201.168	746940.35	0.2656	P	2.0

y = 0.0013 * x + 2.2326E-006
R = 0.9999
DL = 0.008787
BEC = 0.001691

Weight: <None>
Min Conc: <None>

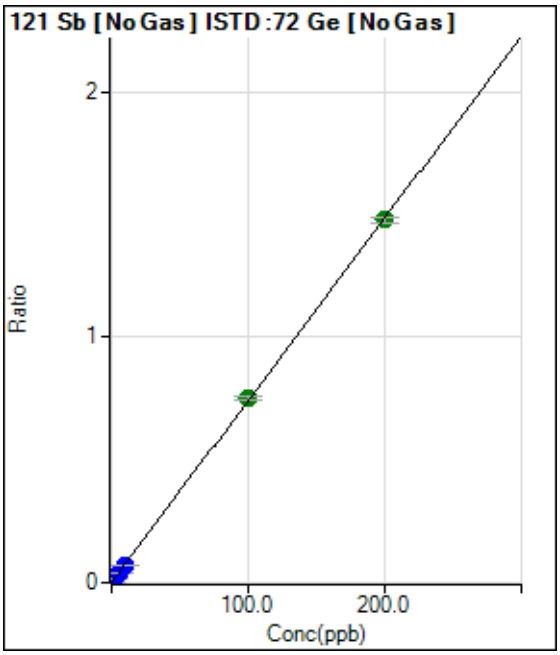
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2173.56	0.0007	P	6.2
2	☐	2.000	1.935	25912.53	0.0086	P	6.4
3	☐	5.000	4.732	60191.30	0.0199	P	2.9
4	☐	10.000	9.487	117327.20	0.0393	P	1.0
5	☐	100.000	98.133	1175250.06	0.3994	A	2.2
6	☐	200.000	200.966	2298326.79	0.8173	A	1.8

y = 0.0041 * x + 7.2199E-004
R = 0.9999
DL = 0.03298
BEC = 0.1777

Weight: <None>
Min Conc: <None>

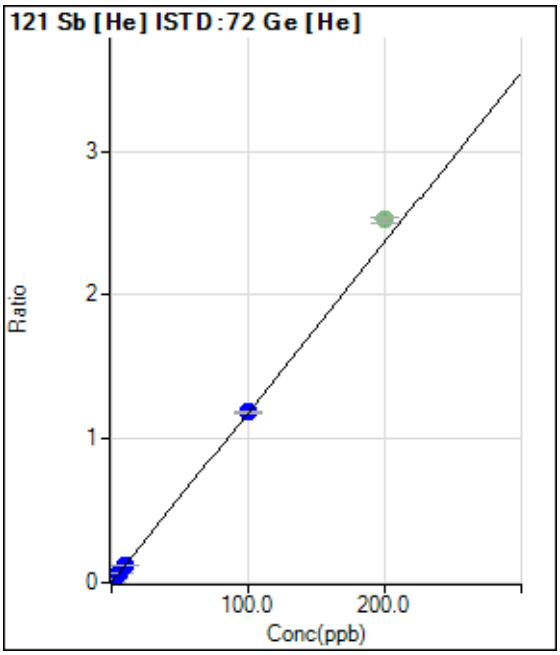


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1580.12	0.0007	P	8.1
2	☐	2.000	1.974	35902.98	0.0153	P	1.7
3	☐	5.000	4.927	86319.71	0.0372	P	0.4
4	☐	10.000	9.537	165251.36	0.0714	P	1.2
5	☐	100.000	101.582	1711186.07	0.7539	A	2.2
6	☐	200.000	199.234	3270114.02	1.4779	A	1.9

y = 0.0074 * x + 6.6947E-004
R = 1.0000
DL = 0.02185
BEC = 0.09029

Weight: <None>
Min Conc: <None>

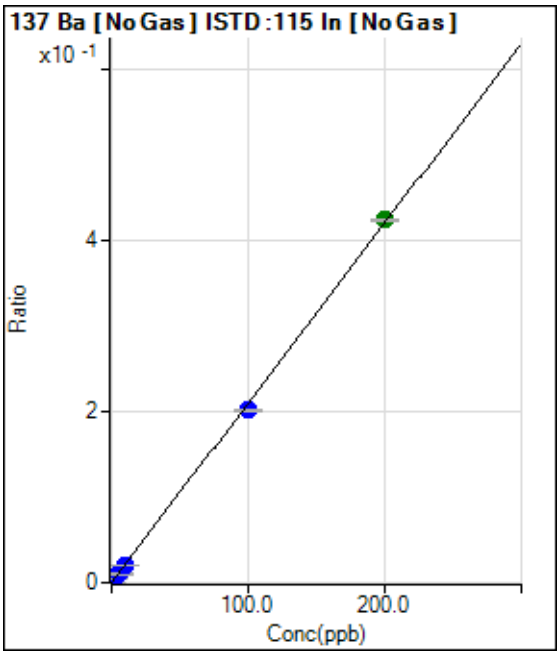
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	680.03	0.0010	P	19.1
2	☐	2.000	2.067	16927.87	0.0255	P	3.0
3	☐	5.000	5.103	40940.86	0.0614	P	2.7
4	☐	10.000	9.821	77759.82	0.1172	P	1.5
5	☐	100.000	100.011	771241.00	1.1841	P	0.3
6	☑	200.000		1584252.84	2.5227	A	1.6

y = 0.0118 * x + 0.0010
R = 1.0000
DL = 0.04967
BEC = 0.08666

Weight: <None>
Min Conc: <None>

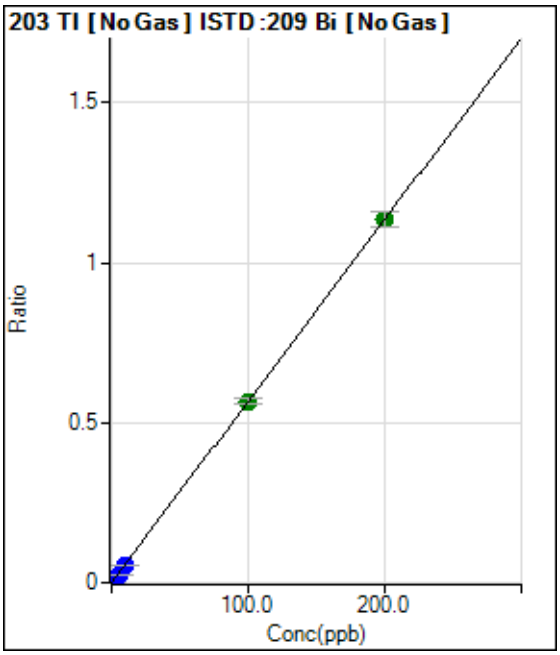


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	410.01	0.0001	P	7.1
2	☐	2.000	1.872	12262.65	0.0041	P	3.3
3	☐	5.000	4.770	30569.65	0.0101	P	1.6
4	☐	10.000	9.341	58873.16	0.0197	P	3.0
5	☐	100.000	96.171	593252.34	0.2016	P	1.0
6	☐	200.000	201.955	1190456.78	0.4233	A	0.7

y = 0.0021 * x + 1.3604E-004
R = 0.9997
DL = 0.01382
BEC = 0.06493

Weight: <None>
Min Conc: <None>

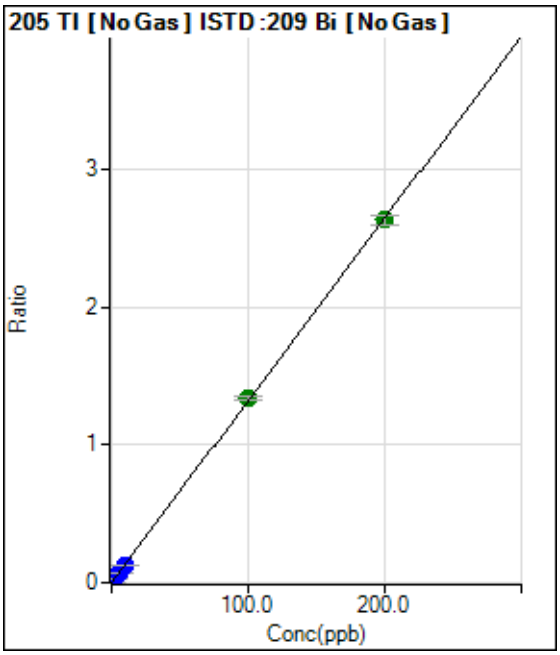
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	470.02	0.0001	P	19.0
2	☐	2.000	1.909	36951.60	0.0110	P	1.8
3	☐	5.000	4.610	89405.50	0.0263	P	1.4
4	☐	10.000	9.415	180084.53	0.0535	P	0.7
5	☐	100.000	100.094	1864357.16	0.5677	A	3.6
6	☐	200.000	199.993	3643297.97	1.1341	A	4.2

y = 0.0057 * x + 1.3816E-004
R = 1.0000
DL = 0.01385
BEC = 0.02437

Weight: <None>
Min Conc: <None>

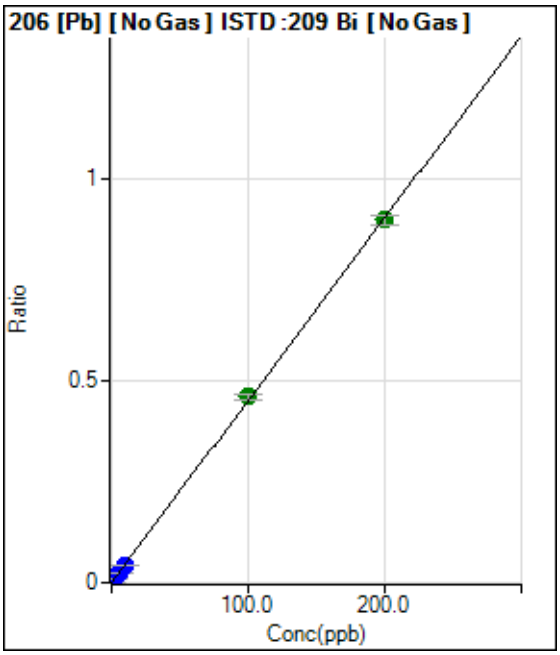


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1243.42	0.0004	P	4.2
2	☐	2.000	1.940	87515.58	0.0260	P	0.7
3	☐	5.000	4.768	215358.54	0.0633	P	1.2
4	☐	10.000	9.423	419595.94	0.1247	P	0.4
5	☐	100.000	101.471	4399144.83	1.3393	A	2.8
6	☐	200.000	199.300	8452090.92	2.6302	A	2.6

y = 0.0132 * x + 3.6559E-004
R = 1.0000
DL = 0.00348
BEC = 0.02771

Weight: <None>
Min Conc: <None>

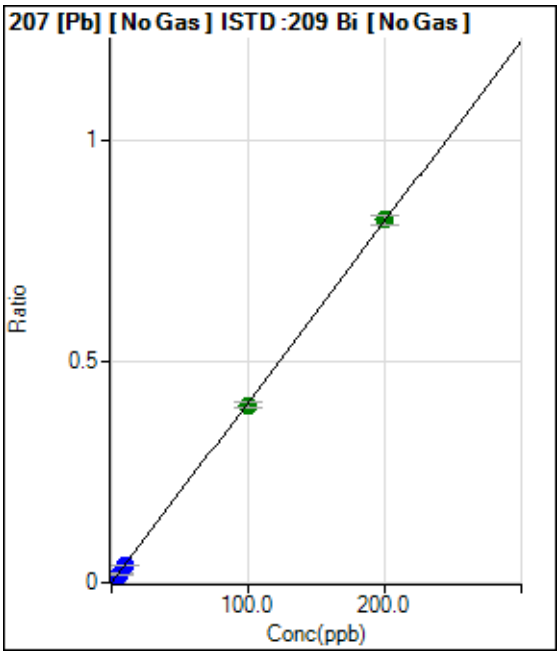
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	623.36	0.0002	P	7.1
2	☐	2.000	1.938	30080.02	0.0089	P	2.6
3	☐	5.000	4.768	73821.42	0.0217	P	0.9
4	☐	10.000	9.410	143444.22	0.0426	P	0.7
5	☐	100.000	101.842	1509681.59	0.4596	A	2.6
6	☐	200.000	199.115	2887299.02	0.8985	A	2.4

y = 0.0045 * x + 1.8317E-004
R = 0.9999
DL = 0.008603
BEC = 0.0406

Weight: <None>
Min Conc: <None>

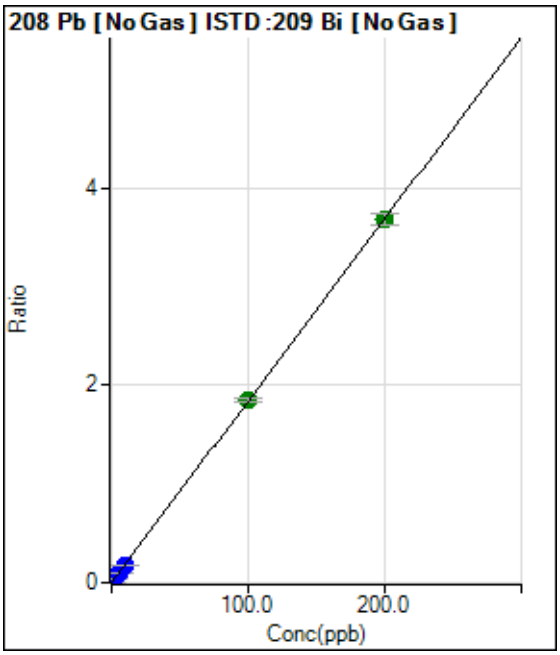


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	500.02	0.0001	P	9.5
2	☐	2.000	1.974	27634.31	0.0082	P	2.6
3	☐	5.000	4.752	66470.53	0.0195	P	1.8
4	☐	10.000	9.547	131530.08	0.0391	P	1.2
5	☐	100.000	98.074	1314501.57	0.4002	A	3.2
6	☐	200.000	200.992	2635058.19	0.8200	A	2.9

y = 0.0041 * x + 1.4705E-004
R = 0.9999
DL = 0.01028
BEC = 0.03605

Weight: <None>
Min Conc: <None>

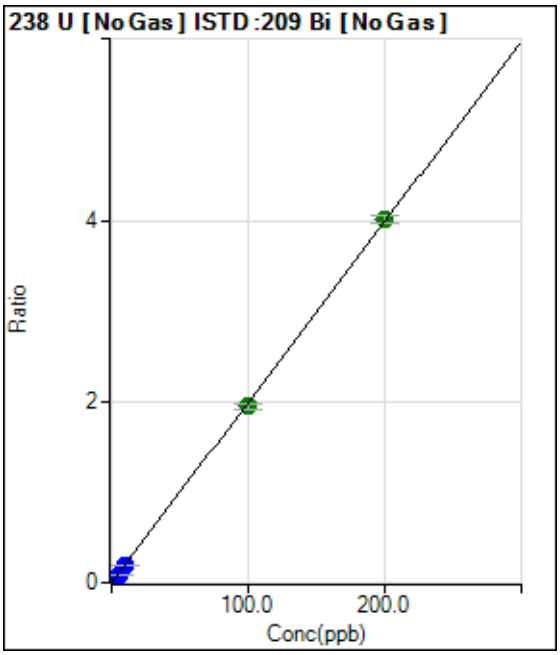
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2383.48	0.0007	P	3.2
2	☐	2.000	1.966	124382.34	0.0369	P	1.5
3	☐	5.000	4.784	302286.47	0.0888	P	0.8
4	☐	10.000	9.483	590045.65	0.1754	P	0.3
5	☐	100.000	100.814	6102153.95	1.8577	A	2.3
6	☐	200.000	199.625	11817433.99	3.6778	A	3.0

y = 0.0184 * x + 7.0049E-004
R = 1.0000
DL = 0.003598
BEC = 0.03803

Weight: <None>
Min Conc: <None>

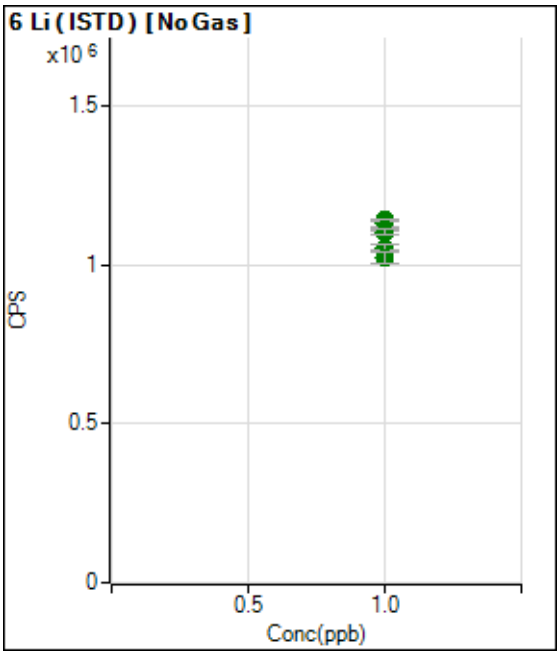


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	320.01	0.0001	P	11.8
2	☐	2.000	1.961	131916.00	0.0391	P	0.3
3	☐	5.000	4.756	322511.24	0.0948	P	0.7
4	☐	10.000	9.508	637244.01	0.1894	P	0.8
5	☐	100.000	97.625	6384286.16	1.9437	A	2.7
6	☐	200.000	201.219	12874955.64	4.0062	A	2.1

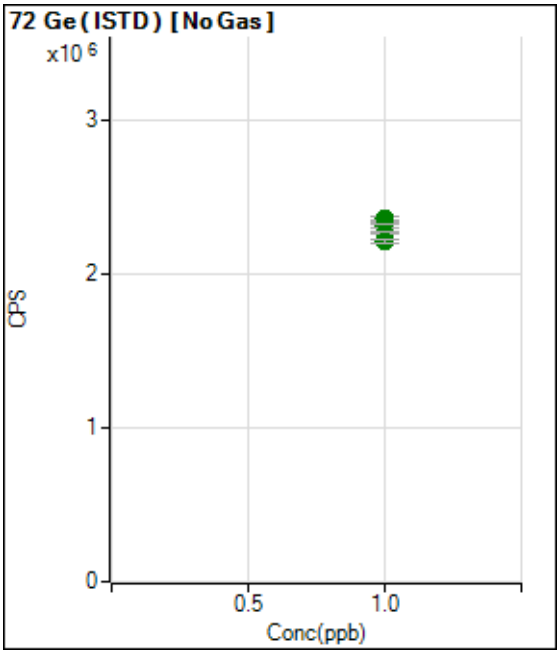
y = 0.0199 * x + 9.4107E-005
R = 0.9999
DL = 0.00168
BEC = 0.004727

Weight: <None>
Min Conc: <None>

Calibration for 019_ICV.d

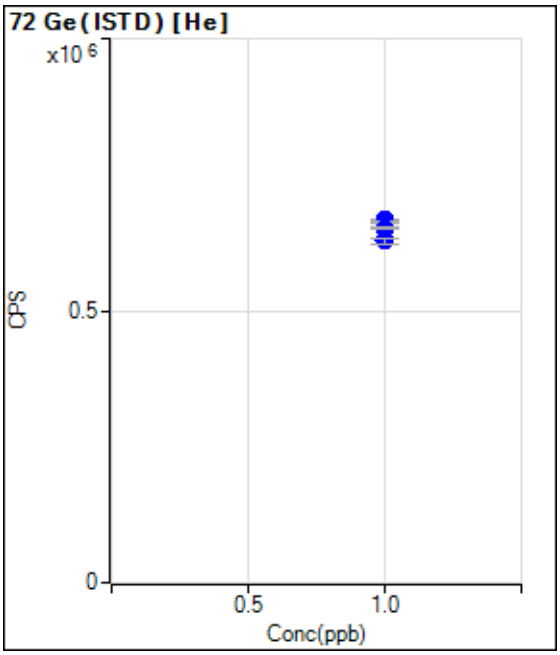


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1130239.19		A	1.7
2	☐	1.000		1140763.40		A	0.8
3	☐	1.000		1113245.76		A	1.2
4	☐	1.000		1102409.31		A	1.4
5	☐	1.000		1054784.74		A	1.6
6	☐	1.000		1022018.23		A	3.4

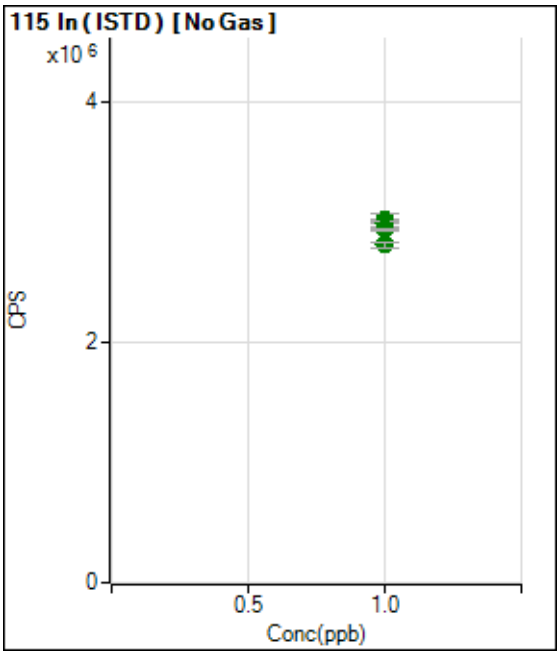


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2359811.32		A	1.0
2	☐	1.000		2345925.59		A	0.8
3	☐	1.000		2320252.00		A	1.9
4	☐	1.000		2314767.62		A	1.3
5	☐	1.000		2269963.77		A	0.6
6	☐	1.000		2213072.36		A	1.6

Calibration for 019_ICV.d

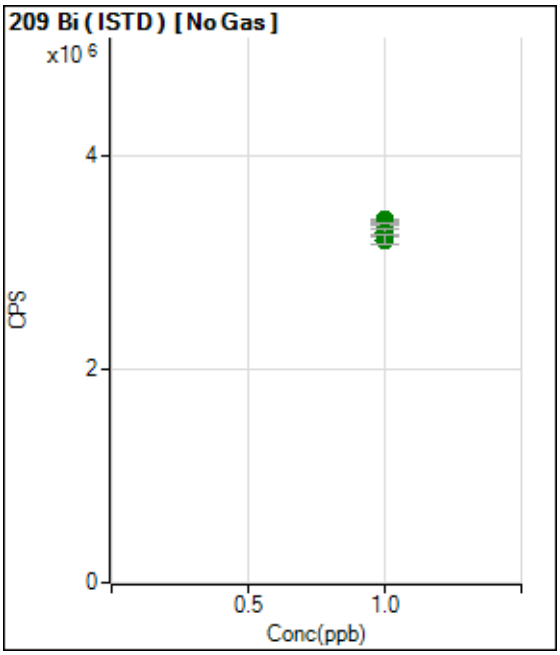


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		663944.94		P	0.7
2	☐	1.000		664453.53		P	0.2
3	☐	1.000		666923.53		P	0.8
4	☐	1.000		663475.09		P	0.3
5	☐	1.000		651350.55		P	0.3
6	☐	1.000		628087.50		P	1.5



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3012000.36		A	1.3
2	☐	1.000		3022855.10		A	3.4
3	☐	1.000		3017928.01		A	1.2
4	☐	1.000		2988215.61		A	1.7
5	☐	1.000		2942369.47		A	0.4
6	☐	1.000		2812769.11		A	1.6

Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3401945.99		A	0.9
2	☐	1.000		3370173.70		A	0.8
3	☐	1.000		3403083.91		A	0.7
4	☐	1.000		3364606.72		A	1.0
5	☐	1.000		3285800.47		A	2.1
6	☐	1.000		3215026.41		A	2.8

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	012CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:01:09-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	71403	0.00
Be	9	1	No Gas	27	214.81
V	51	2	He	3063	0.02
Cr	52	2	He	1387	0.27
Fe	56	2	He	11745	0.02
Se	78	2	He	65	12.04
As	75	2	He	179	9.90
Ca	44	2	He	373	2.31
Na	23	2	He	74619	0.00
Mg	24	2	He	430	3.79
K	39	2	He	51607	0.00
Mn	55	2	He	300	2.94
Co	59	2	He	43	162.69
Ni	60	2	He	197	13.01
Cu	63	2	He	1110	0.82
Zn	66	2	He	5658	0.04
Al	27	2	He	697	0.48
B	11	1	No Gas	46065	0.00
Al	27	1	No Gas	36385	0.00
Si	28	1	No Gas	515830	0.00
Ag	107	1	No Gas	487	3.59
Cd	111	1	No Gas	7	2598.08
Sr	88	1	No Gas	1263	0.60
Mo	95	1	No Gas	90	24.69
Sn	118	1	No Gas	2174	0.23
Sb	121	1	No Gas	1580	0.54
Ba	137	1	No Gas	410	2.06
Tl	205	1	No Gas	1243	0.27
Tl	203	1	No Gas	470	4.02
Pb	208	1	No Gas	2383	0.17
U	238	1	No Gas	320	3.52
Ca	43	2	He	13	649.52
Sb	121	2	He	680	2.71
Ti	47	2	He	7	1299.04
Cu	63	1	No Gas	2364	0.30

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	1130239	1.72
Ge	72	2	He	663945	0.71
Ge	72	1	No Gas	2359811	1.00
In	115	1	No Gas	3012000	1.31

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	3401946	0.91

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	013CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:03:07-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	8424	0.03
V	51	2	He	14712	0.01
Cr	52	2	He	15723	0.02
Fe	56	2	He	1312571	0.00
Se	78	2	He	253	6.19
As	75	2	He	2230	0.19
Ca	44	2	He	7959	0.05
Na	23	2	He	294318	0.00
Mg	24	2	He	131011	0.00
K	39	2	He	190256	0.00
Mn	55	2	He	11181	0.02
Co	59	2	He	21611	0.02
Ni	60	2	He	5685	0.10
Cu	63	2	He	15736	0.02
Zn	66	2	He	8556	0.05
Al	27	2	He	1720	0.24
B	11	1	No Gas	65031	0.00
Al	27	1	No Gas	71128	0.00
Si	28	1	No Gas	633248	0.00
Ag	107	1	No Gas	38787	0.01
Cd	111	1	No Gas	7812	0.02
Sr	88	1	No Gas	70200	0.00
Mo	95	1	No Gas	14368	0.02
Sn	118	1	No Gas	25913	0.01
Sb	121	1	No Gas	35903	0.01
Ba	137	1	No Gas	12263	0.03
Tl	205	1	No Gas	87516	0.00
Tl	203	1	No Gas	36952	0.01
Pb	208	1	No Gas	124382	0.00
U	238	1	No Gas	131916	0.00
Ca	43	2	He	510	1.02
Sb	121	2	He	16928	0.02
Cu	63	1	No Gas	29242	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1140763	0.80	1130239	100.93	70	120	
Ge	72	2	He	664454	0.18	663945	100.08	70	120	
Ge	72	1	No Gas	2345926	0.83	2359811	99.41	70	120	

Calibration Standard Report

In	115	1	No Gas	3022855	3.41	3012000	100.36	70	120	
Bi	209	1	No Gas	3370174	0.80	3401946	99.07	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	014CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:05:06-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	20382	0.01
V	51	2	He	31979	0.00
Cr	52	2	He	35844	0.00
Fe	56	2	He	3183052	0.00
Se	78	2	He	530	0.00
As	75	2	He	5094	0.05
Ca	44	2	He	19013	0.01
Na	23	2	He	610325	0.00
Mg	24	2	He	317057	0.00
K	39	2	He	385757	0.00
Mn	55	2	He	25621	0.01
Co	59	2	He	52334	0.00
Ni	60	2	He	13277	0.03
Cu	63	2	He	37893	0.00
Zn	66	2	He	11545	0.01
Al	27	2	He	2584	0.11
B	11	1	No Gas	97168	0.00
Al	27	1	No Gas	112371	0.00
Si	28	1	No Gas	686286	0.00
Ag	107	1	No Gas	94630	0.00
Cd	111	1	No Gas	18867	0.01
Sr	88	1	No Gas	169280	0.00
Mo	95	1	No Gas	35073	0.00
Sn	118	1	No Gas	60191	0.00
Sb	121	1	No Gas	86320	0.00
Ba	137	1	No Gas	30570	0.00
Tl	205	1	No Gas	215359	0.00
Tl	203	1	No Gas	89405	0.00
Pb	208	1	No Gas	302286	0.00
U	238	1	No Gas	322511	0.00
Ca	43	2	He	1010	0.29
Sb	121	2	He	40941	0.01
Cu	63	1	No Gas	67832	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1113246	1.23	1130239	98.50	70	120	
Ge	72	2	He	666924	0.84	663945	100.45	70	120	
Ge	72	1	No Gas	2320252	1.85	2359811	98.32	70	120	

Calibration Standard Report

In	115	1	No Gas	3017928	1.18	3012000	100.20	70	120	
Bi	209	1	No Gas	3403084	0.75	3401946	100.03	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	015CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:07:05-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	40045	0.00
V	51	2	He	59914	0.00
Cr	52	2	He	69905	0.00
Fe	56	2	He	6134557	0.00
Se	78	2	He	1035	0.33
As	75	2	He	9898	0.01
Ca	44	2	He	35907	0.00
Na	23	2	He	1118386	0.00
Mg	24	2	He	613595	0.00
K	39	2	He	705541	0.00
Mn	55	2	He	51654	0.00
Co	59	2	He	100374	0.00
Ni	60	2	He	25504	0.00
Cu	63	2	He	69615	0.00
Zn	66	2	He	18232	0.01
Al	27	2	He	4291	0.19
B	11	1	No Gas	147585	0.00
Al	27	1	No Gas	186184	0.00
Si	28	1	No Gas	914390	0.00
Ag	107	1	No Gas	184745	0.00
Cd	111	1	No Gas	38393	0.00
Sr	88	1	No Gas	329325	0.00
Mo	95	1	No Gas	67374	0.00
Sn	118	1	No Gas	117327	0.00
Sb	121	1	No Gas	165251	0.00
Ba	137	1	No Gas	58873	0.00
Tl	205	1	No Gas	419596	0.00
Tl	203	1	No Gas	180085	0.00
Pb	208	1	No Gas	590046	0.00
U	238	1	No Gas	637244	0.00
Ca	43	2	He	2167	0.47
Sb	121	2	He	77760	0.00
Cu	63	1	No Gas	128499	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1102409	1.42	1130239	97.54	70	120	
Ge	72	2	He	663475	0.35	663945	99.93	70	120	
Ge	72	1	No Gas	2314768	1.32	2359811	98.09	70	120	

Calibration Standard Report

In	115	1	No Gas	2988216	1.72	3012000	99.21	70	120	
Bi	209	1	No Gas	3364607	0.96	3401946	98.90	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	016CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:09:04-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	404747	0.00
V	51	2	He	579423	0.00
Cr	52	2	He	682412	0.00
Fe	56	2	He	61401754	0.00
Se	78	2	He	9054	0.01
As	75	2	He	97092	0.00
Ca	44	2	He	359525	0.00
Na	23	2	He	10235227	0.00
Mg	24	2	He	5984802	0.00
K	39	2	He	6522703	0.00
Mn	55	2	He	504117	0.00
Co	59	2	He	1026355	0.00
Ni	60	2	He	252292	0.00
Cu	63	2	He	676679	0.00
Zn	66	2	He	135834	0.00
Al	27	2	He	36655	0.01
B	11	1	No Gas	1132877	0.00
Al	27	1	No Gas	1600201	0.00
Si	28	1	No Gas	4302072	0.00
Ag	107	1	No Gas	1880045	0.00
Cd	111	1	No Gas	379570	0.00
Sr	88	1	No Gas	3319437	0.00
Mo	95	1	No Gas	681485	0.00
Sn	118	1	No Gas	1175250	0.00
Sb	121	1	No Gas	1711186	0.00
Ba	137	1	No Gas	593252	0.00
Tl	205	1	No Gas	4399145	0.00
Tl	203	1	No Gas	1864357	0.00
Pb	208	1	No Gas	6102154	0.00
U	238	1	No Gas	6384286	0.00
Ca	43	2	He	21337	0.00
Sb	121	2	He	771241	0.00
Cu	63	1	No Gas	1258003	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1054785	1.62	1130239	93.32	70	120	
Ge	72	2	He	651351	0.31	663945	98.10	70	120	
Ge	72	1	No Gas	2269964	0.62	2359811	96.19	70	120	

Calibration Standard Report

In	115	1	No Gas	2942369	0.38	3012000	97.69	70	120	
Bi	209	1	No Gas	3285800	2.11	3401946	96.59	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	017CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:10:57-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	767634	0.00
V	51	2	He	1138367	0.00
Cr	52	2	He	1352855	0.00
Fe	56	2	He	120535232	0.00
Se	78	2	He	17240	0.00
As	75	2	He	192496	0.00
Ca	44	2	He	702770	0.00
Na	23	2	He	19623715	0.00
Mg	24	2	He	11416427	0.00
K	39	2	He	12657876	0.00
Mn	55	2	He	1012383	0.00
Co	59	2	He	2073057	0.00
Ni	60	2	He	488288	0.00
Cu	63	2	He	1324488	0.00
Zn	66	2	He	258464	0.00
Al	27	2	He	67591	0.00
B	11	1	No Gas	2220539	0.00
Al	27	1	No Gas	2915354	0.00
Si	28	1	No Gas	7168608	0.00
Ag	107	1	No Gas	3585751	0.00
Cd	111	1	No Gas	746940	0.00
Sr	88	1	No Gas	6416876	0.00
Mo	95	1	No Gas	1371082	0.00
Sn	118	1	No Gas	2298327	0.00
Sb	121	1	No Gas	3270114	0.00
Ba	137	1	No Gas	1190457	0.00
Tl	205	1	No Gas	8452091	0.00
Tl	203	1	No Gas	3643298	0.00
Pb	208	1	No Gas	11817434	0.00
U	238	1	No Gas	12874956	0.00
Ca	43	2	He	40851	0.00
Sb	121	2	He	1584253	0.00
Cu	63	1	No Gas	2411593	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1022018	3.39	1130239	90.42	70	120	
Ge	72	2	He	628088	1.46	663945	94.60	70	120	
Ge	72	1	No Gas	2213072	1.59	2359811	93.78	70	120	

Calibration Standard Report

In	115	1	No Gas	2812769	1.57	3012000	93.39	70	120	
Bi	209	1	No Gas	3215026	2.79	3401946	94.51	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	019_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:14:45-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	99.945	1.800	1646240	0.86	100	99.9	90	110	
Be	9	1	No Gas	101.730	1.111	399863	0.25	100	101.7	90	110	
V	51	2	He	98.635	0.494	583660	1.01	100	98.6	90	110	
Cr	52	2	He	97.780	0.823	685472	1.34	100	97.8	90	110	
Fe	56	2	He	10025.047	0.274	62702931	0.75	10000	100.3	90	110	
Se	78	2	He	96.501	1.648	8714	2.16	100	96.5	90	110	
As	75	2	He	96.819	0.908	96568	0.95	100	96.8	90	110	
Ca	44	2	He	10050.272	1.575	366903	1.73	10000	100.5	90	110	
Na	23	2	He	9994.670	0.148	10253476	0.46	10000	99.9	90	110	
Mg	24	2	He	10070.222	1.142	5999633	1.14	10000	100.7	90	110	
K	39	2	He	10154.067	0.520	6703860	1.06	10000	101.5	90	110	
Mn	55	2	He	96.966	0.838	507243	0.30	100	97.0	90	110	
Co	59	2	He	97.749	2.106	1045376	1.78	100	97.7	90	110	
Ni	60	2	He	100.519	0.126	255461	0.44	100	100.5	90	110	
Cu	63	2	He	99.030	0.329	681384	0.84	100	99.0	90	110	
Zn	66	2	He	98.897	1.050	135679	0.49	100	98.9	90	110	
Al	27	2	He	105.566	3.654	37745	3.13	100	105.6	90	110	
B	11	1	No Gas	507.538	2.291	1163021	2.03	500	101.5	90	110	
Al	27	1	No Gas	103.984	0.887	1604826	1.02	100	104.0	90	110	
Si	28	1	No Gas	586.434	1.814	4650255	0.86	500	117.3	90	110	ICV Main CR1 Failed
Ag	107	1	No Gas	98.063	0.971	1860447	0.82	100	98.1	90	110	
Cd	111	1	No Gas	96.652	0.721	379570	0.92	100	96.7	90	110	
Sr	88	1	No Gas	97.504	1.466	3301799	0.90	100	97.5	90	110	
Mo	95	1	No Gas	93.141	1.724	668539	0.22	100	93.1	90	110	
Sn	118	1	No Gas	97.416	0.780	1179596	2.41	100	97.4	90	110	
Sb	121	1	No Gas	101.560	0.476	1726847	0.91	100	101.6	90	110	
Ba	137	1	No Gas	95.743	1.933	596983	0.83	100	95.7	90	110	
Tl	205	1	No Gas	102.209	0.468	4411606	0.29	100	102.2	90	110	
Tl	203	1	No Gas	101.359	0.773	1879760	0.59	100	101.4	90	110	
Pb	208	1	No Gas	99.749	1.703	6010656	1.51	100	99.7	90	110	
U	238	1	No Gas	96.032	1.246	6252675	1.45	100	96.0	90	110	
Ca	43	2	He	10017.116	2.825	21340	2.30	10000	100.2	90	110	
Sb	121	2	He	94.484	0.259	770035	0.80	100	94.5	90	110	
Ti	47	2	He	98.326	1.858	21320	1.39	100	98.3	90	110	
Cu	63	1	No Gas	99.350	1.233	1245565	0.47	100	99.4	90	110	
Se	82	1	No Gas	98.318	1.246	20916	1.94	100	98.3	90	110	

QC ISTD Table

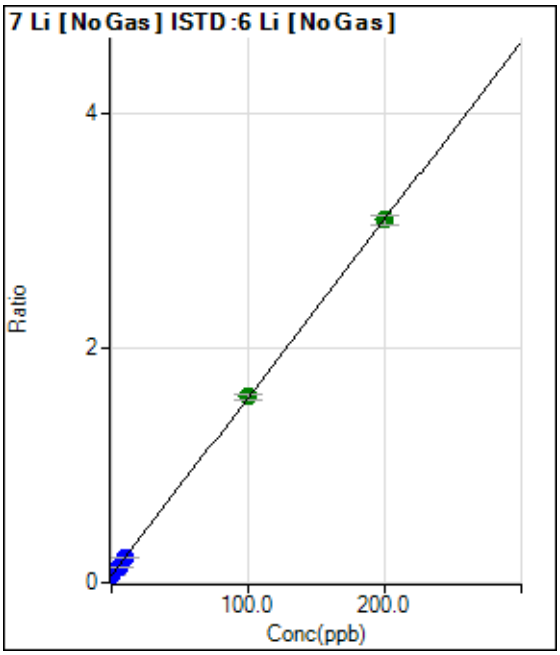
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1041744	0.86	1130239	92.17	70	120	
Ge	72	2	He	653980	0.54	663945	98.50	70	120	
Ge	72	1	No Gas	2291142	0.79	2359811	97.09	70	120	
In	115	1	No Gas	2974596	1.64	3012000	98.76	70	120	
Bi	209	1	No Gas	3270160	0.23	3401946	96.13	70	120	

Calibration for 019_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\062121A.b\
Analysis File: 062121A.batch.bin
DA Date-Time: 6/21/2021 7:27:29 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	012CALB.d	CAL BLK	6/21/2021 12:01:09 PM
2	013CALS.d	2/10/200	6/21/2021 12:03:07 PM
3	014CALS.d	5/25/500	6/21/2021 12:05:06 PM
4	015CALS.d	10/50/100	6/21/2021 12:07:05 PM
5	016CALS.d	100/500/10K	6/21/2021 12:09:04 PM
6	017CALS.d	200/1000/20K	6/21/2021 12:10:57 PM

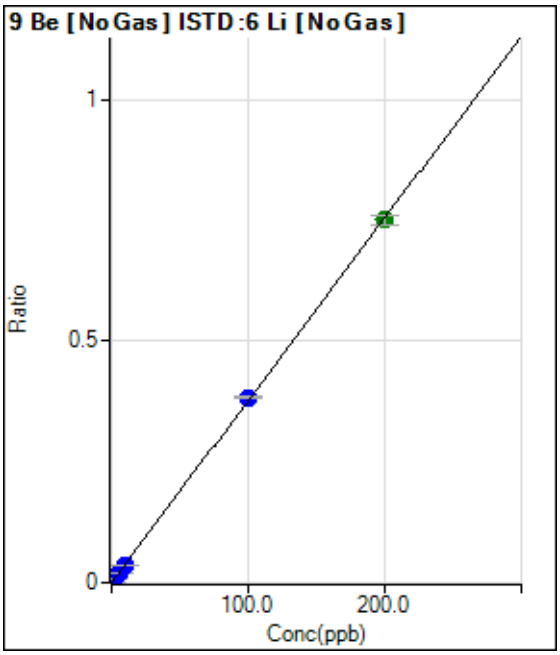
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71403.07	0.0632	P	1.8
2	☐	2.000	1.932	105541.67	0.0925	P	1.0
3	☐	5.000	4.942	153862.45	0.1382	P	0.5
4	☐	10.000	9.980	236639.63	0.2147	P	1.5
5	☐	100.000	100.382	1673464.14	1.5871	A	3.0
6	☐	200.000	199.812	3162766.62	3.0965	A	2.7

y = 0.0152 * x + 0.0632
R = 1.0000
DL = 0.2219
BEC = 4.162

Weight: <None>
Min Conc: <None>

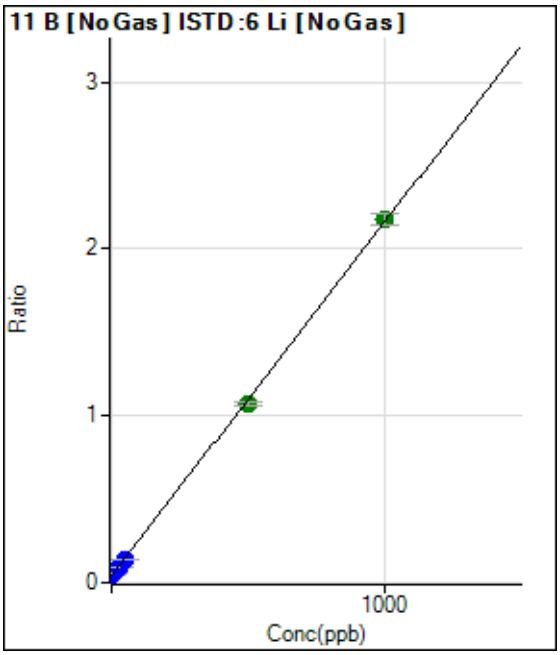


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	56.6
2	☐	2.000	1.951	8424.23	0.0074	P	2.5
3	☐	5.000	4.847	20381.52	0.0183	P	2.3
4	☐	10.000	9.622	40045.18	0.0363	P	0.8
5	☐	100.000	101.709	404747.44	0.3838	P	1.5
6	☐	200.000	199.169	767633.95	0.7515	A	2.5

y = 0.0038 * x + 2.3565E-005
R = 0.9999
DL = 0.01061
BEC = 0.006246

Weight: <None>
Min Conc: <None>

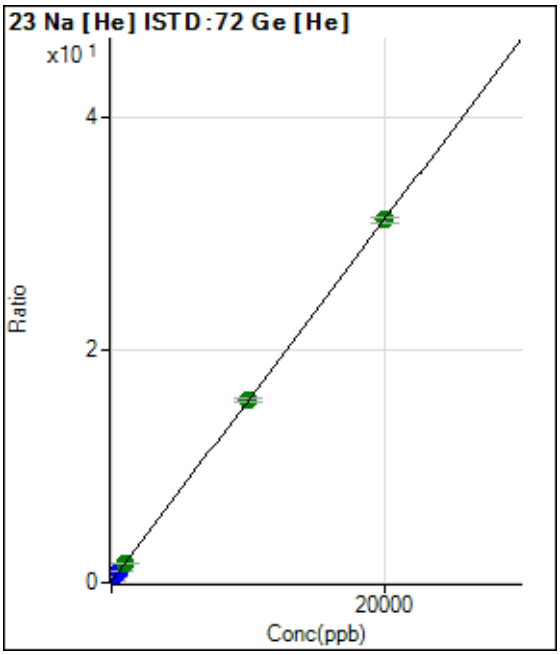
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46065.22	0.0408	P	1.1
2	☐	10.000	7.666	65031.33	0.0570	P	1.2
3	☐	25.000	21.956	97168.44	0.0873	P	1.7
4	☐	50.000	43.932	147585.34	0.1339	P	0.5
5	☐	500.000	487.574	1132877.25	1.0742	A	2.0
6	☐	1000.000	1006.616	2220538.87	2.1743	A	3.2

y = 0.0021 * x + 0.0408
R = 0.9999
DL = 0.6195
BEC = 19.23

Weight: <None>
Min Conc: <None>

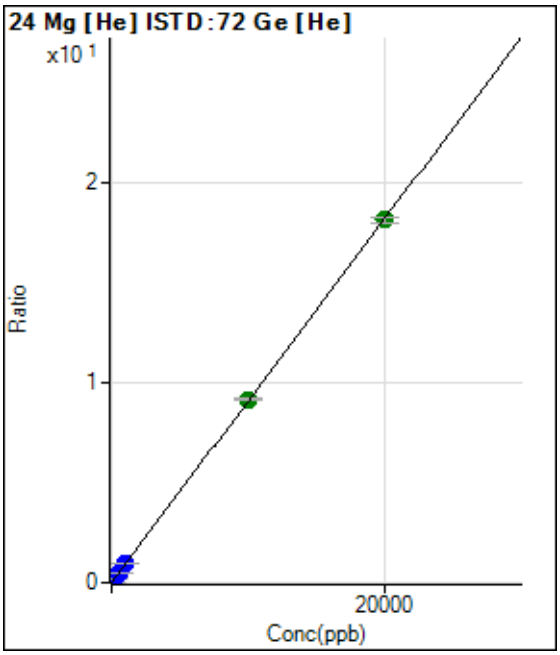


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	74618.81	0.1124	P	1.5
2	☐	200.000	212.243	294318.32	0.4430	P	1.0
3	☐	500.000	515.443	610324.60	0.9152	P	0.8
4	☐	1000.000	1010.204	1118386.31	1.6857	A	2.6
5	☐	10000.000	10017.244	10235226.52	15.7138	A	2.2
6	☐	20000.000	19990.359	19623714.71	31.2465	A	1.4

y = 0.0016 * x + 0.1124
R = 1.0000
DL = 3.148
BEC = 72.17

Weight: <None>
Min Conc: <None>

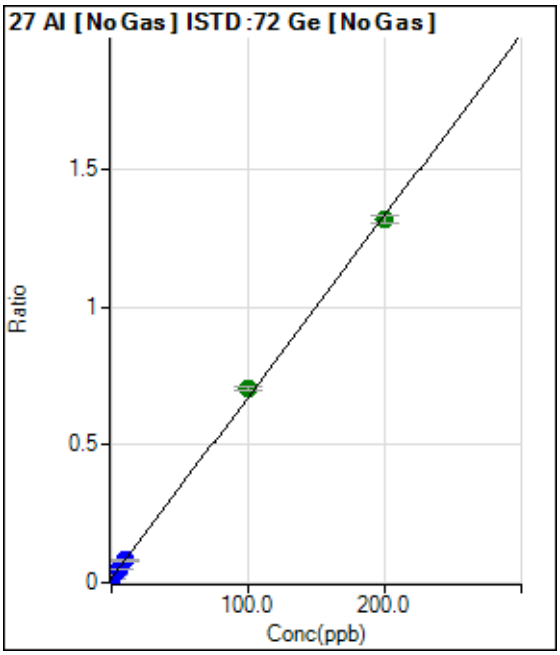
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	430.01	0.0006	P	15.7
2	☐	200.000	215.739	131011.02	0.1972	P	1.8
3	☐	500.000	521.205	317057.33	0.4754	P	2.1
4	☐	1000.000	1014.529	613594.69	0.9248	P	1.2
5	☐	10000.000	10085.687	5984802.21	9.1882	A	0.8
6	☐	20000.000	19955.742	11416426.91	18.1794	A	1.6

y = 9.1095E-004 * x + 6.4727E-004
R = 1.0000
DL = 0.3338
BEC = 0.7105

Weight: <None>
Min Conc: <None>

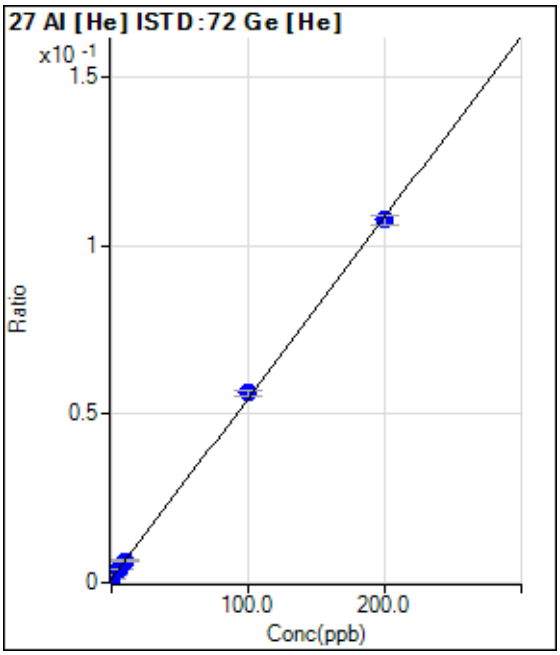


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36384.56	0.0154	P	2.2
2	☐	2.000	2.262	71128.31	0.0303	P	0.7
3	☐	5.000	5.012	112371.24	0.0484	P	1.0
4	☐	10.000	9.870	186183.93	0.0804	P	2.1
5	☐	100.000	104.669	1600201.17	0.7050	A	1.4
6	☐	200.000	197.669	2915353.92	1.3176	A	2.2

y = 0.0066 * x + 0.0154
R = 0.9996
DL = 0.156
BEC = 2.341

Weight: <None>
Min Conc: <None>

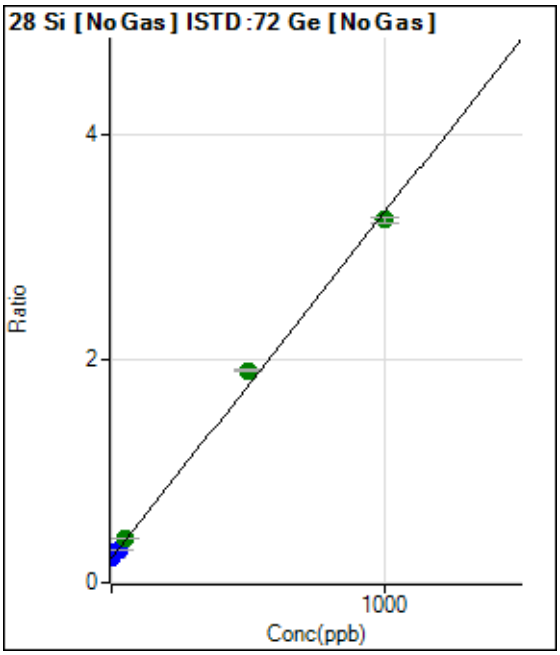
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	696.70	0.0010	P	3.9
2	☐	2.000	2.867	1720.14	0.0026	P	3.9
3	☐	5.000	5.262	2583.63	0.0039	P	3.6
4	☐	10.000	10.093	4290.74	0.0065	P	8.3
5	☐	100.000	102.866	36655.22	0.0563	P	2.4
6	☐	200.000	198.547	67590.87	0.1076	P	2.5

y = 5.3685E-004 * x + 0.0010
R = 0.9999
DL = 0.227
BEC = 1.955

Weight: <None>
Min Conc: <None>

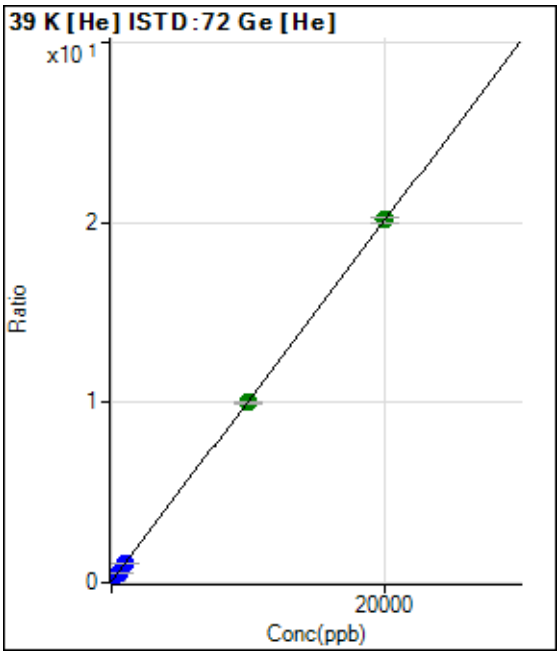


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	515829.63	0.2186	P	1.1
2	☐	10.000	16.666	633247.95	0.2701	P	13.4
3	☐	25.000	25.005	686286.03	0.2958	P	1.5
4	☐	50.000	57.134	914390.17	0.3951	A	1.7
5	☐	500.000	542.862	4302072.12	1.8953	A	0.6
6	☐	1000.000	978.145	7168607.60	3.2397	A	1.3

y = 0.0031 * x + 0.2186
R = 0.9987
DL = 2.318
BEC = 70.78

Weight: <None>
Min Conc: <None>

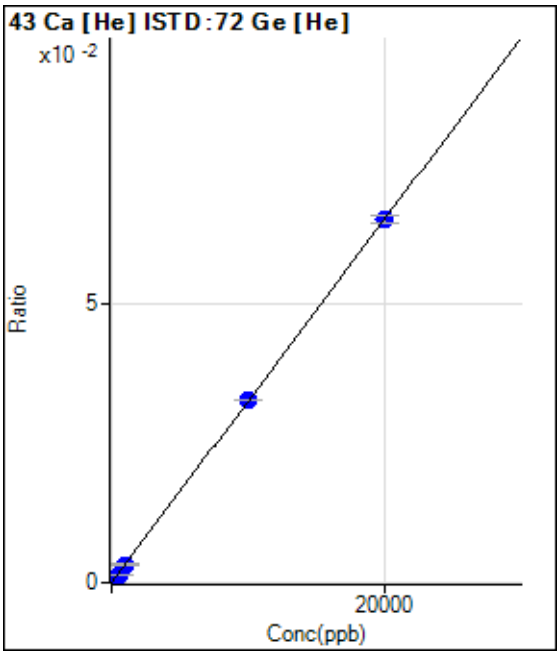
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51606.60	0.0777	P	0.0
2	☐	200.000	208.221	190256.20	0.2863	P	0.3
3	☐	500.000	499.787	385757.35	0.5784	P	1.0
4	☐	1000.000	983.829	705540.80	1.0634	P	0.8
5	☐	10000.000	9918.238	6522702.82	10.0144	A	1.6
6	☐	20000.000	20041.613	12657875.64	20.1566	A	1.9

y = 0.0010 * x + 0.0777
R = 1.0000
DL = 0.07267
BEC = 77.58

Weight: <None>
Min Conc: <None>

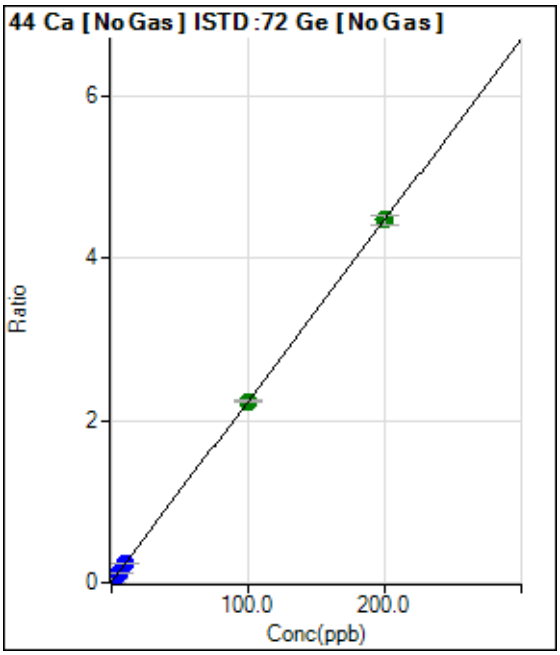


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	86.6
2	☐	200.000	229.584	510.02	0.0008	P	5.3
3	☐	500.000	458.937	1010.06	0.0015	P	2.2
4	☐	1000.000	996.699	2166.88	0.0033	P	9.8
5	☐	10000.000	10054.941	21336.81	0.0328	P	0.4
6	☐	20000.000	19973.425	40850.90	0.0651	P	2.2

y = 3.2559E-006 * x + 2.0099E-005
R = 1.0000
DL = 16.04
BEC = 6.173

Weight: <None>
Min Conc: <None>

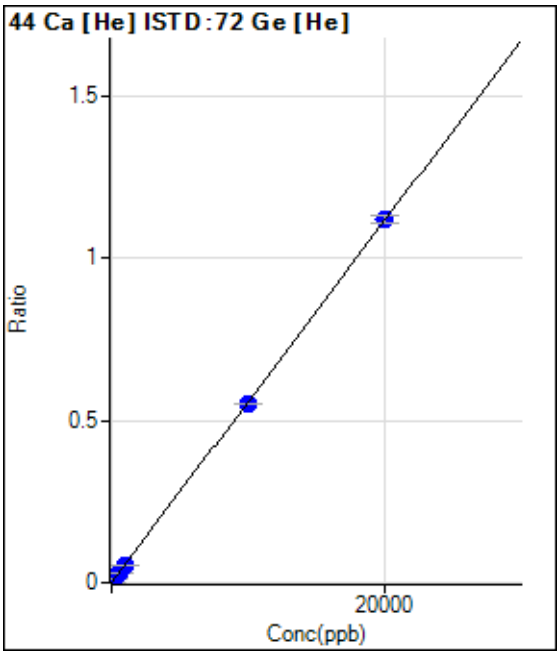
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22188.34	0.0094	P	1.6
2	☐	2.000	2.111	132361.74	0.0564	P	0.6
3	☐	5.000	5.097	285130.20	0.1229	P	2.3
4	☐	10.000	10.033	538975.36	0.2329	P	1.4
5	☐	100.000	99.832	5068782.95	2.2330	A	1.2
6	☐	200.000	200.079	9880839.23	4.4659	A	2.6

y = 0.0223 * x + 0.0094
R = 1.0000
DL = 0.02017
BEC = 0.4221

Weight: <None>
Min Conc: <None>

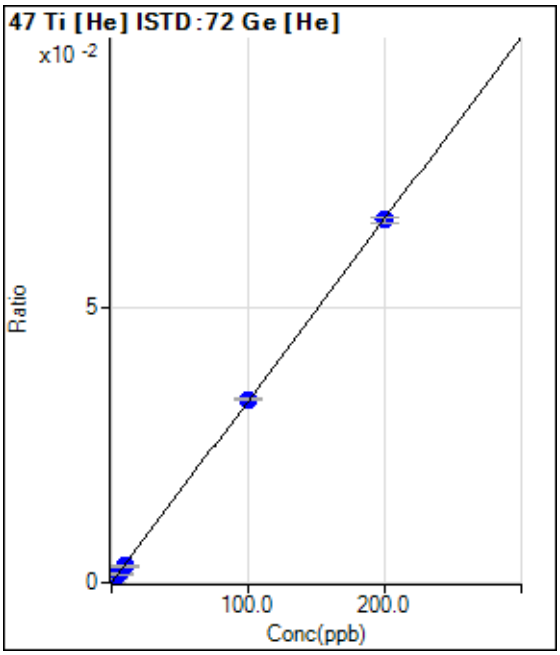


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	373.34	0.0006	P	8.6
2	☐	200.000	204.705	7959.15	0.0120	P	4.1
3	☐	500.000	501.188	19013.46	0.0285	P	2.4
4	☐	1000.000	960.392	35907.11	0.0541	P	0.3
5	☐	10000.000	9887.938	359524.77	0.5520	P	0.6
6	☐	20000.000	20057.935	702769.88	1.1191	P	1.9

y = 5.5766E-005 * x + 5.6232E-004
R = 1.0000
DL = 2.599
BEC = 10.08

Weight: <None>
Min Conc: <None>

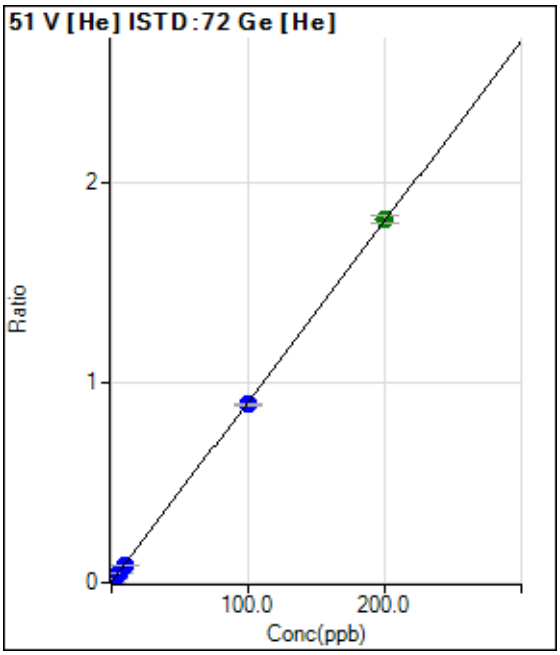
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	86.6
2	☐	2.000	1.937	433.35	0.0007	P	15.8
3	☐	5.000	4.839	1076.73	0.0016	P	7.1
4	☐	10.000	9.186	2026.85	0.0031	P	5.7
5	☐	100.000	100.977	21807.60	0.0335	P	1.5
6	☐	200.000	199.557	41546.51	0.0662	P	1.7

y = 3.3148E-004 * x + 1.0072E-005
R = 1.0000
DL = 0.07895
BEC = 0.03039

Weight: <None>
Min Conc: <None>

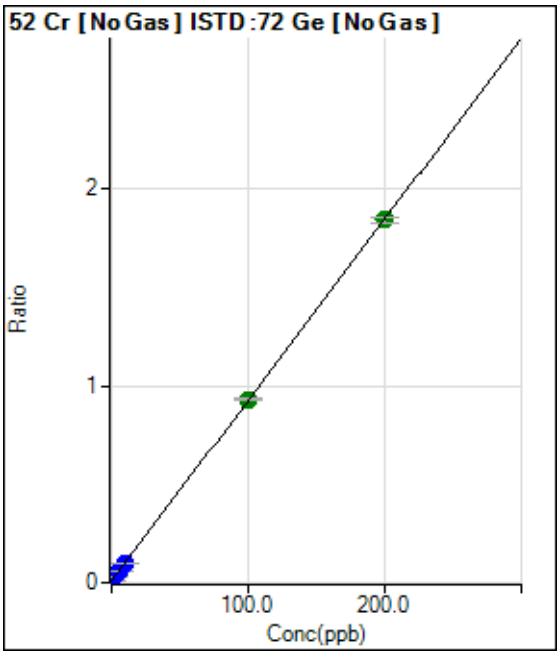


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3062.58	0.0046	P	1.2
2	☐	2.000	1.947	14712.39	0.0221	P	2.3
3	☐	5.000	4.815	31979.45	0.0480	P	0.5
4	☐	10.000	9.520	59913.56	0.0903	P	0.9
5	☐	100.000	98.315	579423.19	0.8896	P	0.4
6	☐	200.000	200.872	1138367.45	1.8127	A	2.0

y = 0.0090 * x + 0.0046
R = 1.0000
DL = 0.01914
BEC = 0.5125

Weight: <None>
Min Conc: <None>

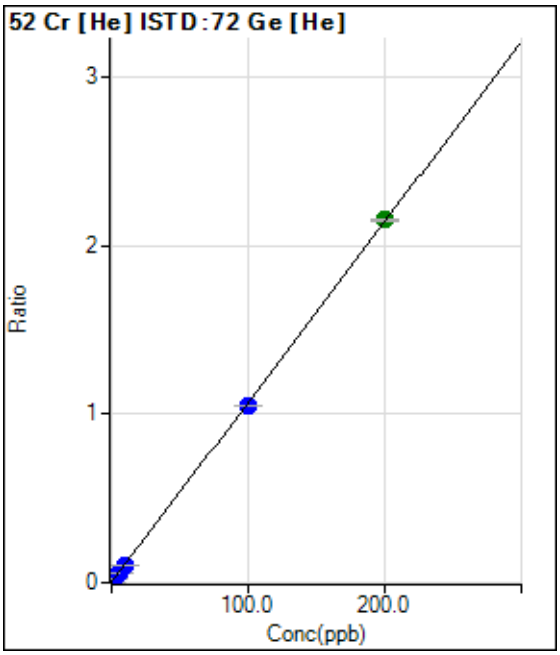
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20769.54	0.0088	P	3.1
2	☐	2.000	1.992	63627.85	0.0271	P	0.5
3	☐	5.000	5.052	128172.24	0.0553	P	2.0
4	☐	10.000	9.909	231250.89	0.0999	P	2.0
5	☐	100.000	100.595	2119603.20	0.9338	A	0.9
6	☐	200.000	199.706	4082660.67	1.8451	A	1.7

y = 0.0092 * x + 0.0088
R = 1.0000
DL = 0.08944
BEC = 0.9573

Weight: <None>
Min Conc: <None>

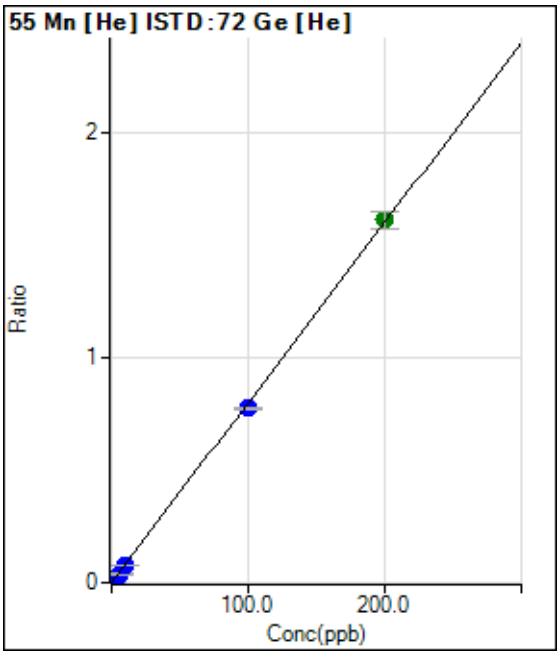


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1386.76	0.0021	P	3.0
2	☐	2.000	2.017	15722.65	0.0237	P	2.3
3	☐	5.000	4.829	35843.99	0.0537	P	1.8
4	☐	10.000	9.654	69904.76	0.1054	P	1.1
5	☐	100.000	97.740	682411.55	1.0477	P	0.5
6	☐	200.000	201.151	1352854.56	2.1540	A	0.5

y = 0.0107 * x + 0.0021
R = 0.9999
DL = 0.01755
BEC = 0.1952

Weight: <None>
Min Conc: <None>

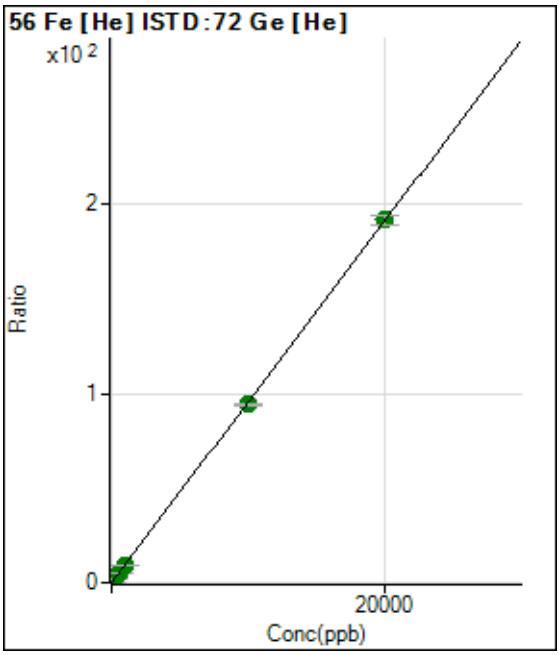
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	300.01	0.0005	P	9.5
2	☐	2.000	2.048	11181.39	0.0168	P	1.6
3	☐	5.000	4.748	25621.04	0.0384	P	1.8
4	☐	10.000	9.682	51654.45	0.0779	P	0.5
5	☐	100.000	96.754	504116.68	0.7740	P	0.5
6	☐	200.000	201.645	1012382.64	1.6125	A	4.5

y = 0.0080 * x + 4.5204E-004
R = 0.9998
DL = 0.01608
BEC = 0.05654

Weight: <None>
Min Conc: <None>

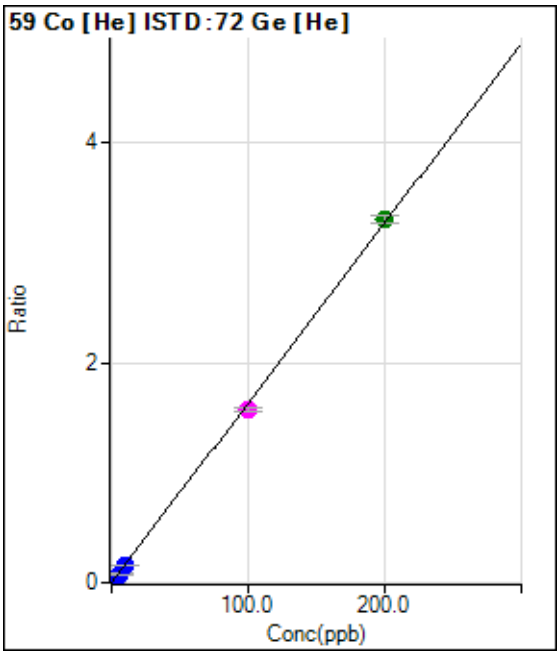


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11745.25	0.0177	P	1.8
2	☐	200.000	204.735	1312571.44	1.9754	A	1.0
3	☐	500.000	497.276	3183052.14	4.7727	A	0.2
4	☐	1000.000	965.122	6134556.99	9.2463	A	1.0
5	☐	10000.000	9856.614	61401754.09	94.2678	A	1.0
6	☐	20000.000	20073.458	120535231.54	191.9625	A	3.0

y = 0.0096 * x + 0.0177
R = 1.0000
DL = 0.1005
BEC = 1.85

Weight: <None>
Min Conc: <None>

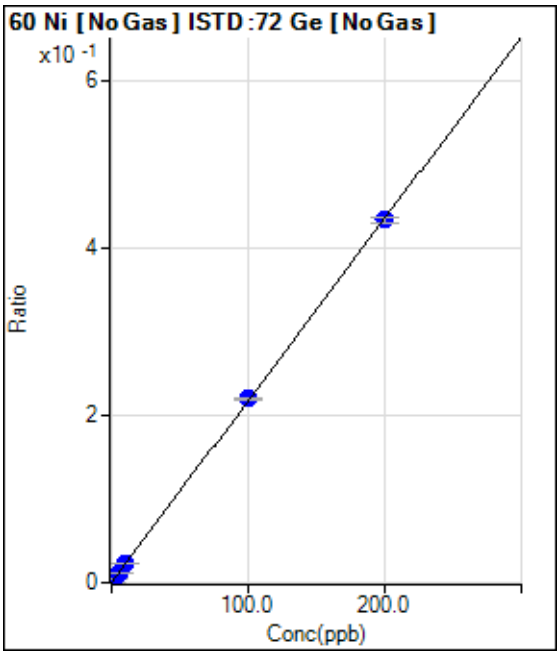
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43.33	0.0001	P	70.2
2	☐	2.000	1.985	21610.77	0.0325	P	3.7
3	☐	5.000	4.795	52333.91	0.0785	P	2.0
4	☐	10.000	9.247	100374.39	0.1513	P	0.6
5	☐	100.000	96.355	1026354.78	1.5758	M	2.1
6	☐	200.000	201.865	2073056.95	3.3012	A	2.2

y = 0.0164 * x + 6.5050E-005
R = 0.9998
DL = 0.008375
BEC = 0.003978

Weight: <None>
Min Conc: <None>

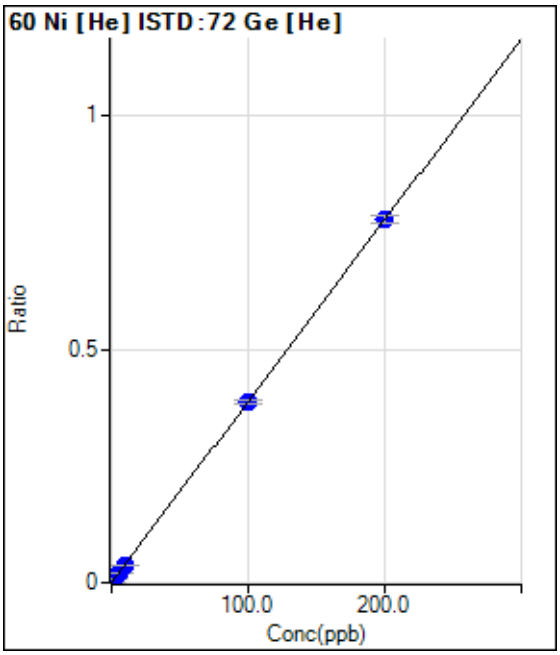


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490.02	0.0002	P	10.8
2	☐	2.000	2.131	11348.28	0.0048	P	0.9
3	☐	5.000	5.161	26475.99	0.0114	P	5.6
4	☐	10.000	10.129	51410.85	0.0222	P	2.0
5	☐	100.000	101.154	499276.48	0.2199	P	0.7
6	☐	200.000	199.411	958955.35	0.4334	P	1.7

y = 0.0022 * x + 2.0757E-004
R = 1.0000
DL = 0.03092
BEC = 0.09555

Weight: <None>
Min Conc: <None>

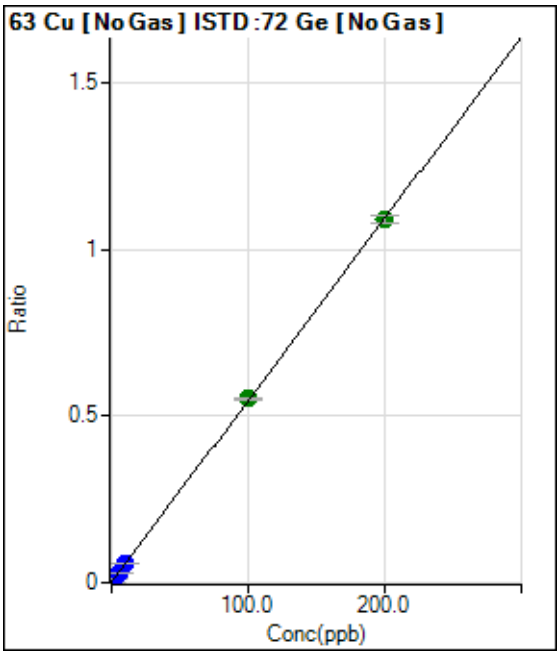
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	196.67	0.0003	P	25.7
2	☐	2.000	2.127	5684.61	0.0086	P	5.6
3	☐	5.000	5.050	13276.67	0.0199	P	2.9
4	☐	10.000	9.823	25504.12	0.0384	P	0.9
5	☐	100.000	99.673	252291.70	0.3873	P	1.3
6	☐	200.000	200.170	488287.75	0.7776	P	2.2

y = 0.0039 * x + 2.9630E-004
R = 1.0000
DL = 0.05873
BEC = 0.0763

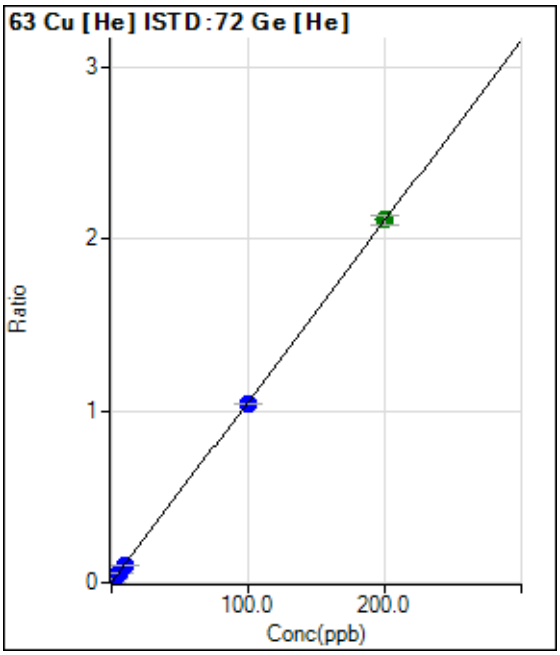
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2363.57	0.0010	P	8.0
2	☐	2.000	2.099	29241.69	0.0125	P	2.2
3	☐	5.000	5.171	67832.31	0.0292	P	3.0
4	☐	10.000	9.981	128499.07	0.0555	P	1.6
5	☐	100.000	101.272	1258002.64	0.5542	A	0.9
6	☐	200.000	199.360	2411592.98	1.0900	A	2.2

y = 0.0055 * x + 0.0010
R = 1.0000
DL = 0.04379
BEC = 0.1835

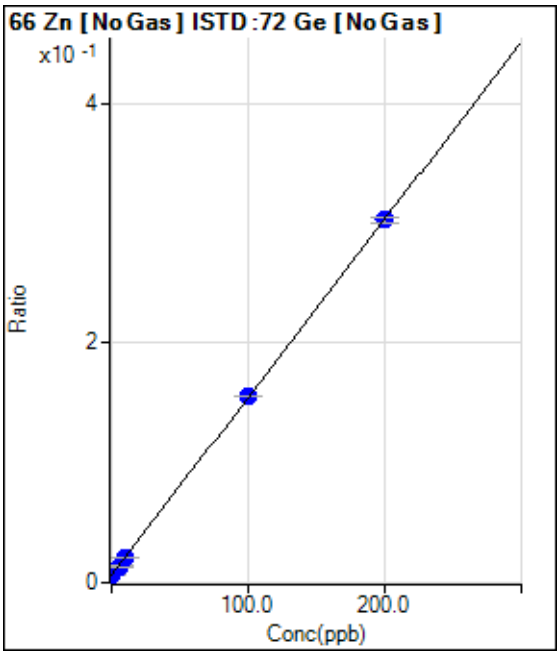
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1110.06	0.0017	P	8.8
2	☐	2.000	2.096	15736.10	0.0237	P	2.7
3	☐	5.000	5.250	37893.05	0.0568	P	1.7
4	☐	10.000	9.830	69614.58	0.1049	P	1.4
5	☐	100.000	98.744	676679.31	1.0389	P	0.5
6	☐	200.000	200.629	1324487.69	2.1091	A	2.9

y = 0.0105 * x + 0.0017
R = 1.0000
DL = 0.04206
BEC = 0.1591

Weight: <None>
Min Conc: <None>

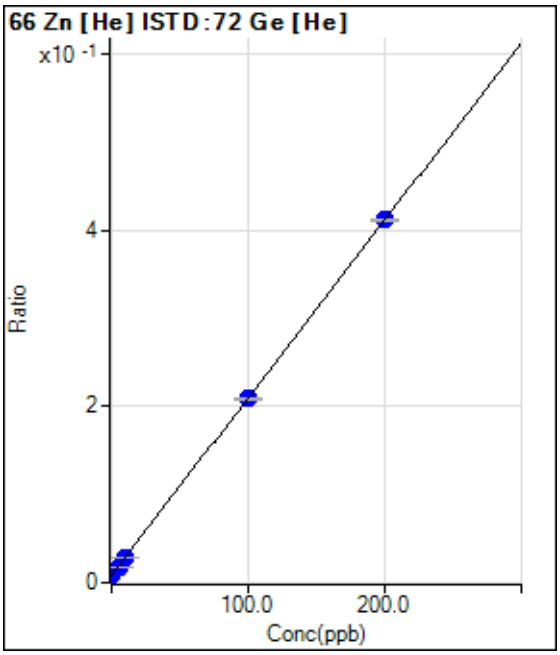


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14975.10	0.0063	P	1.3
2	☐	2.000	2.135	22322.06	0.0095	P	1.8
3	☐	5.000	4.901	31590.45	0.0136	P	3.2
4	☐	10.000	9.748	48179.18	0.0208	P	0.9
5	☐	100.000	100.353	352437.88	0.1553	P	0.1
6	☐	200.000	199.837	670224.78	0.3029	P	1.4

y = 0.0015 * x + 0.0063
R = 1.0000
DL = 0.1624
BEC = 4.277

Weight: <None>
Min Conc: <None>

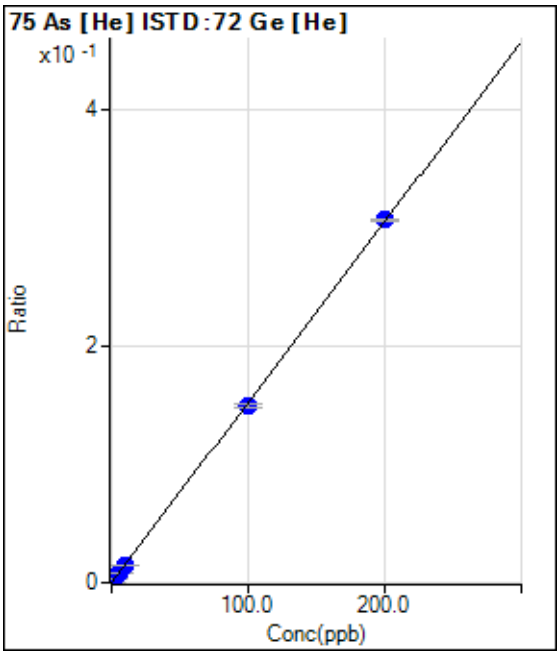
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5657.96	0.0085	P	3.1
2	☐	2.000	2.165	8556.19	0.0129	P	4.4
3	☐	5.000	4.368	11545.06	0.0173	P	0.5
4	☐	10.000	9.423	18232.48	0.0275	P	1.0
5	☐	100.000	99.430	135833.82	0.2085	P	1.2
6	☐	200.000	200.328	258463.69	0.4115	P	0.7

y = 0.0020 * x + 0.0085
R = 1.0000
DL = 0.3933
BEC = 4.237

Weight: <None>
Min Conc: <None>

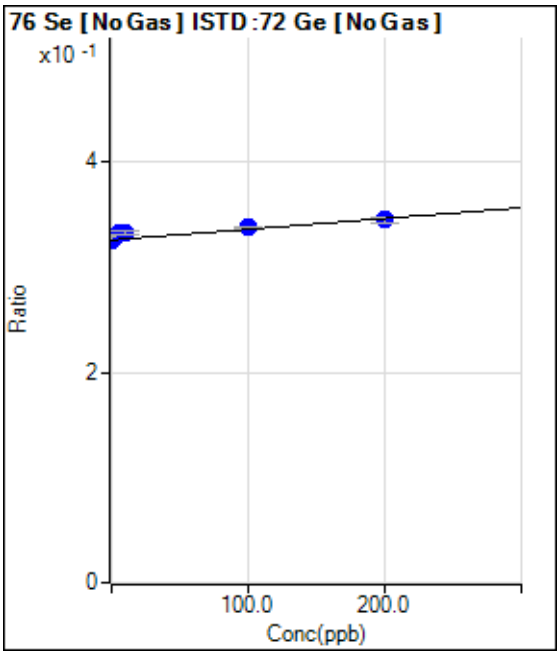


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	178.89	0.0003	P	17.3
2	☐	2.000	2.028	2230.19	0.0034	P	4.3
3	☐	5.000	4.841	5094.32	0.0076	P	2.5
4	☐	10.000	9.623	9898.10	0.0149	P	1.4
5	☐	100.000	97.741	97091.97	0.1491	P	1.7
6	☐	200.000	201.152	192495.53	0.3065	P	0.6

y = 0.0015 * x + 2.6929E-004
R = 0.9999
DL = 0.09178
BEC = 0.1769

Weight: <None>
Min Conc: <None>

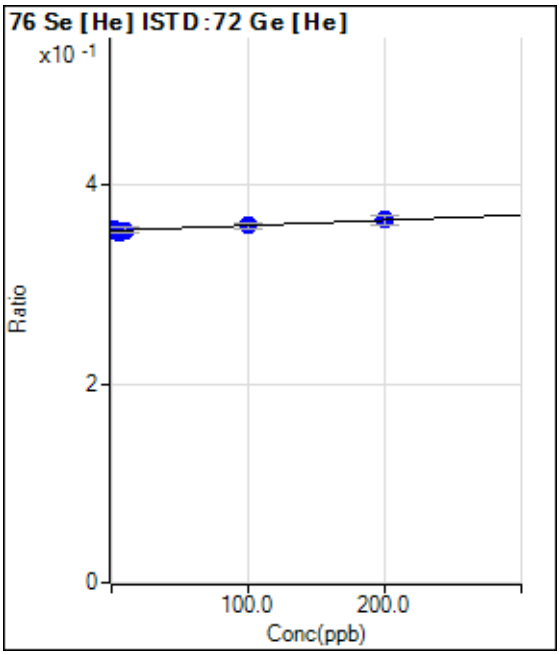
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	768843.45	0.3258	P	0.7
2	☐	2.000	22.260	769685.82	0.3281	P	0.5
3	☐	5.000	65.769	771475.25	0.3326	P	1.7
4	☐	10.000	66.123	769799.55	0.3326	P	1.4
5	☐	100.000	118.585	767190.56	0.3380	P	0.5
6	☐	200.000	186.180	763165.64	0.3449	P	1.8

y = 1.0254E-004 * x + 0.3258
R = 0.9378
DL = 65.7
BEC = 3178

Weight: <None>
Min Conc: <None>

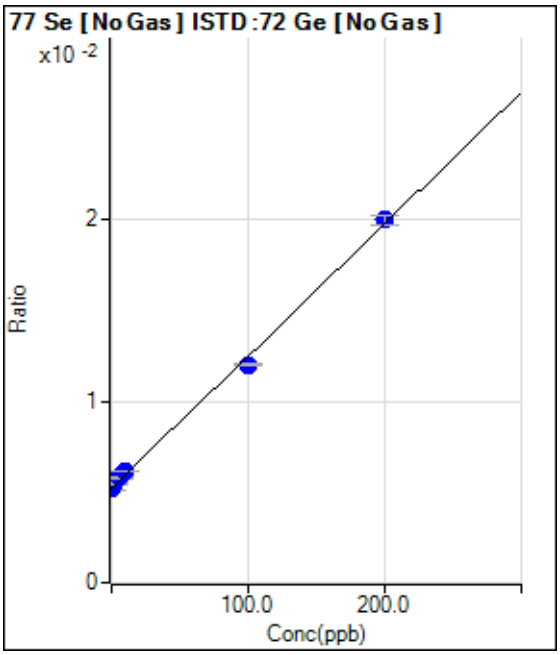


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	235279.33	0.3544	P	0.6
2	☐	2.000	21.464	236218.64	0.3555	P	1.5
3	☐	5.000	-31.631	235222.07	0.3527	P	0.4
4	☐	10.000	7.877	235384.97	0.3548	P	1.9
5	☐	100.000	91.550	233960.99	0.3592	P	1.9
6	☐	200.000	205.053	229325.80	0.3652	P	2.4

y = 5.2810E-005 * x + 0.3544
R = 0.9772
DL = 122.9
BEC = 6710

Weight: <None>
Min Conc: <None>

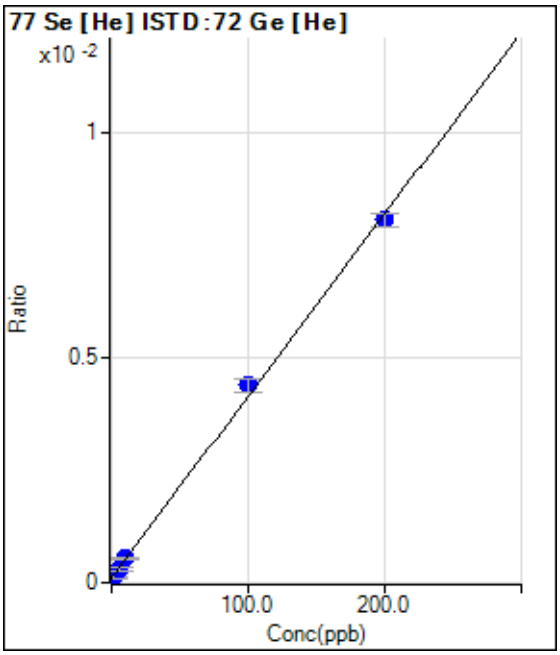
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12312.51	0.0052	P	5.5
2	☐	2.000	3.156	12782.99	0.0054	P	0.8
3	☐	5.000	7.978	13453.56	0.0058	P	2.2
4	☐	10.000	13.255	14314.47	0.0062	P	0.3
5	☐	100.000	93.440	27281.32	0.0120	P	0.7
6	☐	200.000	203.031	44236.35	0.0200	P	2.7

y = 7.2762E-005 * x + 0.0052
R = 0.9990
DL = 11.94
BEC = 71.73

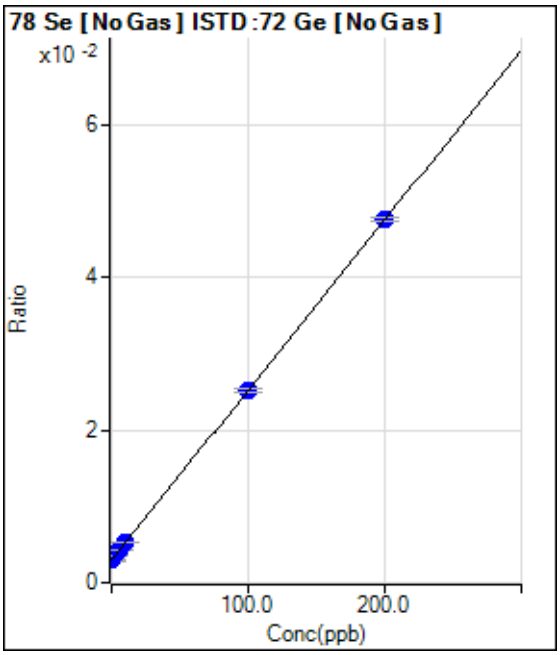
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.00	0.0001	P	37.4
2	☐	2.000	0.375	80.00	0.0001	P	37.6
3	☐	5.000	4.674	196.67	0.0003	P	22.3
4	☐	10.000	10.672	356.68	0.0005	P	14.3
5	☐	100.000	106.215	2870.36	0.0044	P	6.8
6	☐	200.000	196.883	5074.39	0.0081	P	3.5

y = 4.0504E-005 * x + 1.0527E-004
R = 0.9992
DL = 2.915
BEC = 2.599

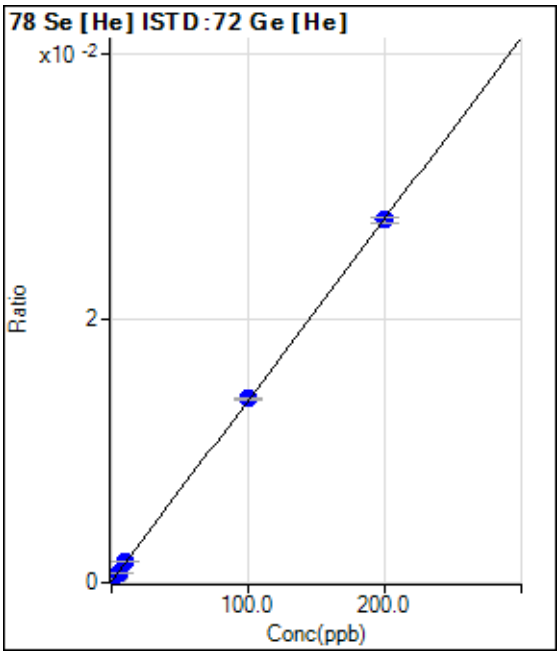
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6975.29	0.0030	P	7.8
2	☐	2.000	2.782	8392.74	0.0036	P	1.2
3	☐	5.000	5.971	9950.51	0.0043	P	4.9
4	☐	10.000	10.428	12225.73	0.0053	P	3.3
5	☐	100.000	99.638	57141.28	0.0252	P	1.6
6	☐	200.000	200.128	105286.33	0.0476	P	1.0

y = 2.2296E-004 * x + 0.0030
R = 1.0000
DL = 3.119
BEC = 13.26

Weight: <None>
Min Conc: <None>

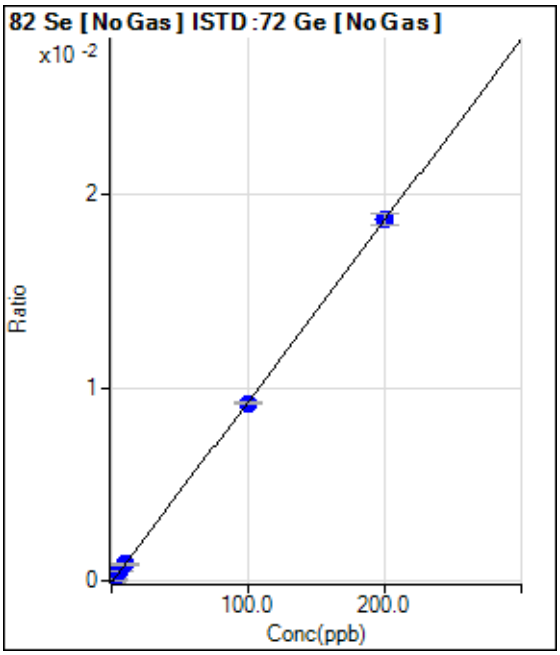


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.67	0.0001	P	7.5
2	☐	2.000	2.071	253.33	0.0004	P	15.7
3	☐	5.000	5.088	530.01	0.0008	P	0.8
4	☐	10.000	10.668	1034.71	0.0016	P	3.2
5	☐	100.000	100.717	9054.40	0.0139	P	1.2
6	☐	200.000	199.605	17240.35	0.0275	P	1.8

y = 1.3705E-004 * x + 9.7386E-005
R = 1.0000
DL = 0.1594
BEC = 0.7106

Weight: <None>
Min Conc: <None>

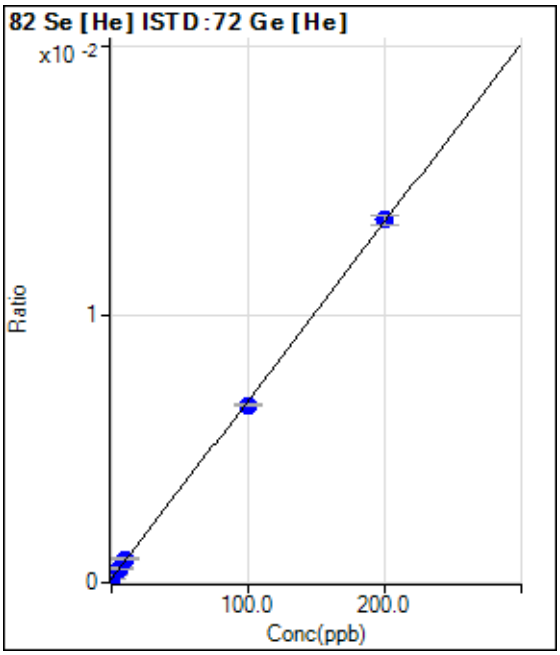
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.24	-0.0001	P	-36.9
2	☐	2.000	2.053	325.56	0.0001	P	62.2
3	☐	5.000	6.055	1189.79	0.0005	P	1.9
4	☐	10.000	10.280	2098.94	0.0009	P	8.0
5	☐	100.000	98.934	20853.11	0.0092	P	1.0
6	☐	200.000	200.492	41307.95	0.0187	P	3.2

y = 9.3385E-005 * x - 5.2653E-005
R = 1.0000
DL = 0.6242
BEC = -0.5638

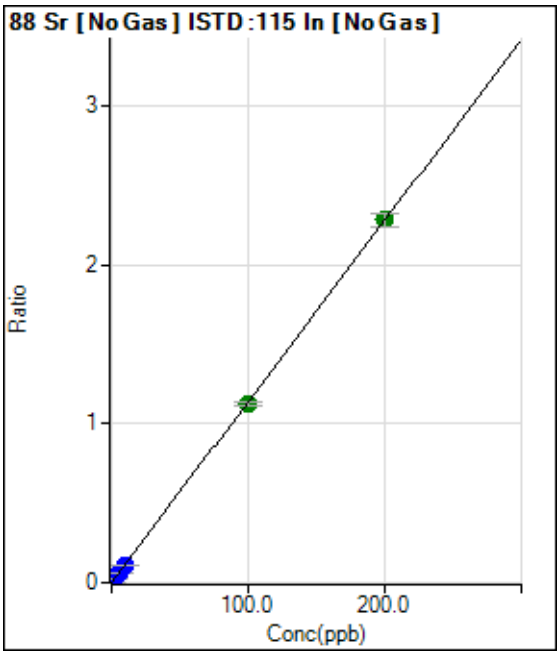
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.33	0.0001	P	16.1
2	☐	2.000	2.787	216.68	0.0003	P	6.9
3	☐	5.000	5.920	356.68	0.0005	P	20.0
4	☐	10.000	10.946	576.69	0.0009	P	8.4
5	☐	100.000	97.524	4320.78	0.0066	P	1.8
6	☐	200.000	201.160	8499.47	0.0135	P	2.4

y = 6.6576E-005 * x + 1.4052E-004
R = 0.9999
DL = 1.016
BEC = 2.111

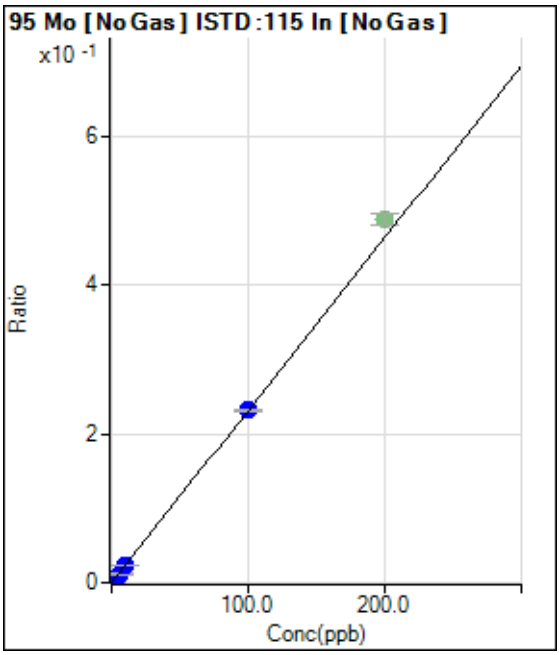
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1263.42	0.0004	P	7.6
2	☐	2.000	2.005	70200.48	0.0232	P	3.8
3	☐	5.000	4.892	169280.04	0.0561	P	1.6
4	☐	10.000	9.648	329324.79	0.1102	P	2.4
5	☐	100.000	99.089	3319436.72	1.1282	A	1.8
6	☐	200.000	200.476	6416875.53	2.2821	A	3.5

y = 0.0114 * x + 4.1950E-004
R = 1.0000
DL = 0.008429
BEC = 0.03686

Weight: <None>
Min Conc: <None>

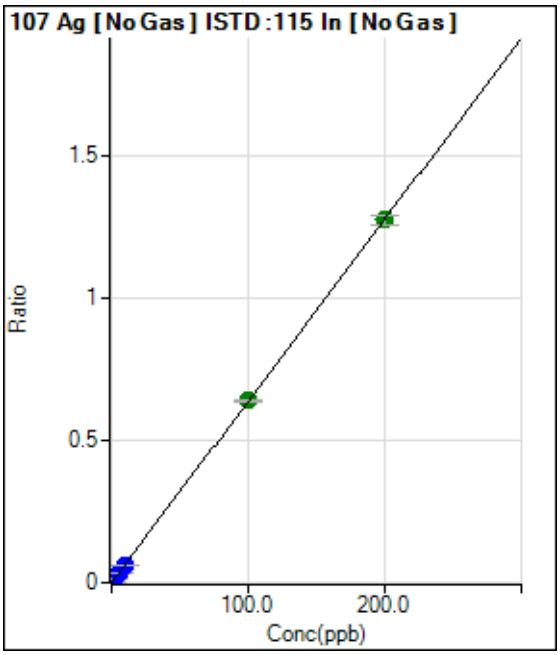


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	90.00	0.0000	P	23.2
2	☐	2.000	2.042	14367.94	0.0048	P	5.2
3	☐	5.000	5.007	35073.24	0.0116	P	2.1
4	☐	10.000	9.727	67373.69	0.0226	P	2.9
5	☐	100.000	100.026	681485.33	0.2316	P	0.7
6	☑	200.000		1371081.59	0.4876	A	3.3

y = 0.0023 * x + 2.9931E-005
R = 1.0000
DL = 0.008986
BEC = 0.01293

Weight: <None>
Min Conc: <None>

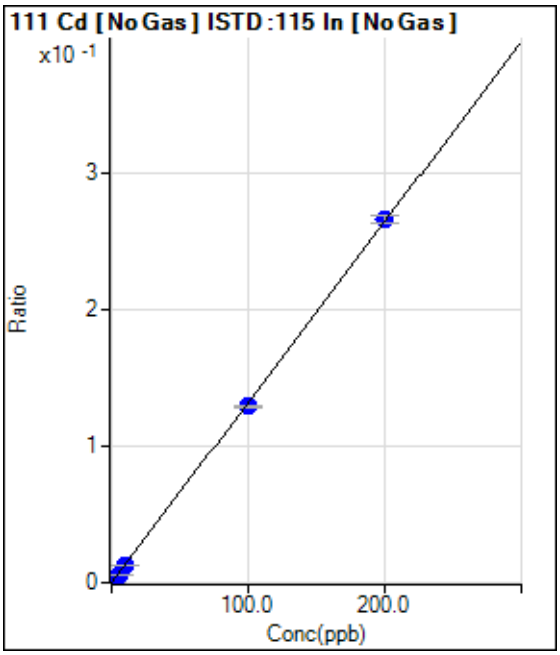
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	486.69	0.0002	P	17.3
2	☐	2.000	1.989	38787.36	0.0128	P	5.2
3	☐	5.000	4.892	94630.24	0.0314	P	1.3
4	☐	10.000	9.672	184745.35	0.0618	P	2.1
5	☐	100.000	100.172	1880044.61	0.6390	A	0.3
6	☐	200.000	199.933	3585750.57	1.2751	A	2.4

y = 0.0064 * x + 1.6154E-004
R = 1.0000
DL = 0.01314
BEC = 0.02533

Weight: <None>
Min Conc: <None>

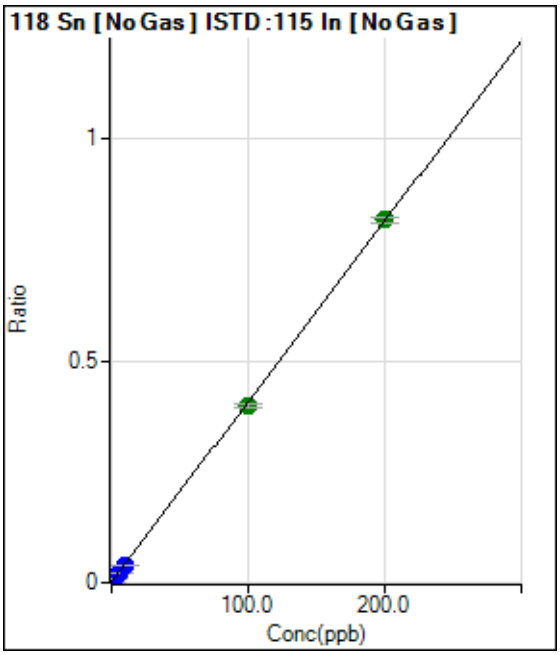


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	173.2
2	☐	2.000	1.957	7812.46	0.0026	P	1.8
3	☐	5.000	4.734	18867.23	0.0063	P	1.8
4	☐	10.000	9.733	38392.85	0.0129	P	3.2
5	☐	100.000	97.704	379569.72	0.1290	P	0.5
6	☐	200.000	201.168	746940.35	0.2656	P	2.0

y = 0.0013 * x + 2.2326E-006
R = 0.9999
DL = 0.008787
BEC = 0.001691

Weight: <None>
Min Conc: <None>

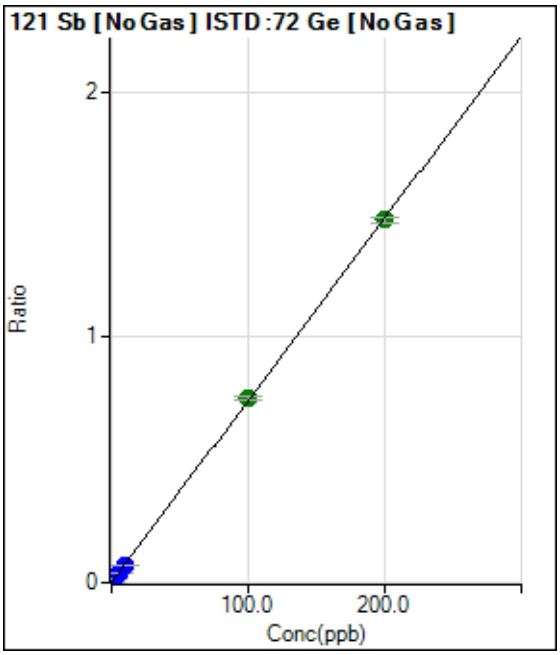
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2173.56	0.0007	P	6.2
2	☐	2.000	1.935	25912.53	0.0086	P	6.4
3	☐	5.000	4.732	60191.30	0.0199	P	2.9
4	☐	10.000	9.487	117327.20	0.0393	P	1.0
5	☐	100.000	98.133	1175250.06	0.3994	A	2.2
6	☐	200.000	200.966	2298326.79	0.8173	A	1.8

y = 0.0041 * x + 7.2199E-004
R = 0.9999
DL = 0.03298
BEC = 0.1777

Weight: <None>
Min Conc: <None>

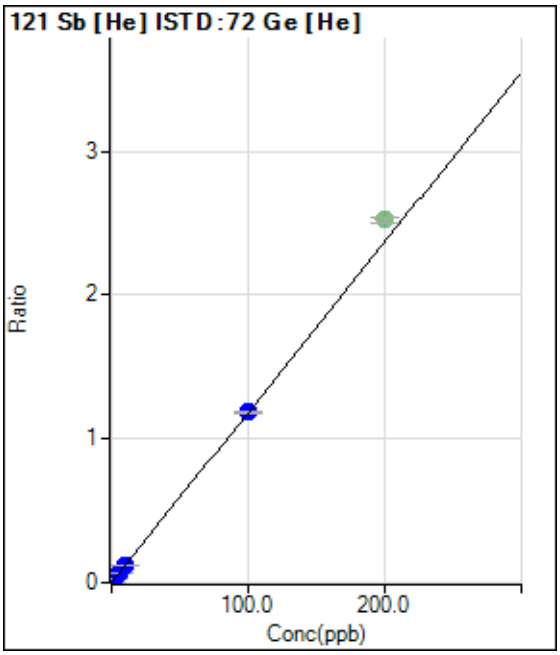


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1580.12	0.0007	P	8.1
2	☐	2.000	1.974	35902.98	0.0153	P	1.7
3	☐	5.000	4.927	86319.71	0.0372	P	0.4
4	☐	10.000	9.537	165251.36	0.0714	P	1.2
5	☐	100.000	101.582	1711186.07	0.7539	A	2.2
6	☐	200.000	199.234	3270114.02	1.4779	A	1.9

y = 0.0074 * x + 6.6947E-004
R = 1.0000
DL = 0.02185
BEC = 0.09029

Weight: <None>
Min Conc: <None>

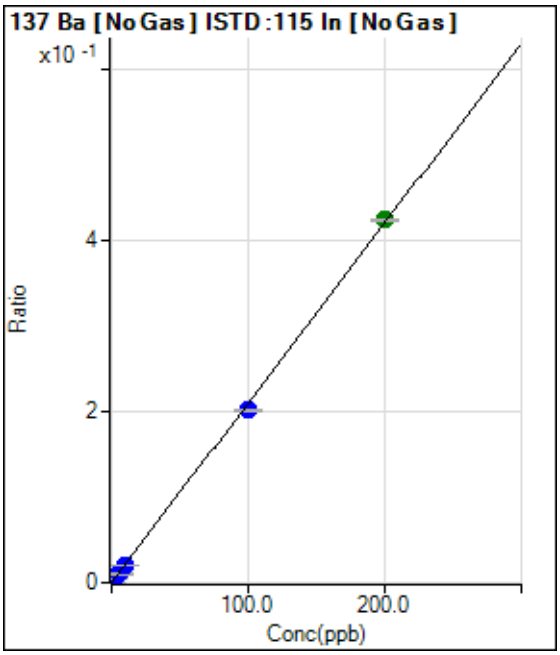
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	680.03	0.0010	P	19.1
2	☐	2.000	2.067	16927.87	0.0255	P	3.0
3	☐	5.000	5.103	40940.86	0.0614	P	2.7
4	☐	10.000	9.821	77759.82	0.1172	P	1.5
5	☐	100.000	100.011	771241.00	1.1841	P	0.3
6	☑	200.000		1584252.84	2.5227	A	1.6

y = 0.0118 * x + 0.0010
R = 1.0000
DL = 0.04967
BEC = 0.08666

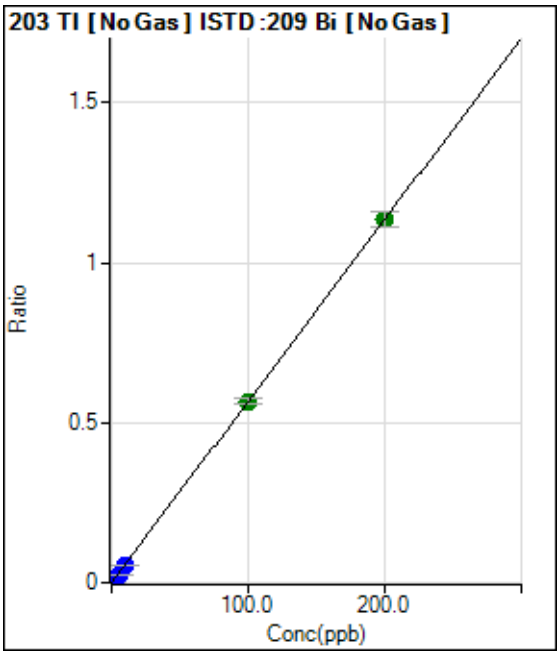
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	410.01	0.0001	P	7.1
2	☐	2.000	1.872	12262.65	0.0041	P	3.3
3	☐	5.000	4.770	30569.65	0.0101	P	1.6
4	☐	10.000	9.341	58873.16	0.0197	P	3.0
5	☐	100.000	96.171	593252.34	0.2016	P	1.0
6	☐	200.000	201.955	1190456.78	0.4233	A	0.7

y = 0.0021 * x + 1.3604E-004
R = 0.9997
DL = 0.01382
BEC = 0.06493

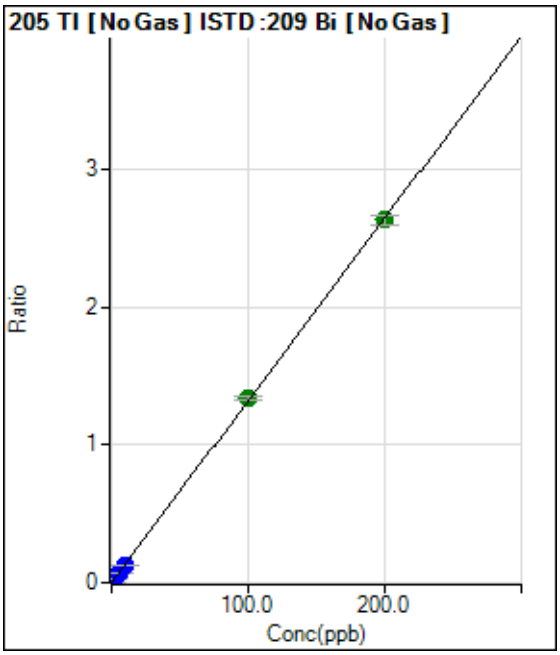
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	470.02	0.0001	P	19.0
2	☐	2.000	1.909	36951.60	0.0110	P	1.8
3	☐	5.000	4.610	89405.50	0.0263	P	1.4
4	☐	10.000	9.415	180084.53	0.0535	P	0.7
5	☐	100.000	100.094	1864357.16	0.5677	A	3.6
6	☐	200.000	199.993	3643297.97	1.1341	A	4.2

y = 0.0057 * x + 1.3816E-004
R = 1.0000
DL = 0.01385
BEC = 0.02437

Weight: <None>
Min Conc: <None>

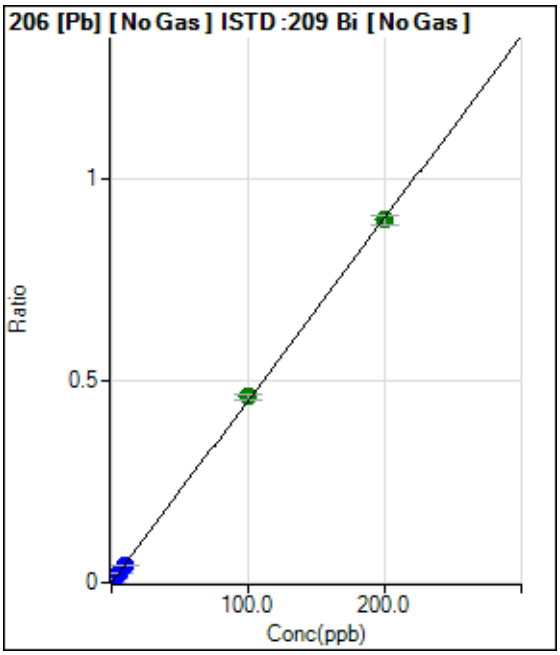


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1243.42	0.0004	P	4.2
2	☐	2.000	1.940	87515.58	0.0260	P	0.7
3	☐	5.000	4.768	215358.54	0.0633	P	1.2
4	☐	10.000	9.423	419595.94	0.1247	P	0.4
5	☐	100.000	101.471	4399144.83	1.3393	A	2.8
6	☐	200.000	199.300	8452090.92	2.6302	A	2.6

y = 0.0132 * x + 3.6559E-004
R = 1.0000
DL = 0.00348
BEC = 0.02771

Weight: <None>
Min Conc: <None>

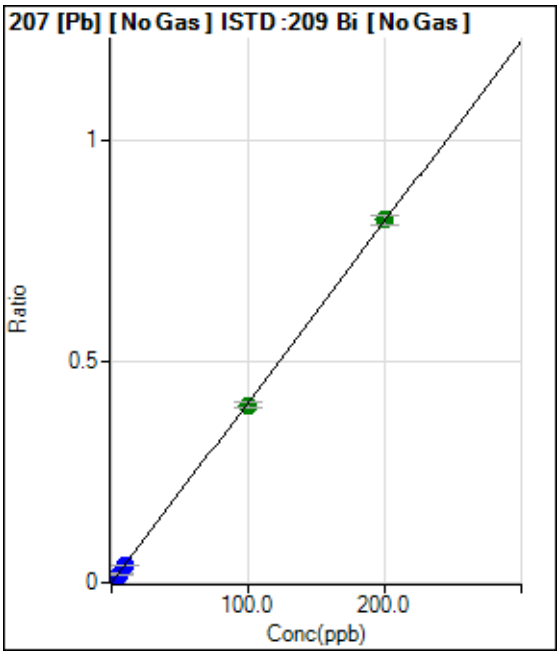
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	623.36	0.0002	P	7.1
2	☐	2.000	1.938	30080.02	0.0089	P	2.6
3	☐	5.000	4.768	73821.42	0.0217	P	0.9
4	☐	10.000	9.410	143444.22	0.0426	P	0.7
5	☐	100.000	101.842	1509681.59	0.4596	A	2.6
6	☐	200.000	199.115	2887299.02	0.8985	A	2.4

y = 0.0045 * x + 1.8317E-004
R = 0.9999
DL = 0.008603
BEC = 0.0406

Weight: <None>
Min Conc: <None>

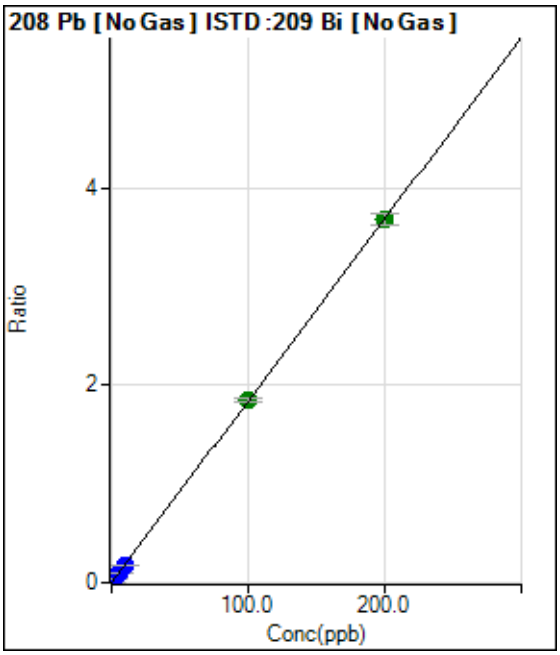


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	500.02	0.0001	P	9.5
2	☐	2.000	1.974	27634.31	0.0082	P	2.6
3	☐	5.000	4.752	66470.53	0.0195	P	1.8
4	☐	10.000	9.547	131530.08	0.0391	P	1.2
5	☐	100.000	98.074	1314501.57	0.4002	A	3.2
6	☐	200.000	200.992	2635058.19	0.8200	A	2.9

y = 0.0041 * x + 1.4705E-004
R = 0.9999
DL = 0.01028
BEC = 0.03605

Weight: <None>
Min Conc: <None>

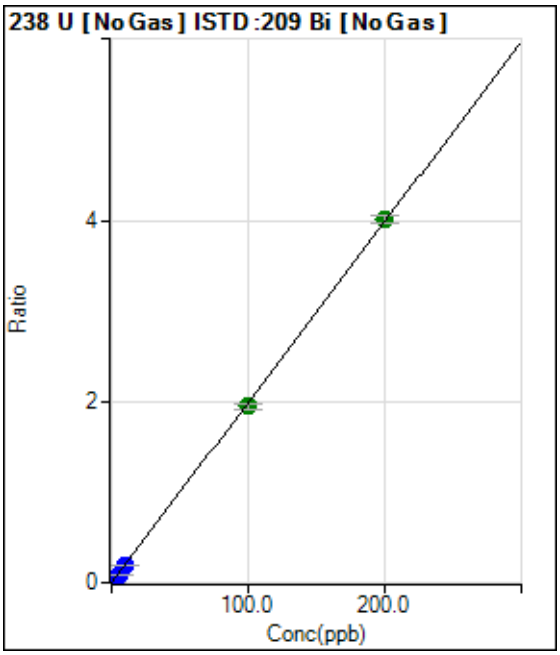
Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2383.48	0.0007	P	3.2
2	☐	2.000	1.966	124382.34	0.0369	P	1.5
3	☐	5.000	4.784	302286.47	0.0888	P	0.8
4	☐	10.000	9.483	590045.65	0.1754	P	0.3
5	☐	100.000	100.814	6102153.95	1.8577	A	2.3
6	☐	200.000	199.625	11817433.99	3.6778	A	3.0

y = 0.0184 * x + 7.0049E-004
R = 1.0000
DL = 0.003598
BEC = 0.03803

Weight: <None>
Min Conc: <None>

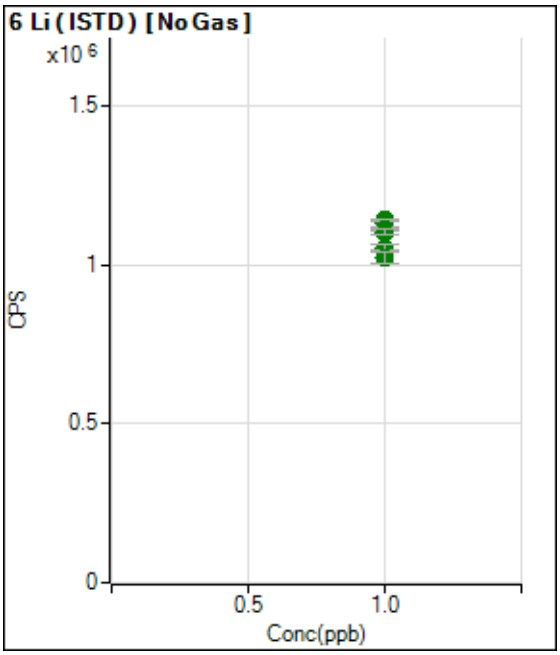


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	320.01	0.0001	P	11.8
2	☐	2.000	1.961	131916.00	0.0391	P	0.3
3	☐	5.000	4.756	322511.24	0.0948	P	0.7
4	☐	10.000	9.508	637244.01	0.1894	P	0.8
5	☐	100.000	97.625	6384286.16	1.9437	A	2.7
6	☐	200.000	201.219	12874955.64	4.0062	A	2.1

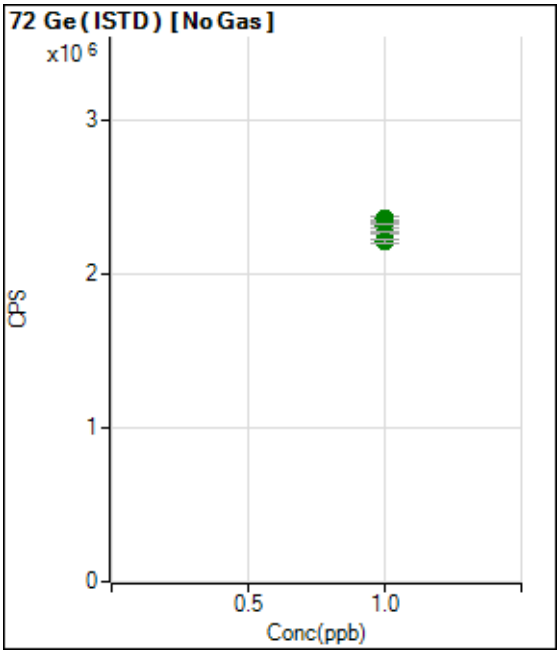
y = 0.0199 * x + 9.4107E-005
R = 0.9999
DL = 0.00168
BEC = 0.004727

Weight: <None>
Min Conc: <None>

Calibration for 019_ICV.d

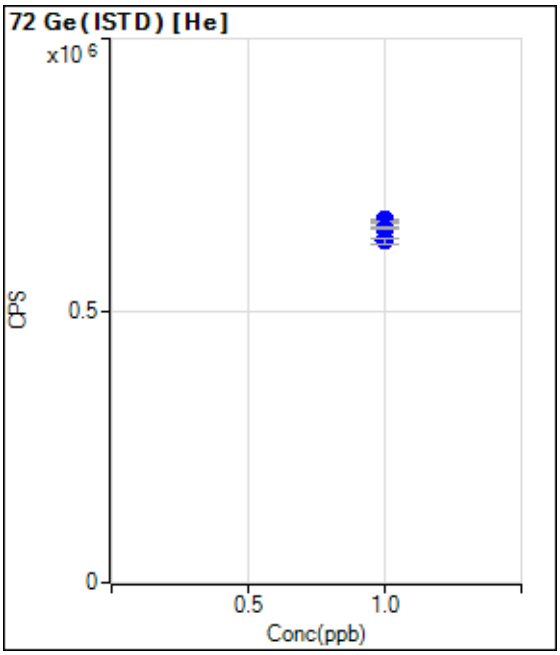


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1130239.19		A	1.7
2	☐	1.000		1140763.40		A	0.8
3	☐	1.000		1113245.76		A	1.2
4	☐	1.000		1102409.31		A	1.4
5	☐	1.000		1054784.74		A	1.6
6	☐	1.000		1022018.23		A	3.4

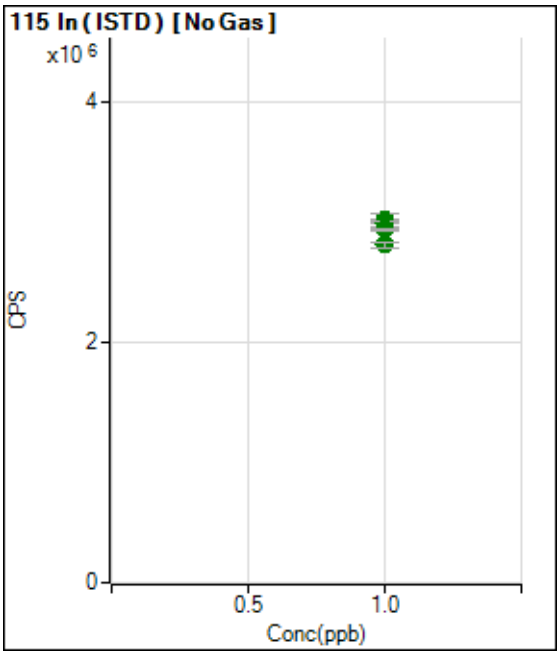


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2359811.32		A	1.0
2	☐	1.000		2345925.59		A	0.8
3	☐	1.000		2320252.00		A	1.9
4	☐	1.000		2314767.62		A	1.3
5	☐	1.000		2269963.77		A	0.6
6	☐	1.000		2213072.36		A	1.6

Calibration for 019_ICV.d

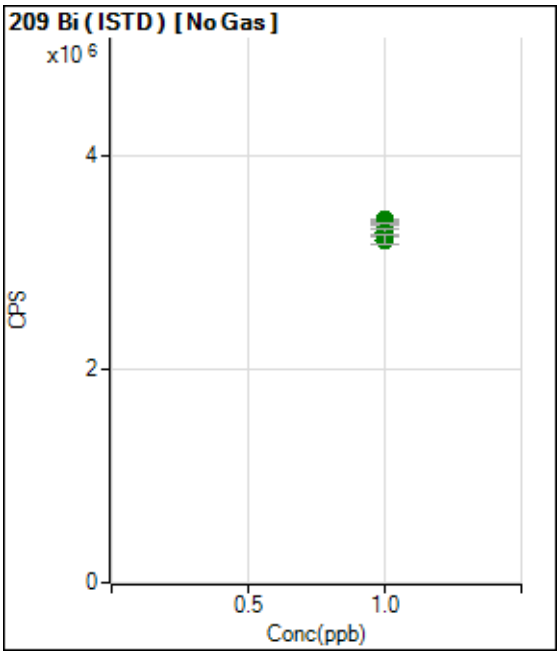


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		663944.94		P	0.7
2	☐	1.000		664453.53		P	0.2
3	☐	1.000		666923.53		P	0.8
4	☐	1.000		663475.09		P	0.3
5	☐	1.000		651350.55		P	0.3
6	☐	1.000		628087.50		P	1.5



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3012000.36		A	1.3
2	☐	1.000		3022855.10		A	3.4
3	☐	1.000		3017928.01		A	1.2
4	☐	1.000		2988215.61		A	1.7
5	☐	1.000		2942369.47		A	0.4
6	☐	1.000		2812769.11		A	1.6

Calibration for 019_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3401945.99		A	0.9
2	☐	1.000		3370173.70		A	0.8
3	☐	1.000		3403083.91		A	0.7
4	☐	1.000		3364606.72		A	1.0
5	☐	1.000		3285800.47		A	2.1
6	☐	1.000		3215026.41		A	2.8

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	020_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:16:38-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.123	-35.4	68449	1.4	0.5	
Be	9	1	No Gas	0.004	67.0	45	29.4	0.5	
V	51	2	He	-0.031	-115.1	2875	7.6	2.5	
Cr	52	2	He	-0.034	-24.4	1147	4.8	2.5	
Fe	56	2	He	0.249	38.8	13313	4.7	100	
Se	78	2	He	0.199	26.8	83	5.6	1	
As	75	2	He	-0.044	-57.5	134	18.6	2.5	
Ca	44	2	He	-1.616	-62.0	313	12.1	100	
Na	23	2	He	1.392	88.1	76006	1.9	100	
Mg	24	2	He	0.100	123.6	490	15.4	100	
K	39	2	He	-2.246	-14.7	50074	0.6	100	
Mn	55	2	He	0.015	82.9	380	17.3	2.5	
Co	59	2	He	0.001	114.2	53	21.7	2.5	
Ni	60	2	He	-0.036	-40.3	103	36.6	2.5	
Cu	63	2	He	-0.010	-139.3	1040	9.5	1	
Zn	66	2	He	-1.402	-10.7	3784	5.4	2.5	
Al	27	2	He	-0.326	-53.8	580	10.5	5	
B	11	1	No Gas	9.434	21.8	67754	4.9	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.744	-6.9	24161	2.5	5	
Si	28	1	No Gas	0.741	207.1	507400	0.7	10	
Ag	107	1	No Gas	-0.003	-70.1	427	9.8	2.5	
Cd	111	1	No Gas	0.004	125.0	23	89.2	1	
Sr	88	1	No Gas	-0.010	-21.6	910	8.3	2.5	
Mo	95	1	No Gas	0.068	34.7	587	29.4	2.5	
Sn	118	1	No Gas	-0.013	-112.9	2027	9.1	5	
Sb	121	1	No Gas	-0.011	-46.8	1353	6.3	2.5	
Ba	137	1	No Gas	-0.029	-44.8	227	35.7	2.5	
Tl	205	1	No Gas	0.183	79.3	9312	68.1	1	
Tl	203	1	No Gas	0.174	79.3	3764	68.7	1	
Pb	208	1	No Gas	0.024	43.6	3867	16.4	2.5	
U	238	1	No Gas	0.013	60.3	1190	43.6	2.5	
Ca	43	2	He	1.550	457.4	17	91.7	100	
Sb	121	2	He	-0.007	-279.3	623	25.1	2.5	
Ti	47	2	He	0.000	-43383.7	7	86.6	2.5	
Se	82	1	No Gas	0.316	104.1	-54	-131.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1116438	2.46	1130239	98.78	70	120	
Ge	72	2	He	663432	0.28	663945	99.92	70	120	
Ge	72	1	No Gas	2297525	1.48	2359811	97.36	70	120	
In	115	1	No Gas	3020685	0.85	3012000	100.29	70	120	
Bi	209	1	No Gas	3364406	0.78	3401946	98.90	70	120	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	021LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:18:37-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.989	1.989	4.15	102162	0.00	2	
Be	9	1	No Gas	1.972	1.972	1.10	8166	0.02	2	
V	51	2	He	1.944	1.944	0.11	14518	0.01	2	
Cr	52	2	He	1.995	1.995	2.40	15382	0.01	2	
Fe	56	2	He	207.983	207.983	0.67	1317330	0.02	200	
Se	78	2	He	1.987	1.987	8.88	243	0.82	2	
As	75	2	He	2.015	2.015	0.48	2191	0.09	2	
Ca	44	2	He	201.862	201.862	5.48	7759	2.60	200	
Na	23	2	He	211.566	211.566	1.25	290121	0.07	200	
Mg	24	2	He	212.930	212.930	1.69	127774	0.17	200	
K	39	2	He	201.810	201.810	0.67	183776	0.11	200	
Mn	55	2	He	2.012	2.012	0.30	10858	0.02	2	
Co	59	2	He	1.963	1.963	3.58	21127	0.01	2	
Ni	60	2	He	2.191	2.191	0.18	5781	0.04	2	
Cu	63	2	He	2.055	2.055	5.32	15269	0.01	2	
Zn	66	2	He	1.011	1.011	23.37	6932	0.01	2	NewName Main CR1 Failed
Al	27	2	He	2.652	2.652	22.59	1623	0.16	2	NewName Main CR1 Failed
B	11	1	No Gas	11.656	11.656	8.94	71613	0.02	10	
Al	27	1	No Gas	2.333	2.333	5.04	71051	0.00	2	
Si	28	1	No Gas	9.909	9.909	12.10	575030	0.00	10	
Ag	107	1	No Gas	2.011	2.011	1.16	38928	0.01	2	
Cd	111	1	No Gas	1.951	1.951	3.22	7726	0.03	2	
Sr	88	1	No Gas	1.998	1.998	1.84	69440	0.00	2	
Mo	95	1	No Gas	1.953	1.953	3.62	14218	0.01	2	
Sn	118	1	No Gas	1.895	1.895	3.49	25238	0.01	2	
Sb	121	1	No Gas	1.971	1.971	0.61	35274	0.01	2	
Ba	137	1	No Gas	1.930	1.930	3.25	12526	0.02	2	
Tl	205	1	No Gas	1.951	1.951	2.80	87067	0.00	2	
Tl	203	1	No Gas	1.924	1.924	2.11	36848	0.01	2	
Pb	208	1	No Gas	1.996	1.996	1.18	124951	0.00	2	
U	238	1	No Gas	1.976	1.976	1.79	131518	0.00	2	
Ca	43	2	He	190.216	190.216	19.22	420	45.29	200	
Sb	121	2	He	1.950	1.950	3.97	16611	0.01	2	
Ti	47	2	He	2.344	2.344	5.77	517	0.45	200	
Cu	63	1	No Gas	2.053	2.053	3.07	28189	0.01	2	
Se	82	1	No Gas	2.683	2.683	7.51	456	0.59	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1094231	1.52	1130239	96.81	70	120	
Ge	72	2	He	656560	0.68	663945	98.89	70	120	
Ge	72	1	No Gas	2307805	1.76	2359811	97.80	70	120	
In	115	1	No Gas	2998484	2.13	3012000	99.55	70	120	
Bi	209	1	No Gas	3335824	2.19	3401946	98.06	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	022LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:20:36-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.041	5.041	1.54	152387	0.00	5	
Be	9	1	No Gas	4.899	4.899	0.96	20186	0.02	5	
V	51	2	He	4.888	4.888	1.61	31907	0.02	5	
Cr	52	2	He	4.937	4.937	2.44	36044	0.01	5	
Fe	56	2	He	503.182	503.182	2.24	3169758	0.02	500	
Se	78	2	He	4.699	4.699	4.85	487	0.97	5	
As	75	2	He	4.898	4.898	2.46	5072	0.10	5	
Ca	44	2	He	504.862	504.862	0.19	18850	2.68	500	
Na	23	2	He	517.582	517.582	0.46	602912	0.09	500	
Mg	24	2	He	528.150	528.150	0.68	316232	0.17	500	
K	39	2	He	504.178	504.178	0.91	382581	0.13	500	
Mn	55	2	He	4.833	4.833	2.53	25661	0.02	5	
Co	59	2	He	4.847	4.847	1.75	52073	0.01	5	
Ni	60	2	He	5.329	5.329	1.72	13777	0.04	5	
Cu	63	2	He	5.110	5.110	0.33	36329	0.01	5	
Zn	66	2	He	3.564	3.564	6.14	10301	0.03	5	
Al	27	2	He	5.159	5.159	1.96	2507	0.21	5	
B	11	1	No Gas	23.533	23.533	3.14	98853	0.02	25	
Al	27	1	No Gas	4.994	4.994	1.46	111857	0.00	5	
Si	28	1	No Gas	23.713	23.713	2.93	675569	0.00	25	
Ag	107	1	No Gas	4.857	4.857	1.28	94912	0.01	5	
Cd	111	1	No Gas	4.777	4.777	3.27	19228	0.02	5	
Sr	88	1	No Gas	4.820	4.820	1.75	168497	0.00	5	
Mo	95	1	No Gas	4.662	4.662	1.22	34381	0.01	5	
Sn	118	1	No Gas	4.721	4.721	0.15	60673	0.01	5	
Sb	121	1	No Gas	4.911	4.911	2.42	85833	0.01	5	
Ba	137	1	No Gas	4.753	4.753	4.94	30753	0.02	5	
Tl	205	1	No Gas	4.848	4.848	0.75	216100	0.00	5	
Tl	203	1	No Gas	4.764	4.764	1.05	91182	0.01	5	
Pb	208	1	No Gas	4.925	4.925	1.50	307026	0.00	5	
U	238	1	No Gas	4.846	4.846	1.51	324314	0.00	5	
Ca	43	2	He	469.609	469.609	4.86	1017	46.19	500	
Sb	121	2	He	4.759	4.759	2.20	39570	0.01	5	
Ti	47	2	He	4.842	4.842	5.63	1060	0.46	5	
Cu	63	1	No Gas	5.037	5.037	0.54	66003	0.01	5	
Se	82	1	No Gas	5.321	5.321	24.26	1029	0.52	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1090800	1.96	1130239	96.51	70	120	
Ge	72	2	He	656414	0.42	663945	98.87	70	120	
Ge	72	1	No Gas	2314938	0.91	2359811	98.10	70	120	

Sample Report

In	115	1	No Gas	3048659	1.92	3012000	101.22	70	120	
Bi	209	1	No Gas	3358672	0.82	3401946	98.73	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	024ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:36:49-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.587	12.5	74236	2.3	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.005	42.3	43	17.6	0	ICSA Main CR1 Failed
V	51	2	He	0.320	5.4	4584	1.4	0	ICSA Main CR1 Failed
Cr	52	2	He	2.084	0.3	14918	0.5	0	ICSA Main CR1 Failed
Fe	56	2	He	99850.485	0.5	584177191	0.7	0	
Se	78	2	He	0.372	82.6	91	27.8	0	ICSA Main CR1 Failed
As	75	2	He	0.139	18.1	294	8.3	0	ICSA Main CR1 Failed
Ca	44	2	He	101460.971	1.1	3462109	1.1	0	
Na	23	2	He	102993.058	0.8	98207805	0.2	0	
Mg	24	2	He	103577.869	0.4	57728769	0.4	0	
K	39	2	He	104404.005	1.4	64040159	0.8	0	
Mn	55	2	He	39.428	1.6	193138	2.0	0	
Co	59	2	He	0.088	7.2	917	6.2	0	ICSA Main CR1 Failed
Ni	60	2	He	0.165	2.8	573	2.7	0	ICSA Main CR1 Failed
Cu	63	2	He	0.319	11.1	3074	7.3	0	ICSA Main CR1 Failed
Zn	66	2	He	-0.211	-128.6	4954	6.8	0	ICSA Main CR1 Failed
Al	27	2	He	97631.033	0.4	32068056	0.3	0	
B	11	1	No Gas	0.033	2161.4	42023	2.4	0	ICSA Main CR1 Failed
Al	27	1	No Gas	95006.520	0.6	1355633953	0.4	0	
Si	28	1	No Gas	34.784	42.1	705798	13.3	0	
Ag	107	1	No Gas	0.291	3.6	5411	3.1	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.841	4.9	6522	4.6	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	1.364	3.1	42739	3.4	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	1986.619	1.0	12852351	1.1	0	
Sn	118	1	No Gas	0.085	24.4	2857	7.9	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.103	6.0	3100	3.4	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.519	5.9	3277	4.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.007	31.4	1367	6.1	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.007	49.7	527	11.4	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.098	1.8	7421	0.7	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.003	82.8	440	30.1	0	ICSA Main CR1 Failed
Ca	43	2	He	101635.304	1.1	202468	0.8	0	
Sb	121	2	He	0.111	8.9	1473	5.5	0	ICSA Main CR1 Failed
Ti	47	2	He	2046.869	0.8	415115	0.4	0	
Se	82	1	No Gas	-0.219	-322.2	-158	-90.5	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1029548	1.44	1130239	91.09	70	120	
Ge	72	2	He	611836	0.72	663945	92.15	70	120	
Ge	72	1	No Gas	2165911	0.58	2359811	91.78	70	120	
In	115	1	No Gas	2680909	0.39	3012000	89.01	70	120	
Bi	209	1	No Gas	2972070	0.66	3401946	87.36	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	025ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:38:50-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	108.544	4.597	1725918	1.76	100	108.5	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	107.968	3.129	411054	0.39	100	108.0	80	120	
V	51	2	He	108.555	0.468	592695	0.46	100	108.6	80	120	
Cr	52	2	He	109.058	1.296	705567	0.49	100	109.1	80	120	
Fe	56	2	He	116891.582	1.903	674749203	1.27	100	116891.6	80	120	ICSB Main CR1 Failed
Se	78	2	He	115.305	1.517	9600	2.34	100	115.3	80	120	
As	75	2	He	112.024	0.507	103120	0.49	100	112.0	80	120	
Ca	44	2	He	116043.484	0.976	3907209	1.29	100	116043.5	80	120	ICSB Main CR1 Failed
Na	23	2	He	120249.091	0.671	113131098	0.51	100	120249.1	80	120	ICSB Main CR1 Failed
Mg	24	2	He	119946.174	0.483	65965857	0.89	100	119946.2	80	120	ICSB Main CR1 Failed
K	39	2	He	120031.191	1.328	72642044	0.59	100	120031.2	80	120	ICSB Main CR1 Failed
Mn	55	2	He	107.887	1.373	520952	0.77	100	107.9	80	120	ICSB Main CR1 Failed
Co	59	2	He	102.745	1.079	1014392	1.05	100	102.7	80	120	
Ni	60	2	He	104.625	1.388	245438	0.61	100	104.6	80	120	
Cu	63	2	He	103.818	1.022	659345	0.24	100	103.8	80	120	
Zn	66	2	He	108.315	0.506	136694	0.63	100	108.3	80	120	
Al	27	2	He	103313.434	1.186	33484726	1.31	100	103313.4	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	565.109	4.041	1249415	1.14	100	565.1	80	120	
Al	27	1	No Gas	99155.245	1.974	1403182219	0.32	100	99155.2	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	591.947	1.791	4396937	0.19	100	591.9	80	120	
Ag	107	1	No Gas	101.463	1.062	1746695	0.27	100	101.5	80	120	
Cd	111	1	No Gas	106.264	1.550	378660	0.95	100	106.3	80	120	
Sr	88	1	No Gas	111.576	2.685	3428175	1.96	100	111.6	80	120	
Mo	95	1	No Gas	2164.450	1.684	14096674	1.27	100	2164.5	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	109.064	1.622	1197918	1.33	100	109.1	80	120	
Sb	121	1	No Gas	107.740	2.116	1717450	1.14	100	107.7	80	120	
Ba	137	1	No Gas	104.336	1.873	590320	1.03	100	104.3	80	120	
Tl	205	1	No Gas	108.928	2.806	4307756	2.01	100	108.9	80	120	
Tl	203	1	No Gas	108.791	2.297	1848627	1.53	100	108.8	80	120	
Pb	208	1	No Gas	107.991	1.387	5962594	0.56	100	108.0	80	120	
U	238	1	No Gas	110.483	1.350	6591352	0.64	100	110.5	80	120	
Ca	43	2	He	116510.518	1.382	229015	0.81	100	116510.5	80	120	ICSB Main CR1 Failed
Sb	121	2	He	101.405	0.723	762863	0.91	100	101.4	80	120	
Ti	47	2	He	2262.048	1.023	452663	0.46	100	2262.0	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	101.782	2.108	1196397	1.05	100	101.8	80	120	
Se	82	1	No Gas	110.217	1.296	22000	2.00	100	110.2	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1009547	2.78	1130239	89.32	70	120	
Ge	72	2	He	603725	0.92	663945	90.93	70	120	
Ge	72	1	No Gas	2148509	1.65	2359811	91.05	70	120	
In	115	1	No Gas	2699056	0.84	3012000	89.61	70	120	
Bi	209	1	No Gas	2996703	0.93	3401946	88.09	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	027_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:47:06-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	97.053	1.369	1588862	0.44	100	97.1	90	110	
Be	9	1	No Gas	96.586	1.797	376849	0.28	100	96.6	90	110	
V	51	2	He	94.522	0.407	548261	0.58	100	94.5	90	110	
Cr	52	2	He	93.591	0.551	643039	0.86	100	93.6	90	110	
Fe	56	2	He	9613.787	0.713	58929657	0.99	10000	96.1	90	110	
Se	78	2	He	96.245	2.664	8517	2.88	100	96.2	90	110	
As	75	2	He	93.536	0.677	91437	1.00	100	93.5	90	110	
Ca	44	2	He	9705.535	1.196	347255	1.51	10000	97.1	90	110	
Na	23	2	He	9744.047	0.775	9798499	0.99	10000	97.4	90	110	
Mg	24	2	He	9824.578	1.336	5736524	1.65	10000	98.2	90	110	
K	39	2	He	9941.731	0.899	6433527	1.21	10000	99.4	90	110	
Mn	55	2	He	92.992	1.153	476767	1.45	100	93.0	90	110	
Co	59	2	He	91.745	0.547	961606	0.49	100	91.7	90	110	
Ni	60	2	He	97.124	1.396	241900	1.13	100	97.1	90	110	
Cu	63	2	He	94.975	0.841	640460	0.81	100	95.0	90	110	
Zn	66	2	He	95.024	1.444	127979	1.39	100	95.0	90	110	
Al	27	2	He	105.806	1.236	37076	0.99	100	105.8	90	110	
B	11	1	No Gas	491.230	1.757	1119060	3.09	500	98.2	90	110	
Al	27	1	No Gas	106.945	1.426	1631015	0.53	100	106.9	90	110	
Si	28	1	No Gas	709.755	0.863	5461774	1.20	5000	14.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	94.810	2.204	1774920	1.41	100	94.8	90	110	
Cd	111	1	No Gas	94.223	0.722	365150	0.35	100	94.2	90	110	
Sr	88	1	No Gas	96.380	1.078	3220920	0.88	100	96.4	90	110	
Mo	95	1	No Gas	94.884	0.781	644881	0.43	100	94.9	90	110	
Sn	118	1	No Gas	95.464	1.279	1140541	0.34	100	95.5	90	110	
Sb	121	1	No Gas	97.064	0.407	1632126	1.28	100	97.1	90	110	
Ba	137	1	No Gas	92.805	0.799	571106	0.20	100	92.8	90	110	
Tl	205	1	No Gas	98.790	1.902	4278573	1.69	100	98.8	90	110	
Tl	203	1	No Gas	96.315	1.296	1792318	0.80	100	96.3	90	110	
Pb	208	1	No Gas	97.561	1.832	5898547	0.63	100	97.6	90	110	
U	238	1	No Gas	92.923	0.786	6070870	0.74	100	92.9	90	110	
Ca	43	2	He	9645.905	2.726	20142	2.91	10000	96.5	90	110	
Sb	121	2	He	96.708	0.424	733833	0.70	100	96.7	90	110	
Ti	47	2	He	97.086	0.900	20632	1.18	100	97.1	90	110	
Cu	63	1	No Gas	93.786	0.735	1162959	1.63	100	93.8	90	110	
Se	82	1	No Gas	94.643	0.762	19906	1.64	100	94.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1034216	1.75	1130239	91.50	70	120	
Ge	72	2	He	640909	0.32	663945	96.53	70	120	
Ge	72	1	No Gas	2265618	0.90	2359811	96.01	70	120	
In	115	1	No Gas	2935266	0.94	3012000	97.45	70	120	
Bi	209	1	No Gas	3281550	1.33	3401946	96.46	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	028_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:48:59-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.213	19.4	70994	0.6	0.5	
Be	9	1	No Gas	0.002	198.4	33	48.2	0.5	
V	51	2	He	-0.020	-81.0	2894	3.6	2.5	
Cr	52	2	He	-0.022	-11.5	1213	1.3	2.5	
Fe	56	2	He	4.454	4.6	39374	3.4	100	
Se	78	2	He	0.146	73.2	77	12.0	2	
As	75	2	He	-0.027	-153.5	149	28.4	2.5	
Ca	44	2	He	-0.199	-1138.4	360	22.7	100	
Na	23	2	He	-2.374	-30.1	71000	0.8	100	
Mg	24	2	He	0.051	333.3	453	22.6	100	
K	39	2	He	3.022	29.1	52751	1.4	100	
Mn	55	2	He	0.034	20.8	473	8.0	2.5	
Co	59	2	He	0.000	741.2	47	65.5	2.5	
Ni	60	2	He	0.024	92.5	253	21.7	2.5	
Cu	63	2	He	0.132	13.6	1997	6.7	2	
Zn	66	2	He	-1.799	-8.6	3204	6.3	2.5	
Al	27	2	He	-0.131	-201.0	640	14.9	5	
B	11	1	No Gas	2.142	70.5	48430	7.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.590	-11.3	26419	2.9	5	
Si	28	1	No Gas	-1.880	-59.2	487380	0.5	10	
Ag	107	1	No Gas	0.000	32835.0	483	4.8	2.5	
Cd	111	1	No Gas	0.003	75.4	20	50.0	1	
Sr	88	1	No Gas	-0.014	-5.2	773	3.3	2.5	
Mo	95	1	No Gas	0.121	15.0	927	13.6	2.5	
Sn	118	1	No Gas	-0.023	-65.4	1877	9.6	5	
Sb	121	1	No Gas	0.004	296.9	1603	13.9	2.5	
Ba	137	1	No Gas	-0.034	-36.2	193	40.2	2.5	
Tl	205	1	No Gas	0.128	83.9	6889	68.7	1	
Tl	203	1	No Gas	0.129	75.9	2924	63.6	1	
Pb	208	1	No Gas	0.025	45.3	3924	17.8	2.5	
U	238	1	No Gas	0.011	45.3	1033	31.0	2.5	
Ca	43	2	He	0.114	9531.3	13	173.2	100	
Sb	121	2	He	-0.018	-10.3	533	2.2	2.5	
Ti	47	2	He	0.016	293.2	10	100.0	2.5	
Cu	63	1	No Gas	0.177	4.2	4511	1.0	2.5	
Se	82	1	No Gas	0.517	100.1	-11	-1045.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1068981	1.56	1130239	94.58	70	120	
Ge	72	2	He	653206	0.48	663945	98.38	70	120	
Ge	72	1	No Gas	2290623	1.16	2359811	97.07	70	120	
In	115	1	No Gas	2991658	0.27	3012000	99.32	70	120	
Bi	209	1	No Gas	3370129	0.97	3401946	99.06	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-12
Data File Name	032SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:57:33-05:00
Sample Type	Sample
Dilution	10
Comment	DOD TW 166932
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.048	30.481	1.88	120100	0.00	2000	
Be	9	1	No Gas	0.127	1.266	18.93	550	0.02	2000	
V	51	2	He	1.487	14.866	1.83	11699	0.01	2000	
Cr	52	2	He	28.147	281.468	2.89	197097	0.01	2000	
Fe	56	2	He	3838.320	38383.197	1.83	23872405	0.02	200000	
Se	78	2	He	0.209	2.089	37.13	82	0.25	2000	
As	75	2	He	1.620	16.197	3.80	1778	0.09	2000	
Ca	44	2	He	2098.447	20984.467	3.98	76432	2.75	200000	
Na	23	2	He	20169.429	201694.285	2.77	20493405	0.10	200000	
Mg	24	2	He	1687.989	16879.892	1.14	1000155	0.17	200000	
K	39	2	He	106.141	1061.412	4.74	119658	0.09	200000	
Mn	55	2	He	91.561	915.606	2.10	476159	0.02	2000	
Co	59	2	He	2.055	20.545	2.21	21885	0.01	2000	
Ni	60	2	He	8.167	81.666	3.18	20816	0.04	2000	
Cu	63	2	He	366.166	3661.664	0.83	2501829	0.01	2000	
Zn	66	2	He	16.174	161.739	1.82	26697	0.06	2000	
Al	27	2	He	127.118	1271.181	3.02	45044	0.28	2000	
B	11	1	No Gas	-3.444	-34.438	-11.67	36713	-0.01	2000	
Al	27	1	No Gas	131.215	1312.151	4.04	2014859	0.01	2000	
Si	28	1	No Gas	1862.336	18623.357	3.65	13675685	0.01	2000	>LDR
Ag	107	1	No Gas	0.013	0.127	37.97	723	0.00	2000	
Cd	111	1	No Gas	0.036	0.365	19.00	150	0.02	2000	
Sr	88	1	No Gas	45.819	458.186	0.42	1555322	0.00	2000	
Mo	95	1	No Gas	0.635	6.351	12.97	4471	0.01	2000	
Sn	118	1	No Gas	0.277	2.765	9.11	5501	0.01	2000	
Sb	121	1	No Gas	0.090	0.903	17.14	3067	0.00	2000	
Ba	137	1	No Gas	54.495	544.945	1.81	340641	0.02	2000	
Tl	205	1	No Gas	0.205	2.051	78.99	10313	0.00	2000	
Tl	203	1	No Gas	0.208	2.075	77.56	4415	0.00	2000	
Pb	208	1	No Gas	7.456	74.555	2.03	459868	0.00	2000	
U	238	1	No Gas	0.119	1.193	5.26	8226	0.00	2000	
Ca	43	2	He	2170.591	21705.912	1.89	4608	47.11	200000	
Sb	121	2	He	0.083	0.832	9.30	1307	0.01	2000	
Ti	47	2	He	0.623	6.227	65.04	140	0.44	2000	
Cu	63	1	No Gas	349.952	3499.520	2.05	4380271	0.01	2000	
Zn	66	1	No Gas	16.568	165.676	4.96	70831	0.02	2000	
Se	82	1	No Gas	0.592	5.919	96.56	6	9.85	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1097204	0.38	1130239	97.08	70	120	
Ge	72	2	He	650221	1.34	663945	97.93	70	120	
Ge	72	1	No Gas	2290643	1.16	2359811	97.07	70	120	
In	115	1	No Gas	2980176	0.72	3012000	98.94	70	120	

Sample Report

Bi	209	1	No Gas	3332422	1.83	3401946	97.96	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-13
Data File Name	033SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T12:59:31-05:00
Sample Type	Sample
Dilution	10
Comment	DOD TW 166932
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.699	26.987	2.68	114309	0.00	2000	
Be	9	1	No Gas	0.062	0.622	3.85	283	0.02	2000	
V	51	2	He	0.594	5.938	7.40	6494	0.01	2000	
Cr	52	2	He	12.914	129.144	2.10	91448	0.01	2000	
Fe	56	2	He	237.999	2379.994	1.84	1495463	0.02	200000	
Se	78	2	He	0.132	1.321	44.82	75	0.18	2000	
As	75	2	He	0.143	1.434	20.44	318	0.05	2000	
Ca	44	2	He	1912.246	19122.464	1.81	69901	2.74	200000	
Na	23	2	He	18592.189	185921.892	0.84	18955593	0.10	200000	
Mg	24	2	He	1559.777	15597.766	0.38	927015	0.17	200000	
K	39	2	He	116.290	1162.901	2.40	126654	0.09	200000	
Mn	55	2	He	76.064	760.635	1.57	396808	0.02	2000	
Co	59	2	He	2.082	20.818	1.19	22242	0.01	2000	
Ni	60	2	He	7.539	75.386	2.18	19281	0.04	2000	
Cu	63	2	He	12.122	121.225	0.67	84126	0.01	2000	
Zn	66	2	He	18.726	187.259	0.61	30124	0.06	2000	
Al	27	2	He	20.622	206.225	4.39	7902	0.26	2000	
B	11	1	No Gas	-5.311	-53.110	-3.23	32386	-0.02	2000	
Al	27	1	No Gas	20.523	205.230	1.60	347625	0.01	2000	
Si	28	1	No Gas	1469.080	14690.798	0.86	10975903	0.01	2000	
Ag	107	1	No Gas	-0.002	-0.025	-95.87	433	0.00	2000	
Cd	111	1	No Gas	0.031	0.315	37.12	130	0.02	2000	
Sr	88	1	No Gas	40.667	406.673	1.98	1376141	0.00	2000	
Mo	95	1	No Gas	0.171	1.708	13.12	1263	0.01	2000	
Sn	118	1	No Gas	0.076	0.762	10.69	3064	0.00	2000	
Sb	121	1	No Gas	0.024	0.245	67.71	1964	0.00	2000	
Ba	137	1	No Gas	28.940	289.399	1.94	180513	0.02	2000	
Tl	205	1	No Gas	-0.005	-0.052	-16.22	1003	0.00	2000	
Tl	203	1	No Gas	-0.005	-0.047	-133.04	377	0.00	2000	
Pb	208	1	No Gas	0.143	1.428	1.05	11252	0.00	2000	
U	238	1	No Gas	0.010	0.101	17.63	997	0.00	2000	
Ca	43	2	He	1997.617	19976.166	1.88	4254	46.96	200000	
Sb	121	2	He	0.026	0.261	44.76	870	0.00	2000	
Ti	47	2	He	-0.015	-0.151	-175.80	3	-0.45	2000	
Cu	63	1	No Gas	12.047	120.471	0.88	154180	0.01	2000	
Zn	66	1	No Gas	17.991	179.913	1.82	76257	0.02	2000	
Se	82	1	No Gas	0.731	7.315	51.79	36	2.03	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1097576	1.13	1130239	97.11	70	120	
Ge	72	2	He	652127	0.97	663945	98.22	70	120	
Ge	72	1	No Gas	2307935	0.83	2359811	97.80	70	120	
In	115	1	No Gas	2970498	0.17	3012000	98.62	70	120	

Sample Report

Bi	209	1	No Gas	3377392	1.09	3401946	99.28	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-19
Data File Name	034SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T13:01:29-05:00
Sample Type	Sample
Dilution	10
Comment	DOD TW 166932
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.574	5.740	14.56	78634	0.00	2000	
Be	9	1	No Gas	0.035	0.349	15.86	170	0.02	2000	
V	51	2	He	0.774	7.740	4.19	7572	0.01	2000	
Cr	52	2	He	0.240	2.400	0.78	3044	0.01	2000	
Fe	56	2	He	130.931	1309.311	0.80	830069	0.02	200000	
Se	78	2	He	0.234	2.343	30.55	85	0.28	2000	
As	75	2	He	0.104	1.045	2.71	280	0.04	2000	
Ca	44	2	He	63.979	639.790	2.31	2700	2.37	200000	
Na	23	2	He	535.183	5351.827	0.19	618435	0.09	200000	
Mg	24	2	He	59.153	591.525	0.22	35653	0.17	200000	
K	39	2	He	85.816	858.155	2.31	107022	0.08	200000	
Mn	55	2	He	1.913	19.127	3.14	10291	0.02	2000	
Co	59	2	He	0.234	2.340	8.26	2544	0.01	2000	
Ni	60	2	He	0.722	7.223	8.10	2027	0.04	2000	
Cu	63	2	He	5.411	54.111	1.63	38258	0.01	2000	
Zn	66	2	He	3.899	38.989	7.46	10698	0.04	2000	
Al	27	2	He	84.049	840.493	1.18	30186	0.28	2000	
B	11	1	No Gas	-6.459	-64.588	-3.08	29606	-0.02	2000	
Al	27	1	No Gas	84.180	841.803	2.06	1314392	0.01	2000	
Si	28	1	No Gas	950.329	9503.288	1.58	7272771	0.01	2000	
Ag	107	1	No Gas	-0.006	-0.055	-66.92	380	0.00	2000	
Cd	111	1	No Gas	0.006	0.058	112.65	30	0.02	2000	
Sr	88	1	No Gas	1.394	13.945	2.12	48990	0.00	2000	
Mo	95	1	No Gas	0.025	0.254	6.46	267	0.01	2000	
Sn	118	1	No Gas	-0.063	-0.632	-11.64	1400	0.00	2000	
Sb	121	1	No Gas	0.043	0.433	17.99	2284	0.00	2000	
Ba	137	1	No Gas	5.833	58.326	1.30	37160	0.02	2000	
Tl	205	1	No Gas	-0.008	-0.082	-17.63	880	0.00	2000	
Tl	203	1	No Gas	-0.007	-0.067	-42.79	343	0.00	2000	
Pb	208	1	No Gas	0.095	0.950	6.13	8371	0.00	2000	
U	238	1	No Gas	0.006	0.064	21.32	757	0.00	2000	
Ca	43	2	He	61.102	611.022	16.68	143	42.63	200000	
Sb	121	2	He	0.041	0.414	16.48	990	0.00	2000	
Ti	47	2	He	0.845	8.446	37.17	190	0.44	2000	
Cu	63	1	No Gas	5.415	54.149	2.70	70506	0.01	2000	
Zn	66	1	No Gas	3.892	38.925	3.00	27956	0.01	2000	
Se	82	1	No Gas	0.356	3.563	157.80	-44	-0.81	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1093669	0.43	1130239	96.76	70	120	
Ge	72	2	He	653798	1.01	663945	98.47	70	120	
Ge	72	1	No Gas	2305957	0.73	2359811	97.72	70	120	
In	115	1	No Gas	3007808	1.69	3012000	99.86	70	120	

Sample Report

Bi	209	1	No Gas	3418557	1.55	3401946	100.49	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-22
Data File Name	036SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T13:05:28-05:00
Sample Type	Sample
Dilution	10
Comment	DOD TW 166932
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.665	46.654	7.31	144899	0.00	2000	
Be	9	1	No Gas	0.010	0.097	52.18	65	0.01	2000	
V	51	2	He	0.402	4.017	12.24	5333	0.01	2000	
Cr	52	2	He	3.256	32.565	0.18	23931	0.01	2000	
Fe	56	2	He	5361.277	53612.770	0.34	33236117	0.02	200000	
Se	78	2	He	0.415	4.155	33.56	100	0.42	2000	
As	75	2	He	0.232	2.319	10.76	403	0.06	2000	
Ca	44	2	He	8889.525	88895.253	1.17	321648	2.76	200000	
Na	23	2	He	21221.478	212214.780	0.13	21493447	0.10	200000	
Mg	24	2	He	7787.739	77877.390	2.42	4597981	0.17	200000	
K	39	2	He	79.649	796.491	1.51	102092	0.08	200000	
Mn	55	2	He	331.270	3312.698	0.95	1716640	0.02	2000	
Co	59	2	He	5.764	57.644	1.23	61137	0.01	2000	
Ni	60	2	He	60.660	606.600	1.64	152854	0.04	2000	
Cu	63	2	He	0.854	8.537	2.28	6895	0.01	2000	
Zn	66	2	He	0.239	2.390	92.16	5835	0.00	2000	
Al	27	2	He	1.551	15.514	19.61	1220	0.13	2000	
B	11	1	No Gas	-8.063	-80.632	-6.66	25590	-0.03	2000	
Al	27	1	No Gas	0.879	8.789	12.83	48809	0.00	2000	
Si	28	1	No Gas	1576.357	15763.565	3.59	11707290	0.01	2000	
Ag	107	1	No Gas	-0.007	-0.066	-37.26	357	0.00	2000	
Cd	111	1	No Gas	0.053	0.526	15.02	213	0.02	2000	
Sr	88	1	No Gas	167.131	1671.306	0.41	5666007	0.00	2000	
Mo	95	1	No Gas	0.052	0.519	15.95	447	0.01	2000	
Sn	118	1	No Gas	-0.073	-0.733	-19.75	1263	-0.01	2000	
Sb	121	1	No Gas	-0.012	-0.117	-31.48	1343	0.00	2000	
Ba	137	1	No Gas	187.226	1872.259	0.20	1168580	0.02	2000	
Tl	205	1	No Gas	-0.014	-0.143	-21.47	590	0.00	2000	
Tl	203	1	No Gas	-0.014	-0.136	-23.65	203	-0.01	2000	
Pb	208	1	No Gas	-0.013	-0.126	-8.04	1557	0.00	2000	
U	238	1	No Gas	0.013	0.129	7.89	1167	0.00	2000	
Ca	43	2	He	9130.964	91309.638	0.27	19281	47.36	200000	
Sb	121	2	He	0.013	0.129	57.63	763	0.00	2000	
Ti	47	2	He	0.032	0.316	84.33	13	0.24	2000	
Cu	63	1	No Gas	0.915	9.152	3.54	13811	0.01	2000	
Zn	66	1	No Gas	-0.093	-0.931	-189.77	14284	0.00	2000	
Se	82	1	No Gas	0.110	1.097	276.00	-97	-0.11	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1082055	2.92	1130239	95.74	70	120	
Ge	72	2	He	648099	0.37	663945	97.61	70	120	
Ge	72	1	No Gas	2302430	2.38	2359811	97.57	70	120	
In	115	1	No Gas	2978017	0.25	3012000	98.87	70	120	

Sample Report

Bi	209	1	No Gas	3327334	1.38	3401946	97.81	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	039_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T13:11:22-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	100.020	1.131	1599906	0.96	100	100.0	90	110	
Be	9	1	No Gas	98.792	2.626	377027	0.71	100	98.8	90	110	
V	51	2	He	94.796	1.046	556054	0.56	100	94.8	90	110	
Cr	52	2	He	95.498	0.932	663540	1.04	100	95.5	90	110	
Fe	56	2	He	9788.737	0.129	60681422	0.73	10000	97.9	90	110	
Se	78	2	He	96.244	0.309	8613	0.51	100	96.2	90	110	
As	75	2	He	93.207	0.965	92146	1.07	100	93.2	90	110	
Ca	44	2	He	9586.728	1.186	346880	1.07	10000	95.9	90	110	
Na	23	2	He	9787.320	0.656	9953185	0.96	10000	97.9	90	110	
Mg	24	2	He	9799.858	0.169	5786883	0.96	10000	98.0	90	110	
K	39	2	He	9807.921	0.348	6419479	0.85	10000	98.1	90	110	
Mn	55	2	He	93.897	1.059	486837	0.72	100	93.9	90	110	
Co	59	2	He	93.482	1.267	990897	1.14	100	93.5	90	110	
Ni	60	2	He	98.798	0.376	248863	0.84	100	98.8	90	110	
Cu	63	2	He	97.270	1.253	663320	0.90	100	97.3	90	110	
Zn	66	2	He	96.984	0.594	131983	0.43	100	97.0	90	110	
Al	27	2	He	105.579	0.917	37417	0.39	100	105.6	90	110	
B	11	1	No Gas	500.798	2.517	1114768	0.48	500	100.2	90	110	
Al	27	1	No Gas	107.213	0.082	1631573	1.53	100	107.2	90	110	
Si	28	1	No Gas	715.747	1.604	5490851	0.29	5000	14.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	96.248	0.634	1809533	0.08	100	96.2	90	110	
Cd	111	1	No Gas	95.366	1.648	371112	1.04	100	95.4	90	110	
Sr	88	1	No Gas	97.831	2.066	3283091	1.98	100	97.8	90	110	
Mo	95	1	No Gas	96.330	1.853	657418	1.24	100	96.3	90	110	
Sn	118	1	No Gas	96.441	1.636	1157066	1.53	100	96.4	90	110	
Sb	121	1	No Gas	98.491	1.225	1652300	1.24	100	98.5	90	110	
Ba	137	1	No Gas	94.179	1.670	581962	1.04	100	94.2	90	110	
Tl	205	1	No Gas	101.069	1.546	4407108	0.66	100	101.1	90	110	
Tl	203	1	No Gas	99.084	1.228	1856522	1.10	100	99.1	90	110	
Pb	208	1	No Gas	99.373	1.251	6049570	0.41	100	99.4	90	110	
U	238	1	No Gas	94.482	1.344	6214774	0.63	100	94.5	90	110	
Ca	43	2	He	9744.198	2.980	20576	2.74	10000	97.4	90	110	
Sb	121	2	He	98.005	0.419	752083	0.47	100	98.0	90	110	
Ti	47	2	He	94.889	2.836	20395	3.26	100	94.9	90	110	
Cu	63	1	No Gas	96.283	3.373	1190891	2.44	100	96.3	90	110	
Se	82	1	No Gas	96.193	1.369	20186	0.29	100	96.2	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1011740	2.02	1130239	89.52	70	120	
Ge	72	2	He	648178	0.80	663945	97.63	70	120	
Ge	72	1	No Gas	2260673	1.59	2359811	95.80	70	120	
In	115	1	No Gas	2947517	0.64	3012000	97.86	70	120	
Bi	209	1	No Gas	3303951	0.90	3401946	97.12	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	040_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T13:13:16-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.094	57.1	69651	1.5	0.5	
Be	9	1	No Gas	0.003	212.9	38	71.8	0.5	
V	51	2	He	-0.037	-95.8	2797	7.6	2.5	
Cr	52	2	He	-0.043	-53.7	1067	15.5	2.5	
Fe	56	2	He	4.024	4.8	36736	2.9	100	
Se	78	2	He	-0.056	-45.9	59	3.9	2	
As	75	2	He	-0.044	-23.5	132	8.1	2.5	
Ca	44	2	He	-1.496	-120.8	313	21.2	100	
Na	23	2	He	-0.978	-120.8	72514	1.3	100	
Mg	24	2	He	-0.061	-178.0	387	16.4	100	
K	39	2	He	0.675	56.9	51282	0.9	100	
Mn	55	2	He	0.042	54.6	517	23.1	2.5	
Co	59	2	He	0.003	106.2	80	50.0	2.5	
Ni	60	2	He	0.012	198.4	223	26.2	2.5	
Cu	63	2	He	0.106	16.4	1820	6.3	2	
Zn	66	2	He	-1.609	-6.2	3457	3.7	2.5	
Al	27	2	He	-0.236	-150.6	603	20.3	5	
B	11	1	No Gas	-0.408	-394.3	43014	8.7	0.5	
Al	27	1	No Gas	-0.817	-3.4	23223	2.7	5	
Si	28	1	No Gas	-1.917	-26.7	491828	0.8	10	
Ag	107	1	No Gas	-0.006	-34.3	367	8.3	2.5	
Cd	111	1	No Gas	0.004	89.6	23	65.5	1	
Sr	88	1	No Gas	-0.010	-21.6	907	7.3	2.5	
Mo	95	1	No Gas	0.061	48.4	513	41.6	2.5	
Sn	118	1	No Gas	-0.026	-35.6	1830	8.3	5	
Sb	121	1	No Gas	-0.022	-31.1	1173	9.9	2.5	
Ba	137	1	No Gas	-0.036	-17.9	180	24.2	2.5	
Tl	205	1	No Gas	0.133	81.8	7266	69.1	1	
Tl	203	1	No Gas	0.132	82.4	3041	71.0	1	
Pb	208	1	No Gas	0.023	46.3	3824	18.9	2.5	
U	238	1	No Gas	0.011	61.9	1043	44.2	2.5	
Ca	43	2	He	6.349	42.7	27	21.7	100	
Sb	121	2	He	-0.012	-115.0	577	19.1	2.5	
Ti	47	2	He	-0.030	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	0.120	6.2	3837	2.2	2.5	
Se	82	1	No Gas	1.060	38.3	107	80.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Continuing Calibration Blank (CCB) Report

Li	6	1	No Gas	1078071	0.21	1130239	95.38	70	120	
Ge	72	2	He	654072	0.42	663945	98.51	70	120	
Ge	72	1	No Gas	2312600	1.21	2359811	98.00	70	120	
In	115	1	No Gas	2972436	2.16	3012000	98.69	70	120	
Bi	209	1	No Gas	3399826	1.45	3401946	99.94	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	063_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:21:59-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	97.216	2.960	1515509	1.29	100	97.2	90	110	
Be	9	1	No Gas	96.245	1.660	357670	0.33	100	96.2	90	110	
V	51	2	He	95.551	1.387	518353	0.67	100	95.6	90	110	
Cr	52	2	He	96.143	1.284	617833	1.25	100	96.1	90	110	
Fe	56	2	He	9852.282	1.193	56484816	0.27	10000	98.5	90	110	
Se	78	2	He	96.542	1.364	7990	1.38	100	96.5	90	110	
As	75	2	He	93.898	1.876	85854	1.68	100	93.9	90	110	
Ca	44	2	He	9725.192	0.257	325475	1.21	10000	97.3	90	110	
Na	23	2	He	9991.051	2.152	9395789	2.19	10000	99.9	90	110	
Mg	24	2	He	10043.610	1.248	5484943	0.15	10000	100.4	90	110	
K	39	2	He	9878.317	1.835	5980095	2.49	10000	98.8	90	110	
Mn	55	2	He	94.473	1.249	453021	0.36	100	94.5	90	110	
Co	59	2	He	93.702	1.476	918597	0.83	100	93.7	90	110	
Ni	60	2	He	98.356	1.581	229123	0.32	100	98.4	90	110	
Cu	63	2	He	96.299	1.286	607389	0.98	100	96.3	90	110	
Zn	66	2	He	93.983	1.284	118450	1.03	100	94.0	90	110	
Al	27	2	He	104.724	3.812	34329	3.35	100	104.7	90	110	
B	11	1	No Gas	489.049	3.397	1060824	1.97	500	97.8	90	110	
Al	27	1	No Gas	106.121	4.642	1534784	3.19	100	106.1	90	110	
Si	28	1	No Gas	695.062	1.118	5082506	1.34	5000	13.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	96.534	2.216	1740694	0.52	100	96.5	90	110	
Cd	111	1	No Gas	95.711	1.471	357303	1.64	100	95.7	90	110	
Sr	88	1	No Gas	97.243	2.192	3129928	0.36	100	97.2	90	110	
Mo	95	1	No Gas	94.659	1.283	619707	0.82	100	94.7	90	110	
Sn	118	1	No Gas	95.675	1.349	1101097	1.00	100	95.7	90	110	
Sb	121	1	No Gas	99.408	4.334	1584542	2.49	100	99.4	90	110	
Ba	137	1	No Gas	94.878	2.635	562306	0.92	100	94.9	90	110	
Tl	205	1	No Gas	99.625	1.531	4290535	0.69	100	99.6	90	110	
Tl	203	1	No Gas	98.242	2.833	1817620	1.07	100	98.2	90	110	
Pb	208	1	No Gas	97.300	1.062	5850513	0.92	100	97.3	90	110	
U	238	1	No Gas	94.124	1.178	6115026	1.11	100	94.1	90	110	
Ca	43	2	He	9515.609	1.101	18586	1.70	10000	95.2	90	110	
Sb	121	2	He	99.236	0.339	704353	1.10	100	99.2	90	110	
Ti	47	2	He	94.959	0.340	18877	1.15	100	95.0	90	110	
Cu	63	1	No Gas	95.219	2.825	1119526	1.85	100	95.2	90	110	
Se	82	1	No Gas	95.139	0.611	18981	2.52	100	95.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	985041	1.71	1130239	87.15	70	120	
Ge	72	2	He	599523	1.38	663945	90.30	70	120	
Ge	72	1	No Gas	2148948	1.91	2359811	91.06	70	120	
In	115	1	No Gas	2827684	1.83	3012000	93.88	70	120	
Bi	209	1	No Gas	3263511	1.99	3401946	95.93	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	064_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:23:53-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.033	-131.6	63487	0.6	0.5	
Be	9	1	No Gas	0.002	82.1	30	16.7	0.5	
V	51	2	He	0.087	31.8	3308	4.6	2.5	
Cr	52	2	He	-0.039	-31.8	1027	7.8	2.5	
Fe	56	2	He	4.397	2.4	36613	1.6	100	
Se	78	2	He	0.107	117.8	69	14.9	2	
As	75	2	He	0.016	128.3	180	11.3	2.5	
Ca	44	2	He	-3.059	-26.6	240	11.0	100	
Na	23	2	He	-4.253	-14.6	64830	0.5	100	
Mg	24	2	He	0.179	153.5	497	31.0	100	
K	39	2	He	0.438	109.1	47914	1.2	100	
Mn	55	2	He	0.028	17.1	413	5.0	2.5	
Co	59	2	He	0.002	132.4	60	44.1	2.5	
Ni	60	2	He	0.022	54.8	233	12.4	2.5	
Cu	63	2	He	0.127	2.5	1843	1.7	2	
Zn	66	2	He	-3.494	-2.2	917	10.9	2.5	
Al	27	2	He	-0.517	-22.3	473	8.5	5	
B	11	1	No Gas	-1.336	-101.9	38408	7.3	0.5	
Al	27	1	No Gas	-0.787	-8.4	21768	4.0	5	
Si	28	1	No Gas	-3.247	-22.5	443601	0.5	10	
Ag	107	1	No Gas	0.002	218.1	497	12.9	2.5	
Cd	111	1	No Gas	0.004	92.2	23	65.5	1	
Sr	88	1	No Gas	-0.013	-33.3	770	20.9	2.5	
Mo	95	1	No Gas	0.062	42.3	500	36.5	2.5	
Sn	118	1	No Gas	-0.031	-22.1	1727	2.9	5	
Sb	121	1	No Gas	0.025	39.3	1817	7.6	2.5	
Ba	137	1	No Gas	-0.030	-37.0	210	33.3	2.5	
Tl	205	1	No Gas	0.150	83.0	7714	71.1	1	
Tl	203	1	No Gas	0.136	83.2	3004	71.7	1	
Pb	208	1	No Gas	0.020	45.2	3487	16.6	2.5	
U	238	1	No Gas	0.013	63.9	1180	48.0	2.5	
Ca	43	2	He	5.507	51.0	23	24.7	100	
Sb	121	2	He	0.015	13.5	740	2.3	2.5	
Ti	47	2	He	-0.030	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	0.131	3.4	3654	0.3	2.5	
Se	82	1	No Gas	0.123	215.9	-87	-59.2	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Continuing Calibration Blank (CCB) Report

Li	6	1	No Gas	1012767	0.40	1130239	89.61	70	120	
Ge	72	2	He	612955	0.64	663945	92.32	70	120	
Ge	72	1	No Gas	2127001	1.45	2359811	90.13	70	120	
In	115	1	No Gas	2889872	1.66	3012000	95.95	70	120	
Bi	209	1	No Gas	3284551	1.61	3401946	96.55	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-14
Data File Name	071SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:50:31-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 166932
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.970	4.848	11.79	79887	0.00	2000	
Be	9	1	No Gas	0.030	0.148	30.50	138	0.02	2000	
V	51	2	He	1.862	9.310	1.07	13573	0.01	2000	
Cr	52	2	He	27.880	139.401	0.49	190728	0.01	2000	
Fe	56	2	He	3134.289	15671.446	1.53	19043719	0.02	200000	
Se	78	2	He	0.170	0.852	60.55	77	0.22	2000	
As	75	2	He	0.866	4.329	9.09	1008	0.09	2000	
Ca	44	2	He	547.184	2735.922	3.80	19734	2.77	200000	
Na	23	2	He	5516.454	27582.272	0.49	5527330	0.10	200000	
Mg	24	2	He	363.115	1815.576	0.49	210463	0.17	200000	
K	39	2	He	68.855	344.277	4.13	93166	0.07	200000	
Mn	55	2	He	13.688	68.440	0.54	69778	0.02	2000	
Co	59	2	He	1.039	5.195	3.31	10831	0.01	2000	
Ni	60	2	He	24.811	124.053	0.94	61368	0.04	2000	
Cu	63	2	He	16.603	83.014	1.83	111810	0.01	2000	
Zn	66	2	He	88.735	443.675	0.84	118769	0.07	2000	
Al	27	2	He	21.900	109.502	4.05	8133	0.27	2000	
B	11	1	No Gas	-5.424	-27.119	-10.36	30000	-0.02	2000	
Al	27	1	No Gas	22.848	114.238	8.86	368581	0.01	2000	
Si	28	1	No Gas	2565.864	12829.321	0.36	18083698	0.01	2000	>LDR
Ag	107	1	No Gas	-0.001	-0.004	-510.97	470	0.00	2000	
Cd	111	1	No Gas	0.012	0.059	62.94	53	0.02	2000	
Sr	88	1	No Gas	14.938	74.689	2.44	511981	0.00	2000	
Mo	95	1	No Gas	0.568	2.842	7.25	4041	0.01	2000	
Sn	118	1	No Gas	2.038	10.190	3.81	27063	0.01	2000	
Sb	121	1	No Gas	0.112	0.559	16.94	3327	0.00	2000	
Ba	137	1	No Gas	26.712	133.559	1.65	168543	0.02	2000	
Tl	205	1	No Gas	-0.017	-0.085	-7.03	497	0.00	2000	
Tl	203	1	No Gas	-0.017	-0.084	-9.75	150	-0.01	2000	
Pb	208	1	No Gas	0.691	3.457	3.21	46989	0.00	2000	
U	238	1	No Gas	0.076	0.382	3.87	5648	0.00	2000	
Ca	43	2	He	550.117	2750.583	16.34	1150	47.83	200000	
Sb	121	2	He	0.116	0.579	18.85	1520	0.01	2000	
Ti	47	2	He	0.144	0.720	69.12	37	0.39	2000	
Cu	63	1	No Gas	16.538	82.690	0.54	202833	0.01	2000	
Zn	66	1	No Gas	89.752	448.759	0.13	309853	0.03	2000	
Se	82	1	No Gas	0.528	2.639	61.42	-7	-7.18	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1025800	2.47	1130239	90.76	70	120	
Ge	72	2	He	635027	0.29	663945	95.64	70	120	
Ge	72	1	No Gas	2220675	0.57	2359811	94.10	70	120	
In	115	1	No Gas	3004891	1.98	3012000	99.76	70	120	

Sample Report

Bi	209	1	No Gas	3498613	1.68	3401946	102.84	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-14PDS
Data File Name	073SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:54:30-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 166932
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.841	4.207	15.95	79848	0.00	2000	
Be	9	1	No Gas	87.420	437.102	3.63	346649	0.03	2000	
V	51	2	He	92.099	460.497	1.57	530189	0.02	2000	
Cr	52	2	He	117.155	585.773	0.64	798453	0.01	2000	
Fe	56	2	He	11996.938	59984.689	0.21	72974496	0.02	200000	
Se	78	2	He	90.010	450.049	1.60	7908	1.14	2000	
As	75	2	He	88.445	442.226	0.28	85812	0.10	2000	
Ca	44	2	He	9328.357	46641.787	1.05	331210	2.82	200000	
Na	23	2	He	14552.671	72763.355	1.10	14486518	0.10	200000	
Mg	24	2	He	9515.015	47575.077	3.08	5512629	0.17	200000	
K	39	2	He	9173.131	45865.653	1.42	5894316	0.16	200000	
Mn	55	2	He	101.448	507.241	0.99	516115	0.02	2000	
Co	59	2	He	88.625	443.125	1.59	921778	0.01	2000	
Ni	60	2	He	116.394	581.970	1.55	287641	0.04	2000	
Cu	63	2	He	106.953	534.766	0.78	715592	0.01	2000	
Zn	66	2	He	180.931	904.654	1.34	236911	0.08	2000	
Al	27	2	He	107.628	538.140	5.57	37408	0.29	2000	
B	11	1	No Gas	-5.915	-29.575	-7.80	29663	-0.02	2000	
Al	27	1	No Gas	104.819	524.094	1.15	1617316	0.01	2000	
Si	28	1	No Gas	2551.064	12755.320	0.71	18548453	0.01	2000	>LDR
Ag	107	1	No Gas	88.753	443.767	2.41	1672493	0.01	2000	
Cd	111	1	No Gas	90.511	452.556	1.24	353068	0.03	2000	
Sr	88	1	No Gas	15.311	76.557	0.79	516102	0.00	2000	
Mo	95	1	No Gas	93.075	465.374	1.66	636721	0.01	2000	
Sn	118	1	No Gas	2.011	10.057	2.29	26277	0.01	2000	
Sb	121	1	No Gas	91.224	456.118	3.48	1550575	0.01	2000	
Ba	137	1	No Gas	116.329	581.643	1.22	720468	0.02	2000	
Tl	205	1	No Gas	93.631	468.157	1.21	4159489	0.00	2000	
Tl	203	1	No Gas	91.224	456.118	1.46	1741205	0.01	2000	
Pb	208	1	No Gas	94.267	471.336	1.09	5846528	0.00	2000	
U	238	1	No Gas	0.081	0.405	3.54	5738	0.00	2000	
Ca	43	2	He	9421.177	47105.887	1.90	19521	48.26	200000	
Sb	121	2	He	92.738	463.688	1.32	698337	0.01	2000	
Ti	47	2	He	88.805	444.025	3.20	18726	0.47	2000	
Cu	63	1	No Gas	106.038	530.189	1.27	1329093	0.01	2000	
Zn	66	1	No Gas	177.779	888.896	1.12	618815	0.03	2000	
Se	82	1	No Gas	89.487	447.434	2.78	19026	0.47	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1051864	3.97	1130239	93.07	70	120	
Ge	72	2	He	636033	0.72	663945	95.80	70	120	
Ge	72	1	No Gas	2290742	1.58	2359811	97.07	70	120	
In	115	1	No Gas	2954602	0.84	3012000	98.09	70	120	

Sample Report

Bi	209	1	No Gas	3366035	1.49	3401946	98.94	70	120	

Sample Report

Sample Table

Sample Name	HS21060700-14SD
Data File Name	074SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T14:58:29-05:00
Sample Type	Sample
Dilution	25
Comment	DOD TW 166932
ISTD Ref FileName	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.190	4.750	39.00	69787	0.00	2000	
Be	9	1	No Gas	0.009	0.220	38.00	60	0.01	2000	
V	51	2	He	0.270	6.748	1.73	4493	0.01	2000	
Cr	52	2	He	5.493	137.314	1.46	38815	0.01	2000	
Fe	56	2	He	614.966	15374.160	1.06	3762497	0.02	200000	
Se	78	2	He	0.105	2.625	83.86	71	0.15	2000	
As	75	2	He	0.147	3.674	16.05	314	0.05	2000	
Ca	44	2	He	106.772	2669.288	1.34	4157	2.57	200000	
Na	23	2	He	1128.156	28203.894	1.62	1192568	0.09	200000	
Mg	24	2	He	72.017	1800.419	0.37	42264	0.17	200000	
K	39	2	He	12.913	322.824	7.27	57838	0.02	200000	
Mn	55	2	He	2.665	66.637	3.40	13881	0.02	2000	
Co	59	2	He	0.221	5.534	6.36	2350	0.01	2000	
Ni	60	2	He	4.782	119.555	1.95	12036	0.04	2000	
Cu	63	2	He	3.287	82.169	1.87	23090	0.01	2000	
Zn	66	2	He	14.232	355.788	2.41	23701	0.06	2000	
Al	27	2	He	4.702	117.562	6.24	2280	0.21	2000	
B	11	1	No Gas	-9.901	-247.521	-0.92	20891	-0.05	2000	
Al	27	1	No Gas	5.707	142.667	35.12	121798	0.00	2000	
Si	28	1	No Gas	501.877	12546.925	2.41	4063732	0.01	2000	
Ag	107	1	No Gas	-0.001	-0.016	-106.50	473	0.00	2000	
Cd	111	1	No Gas	0.005	0.126	57.60	27	0.02	2000	
Sr	88	1	No Gas	2.978	74.458	1.21	103210	0.00	2000	
Mo	95	1	No Gas	0.161	4.037	12.57	1213	0.01	2000	
Sn	118	1	No Gas	0.316	7.910	5.83	6038	0.01	2000	
Sb	121	1	No Gas	0.376	9.394	2.37	7939	0.00	2000	
Ba	137	1	No Gas	5.311	132.770	0.39	33871	0.02	2000	
Tl	205	1	No Gas	-0.008	-0.209	-50.82	913	0.00	2000	
Tl	203	1	No Gas	-0.008	-0.191	-72.53	340	0.00	2000	
Pb	208	1	No Gas	0.156	3.896	3.91	12739	0.00	2000	
U	238	1	No Gas	0.011	0.268	9.25	1097	0.00	2000	
Ca	43	2	He	119.010	2975.260	18.49	260	45.77	200000	
Sb	121	2	He	0.299	7.484	13.54	2914	0.01	2000	
Ti	47	2	He	0.033	0.815	82.79	13	0.24	2000	
Cu	63	1	No Gas	3.242	81.061	1.17	42995	0.01	2000	
Zn	66	1	No Gas	13.999	349.968	2.38	62316	0.02	2000	
Se	82	1	No Gas	-0.063	-1.575	-839.58	-134	0.05	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1056340	1.28	1130239	93.46	70	120	
Ge	72	2	He	637941	0.60	663945	96.08	70	120	
Ge	72	1	No Gas	2297785	1.22	2359811	97.37	70	120	
In	115	1	No Gas	3007372	0.93	3012000	99.85	70	120	

Sample Report

Bi	209	1	No Gas	3565884	2.71	3401946	104.82	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	075_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:00:28-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.174	1.310	1595419	0.54	100	101.2	90	110	
Be	9	1	No Gas	98.411	1.617	370488	0.93	100	98.4	90	110	
V	51	2	He	95.550	0.599	552455	0.45	100	95.5	90	110	
Cr	52	2	He	96.035	0.664	657715	0.19	100	96.0	90	110	
Fe	56	2	He	9860.457	1.470	60249124	0.92	10000	98.6	90	110	
Se	78	2	He	97.802	2.764	8626	2.73	100	97.8	90	110	
As	75	2	He	95.500	0.901	93058	0.41	100	95.5	90	110	
Ca	44	2	He	9689.033	1.291	345574	1.32	10000	96.9	90	110	
Na	23	2	He	9850.244	2.040	9872768	1.42	10000	98.5	90	110	
Mg	24	2	He	9920.032	0.287	5774159	0.97	10000	99.2	90	110	
K	39	2	He	9751.175	0.241	6291402	0.62	10000	97.5	90	110	
Mn	55	2	He	94.870	0.620	484856	0.51	100	94.9	90	110	
Co	59	2	He	94.084	0.367	983067	0.90	100	94.1	90	110	
Ni	60	2	He	98.322	0.693	244118	0.16	100	98.3	90	110	
Cu	63	2	He	96.839	0.249	650987	0.91	100	96.8	90	110	
Zn	66	2	He	95.412	0.796	128076	0.08	100	95.4	90	110	
Al	27	2	He	104.390	1.969	36475	1.73	100	104.4	90	110	
B	11	1	No Gas	506.081	0.831	1110954	1.58	500	101.2	90	110	
Al	27	1	No Gas	106.012	3.038	1633523	0.58	100	106.0	90	110	
Si	28	1	No Gas	707.333	2.324	5500515	0.75	5000	14.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	97.760	0.712	1846896	0.38	100	97.8	90	110	
Cd	111	1	No Gas	96.166	1.148	376064	0.85	100	96.2	90	110	
Sr	88	1	No Gas	96.997	0.134	3271026	0.65	100	97.0	90	110	
Mo	95	1	No Gas	96.484	0.613	661710	0.46	100	96.5	90	110	
Sn	118	1	No Gas	96.904	2.823	1168201	2.45	100	96.9	90	110	
Sb	121	1	No Gas	98.999	4.017	1681015	1.35	100	99.0	90	110	
Ba	137	1	No Gas	95.566	1.379	593412	0.86	100	95.6	90	110	
Tl	205	1	No Gas	99.084	2.447	4429180	1.61	100	99.1	90	110	
Tl	203	1	No Gas	97.900	3.882	1879679	0.95	100	97.9	90	110	
Pb	208	1	No Gas	98.931	2.966	6172864	0.34	100	98.9	90	110	
U	238	1	No Gas	94.121	3.217	6345144	0.69	100	94.1	90	110	
Ca	43	2	He	9634.951	3.316	20055	3.19	10000	96.3	90	110	
Sb	121	2	He	100.344	1.715	758967	0.98	100	100.3	90	110	
Ti	47	2	He	95.709	1.541	20275	1.15	100	95.7	90	110	
Cu	63	1	No Gas	94.932	3.099	1188926	0.73	100	94.9	90	110	
Se	82	1	No Gas	92.936	5.374	19731	2.61	100	92.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	997782	0.96	1130239	88.28	70	120	
Ge	72	2	He	638920	0.81	663945	96.23	70	120	
Ge	72	1	No Gas	2289723	2.89	2359811	97.03	70	120	
In	115	1	No Gas	2961860	0.52	3012000	98.34	70	120	
Bi	209	1	No Gas	3388046	2.92	3401946	99.59	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	076_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:02:22-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	012CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.090	-102.4	66988	1.7	0.5	
Be	9	1	No Gas	0.001	197.6	28	20.4	0.5	
V	51	2	He	-0.119	-8.3	2306	2.6	2.5	
Cr	52	2	He	-0.039	-7.8	1087	1.1	2.5	
Fe	56	2	He	5.019	4.1	42704	2.1	100	
Se	78	2	He	0.090	115.7	71	12.6	2	
As	75	2	He	-0.031	-37.7	144	8.7	2.5	
Ca	44	2	He	-1.533	-21.5	310	3.2	100	
Na	23	2	He	0.247	644.2	73330	1.7	100	
Mg	24	2	He	0.331	24.5	617	7.7	100	
K	39	2	He	-2.503	-28.6	48910	0.1	100	
Mn	55	2	He	0.020	51.0	400	13.2	2.5	
Co	59	2	He	0.002	30.1	63	9.1	2.5	
Ni	60	2	He	-0.008	-242.0	173	26.0	2.5	
Cu	63	2	He	0.151	10.2	2120	5.7	2	
Zn	66	2	He	-3.566	-2.1	877	10.4	2.5	
Al	27	2	He	-0.398	-10.0	543	2.8	5	
B	11	1	No Gas	-2.634	-41.4	38138	7.8	0.5	
Al	27	1	No Gas	-0.822	-6.3	22866	1.9	5	
Si	28	1	No Gas	-2.240	-52.6	483750	0.2	10	
Ag	107	1	No Gas	-0.001	-172.1	460	9.5	2.5	
Cd	111	1	No Gas	0.003	78.3	20	50.0	1	
Sr	88	1	No Gas	-0.010	-23.5	937	8.6	2.5	
Mo	95	1	No Gas	0.064	36.1	533	27.3	2.5	
Sn	118	1	No Gas	-0.013	-77.7	2027	3.5	5	
Sb	121	1	No Gas	0.060	28.2	2537	9.8	2.5	
Ba	137	1	No Gas	-0.032	-26.5	210	24.7	2.5	
Tl	205	1	No Gas	0.110	80.7	6196	64.3	1	
Tl	203	1	No Gas	0.108	74.4	2567	60.6	1	
Pb	208	1	No Gas	0.045	15.1	5224	8.1	2.5	
U	238	1	No Gas	0.012	44.5	1130	31.4	2.5	
Ca	43	2	He	0.106	6799.6	13	114.6	100	
Sb	121	2	He	0.056	23.2	1093	8.5	2.5	
Ti	47	2	He	-0.015	-176.4	3	173.2	2.5	
Cu	63	1	No Gas	0.160	12.6	4284	5.8	2.5	
Se	82	1	No Gas	0.297	114.2	-57	-126.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Continuing Calibration Blank (CCB) Report

Li	6	1	No Gas	1083680	1.97	1130239	95.88	70	120	
Ge	72	2	He	650267	0.92	663945	97.94	70	120	
Ge	72	1	No Gas	2285598	1.53	2359811	96.86	70	120	
In	115	1	No Gas	3026639	2.49	3012000	100.49	70	120	
Bi	209	1	No Gas	3425519	1.04	3401946	100.69	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	086CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:37:22-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	68020	0.00
Be	9	1	No Gas	7	649.52
V	51	2	He	4647	0.09
Cr	52	2	He	1130	1.33
Fe	56	2	He	14625	0.00
Se	78	2	He	77	3.86
As	75	2	He	224	8.27
Ca	44	2	He	490	7.64
Na	23	2	He	92545	0.00
Mg	24	2	He	503	2.24
K	39	2	He	55277	0.00
Mn	55	2	He	417	4.36
Co	59	2	He	27	429.62
Ni	60	2	He	173	10.70
Cu	63	2	He	1127	0.71
Zn	66	2	He	490	3.70
Al	27	2	He	737	1.61
B	11	1	No Gas	21485	0.01
Al	27	1	No Gas	36071	0.01
Si	28	1	No Gas	450649	0.00
Ag	107	1	No Gas	470	3.26
Cd	111	1	No Gas	13	859.23
Sr	88	1	No Gas	1220	0.44
Mo	95	1	No Gas	60	55.56
Sn	118	1	No Gas	2154	0.27
Sb	121	1	No Gas	1980	0.37
Ba	137	1	No Gas	447	5.02
Tl	205	1	No Gas	363	5.79
Tl	203	1	No Gas	197	9.08
Pb	208	1	No Gas	2063	0.35
U	238	1	No Gas	80	31.25
Ca	43	2	He	13	859.23
Sb	121	2	He	1030	1.15
Ti	47	2	He	10	1732.05
Cu	63	1	No Gas	3651	0.16

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	1105285	0.29
Ge	72	2	He	635874	0.70
Ge	72	1	No Gas	2313189	0.89
In	115	1	No Gas	2972793	1.76

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	3337431	1.50

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	087CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:39:21-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7504	0.03
V	51	2	He	15611	0.01
Cr	52	2	He	14785	0.02
Fe	56	2	He	1265786	0.00
Se	78	2	He	233	0.77
As	75	2	He	2141	0.18
Ca	44	2	He	7205	0.05
Na	23	2	He	295422	0.00
Mg	24	2	He	124344	0.00
K	39	2	He	184698	0.00
Mn	55	2	He	10458	0.04
Co	59	2	He	20776	0.01
Ni	60	2	He	5334	0.09
Cu	63	2	He	15242	0.02
Zn	66	2	He	3367	0.04
Al	27	2	He	1423	0.50
B	11	1	No Gas	40248	0.00
Al	27	1	No Gas	65423	0.00
Si	28	1	No Gas	516125	0.00
Ag	107	1	No Gas	37978	0.00
Cd	111	1	No Gas	7856	0.04
Sr	88	1	No Gas	69946	0.00
Mo	95	1	No Gas	14128	0.03
Sn	118	1	No Gas	25558	0.01
Sb	121	1	No Gas	36742	0.00
Ba	137	1	No Gas	12460	0.04
Tl	205	1	No Gas	87526	0.00
Tl	203	1	No Gas	36293	0.00
Pb	208	1	No Gas	123498	0.00
U	238	1	No Gas	129069	0.00
Ca	43	2	He	360	8.13
Sb	121	2	He	16621	0.02
Cu	63	1	No Gas	29633	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1086884	0.91	1105285	98.34	70	120	
Ge	72	2	He	635212	0.65	635874	99.90	70	120	
Ge	72	1	No Gas	2303849	1.02	2313189	99.60	70	120	

Calibration Standard Report

In	115	1	No Gas	2942608	0.70	2972793	98.98	70	120	
Bi	209	1	No Gas	3344247	0.93	3337431	100.20	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	088CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:41:20-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	19115	0.01
V	51	2	He	32578	0.00
Cr	52	2	He	34664	0.00
Fe	56	2	He	3125284	0.00
Se	78	2	He	454	2.90
As	75	2	He	4869	0.02
Ca	44	2	He	17435	0.01
Na	23	2	He	596528	0.00
Mg	24	2	He	307178	0.00
K	39	2	He	372070	0.00
Mn	55	2	He	25741	0.01
Co	59	2	He	51080	0.00
Ni	60	2	He	12676	0.01
Cu	63	2	He	36529	0.00
Zn	66	2	He	7195	0.04
Al	27	2	He	2227	0.57
B	11	1	No Gas	71600	0.00
Al	27	1	No Gas	108373	0.00
Si	28	1	No Gas	610966	0.00
Ag	107	1	No Gas	94060	0.00
Cd	111	1	No Gas	18900	0.02
Sr	88	1	No Gas	167033	0.00
Mo	95	1	No Gas	34084	0.01
Sn	118	1	No Gas	59227	0.00
Sb	121	1	No Gas	85548	0.00
Ba	137	1	No Gas	30416	0.00
Tl	205	1	No Gas	216516	0.00
Tl	203	1	No Gas	91736	0.00
Pb	208	1	No Gas	305592	0.00
U	238	1	No Gas	323515	0.00
Ca	43	2	He	973	1.17
Sb	121	2	He	38848	0.00
Cu	63	1	No Gas	67367	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1086097	1.31	1105285	98.26	70	120	
Ge	72	2	He	632849	0.71	635874	99.52	70	120	
Ge	72	1	No Gas	2257447	0.98	2313189	97.59	70	120	

Calibration Standard Report

In	115	1	No Gas	2967408	0.84	2972793	99.82	70	120	
Bi	209	1	No Gas	3366726	1.06	3337431	100.88	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	089CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:43:19-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	36947	0.00
V	51	2	He	59857	0.00
Cr	52	2	He	68039	0.00
Fe	56	2	He	5899881	0.00
Se	78	2	He	878	0.47
As	75	2	He	9541	0.05
Ca	44	2	He	35162	0.01
Na	23	2	He	1081175	0.00
Mg	24	2	He	598053	0.00
K	39	2	He	675359	0.00
Mn	55	2	He	49574	0.00
Co	59	2	He	101110	0.00
Ni	60	2	He	25210	0.01
Cu	63	2	He	69249	0.00
Zn	66	2	He	13550	0.01
Al	27	2	He	4071	0.12
B	11	1	No Gas	122861	0.00
Al	27	1	No Gas	185658	0.00
Si	28	1	No Gas	784935	0.00
Ag	107	1	No Gas	182492	0.00
Cd	111	1	No Gas	37935	0.00
Sr	88	1	No Gas	332754	0.00
Mo	95	1	No Gas	67719	0.00
Sn	118	1	No Gas	117159	0.00
Sb	121	1	No Gas	168532	0.00
Ba	137	1	No Gas	59302	0.00
Tl	205	1	No Gas	429381	0.00
Tl	203	1	No Gas	181127	0.00
Pb	208	1	No Gas	601417	0.00
U	238	1	No Gas	639417	0.00
Ca	43	2	He	2137	0.31
Sb	121	2	He	75424	0.00
Cu	63	1	No Gas	125637	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1054252	0.92	1105285	95.38	70	120	
Ge	72	2	He	627231	0.34	635874	98.64	70	120	
Ge	72	1	No Gas	2239675	0.49	2313189	96.82	70	120	

Calibration Standard Report

In	115	1	No Gas	2943756	1.66	2972793	99.02	70	120	
Bi	209	1	No Gas	3299857	0.80	3337431	98.87	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	090CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:45:17-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	362134	0.00
V	51	2	He	547435	0.00
Cr	52	2	He	653355	0.00
Fe	56	2	He	58585329	0.00
Se	78	2	He	8172	0.01
As	75	2	He	91664	0.00
Ca	44	2	He	332545	0.00
Na	23	2	He	9700740	0.00
Mg	24	2	He	5666489	0.00
K	39	2	He	6065965	0.00
Mn	55	2	He	475816	0.00
Co	59	2	He	970912	0.00
Ni	60	2	He	242335	0.00
Cu	63	2	He	647833	0.00
Zn	66	2	He	125883	0.00
Al	27	2	He	33538	0.00
B	11	1	No Gas	1057445	0.00
Al	27	1	No Gas	1513403	0.00
Si	28	1	No Gas	3986148	0.00
Ag	107	1	No Gas	1821248	0.00
Cd	111	1	No Gas	375455	0.00
Sr	88	1	No Gas	3267675	0.00
Mo	95	1	No Gas	663339	0.00
Sn	118	1	No Gas	1180849	0.00
Sb	121	1	No Gas	1667849	0.00
Ba	137	1	No Gas	585183	0.00
Tl	205	1	No Gas	4415651	0.00
Tl	203	1	No Gas	1843441	0.00
Pb	208	1	No Gas	6117186	0.00
U	238	1	No Gas	6404183	0.00
Ca	43	2	He	19481	0.02
Sb	121	2	He	744002	0.00
Cu	63	1	No Gas	1190284	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	973419	2.29	1105285	88.07	70	120	
Ge	72	2	He	602788	0.24	635874	94.80	70	120	
Ge	72	1	No Gas	2135862	0.75	2313189	92.33	70	120	

Calibration Standard Report

In	115	1	No Gas	2834740	0.33	2972793	95.36	70	120	
Bi	209	1	No Gas	3170302	1.77	3337431	94.99	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	091CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:47:10-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	697719	0.00
V	51	2	He	1062340	0.00
Cr	52	2	He	1281749	0.00
Fe	56	2	He	111697575	0.00
Se	78	2	He	15567	0.01
As	75	2	He	177763	0.00
Ca	44	2	He	643933	0.00
Na	23	2	He	18404038	0.00
Mg	24	2	He	10789587	0.00
K	39	2	He	11637946	0.00
Mn	55	2	He	915620	0.00
Co	59	2	He	1895620	0.00
Ni	60	2	He	455527	0.00
Cu	63	2	He	1267250	0.00
Zn	66	2	He	239927	0.00
Al	27	2	He	61101	0.00
B	11	1	No Gas	2046720	0.00
Al	27	1	No Gas	2705259	0.00
Si	28	1	No Gas	6488457	0.00
Ag	107	1	No Gas	3467940	0.00
Cd	111	1	No Gas	726488	0.00
Sr	88	1	No Gas	6279674	0.00
Mo	95	1	No Gas	1320406	0.00
Sn	118	1	No Gas	2287697	0.00
Sb	121	1	No Gas	3283169	0.00
Ba	137	1	No Gas	1143201	0.00
Tl	205	1	No Gas	8419943	0.00
Tl	203	1	No Gas	3585576	0.00
Pb	208	1	No Gas	11902870	0.00
U	238	1	No Gas	12840394	0.00
Ca	43	2	He	38424	0.00
Sb	121	2	He	1524955	0.00
Cu	63	1	No Gas	2266411	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	938851	0.75	1105285	84.94	70	120	
Ge	72	2	He	575008	0.87	635874	90.43	70	120	
Ge	72	1	No Gas	2086553	1.30	2313189	90.20	70	120	

Calibration Standard Report

In	115	1	No Gas	2705982	1.29	2972793	91.02	70	120	
Bi	209	1	No Gas	3047039	1.16	3337431	91.30	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	093_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:51:00-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	100.992	0.997	1531586	0.95	100	101.0	90	110	
Be	9	1	No Gas	100.459	1.310	353513	0.11	100	100.5	90	110	
V	51	2	He	97.129	1.404	537461	0.87	100	97.1	90	110	
Cr	52	2	He	96.660	1.277	642184	0.35	100	96.7	90	110	
Fe	56	2	He	9949.453	0.709	57901537	0.47	10000	99.5	90	110	
Se	78	2	He	99.515	1.276	8100	1.44	100	99.5	90	110	
As	75	2	He	96.333	1.847	88988	1.03	100	96.3	90	110	
Ca	44	2	He	9941.402	1.094	332634	0.85	10000	99.4	90	110	
Na	23	2	He	9848.418	1.422	9487337	1.09	10000	98.5	90	110	
Mg	24	2	He	9881.684	0.639	5556469	0.62	10000	98.8	90	110	
K	39	2	He	9911.206	0.815	6023191	1.82	10000	99.1	90	110	
Mn	55	2	He	98.591	1.118	469577	0.60	100	98.6	90	110	
Co	59	2	He	96.885	1.975	952199	0.97	100	96.9	90	110	
Ni	60	2	He	100.554	0.517	239397	0.57	100	100.6	90	110	
Cu	63	2	He	97.521	0.645	641068	0.38	100	97.5	90	110	
Zn	66	2	He	99.815	1.282	124959	0.32	100	99.8	90	110	
Al	27	2	He	103.890	1.817	33634	0.79	100	103.9	90	110	
B	11	1	No Gas	507.654	0.794	1054282	1.61	500	101.5	90	110	
Al	27	1	No Gas	106.960	2.782	1517693	1.94	100	107.0	90	110	
Si	28	1	No Gas	600.267	2.322	4255992	1.78	500	120.1	90	110	ICV Main CR1 Failed
Ag	107	1	No Gas	102.011	3.116	1816163	0.31	100	102.0	90	110	
Cd	111	1	No Gas	100.669	2.521	374286	0.63	100	100.7	90	110	
Sr	88	1	No Gas	101.173	3.807	3255381	1.02	100	101.2	90	110	
Mo	95	1	No Gas	96.188	3.100	646277	0.33	100	96.2	90	110	
Sn	118	1	No Gas	100.211	2.665	1173604	0.75	100	100.2	90	110	
Sb	121	1	No Gas	100.824	0.513	1689577	1.24	100	100.8	90	110	
Ba	137	1	No Gas	100.698	2.422	588150	1.03	100	100.7	90	110	
Tl	205	1	No Gas	98.203	1.463	4423262	1.35	100	98.2	90	110	
Tl	203	1	No Gas	97.312	2.799	1858784	2.41	100	97.3	90	110	
Pb	208	1	No Gas	96.046	2.283	6091105	1.71	100	96.0	90	110	
U	238	1	No Gas	92.200	0.821	6270244	1.30	100	92.2	90	110	
Ca	43	2	He	9989.899	1.766	19868	1.04	10000	99.9	90	110	
Sb	121	2	He	93.777	0.837	734830	0.23	100	93.8	90	110	
Ti	47	2	He	97.701	2.773	19364	2.43	100	97.7	90	110	
Cu	63	1	No Gas	99.403	0.475	1158521	0.97	100	99.4	90	110	
Se	82	1	No Gas	99.991	2.017	19848	1.66	100	100.0	90	110	

QC ISTD Table

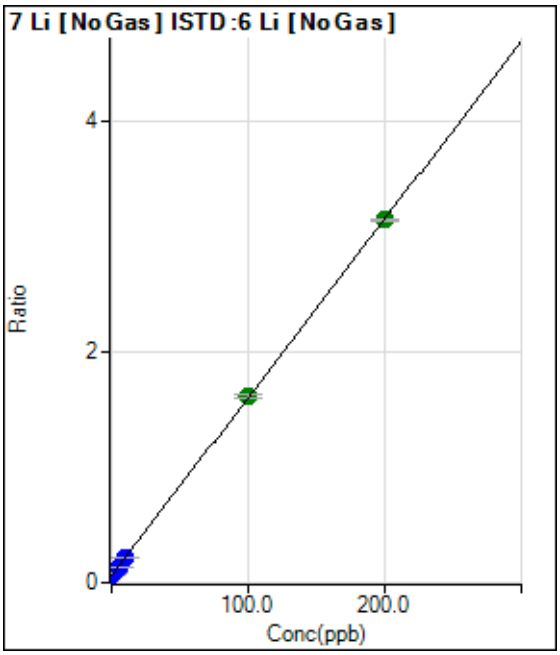
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	946959	1.34	1105285	85.68	70	120	
Ge	72	2	He	599059	1.02	635874	94.21	70	120	
Ge	72	1	No Gas	2132256	0.99	2313189	92.18	70	120	
In	115	1	No Gas	2778173	2.82	2972793	93.45	70	120	
Bi	209	1	No Gas	3254753	1.06	3337431	97.52	70	120	

Calibration for 093_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\062121A.b\
Analysis File: 062121A.batch.bin
DA Date-Time: 6/21/2021 7:27:29 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	086CALB.d	CAL BLK	6/21/2021 3:37:22 PM
2	087CALS.d	2/10/200	6/21/2021 3:39:21 PM
3	088CALS.d	5/25/500	6/21/2021 3:41:20 PM
4	089CALS.d	10/50/100	6/21/2021 3:43:19 PM
5	090CALS.d	100/500/10K	6/21/2021 3:45:17 PM
6	091CALS.d	200/1000/20K	6/21/2021 3:47:10 PM

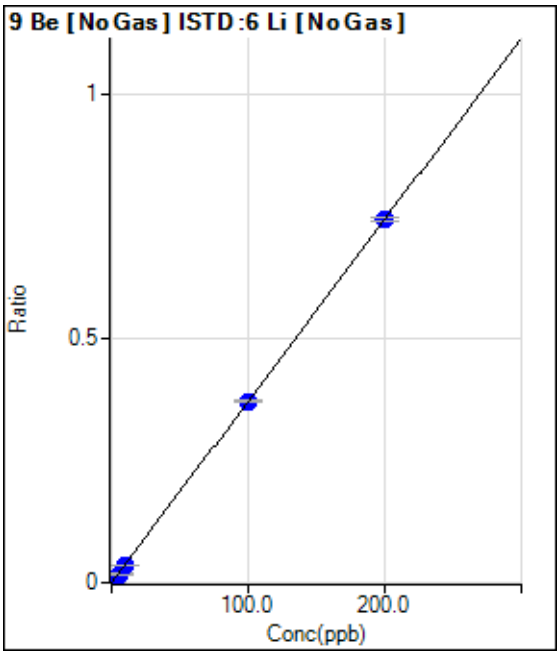
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68019.94	0.0615	P	0.6
2	☐	2.000	1.928	99162.50	0.0912	P	1.0
3	☐	5.000	4.699	145432.74	0.1339	P	2.6
4	☐	10.000	9.774	223636.70	0.2121	P	0.5
5	☐	100.000	100.639	1568590.91	1.6120	A	2.5
6	☐	200.000	199.700	2946313.18	3.1382	A	0.7

y = 0.0154 * x + 0.0615
R = 1.0000
DL = 0.07595
BEC = 3.994

Weight: <None>
Min Conc: <None>

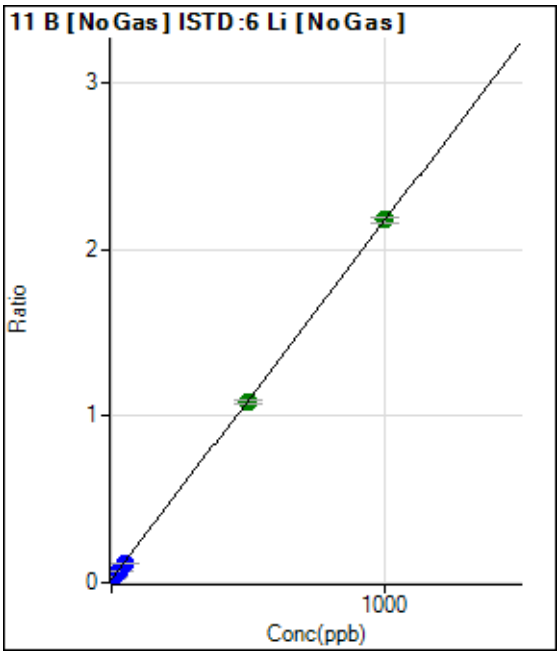


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	43.4
2	☐	2.000	1.856	7503.72	0.0069	P	2.9
3	☐	5.000	4.735	19114.70	0.0176	P	2.2
4	☐	10.000	9.428	36946.64	0.0350	P	0.6
5	☐	100.000	100.126	362133.63	0.3721	P	1.7
6	☐	200.000	199.973	697718.66	0.7432	P	0.9

y = 0.0037 * x + 6.0327E-006
R = 1.0000
DL = 0.002112
BEC = 0.001623

Weight: <None>
Min Conc: <None>

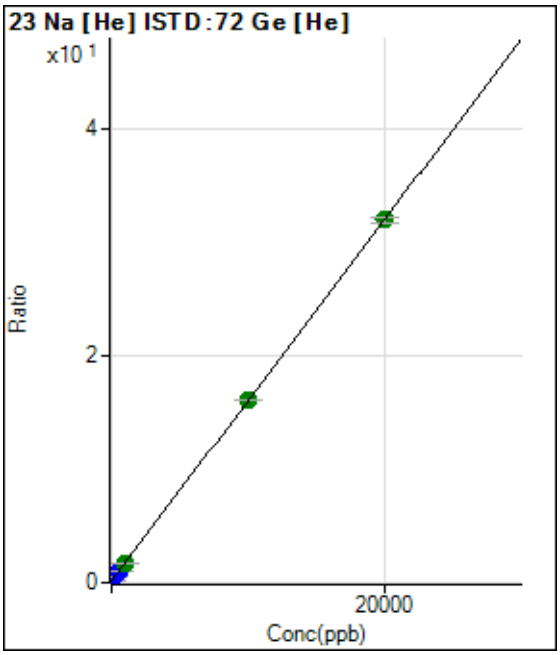
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	21484.82	0.0194	P	1.4
2	☐	10.000	8.167	40247.56	0.0370	P	2.6
3	☐	25.000	21.582	71599.83	0.0659	P	3.2
4	☐	50.000	45.066	122860.76	0.1165	P	1.5
5	☐	500.000	495.208	1057445.22	1.0865	A	1.8
6	☐	1000.000	1002.746	2046720.49	2.1801	A	1.4

y = 0.0022 * x + 0.0194
R = 1.0000
DL = 0.3809
BEC = 9.021

Weight: <None>
Min Conc: <None>

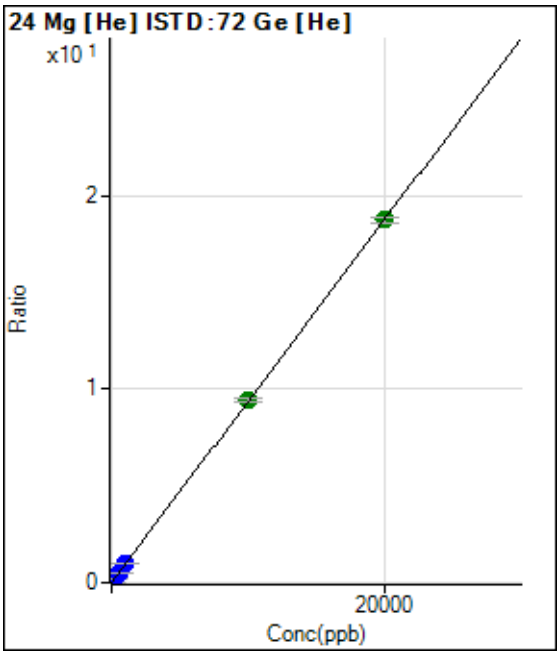


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92545.28	0.1455	P	1.6
2	☐	200.000	200.534	295422.15	0.4651	P	0.3
3	☐	500.000	500.253	596527.66	0.9426	P	1.0
4	☐	1000.000	990.476	1081174.52	1.7238	A	1.3
5	☐	10000.000	10008.556	9700740.27	16.0932	A	0.6
6	☐	20000.000	19996.187	18404037.64	32.0075	A	1.3

y = 0.0016 * x + 0.1455
R = 1.0000
DL = 4.384
BEC = 91.34

Weight: <None>
Min Conc: <None>

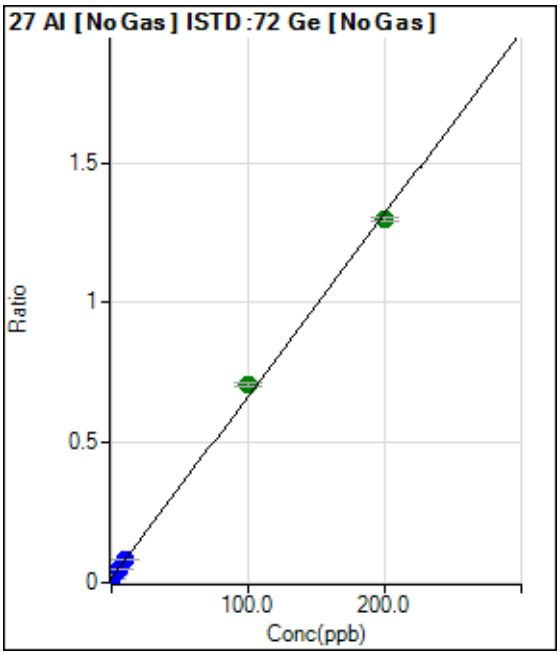
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	503.35	0.0008	P	11.9
2	☐	200.000	207.726	124344.32	0.1958	P	1.4
3	☐	500.000	516.337	307178.05	0.4854	P	1.4
4	☐	1000.000	1015.022	598052.74	0.9535	P	0.2
5	☐	10000.000	10014.329	5666488.87	9.4002	A	2.1
6	☐	20000.000	19991.599	10789586.92	18.7647	A	1.3

y = 9.3859E-004 * x + 7.9201E-004
R = 1.0000
DL = 0.3023
BEC = 0.8438

Weight: <None>
Min Conc: <None>

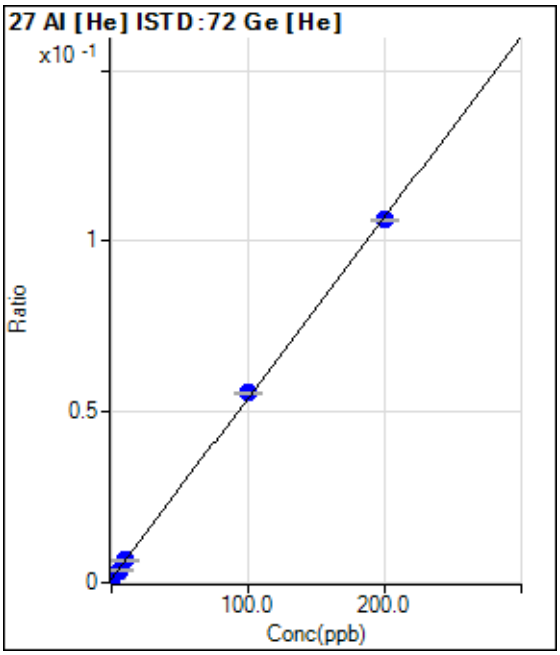


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36070.66	0.0156	P	3.0
2	☐	2.000	1.967	65423.44	0.0284	P	1.4
3	☐	5.000	4.979	108373.45	0.0480	P	1.2
4	☐	10.000	10.338	185657.82	0.0829	P	1.4
5	☐	100.000	106.455	1513402.69	0.7086	A	1.3
6	☐	200.000	196.757	2705259.02	1.2965	A	0.9

y = 0.0065 * x + 0.0156
R = 0.9993
DL = 0.215
BEC = 2.396

Weight: <None>
Min Conc: <None>

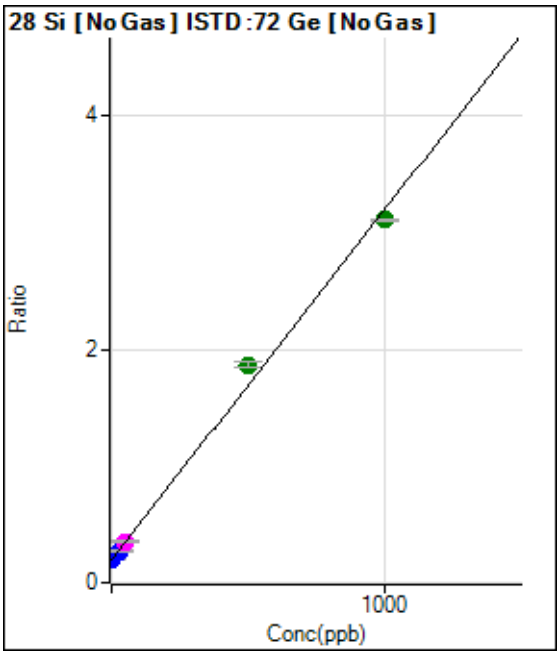
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	736.70	0.0012	P	12.1
2	☐	2.000	2.046	1423.44	0.0022	P	7.7
3	☐	5.000	4.459	2226.88	0.0035	P	12.9
4	☐	10.000	10.070	4070.67	0.0065	P	4.6
5	☐	100.000	102.918	33537.55	0.0556	P	1.1
6	☐	200.000	198.550	61100.94	0.1063	P	0.7

y = 5.2934E-004 * x + 0.0012
R = 0.9998
DL = 0.797
BEC = 2.189

Weight: <None>
Min Conc: <None>

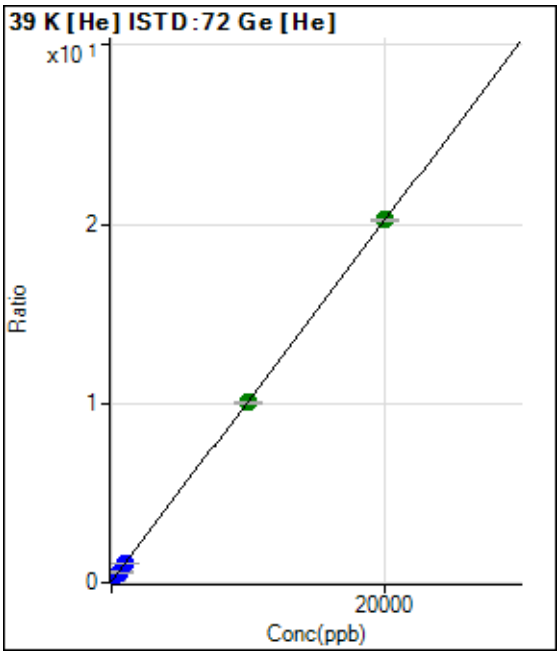


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	450649.43	0.1948	P	1.7
2	☐	10.000	9.732	516125.28	0.2240	P	0.9
3	☐	25.000	25.270	610965.65	0.2707	P	1.6
4	☐	50.000	51.852	784934.73	0.3504	M	3.0
5	☐	500.000	557.079	3986147.54	1.8666	A	3.0
6	☐	1000.000	971.364	6488457.19	3.1098	A	0.4

y = 0.0030 * x + 0.1948
R = 0.9977
DL = 3.25
BEC = 64.93

Weight: <None>
Min Conc: <None>

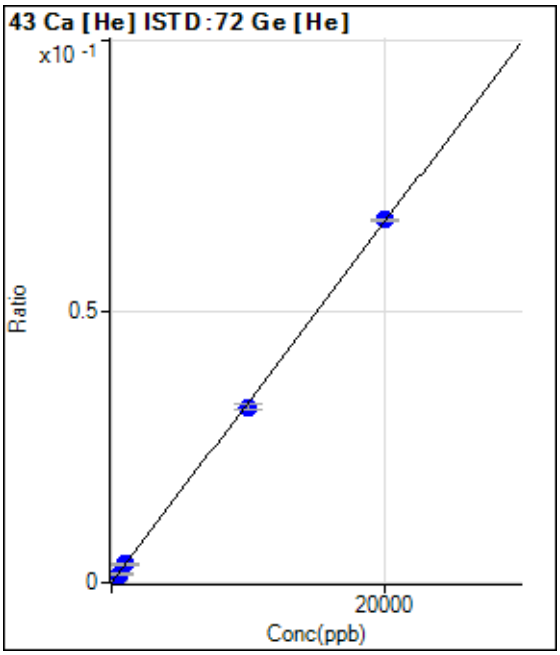
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55277.45	0.0869	P	1.2
2	☐	200.000	202.702	184698.28	0.2908	P	1.1
3	☐	500.000	498.213	372069.63	0.5880	P	1.1
4	☐	1000.000	984.264	675358.64	1.0767	P	0.7
5	☐	10000.000	9920.357	6065965.33	10.0631	A	0.8
6	☐	20000.000	20040.626	11637946.08	20.2403	A	0.9

y = 0.0010 * x + 0.0869
R = 1.0000
DL = 3.078
BEC = 86.45

Weight: <None>
Min Conc: <None>

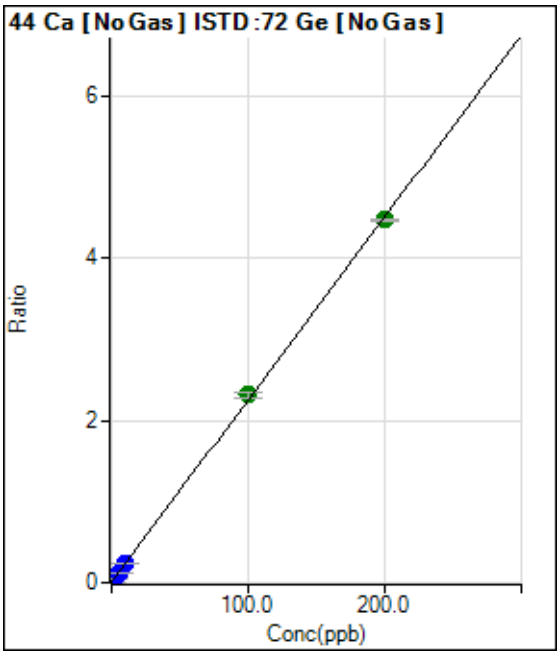


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	114.8
2	☐	200.000	164.713	360.01	0.0006	P	29.9
3	☐	500.000	457.006	973.39	0.0015	P	10.6
4	☐	1000.000	1020.353	2136.87	0.0034	P	6.4
5	☐	10000.000	9733.867	19480.81	0.0323	P	3.6
6	☐	20000.000	20133.477	38423.87	0.0668	P	0.8

y = 3.3181E-006 * x + 2.0927E-005
R = 0.9999
DL = 21.72
BEC = 6.307

Weight: <None>
Min Conc: <None>

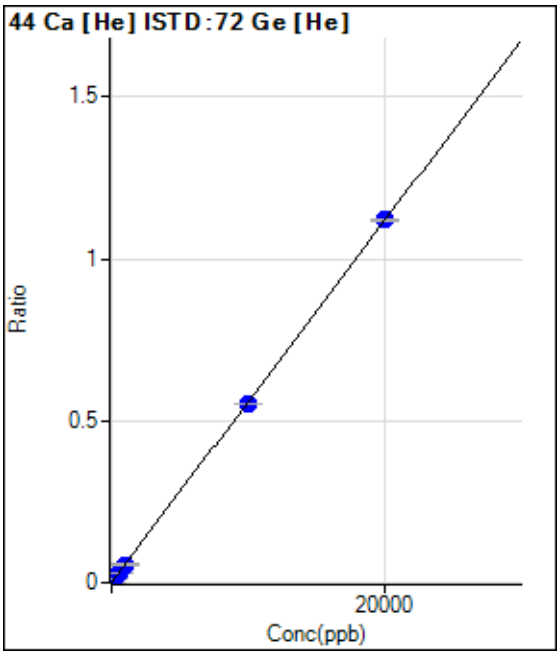
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15926.14	0.0069	P	1.2
2	☐	2.000	2.052	122138.11	0.0530	P	2.4
3	☐	5.000	5.128	275837.10	0.1222	P	0.9
4	☐	10.000	10.248	531489.09	0.2373	P	1.0
5	☐	100.000	102.756	4949187.11	2.3175	A	2.6
6	☐	200.000	198.606	9332433.61	4.4727	A	0.4

y = 0.0225 * x + 0.0069
R = 0.9999
DL = 0.0113
BEC = 0.3062

Weight: <None>
Min Conc: <None>

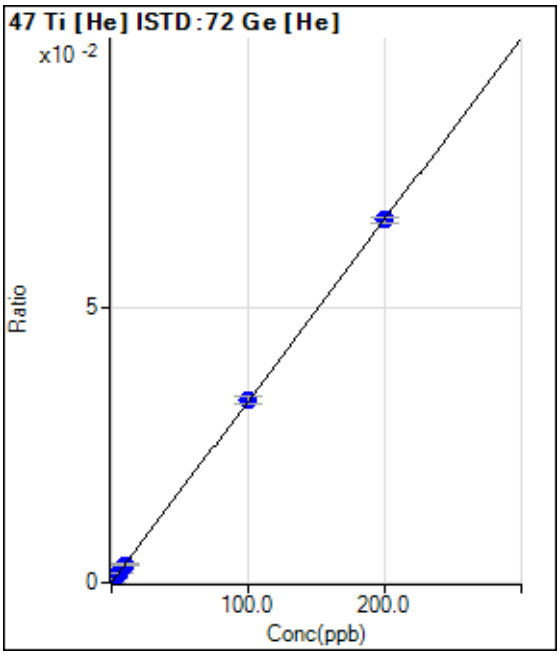


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490.07	0.0008	P	37.5
2	☐	200.000	189.515	7205.36	0.0113	P	3.2
3	☐	500.000	480.100	17434.63	0.0276	P	1.3
4	☐	1000.000	991.140	35161.85	0.0561	P	2.8
5	☐	10000.000	9876.690	332545.22	0.5517	P	0.2
6	☐	20000.000	20062.700	643932.63	1.1198	P	0.4

y = 5.5779E-005 * x + 7.7110E-004
R = 1.0000
DL = 15.55
BEC = 13.82

Weight: <None>
Min Conc: <None>

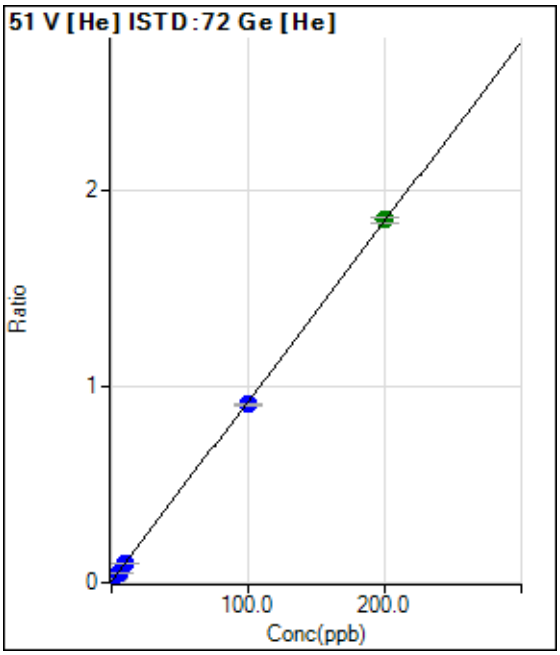
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	173.2
2	☐	2.000	1.730	373.34	0.0006	P	9.3
3	☐	5.000	5.223	1103.40	0.0017	P	16.1
4	☐	10.000	9.899	2063.53	0.0033	P	3.8
5	☐	100.000	100.251	19994.80	0.0332	P	4.3
6	☐	200.000	199.876	38019.82	0.0661	P	1.3

y = 3.3071E-004 * x + 1.5840E-005
R = 1.0000
DL = 0.2489
BEC = 0.0479

Weight: <None>
Min Conc: <None>

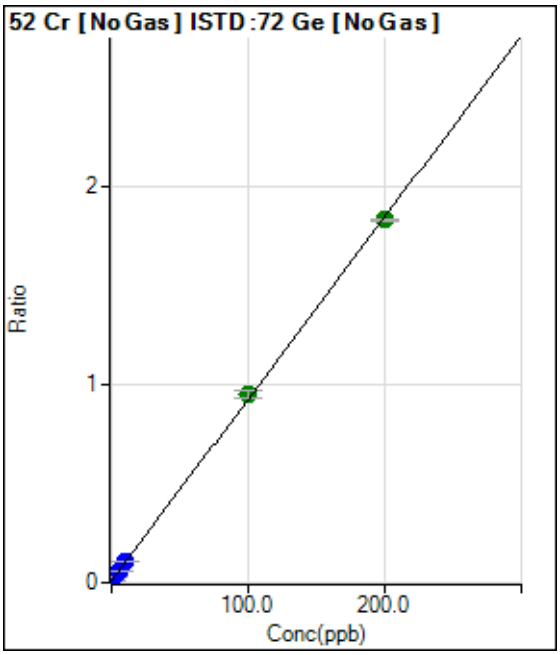


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4647.49	0.0073	P	4.8
2	☐	2.000	1.885	15611.15	0.0246	P	1.4
3	☐	5.000	4.821	32577.50	0.0515	P	2.0
4	☐	10.000	9.618	59856.56	0.0954	P	0.7
5	☐	100.000	98.322	547434.75	0.9082	P	0.6
6	☐	200.000	200.864	1062340.27	1.8477	A	1.7

y = 0.0092 * x + 0.0073
R = 1.0000
DL = 0.1145
BEC = 0.7978

Weight: <None>
Min Conc: <None>

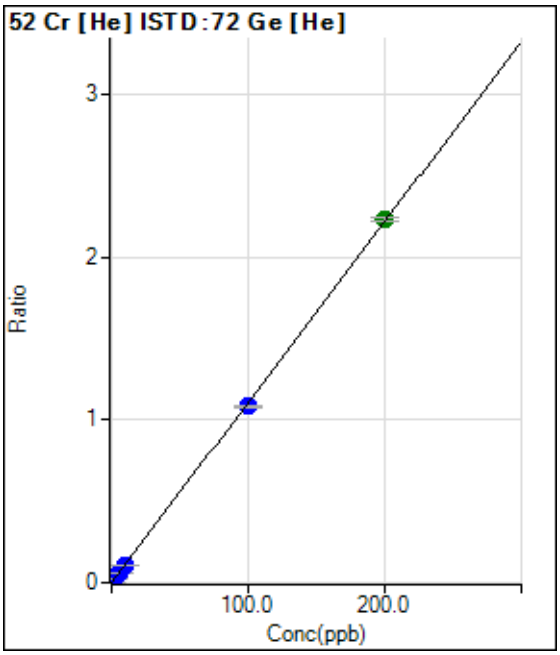
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20532.43	0.0089	P	1.6
2	☐	2.000	1.958	61782.61	0.0268	P	0.9
3	☐	5.000	5.018	123829.41	0.0549	P	0.2
4	☐	10.000	10.228	229763.48	0.1026	P	0.7
5	☐	100.000	102.744	2029420.59	0.9503	A	3.3
6	☐	200.000	198.616	3815426.51	1.8287	A	0.8

y = 0.0092 * x + 0.0089
R = 0.9999
DL = 0.04658
BEC = 0.9688

Weight: <None>
Min Conc: <None>

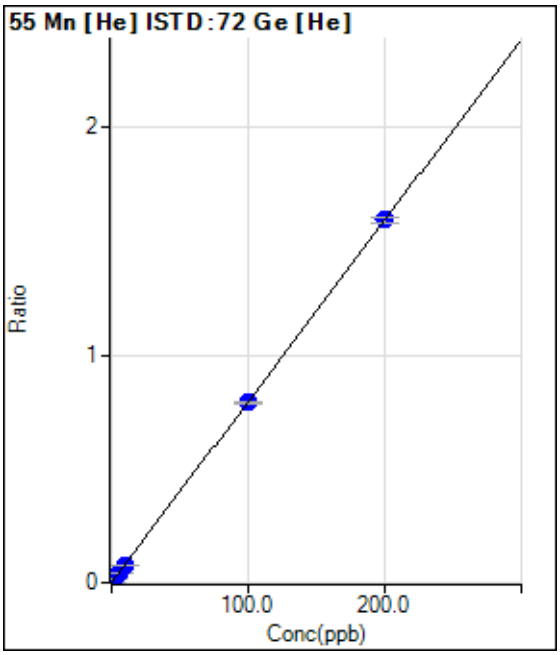


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1130.07	0.0018	P	15.5
2	☐	2.000	1.941	14784.81	0.0233	P	1.8
3	☐	5.000	4.786	34664.16	0.0548	P	1.6
4	☐	10.000	9.636	68039.09	0.1085	P	1.9
5	☐	100.000	97.728	653355.41	1.0839	P	1.5
6	☐	200.000	201.160	1281749.33	2.2292	A	1.0

y = 0.0111 * x + 0.0018
R = 0.9999
DL = 0.07458
BEC = 0.1606

Weight: <None>
Min Conc: <None>

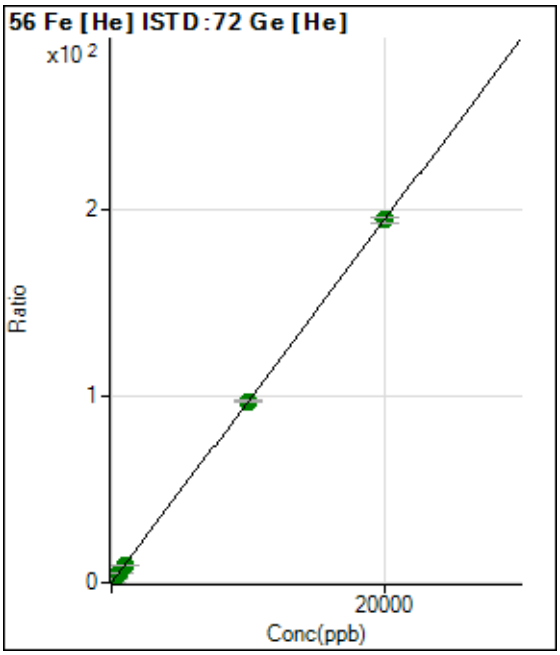
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	416.68	0.0007	P	18.6
2	☐	2.000	1.989	10457.54	0.0165	P	3.2
3	☐	5.000	5.037	25741.25	0.0407	P	2.6
4	☐	10.000	9.866	49573.72	0.0790	P	1.7
5	☐	100.000	99.277	475816.31	0.7894	P	1.2
6	☐	200.000	200.367	915619.67	1.5925	P	1.3

y = 0.0079 * x + 6.5573E-004
R = 1.0000
DL = 0.04613
BEC = 0.08254

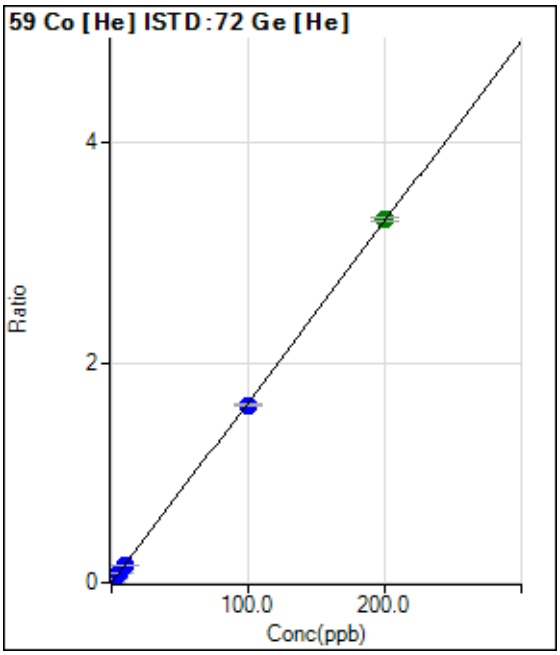
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14624.74	0.0230	P	1.2
2	☐	200.000	202.800	1265785.76	1.9927	A	1.3
3	☐	500.000	506.094	3125284.22	4.9385	A	1.0
4	☐	1000.000	966.068	5899880.54	9.4061	A	1.4
5	☐	10000.000	10004.367	58585329.13	97.1917	A	1.9
6	☐	20000.000	19999.333	111697575.00	194.2691	A	1.4

y = 0.0097 * x + 0.0230
R = 1.0000
DL = 0.08814
BEC = 2.368

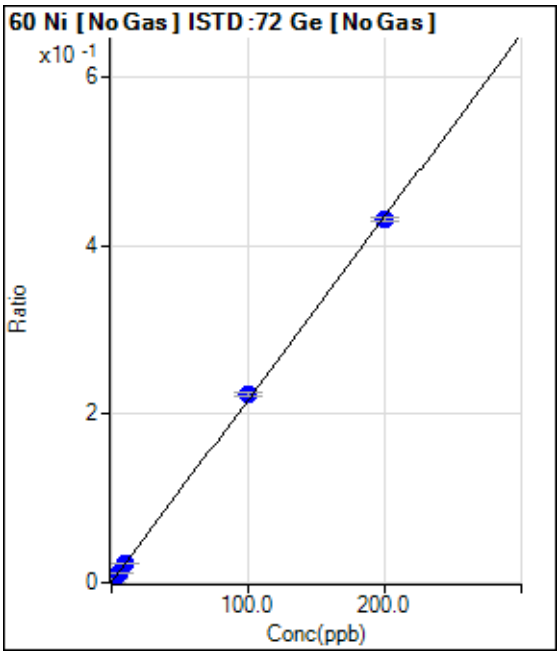
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	114.8
2	☐	2.000	1.991	20776.17	0.0327	P	2.2
3	☐	5.000	4.917	51079.51	0.0807	P	0.7
4	☐	10.000	9.822	101110.27	0.1612	P	0.7
5	☐	100.000	98.166	970912.12	1.6107	P	0.9
6	☐	200.000	200.928	1895620.08	3.2968	A	1.2

y = 0.0164 * x + 4.1855E-005
R = 0.9999
DL = 0.008785
BEC = 0.002551

Weight: <None>
Min Conc: <None>

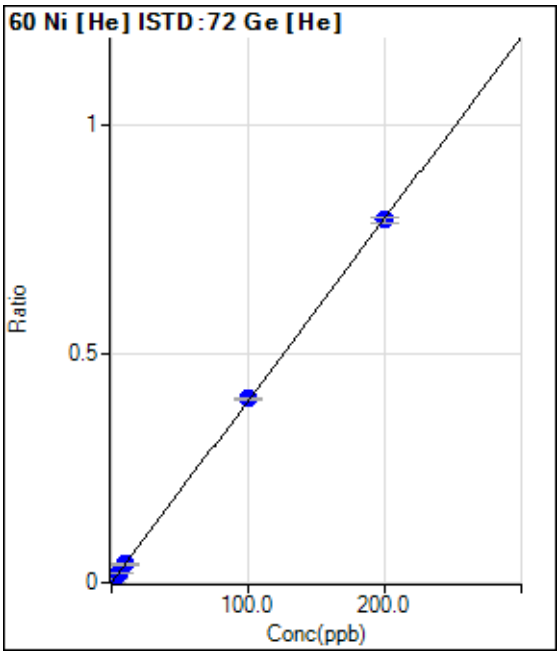


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	873.38	0.0004	P	17.0
2	☐	2.000	2.095	11338.19	0.0049	P	0.9
3	☐	5.000	5.060	25621.10	0.0113	P	1.4
4	☐	10.000	10.364	51172.97	0.0228	P	1.2
5	☐	100.000	103.306	479155.28	0.2244	P	1.9
6	☐	200.000	198.326	897961.76	0.4304	P	1.0

y = 0.0022 * x + 3.7795E-004
R = 0.9998
DL = 0.08882
BEC = 0.1743

Weight: <None>
Min Conc: <None>

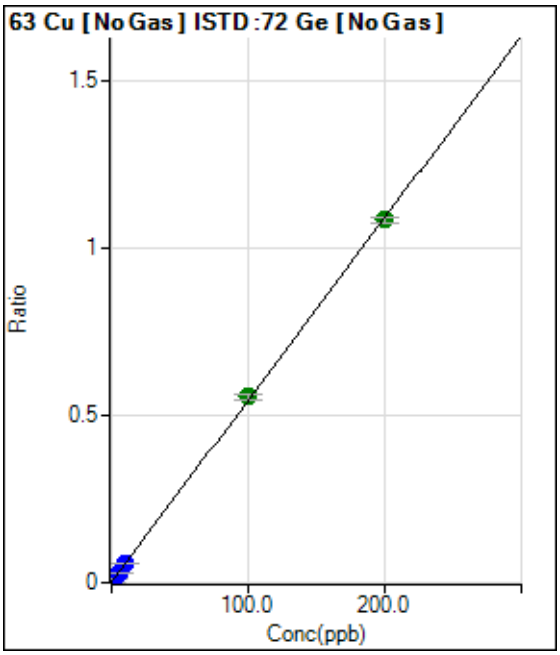
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	173.34	0.0003	P	19.2
2	☐	2.000	2.046	5334.50	0.0084	P	4.5
3	☐	5.000	4.975	12676.14	0.0200	P	1.9
4	☐	10.000	10.052	25210.28	0.0402	P	1.6
5	☐	100.000	101.157	242335.02	0.4020	P	1.0
6	☐	200.000	199.419	455527.21	0.7923	P	1.6

y = 0.0040 * x + 2.7280E-004
R = 1.0000
DL = 0.03952
BEC = 0.06869

Weight: <None>
Min Conc: <None>

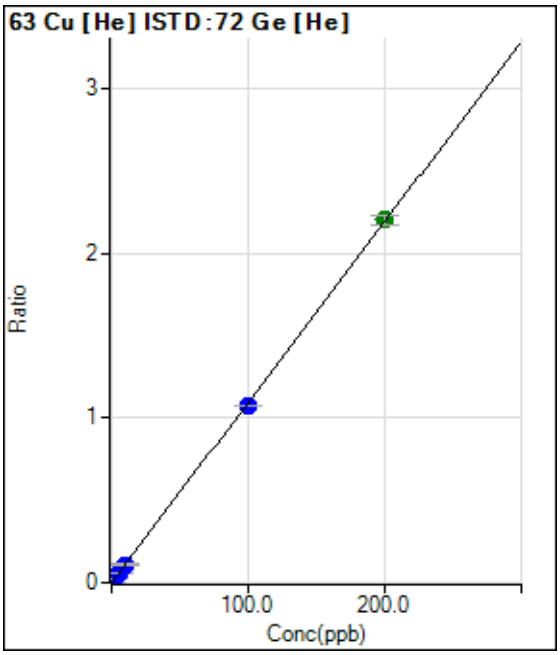


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3650.55	0.0016	P	6.7
2	☐	2.000	2.070	29632.58	0.0129	P	0.8
3	☐	5.000	5.187	67366.60	0.0298	P	2.6
4	☐	10.000	10.003	125636.78	0.0561	P	1.4
5	☐	100.000	101.976	1190283.76	0.5574	A	2.7
6	☐	200.000	199.007	2266410.96	1.0862	A	1.5

y = 0.0055 * x + 0.0016
R = 0.9999
DL = 0.05856
BEC = 0.2897

Weight: <None>
Min Conc: <None>

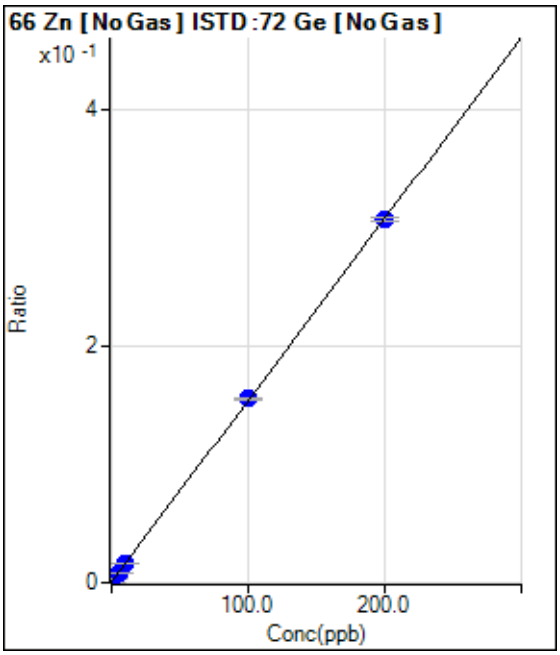
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1126.74	0.0018	P	8.6
2	☐	2.000	2.028	15242.11	0.0240	P	2.9
3	☐	5.000	5.107	36529.36	0.0577	P	1.4
4	☐	10.000	9.916	69249.38	0.1104	P	1.1
5	☐	100.000	97.937	647833.26	1.0747	P	0.5
6	☐	200.000	201.033	1267249.85	2.2042	A	2.5

y = 0.0110 * x + 0.0018
R = 0.9999
DL = 0.04186
BEC = 0.1618

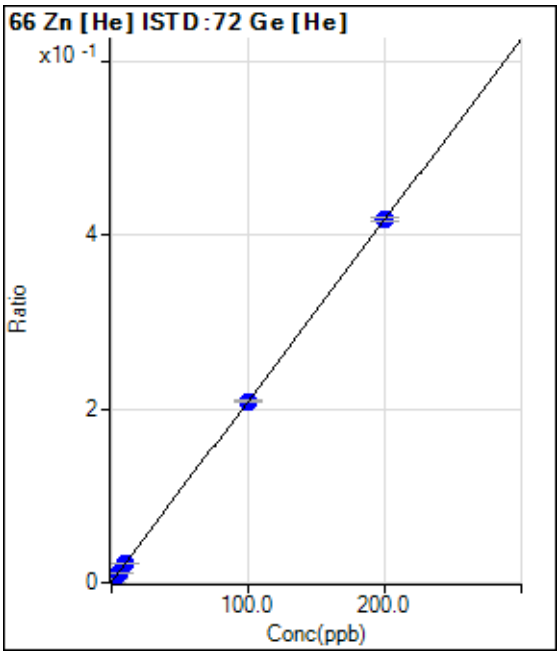
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1460.10	0.0006	P	11.4
2	☐	2.000	2.274	9483.48	0.0041	P	5.9
3	☐	5.000	5.064	18943.53	0.0084	P	3.4
4	☐	10.000	10.191	36395.79	0.0163	P	2.2
5	☐	100.000	100.981	331902.37	0.1554	P	1.5
6	☐	200.000	199.495	639284.05	0.3064	P	1.2

y = 0.0015 * x + 6.3158E-004
R = 1.0000
DL = 0.1405
BEC = 0.4121

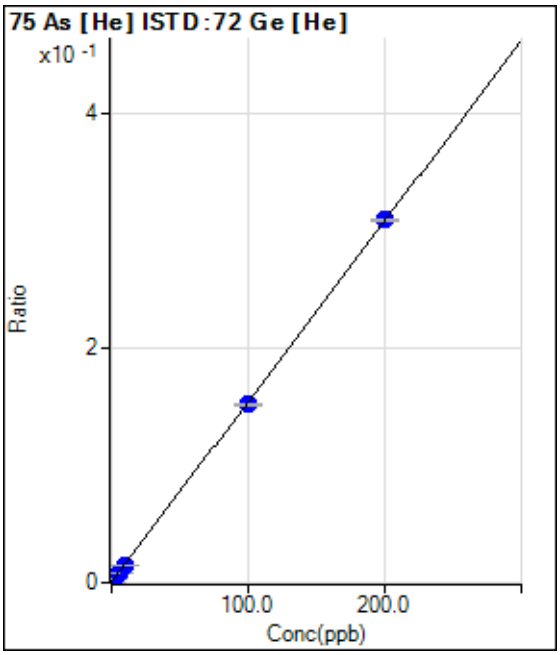
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490.02	0.0008	P	17.7
2	☐	2.000	2.176	3367.15	0.0053	P	1.4
3	☐	5.000	5.090	7195.36	0.0114	P	1.9
4	☐	10.000	10.005	13550.34	0.0216	P	1.9
5	☐	100.000	99.925	125882.67	0.2088	P	1.1
6	☐	200.000	200.033	239927.48	0.4173	P	1.2

y = 0.0021 * x + 7.7015E-004
R = 1.0000
DL = 0.1963
BEC = 0.3699

Weight: <None>
Min Conc: <None>

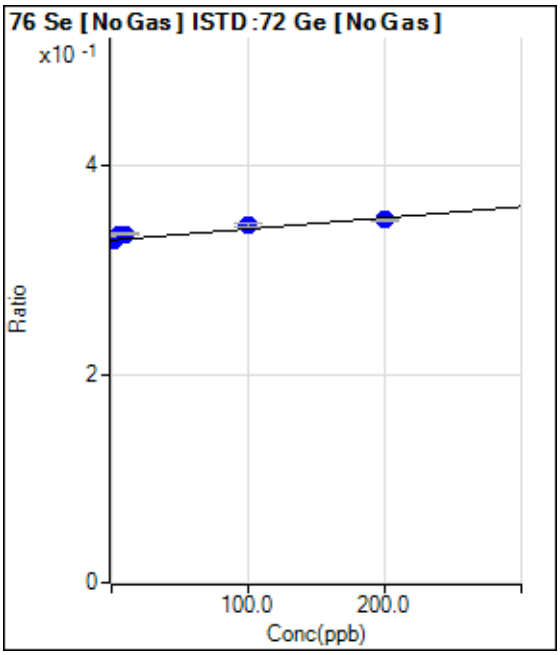


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	224.45	0.0004	P	19.1
2	☐	2.000	1.962	2141.29	0.0034	P	4.6
3	☐	5.000	4.771	4868.68	0.0077	P	1.5
4	☐	10.000	9.657	9541.19	0.0152	P	4.4
5	☐	100.000	98.610	91664.38	0.1521	P	0.7
6	☐	200.000	200.718	177763.01	0.3092	P	0.6

y = 0.0015 * x + 3.5327E-004
R = 1.0000
DL = 0.1318
BEC = 0.2296

Weight: <None>
Min Conc: <None>

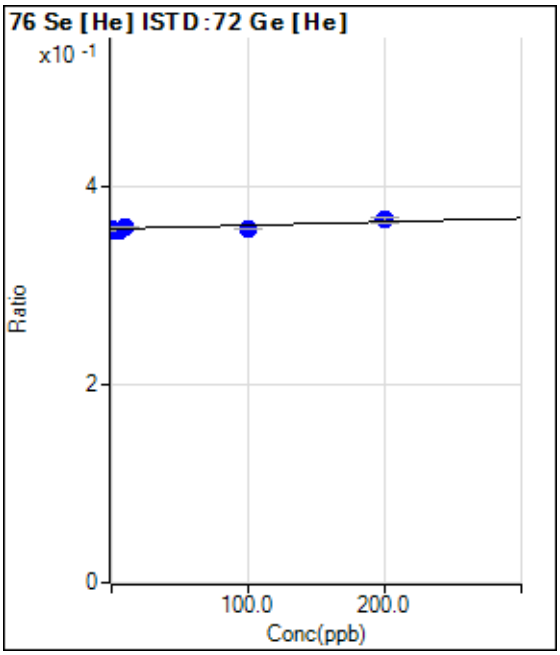
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	759892.25	0.3285	P	1.6
2	☐	2.000	3.485	757719.16	0.3289	P	0.8
3	☐	5.000	55.595	755046.91	0.3345	P	1.1
4	☐	10.000	53.494	748649.31	0.3343	P	0.3
5	☐	100.000	132.293	731964.05	0.3427	P	0.9
6	☐	200.000	180.399	725828.66	0.3479	P	0.8

y = 1.0722E-004 * x + 0.3285
R = 0.9413
DL = 146
BEC = 3064

Weight: <None>
Min Conc: <None>

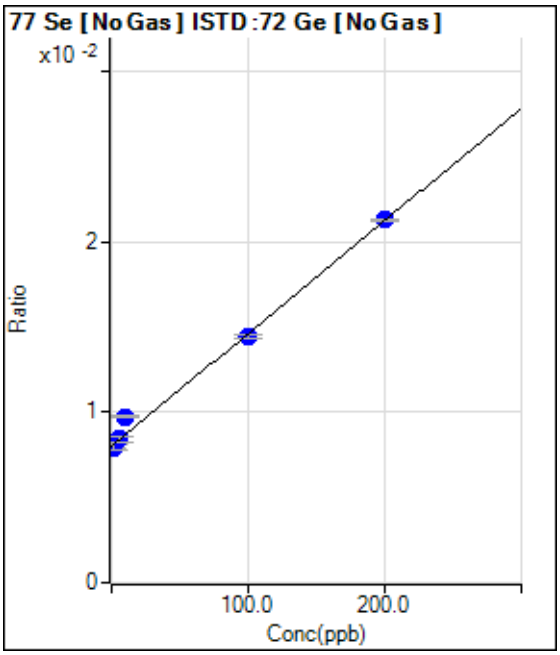


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226820.80	0.3567	P	1.7
2	☐	2.000	-58.971	225254.18	0.3546	P	1.4
3	☐	5.000	-44.110	224763.34	0.3552	P	0.2
4	☐	10.000	31.691	224463.04	0.3579	P	0.6
5	☐	100.000	-1.055	215013.82	0.3567	P	0.3
6	☐	200.000	251.280	210260.60	0.3657	P	1.3

y = 3.5645E-005 * x + 0.3567
R = 0.8785
DL = 509.4
BEC = 1.001E+04

Weight: <None>
Min Conc: <None>

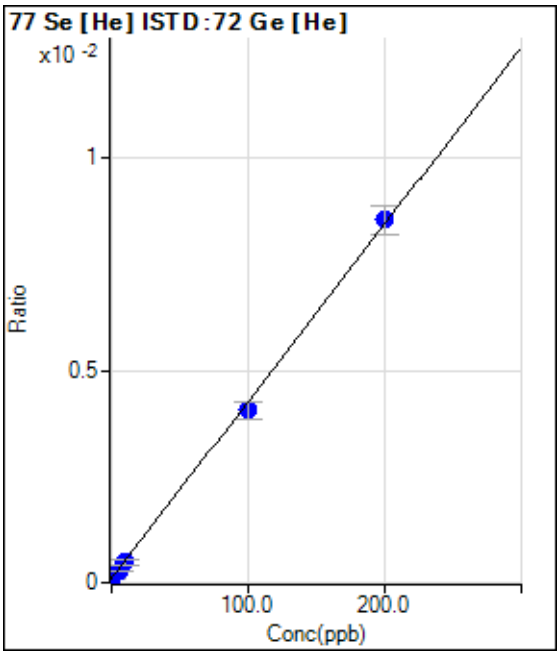
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18556.42	0.0080	P	2.2
2	☐	2.000	-1.668	18232.70	0.0079	P	4.3
3	☐	5.000	6.183	19037.14	0.0084	P	3.5
4	☐	10.000	25.700	21771.25	0.0097	P	1.1
5	☐	100.000	97.024	30825.70	0.0144	P	1.5
6	☐	200.000	200.710	44410.07	0.0213	P	0.8

y = 6.6074E-005 * x + 0.0080
R = 0.9963
DL = 8.149
BEC = 121.4

Weight: <None>
Min Conc: <None>

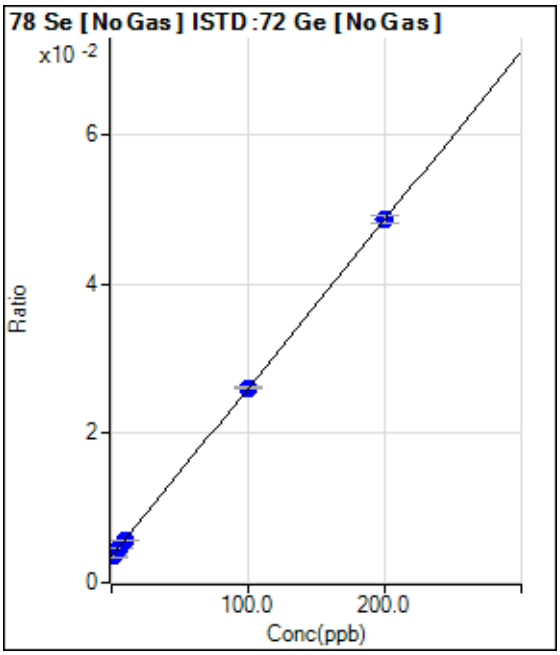


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.33	0.0001	P	33.1
2	☐	2.000	2.643	133.33	0.0002	P	17.1
3	☐	5.000	4.181	173.34	0.0003	P	7.3
4	☐	10.000	9.203	303.34	0.0005	P	22.1
5	☐	100.000	95.081	2450.27	0.0041	P	10.4
6	☐	200.000	202.513	4911.00	0.0085	P	8.0

y = 4.1698E-005 * x + 9.9648E-005
R = 0.9996
DL = 2.375
BEC = 2.39

Weight: <None>
Min Conc: <None>

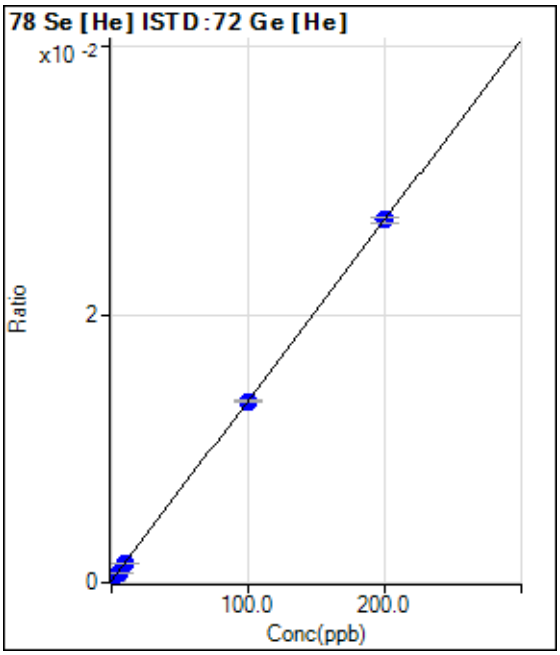
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8102.57	0.0035	P	8.5
2	☐	2.000	0.347	8252.64	0.0036	P	6.3
3	☐	5.000	4.710	10310.77	0.0046	P	0.1
4	☐	10.000	9.561	12682.82	0.0057	P	2.4
5	☐	100.000	100.210	55795.71	0.0261	P	1.3
6	☐	200.000	199.941	101463.98	0.0486	P	2.1

y = 2.2572E-004 * x + 0.0035
R = 1.0000
DL = 3.96
BEC = 15.53

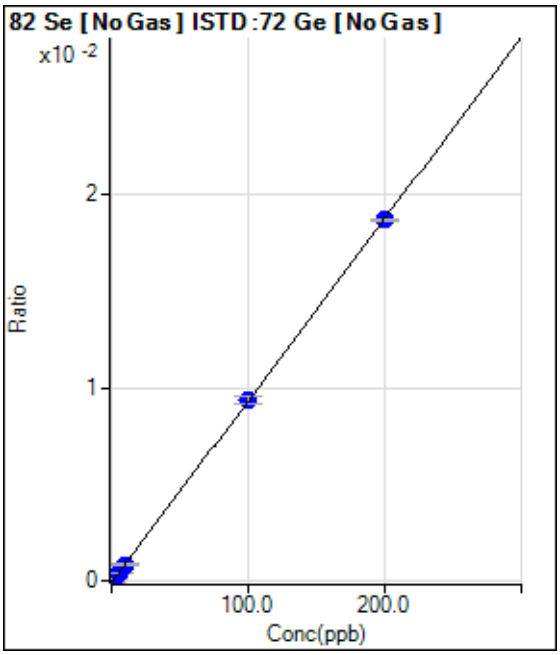
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.33	0.0001	P	2.4
2	☐	2.000	1.817	232.67	0.0004	P	1.1
3	☐	5.000	4.424	454.01	0.0007	P	13.1
4	☐	10.000	9.492	878.03	0.0014	P	3.9
5	☐	100.000	99.773	8171.83	0.0136	P	1.1
6	☐	200.000	200.155	15567.00	0.0271	P	1.6

y = 1.3466E-004 * x + 1.2161E-004
R = 1.0000
DL = 0.06546
BEC = 0.9031

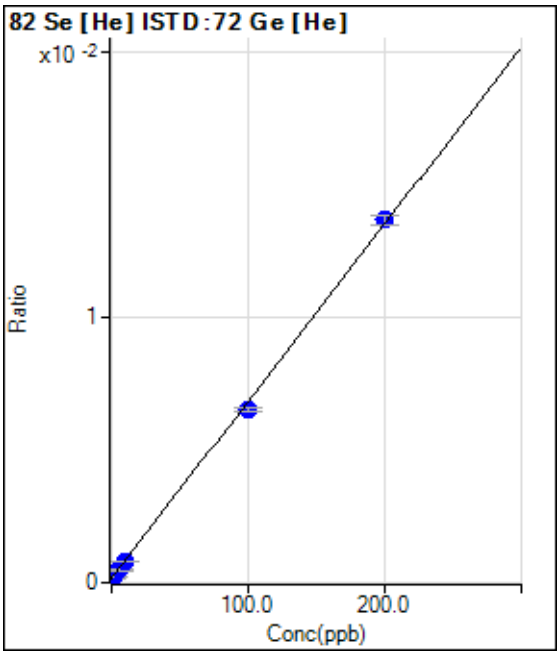
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-124.72	-0.0001	P	-36.1
2	☐	2.000	2.395	392.73	0.0002	P	18.9
3	☐	5.000	5.095	955.71	0.0004	P	6.6
4	☐	10.000	9.902	1956.13	0.0009	P	7.2
5	☐	100.000	100.459	19974.92	0.0094	P	3.7
6	☐	200.000	199.769	38920.62	0.0187	P	0.4

y = 9.3640E-005 * x - 5.3866E-005
R = 1.0000
DL = 0.6237
BEC = -0.5752

Weight: <None>
Min Conc: <None>

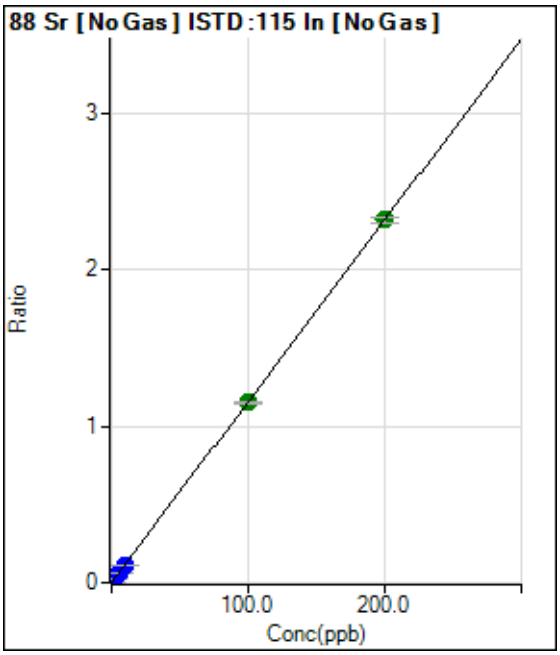


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	106.67	0.0002	P	33.6
2	☐	2.000	0.709	136.67	0.0002	P	9.1
3	☐	5.000	4.596	300.01	0.0005	P	15.8
4	☐	10.000	9.121	486.69	0.0008	P	2.1
5	☐	100.000	95.238	3927.31	0.0065	P	3.0
6	☐	200.000	202.448	7855.76	0.0137	P	2.5

y = 6.6649E-005 * x + 1.6801E-004
R = 0.9996
DL = 2.537
BEC = 2.521

Weight: <None>
Min Conc: <None>

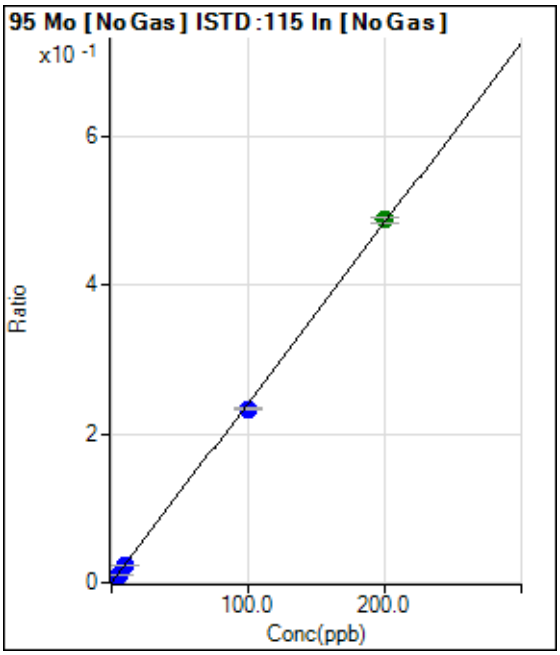
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1220.08	0.0004	P	7.0
2	☐	2.000	2.016	69945.82	0.0238	P	0.5
3	☐	5.000	4.823	167032.76	0.0563	P	1.5
4	☐	10.000	9.722	332754.19	0.1131	P	1.6
5	☐	100.000	99.457	3267674.95	1.1527	A	0.7
6	☐	200.000	200.289	6279673.86	2.3210	A	1.6

y = 0.0116 * x + 4.1073E-004
R = 1.0000
DL = 0.007457
BEC = 0.03545

Weight: <None>
Min Conc: <None>

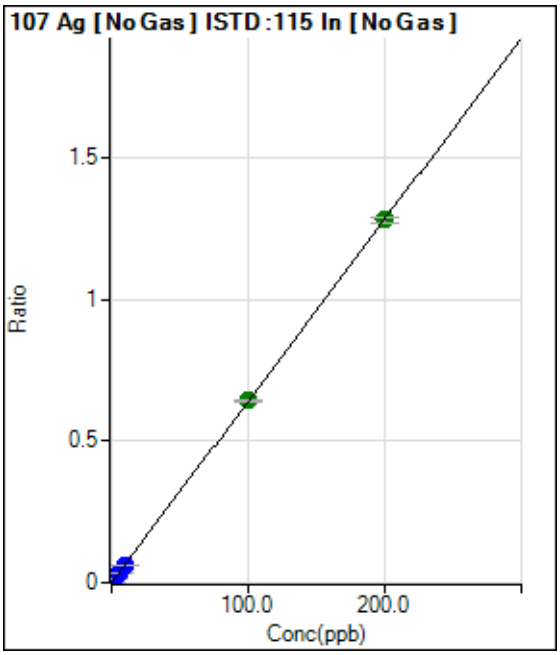


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0000	P	33.3
2	☐	2.000	1.976	14127.74	0.0048	P	5.4
3	☐	5.000	4.739	34083.94	0.0115	P	2.0
4	☐	10.000	9.502	67718.77	0.0230	P	2.5
5	☐	100.000	96.700	663338.90	0.2340	P	0.6
6	☐	200.000	201.682	1320406.49	0.4880	A	1.5

y = 0.0024 * x + 2.0202E-005
R = 0.9998
DL = 0.008351
BEC = 0.008349

Weight: <None>
Min Conc: <None>

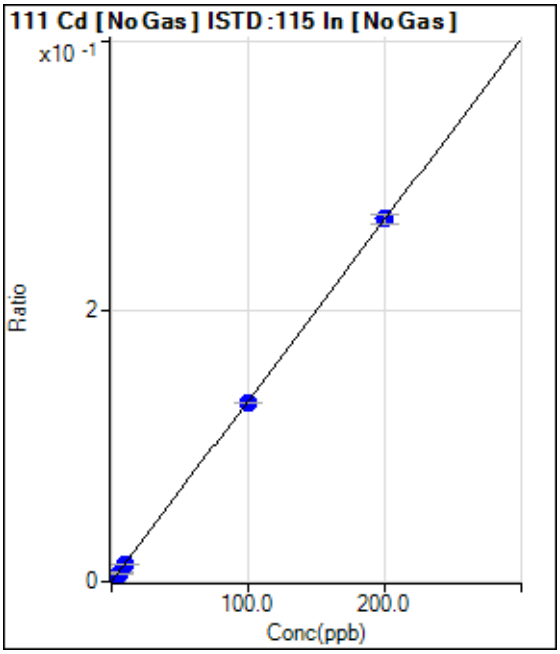
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	470.02	0.0002	P	14.6
2	☐	2.000	1.989	37978.09	0.0129	P	0.7
3	☐	5.000	4.920	94059.73	0.0317	P	0.9
4	☐	10.000	9.646	182491.79	0.0620	P	0.6
5	☐	100.000	100.196	1821248.36	0.6425	A	0.5
6	☐	200.000	199.922	3467939.53	1.2818	A	1.9

y = 0.0064 * x + 1.5802E-004
R = 1.0000
DL = 0.01076
BEC = 0.02465

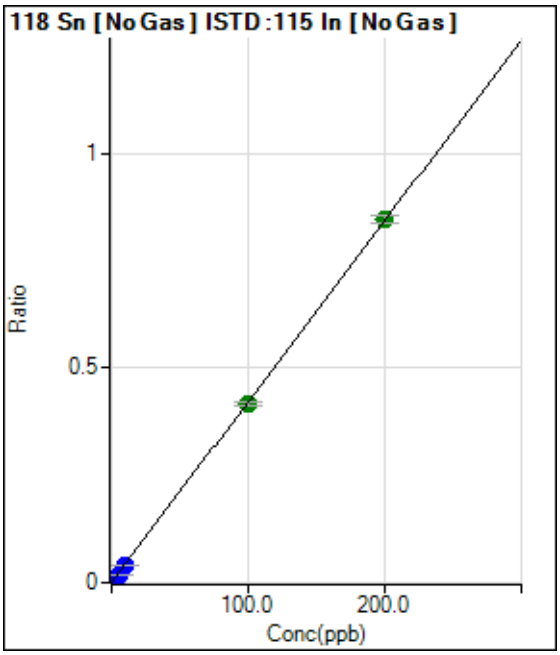
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	115.6
2	☐	2.000	1.990	7855.78	0.0027	P	2.1
3	☐	5.000	4.755	18900.49	0.0064	P	4.5
4	☐	10.000	9.624	37934.77	0.0129	P	2.2
5	☐	100.000	98.924	375455.28	0.1324	P	0.9
6	☐	200.000	200.563	726488.29	0.2685	P	2.4

y = 0.0013 * x + 4.5463E-006
R = 1.0000
DL = 0.01177
BEC = 0.003396

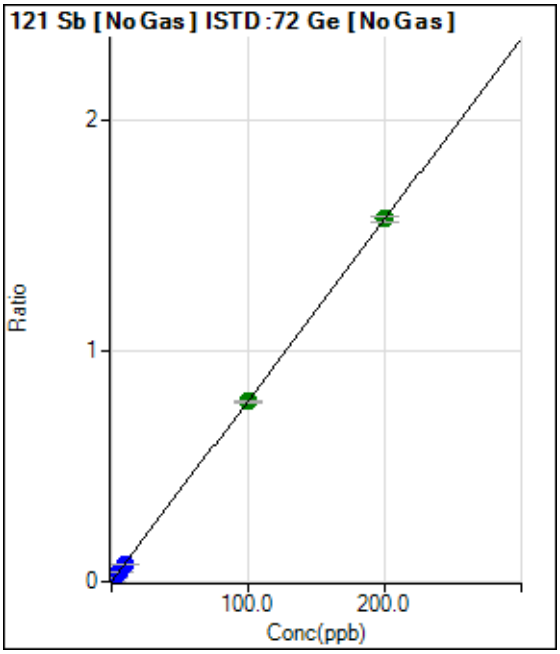
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2153.55	0.0007	P	4.1
2	☐	2.000	1.891	25558.46	0.0087	P	4.2
3	☐	5.000	4.569	59226.80	0.0200	P	0.9
4	☐	10.000	9.281	117158.76	0.0398	P	1.3
5	☐	100.000	98.769	1180849.41	0.4166	A	2.7
6	☐	200.000	200.663	2287697.00	0.8456	A	2.2

y = 0.0042 * x + 7.2409E-004
R = 1.0000
DL = 0.02125
BEC = 0.172

Weight: <None>
Min Conc: <None>

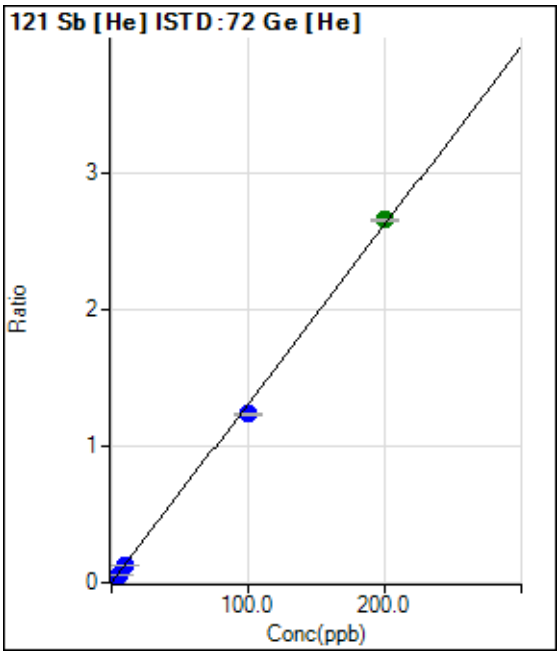


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1980.19	0.0009	P	6.8
2	☐	2.000	1.923	36742.01	0.0159	P	0.8
3	☐	5.000	4.718	85547.85	0.0379	P	1.0
4	☐	10.000	9.476	168532.25	0.0753	P	0.8
5	☐	100.000	99.360	1667848.62	0.7809	A	0.4
6	☐	200.000	200.354	3283169.12	1.5737	A	1.9

y = 0.0079 * x + 8.5584E-004
R = 1.0000
DL = 0.02224
BEC = 0.109

Weight: <None>
Min Conc: <None>

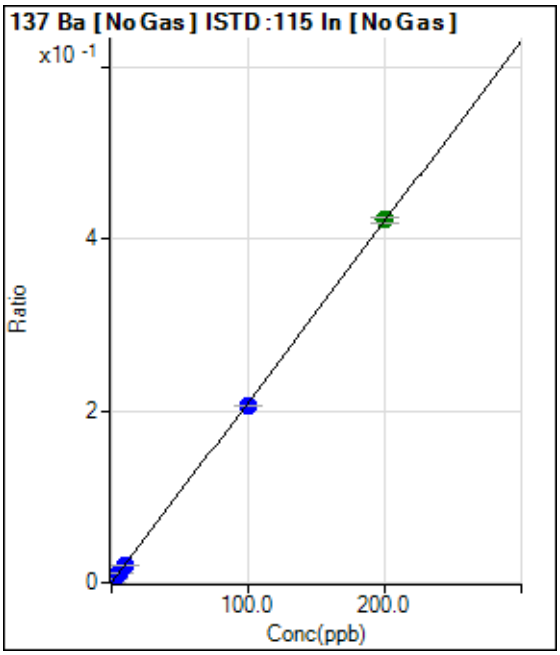
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1030.06	0.0016	P	12.4
2	☐	2.000	1.879	16620.80	0.0262	P	3.7
3	☐	5.000	4.575	38847.83	0.0614	P	1.1
4	☐	10.000	9.081	75423.56	0.1203	P	1.3
5	☐	100.000	94.356	744001.58	1.2343	P	0.9
6	☐	200.000	202.880	1524955.03	2.6520	A	0.4

y = 0.0131 * x + 0.0016
R = 0.9995
DL = 0.04613
BEC = 0.1241

Weight: <None>
Min Conc: <None>

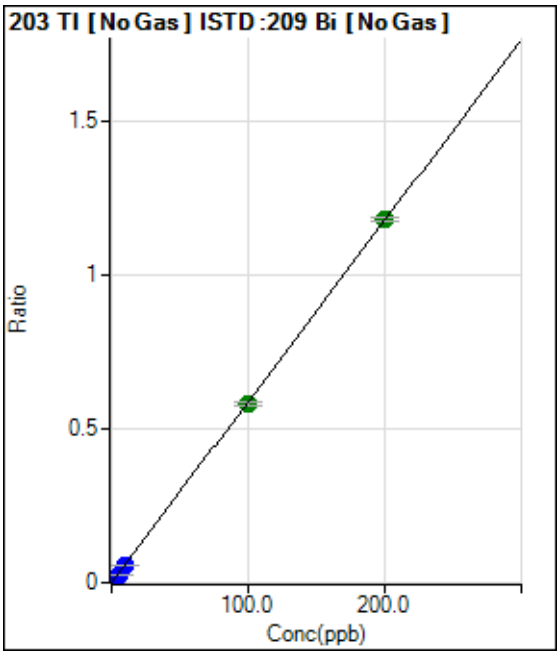


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	446.69	0.0001	P	21.0
2	☐	2.000	1.944	12459.53	0.0042	P	5.0
3	☐	5.000	4.806	30415.92	0.0103	P	0.9
4	☐	10.000	9.515	59302.14	0.0201	P	1.2
5	☐	100.000	98.148	585182.56	0.2064	P	0.4
6	☐	200.000	200.956	1143200.58	0.4225	A	1.5

y = 0.0021 * x + 1.4997E-004
R = 0.9999
DL = 0.04499
BEC = 0.07136

Weight: <None>
Min Conc: <None>

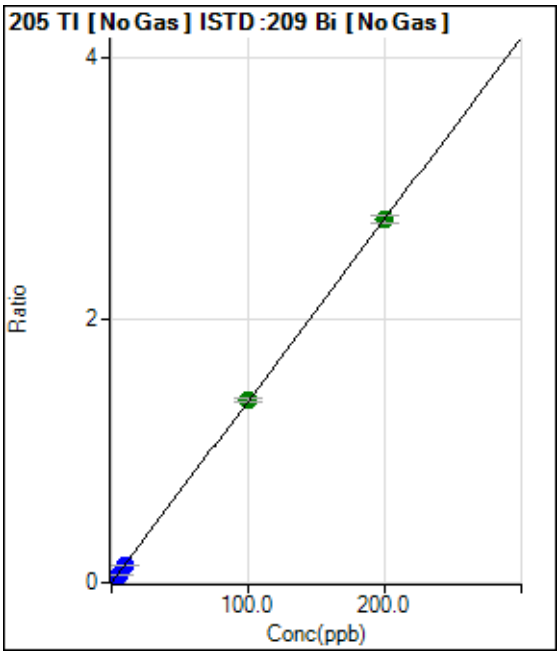
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	196.67	0.0001	P	17.8
2	☐	2.000	1.839	36293.18	0.0109	P	1.8
3	☐	5.000	4.633	91735.50	0.0273	P	1.9
4	☐	10.000	9.343	181127.12	0.0549	P	0.9
5	☐	100.000	99.089	1843440.55	0.5816	A	2.1
6	☐	200.000	200.499	3585575.57	1.1767	A	1.2

y = 0.0059 * x + 5.8922E-005
R = 1.0000
DL = 0.005373
BEC = 0.01004

Weight: <None>
Min Conc: <None>

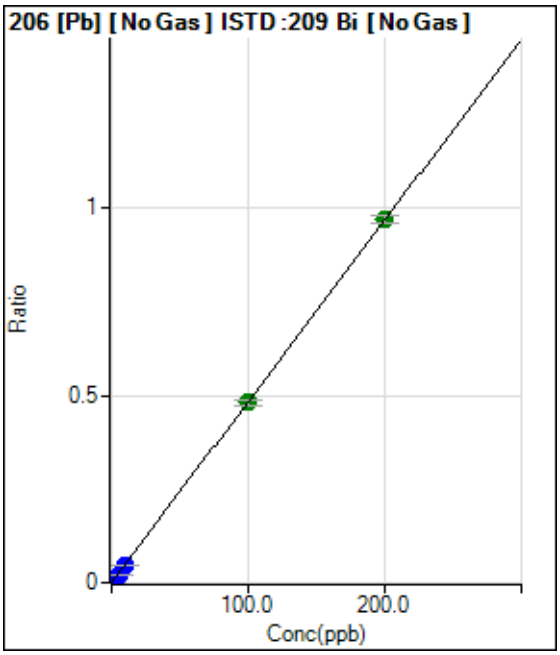


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	363.35	0.0001	P	22.2
2	☐	2.000	1.884	87526.30	0.0262	P	1.2
3	☐	5.000	4.640	216516.17	0.0643	P	2.3
4	☐	10.000	9.395	429380.98	0.1301	P	0.9
5	☐	100.000	100.667	4415650.56	1.3932	A	2.2
6	☐	200.000	199.707	8419942.59	2.7637	A	2.1

y = 0.0138 * x + 1.0909E-004
R = 1.0000
DL = 0.00525
BEC = 0.007883

Weight: <None>
Min Conc: <None>

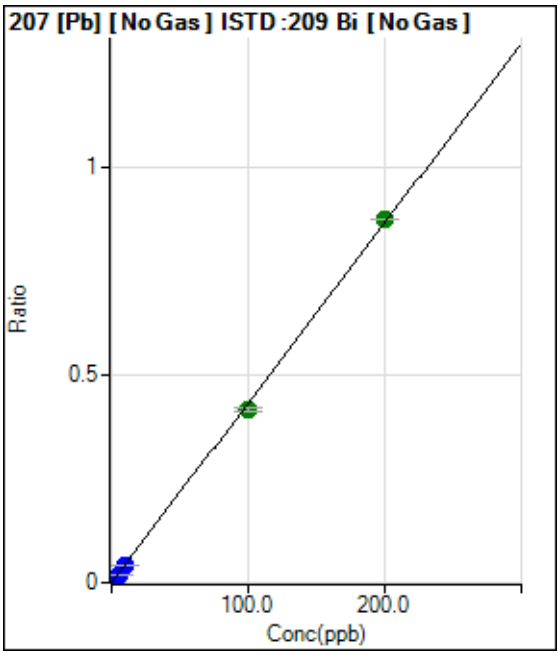
Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	496.69	0.0001	P	17.4
2	☐	2.000	1.836	30193.59	0.0090	P	2.5
3	☐	5.000	4.548	74589.45	0.0222	P	0.4
4	☐	10.000	9.089	145586.92	0.0441	P	1.2
5	☐	100.000	99.411	1524685.39	0.4811	A	3.4
6	☐	200.000	200.353	2953588.18	0.9695	A	2.3

y = 0.0048 * x + 1.4901E-004
R = 1.0000
DL = 0.01612
BEC = 0.0308

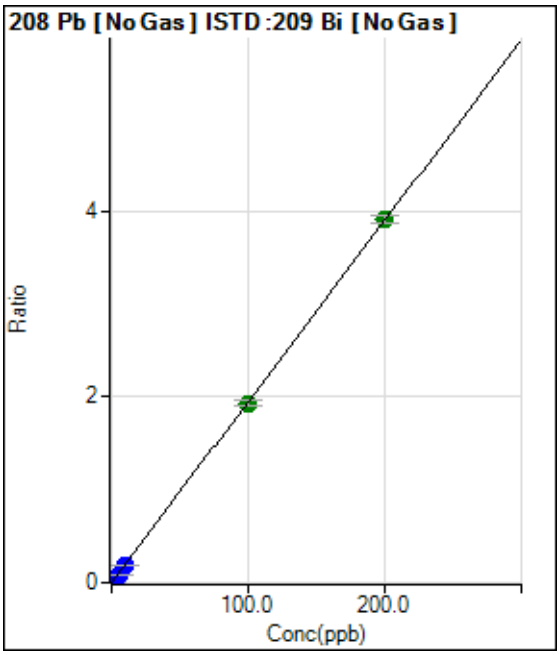
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	433.35	0.0001	P	26.7
2	☐	2.000	1.888	27704.64	0.0083	P	2.6
3	☐	5.000	4.658	68163.36	0.0202	P	1.8
4	☐	10.000	9.422	134690.11	0.0408	P	2.9
5	☐	100.000	96.366	1319571.23	0.4163	A	2.3
6	☐	200.000	201.855	2656844.75	0.8719	A	0.1

y = 0.0043 * x + 1.3015E-004
R = 0.9998
DL = 0.02413
BEC = 0.03013

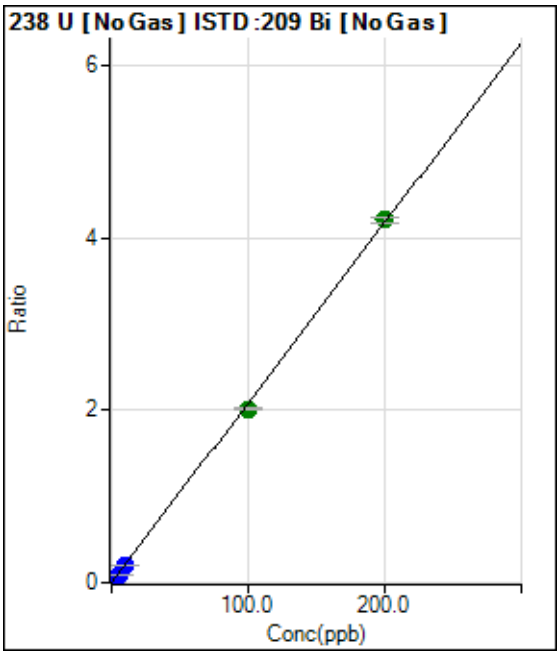
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2063.45	0.0006	P	8.4
2	☐	2.000	1.864	123497.54	0.0369	P	2.7
3	☐	5.000	4.628	305592.00	0.0908	P	0.7
4	☐	10.000	9.325	601416.78	0.1823	P	1.8
5	☐	100.000	99.051	6117185.85	1.9302	A	3.0
6	☐	200.000	200.519	11902870.34	3.9069	A	2.0

y = 0.0195 * x + 6.1871E-004
R = 1.0000
DL = 0.008047
BEC = 0.03176

Weight: <None>
Min Conc: <None>

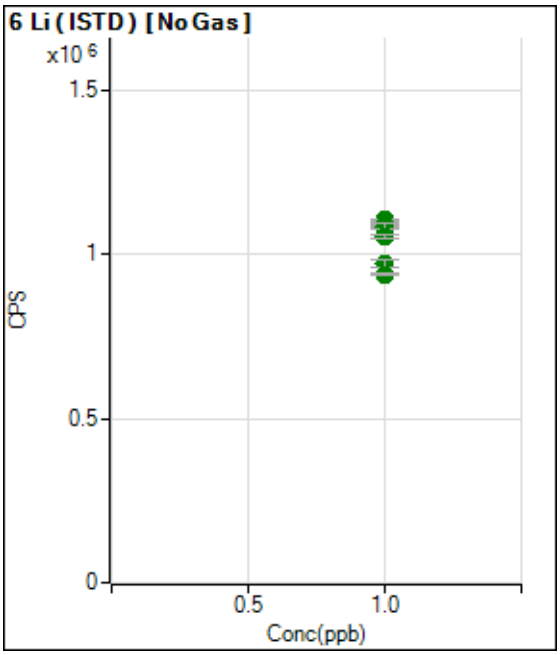


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.00	0.0000	P	23.6
2	☐	2.000	1.846	129068.74	0.0386	P	0.9
3	☐	5.000	4.598	323514.98	0.0961	P	1.1
4	☐	10.000	9.273	639417.11	0.1938	P	1.6
5	☐	100.000	96.695	6404183.44	2.0204	A	1.5
6	☐	200.000	201.701	12840393.98	4.2144	A	1.9

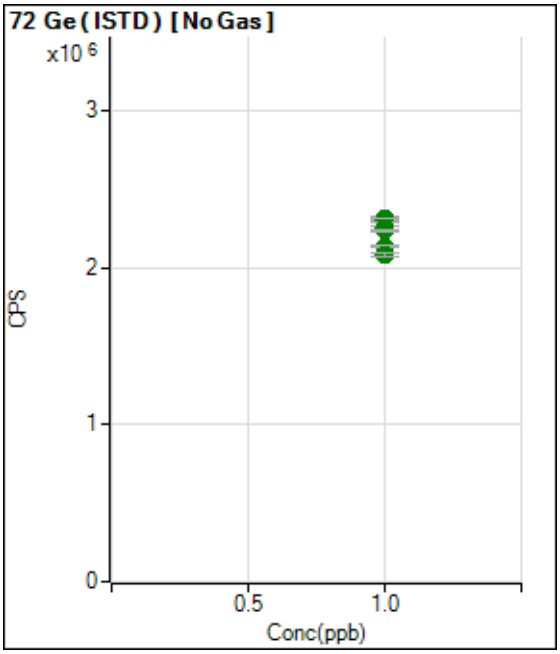
y = 0.0209 * x + 2.3920E-005
R = 0.9998
DL = 0.0008116
BEC = 0.001145

Weight: <None>
Min Conc: <None>

Calibration for 093_ICV.d

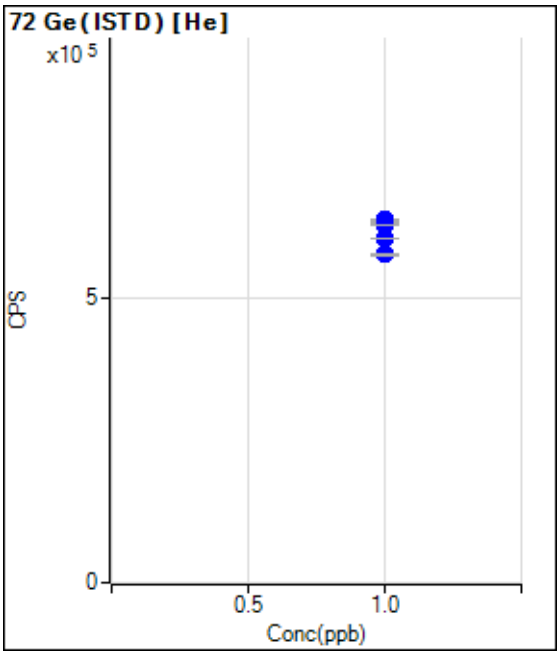


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1105284.62		A	0.3
2	☐	1.000		1086883.94		A	0.9
3	☐	1.000		1086097.11		A	1.3
4	☐	1.000		1054252.02		A	0.9
5	☐	1.000		973418.86		A	2.3
6	☐	1.000		938850.94		A	0.8

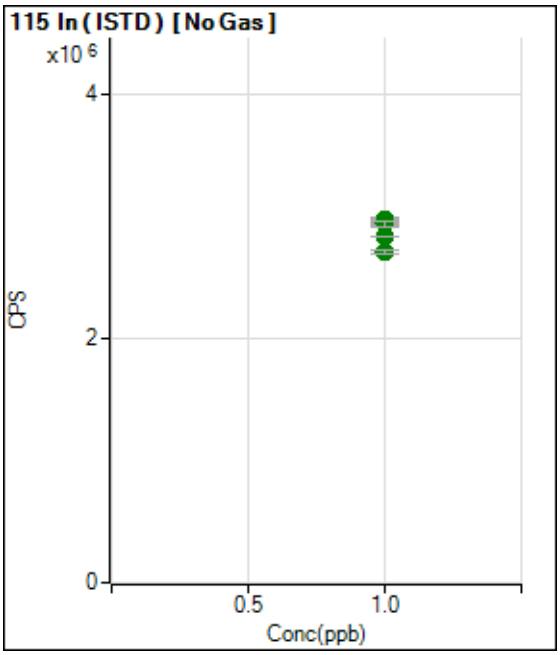


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2313189.29		A	0.9
2	☐	1.000		2303848.93		A	1.0
3	☐	1.000		2257446.63		A	1.0
4	☐	1.000		2239674.97		A	0.5
5	☐	1.000		2135861.79		A	0.8
6	☐	1.000		2086552.52		A	1.3

Calibration for 093_ICV.d

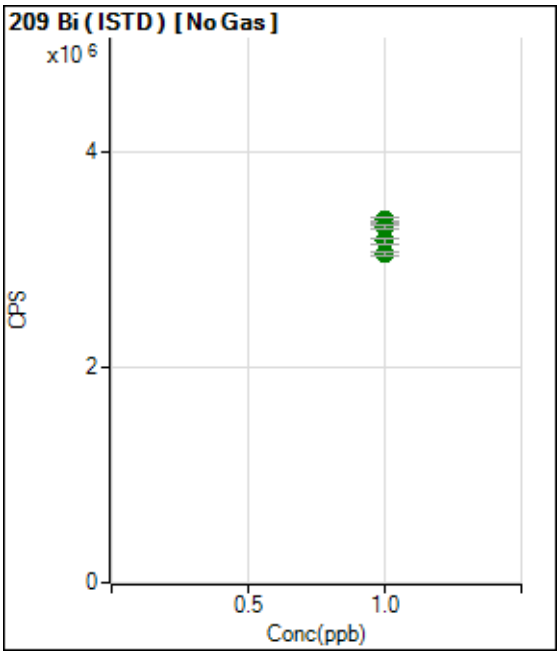


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		635873.70		P	0.7
2	☐	1.000		635211.97		P	0.7
3	☐	1.000		632849.34		P	0.7
4	☐	1.000		627231.06		P	0.3
5	☐	1.000		602788.31		P	0.2
6	☐	1.000		575008.43		P	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2972792.62		A	1.8
2	☐	1.000		2942607.76		A	0.7
3	☐	1.000		2967408.28		A	0.8
4	☐	1.000		2943756.09		A	1.7
5	☐	1.000		2834739.83		A	0.3
6	☐	1.000		2705982.31		A	1.3

Calibration for 093_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3337430.68		A	1.5
2	☐	1.000		3344246.93		A	0.9
3	☐	1.000		3366726.30		A	1.1
4	☐	1.000		3299857.14		A	0.8
5	☐	1.000		3170301.83		A	1.8
6	☐	1.000		3047038.81		A	1.2

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	094_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:52:53-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.042	-245.7	62222	1.0	0.5	
Be	9	1	No Gas	0.013	2.1	55	0.0	0.5	
V	51	2	He	-0.387	-1.2	2288	1.3	2.5	
Cr	52	2	He	-0.024	-31.1	920	5.0	2.5	
Fe	56	2	He	-0.143	-84.4	13130	5.8	100	
Se	78	2	He	-0.056	-172.1	69	11.7	1	
As	75	2	He	-0.088	-3.0	132	1.5	2.5	
Ca	44	2	He	4.566	53.5	623	13.6	100	
Na	23	2	He	-19.773	-6.4	69278	1.7	100	
Mg	24	2	He	-0.037	-154.8	460	7.5	100	
K	39	2	He	-11.389	-8.9	45857	1.5	100	
Mn	55	2	He	-0.004	-27.4	377	1.5	2.5	
Co	59	2	He	0.003	90.3	53	47.2	2.5	
Ni	60	2	He	-0.004	-753.7	157	42.5	2.5	
Cu	63	2	He	-0.011	-107.8	1007	8.0	1	
Zn	66	2	He	0.015	140.3	487	5.2	2.5	
Al	27	2	He	-0.333	-109.8	597	19.6	5	
B	11	1	No Gas	14.041	12.0	50827	9.0	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.733	-6.5	23774	2.8	5	
Si	28	1	No Gas	1.434	22.0	437476	0.4	10	
Ag	107	1	No Gas	-0.006	-11.1	350	2.9	2.5	
Cd	111	1	No Gas	0.001	162.2	17	34.6	1	
Sr	88	1	No Gas	-0.004	-102.7	1063	11.8	2.5	
Mo	95	1	No Gas	0.055	25.0	443	21.3	2.5	
Sn	118	1	No Gas	-0.008	-211.7	1987	10.5	5	
Sb	121	1	No Gas	-0.012	-57.6	1673	7.2	2.5	
Ba	137	1	No Gas	-0.026	-12.5	277	7.5	2.5	
Tl	205	1	No Gas	0.155	72.7	7460	69.8	1	
Tl	203	1	No Gas	0.150	75.5	3114	71.3	1	
Pb	208	1	No Gas	0.026	25.5	3724	12.6	2.5	
U	238	1	No Gas	0.015	37.6	1093	35.8	2.5	
Ca	43	2	He	21.806	26.3	57	20.4	100	
Sb	121	2	He	-0.020	-34.3	827	6.9	2.5	
Ti	47	2	He	-0.031	-91.8	3	173.2	2.5	
Se	82	1	No Gas	-0.111	-469.5	-141	-76.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1021998	1.86	1105285	92.46	70	120	
Ge	72	2	He	607502	0.43	635874	95.54	70	120	
Ge	72	1	No Gas	2196839	0.09	2313189	94.97	70	120	
In	115	1	No Gas	2877715	0.54	2972793	96.80	70	120	
Bi	209	1	No Gas	3304186	2.18	3337431	99.00	70	120	

Sample Report

Sample Table

Sample Name	LLICCV2
Data File Name	095LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:54:52-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.923	1.923	4.81	91961	0.00	2	
Be	9	1	No Gas	1.868	1.868	2.51	7007	0.03	2	
V	51	2	He	1.562	1.562	3.86	13129	0.01	2	
Cr	52	2	He	1.898	1.898	2.83	13844	0.01	2	
Fe	56	2	He	200.380	200.380	3.36	1195812	0.02	200	
Se	78	2	He	1.861	1.861	10.76	226	0.82	2	
As	75	2	He	1.900	1.900	0.69	1990	0.10	2	
Ca	44	2	He	194.658	194.658	7.72	7065	2.76	200	
Na	23	2	He	181.733	181.733	3.34	264233	0.07	200	
Mg	24	2	He	205.651	205.651	0.76	117707	0.17	200	
K	39	2	He	184.847	184.847	2.15	165684	0.11	200	
Mn	55	2	He	1.921	1.921	3.15	9667	0.02	2	
Co	59	2	He	1.901	1.901	1.44	18963	0.01	2	
Ni	60	2	He	1.972	1.972	4.42	4921	0.04	2	
Cu	63	2	He	2.011	2.011	1.60	14458	0.01	2	
Zn	66	2	He	2.285	2.285	5.09	3357	0.07	2	
Al	27	2	He	2.104	2.104	8.75	1380	0.15	2	
B	11	1	No Gas	15.340	15.340	1.63	52953	0.03	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.955	1.955	5.04	60876	0.00	2	
Si	28	1	No Gas	11.896	11.896	18.33	495435	0.00	10	
Ag	107	1	No Gas	1.937	1.937	2.82	36290	0.01	2	
Cd	111	1	No Gas	1.941	1.941	2.19	7512	0.03	2	
Sr	88	1	No Gas	1.915	1.915	1.79	65209	0.00	2	
Mo	95	1	No Gas	1.887	1.887	2.12	13233	0.01	2	
Sn	118	1	No Gas	1.818	1.818	2.18	24183	0.01	2	
Sb	121	1	No Gas	1.956	1.956	0.47	34857	0.01	2	
Ba	137	1	No Gas	1.888	1.888	3.96	11886	0.02	2	
Tl	205	1	No Gas	1.882	1.882	2.69	86445	0.00	2	
Tl	203	1	No Gas	1.869	1.869	3.54	36460	0.01	2	
Pb	208	1	No Gas	1.863	1.863	2.00	122013	0.00	2	
U	238	1	No Gas	1.871	1.871	1.46	129338	0.00	2	
Ca	43	2	He	154.108	154.108	17.57	323	47.66	200	
Sb	121	2	He	1.825	1.825	3.19	15466	0.01	2	
Ti	47	2	He	2.245	2.245	27.05	460	0.49	200	
Cu	63	1	No Gas	2.028	2.028	3.01	27151	0.01	2	
Se	82	1	No Gas	2.459	2.459	11.07	379	0.65	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1008765	1.67	1105285	91.27	70	120	
Ge	72	2	He	607333	0.80	635874	95.51	70	120	
Ge	72	1	No Gas	2150057	2.46	2313189	92.95	70	120	
In	115	1	No Gas	2885779	0.87	2972793	97.07	70	120	
Bi	209	1	No Gas	3306328	1.02	3337431	99.07	70	120	

Sample Report

Sample Table

Sample Name	LLICCV5
Data File Name	096LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T15:56:51-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	086CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.908	4.908	3.46	137716	0.00	5	
Be	9	1	No Gas	4.774	4.774	1.49	17821	0.03	5	
V	51	2	He	4.493	4.493	1.97	29345	0.02	5	
Cr	52	2	He	4.741	4.741	2.69	32856	0.01	5	
Fe	56	2	He	501.692	501.692	1.24	2963298	0.02	500	
Se	78	2	He	5.051	5.051	4.76	485	1.04	5	
As	75	2	He	4.937	4.937	8.85	4811	0.10	5	
Ca	44	2	He	497.830	497.830	2.50	17274	2.88	500	
Na	23	2	He	483.077	483.077	0.56	554000	0.09	500	
Mg	24	2	He	505.399	505.399	0.90	287595	0.18	500	
K	39	2	He	483.994	483.994	1.07	347207	0.14	500	
Mn	55	2	He	4.870	4.870	3.86	23818	0.02	5	
Co	59	2	He	4.845	4.845	1.56	48142	0.01	5	
Ni	60	2	He	4.908	4.908	1.91	11962	0.04	5	
Cu	63	2	He	4.965	4.965	2.38	33996	0.01	5	
Zn	66	2	He	4.879	4.879	3.32	6615	0.07	5	
Al	27	2	He	5.085	5.085	11.91	2330	0.22	5	
B	11	1	No Gas	27.091	27.091	1.18	78146	0.03	25	
Al	27	1	No Gas	4.880	4.880	3.42	102554	0.00	5	
Si	28	1	No Gas	25.623	25.623	6.76	588373	0.00	25	
Ag	107	1	No Gas	4.825	4.825	2.32	88733	0.01	5	
Cd	111	1	No Gas	4.978	4.978	2.77	19047	0.03	5	
Sr	88	1	No Gas	4.839	4.839	2.75	161192	0.00	5	
Mo	95	1	No Gas	4.799	4.799	3.49	33195	0.01	5	
Sn	118	1	No Gas	4.654	4.654	2.53	57988	0.01	5	
Sb	121	1	No Gas	4.792	4.792	0.50	83321	0.01	5	
Ba	137	1	No Gas	4.893	4.893	2.41	29778	0.02	5	
Tl	205	1	No Gas	4.686	4.686	0.98	214299	0.00	5	
Tl	203	1	No Gas	4.608	4.608	0.34	89416	0.01	5	
Pb	208	1	No Gas	4.641	4.641	1.97	300303	0.00	5	
U	238	1	No Gas	4.651	4.651	1.22	320660	0.00	5	
Ca	43	2	He	499.825	499.825	8.66	1017	49.16	500	
Sb	121	2	He	4.600	4.600	2.70	37353	0.01	5	
Ti	47	2	He	4.631	4.631	5.42	937	0.49	5	
Cu	63	1	No Gas	5.108	5.108	1.24	63699	0.01	5	
Se	82	1	No Gas	5.008	5.008	6.64	899	0.56	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1004327	1.51	1105285	90.87	70	120	
Ge	72	2	He	605272	0.53	635874	95.19	70	120	
Ge	72	1	No Gas	2165681	1.66	2313189	93.62	70	120	

Sample Report

In	115	1	No Gas	2854801	1.66	2972793	96.03	70	120	
Bi	209	1	No Gas	3299143	1.26	3337431	98.85	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	098_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T16:18:44-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.739	0.244	1554795	0.57	100	98.7	90	110	
Be	9	1	No Gas	98.120	0.509	358217	0.66	100	98.1	90	110	
V	51	2	He	96.209	0.556	537604	0.70	100	96.2	90	110	
Cr	52	2	He	95.062	1.551	637731	1.33	100	95.1	90	110	
Fe	56	2	He	9985.365	1.240	58674184	1.10	10000	99.9	90	110	
Se	78	2	He	97.385	1.397	8005	0.61	100	97.4	90	110	
As	75	2	He	95.899	0.436	89455	0.71	100	95.9	90	110	
Ca	44	2	He	9898.761	0.910	334428	0.91	10000	99.0	90	110	
Na	23	2	He	9923.757	1.129	9652098	0.88	10000	99.2	90	110	
Mg	24	2	He	9861.913	1.402	5598913	0.80	10000	98.6	90	110	
K	39	2	He	10018.983	0.458	6146884	1.16	10000	100.2	90	110	
Mn	55	2	He	96.532	1.595	464227	0.85	100	96.5	90	110	
Co	59	2	He	95.834	1.152	951056	0.37	100	95.8	90	110	
Ni	60	2	He	99.156	0.977	238359	0.95	100	99.2	90	110	
Cu	63	2	He	95.794	1.183	635822	0.46	100	95.8	90	110	
Zn	66	2	He	98.313	1.832	124278	1.30	100	98.3	90	110	
Al	27	2	He	108.144	3.337	35322	2.72	100	108.1	90	110	
B	11	1	No Gas	511.988	2.393	1102771	2.08	500	102.4	90	110	
Al	27	1	No Gas	112.129	1.781	1607843	1.99	100	112.1	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	755.906	1.134	5311991	1.05	5000	15.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	97.007	0.524	1768210	1.18	100	97.0	90	110	
Cd	111	1	No Gas	96.511	0.124	367315	0.84	100	96.5	90	110	
Sr	88	1	No Gas	98.088	2.361	3231459	2.12	100	98.1	90	110	
Mo	95	1	No Gas	93.777	0.724	645046	0.69	100	93.8	90	110	
Sn	118	1	No Gas	95.813	2.791	1148664	2.42	100	95.8	90	110	
Sb	121	1	No Gas	97.828	2.222	1657828	0.64	100	97.8	90	110	
Ba	137	1	No Gas	96.224	0.478	575304	0.76	100	96.2	90	110	
Tl	205	1	No Gas	96.251	0.790	4331918	1.36	100	96.3	90	110	
Tl	203	1	No Gas	94.608	2.794	1805612	2.43	100	94.6	90	110	
Pb	208	1	No Gas	94.299	1.603	5975414	0.85	100	94.3	90	110	
U	238	1	No Gas	90.708	1.893	6163154	1.65	100	90.7	90	110	
Ca	43	2	He	9666.071	1.854	19411	1.01	10000	96.7	90	110	
Sb	121	2	He	92.480	0.490	731724	0.35	100	92.5	90	110	
Ti	47	2	He	96.941	1.072	19401	0.75	100	96.9	90	110	
Cu	63	1	No Gas	98.781	1.792	1164313	0.76	100	98.8	90	110	
Se	82	1	No Gas	96.959	3.717	19458	2.15	100	97.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	982324	0.39	1105285	88.88	70	120	
Ge	72	2	He	604865	0.83	635874	95.12	70	120	
Ge	72	1	No Gas	2156720	1.58	2313189	93.24	70	120	
In	115	1	No Gas	2842578	0.74	2972793	95.62	70	120	
Bi	209	1	No Gas	3252366	2.15	3337431	97.45	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	099_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T16:20:38-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.030	-145.1	62550	0.4	0.5	
Be	9	1	No Gas	0.010	13.1	45	11.1	0.5	
V	51	2	He	-0.405	-3.5	2208	4.0	2.5	
Cr	52	2	He	0.001	2714.5	1093	8.5	2.5	
Fe	56	2	He	1.870	3.1	25237	1.0	100	
Se	78	2	He	-0.104	-293.6	66	38.7	2	
As	75	2	He	-0.066	-37.7	154	15.3	2.5	
Ca	44	2	He	-6.904	-16.0	237	16.0	100	
Na	23	2	He	-22.677	-4.5	67077	1.3	100	
Mg	24	2	He	-0.218	-24.5	360	8.3	100	
K	39	2	He	-11.176	-3.9	46408	1.0	100	
Mn	55	2	He	-0.008	-199.8	363	21.4	2.5	
Co	59	2	He	0.004	81.4	63	48.2	2.5	
Ni	60	2	He	-0.008	-53.1	147	7.9	2.5	
Cu	63	2	He	0.046	20.1	1397	4.7	2	
Zn	66	2	He	0.019	228.6	497	11.1	2.5	
Al	27	2	He	-0.720	-14.6	477	7.4	5	
B	11	1	No Gas	8.730	20.4	39163	9.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.873	-6.3	21540	3.6	5	
Si	28	1	No Gas	2.208	25.3	437845	0.7	10	
Ag	107	1	No Gas	0.002	233.5	507	20.5	2.5	
Cd	111	1	No Gas	-0.001	-304.4	10	100.0	1	
Sr	88	1	No Gas	-0.012	-30.5	803	14.4	2.5	
Mo	95	1	No Gas	0.064	23.6	513	19.9	2.5	
Sn	118	1	No Gas	-0.019	-19.7	1873	2.0	5	
Sb	121	1	No Gas	0.002	574.4	1890	9.0	2.5	
Ba	137	1	No Gas	-0.038	-42.2	207	47.7	2.5	
Tl	205	1	No Gas	0.149	68.5	7196	66.3	1	
Tl	203	1	No Gas	0.140	76.2	2907	72.3	1	
Pb	208	1	No Gas	0.024	39.5	3547	18.1	2.5	
U	238	1	No Gas	0.014	43.3	1023	41.3	2.5	
Ca	43	2	He	8.441	0.8	30	0.0	100	
Sb	121	2	He	-0.010	-15.1	910	1.1	2.5	
Ti	47	2	He	-0.015	-188.3	7	86.6	2.5	
Cu	63	1	No Gas	0.006	365.9	3497	6.9	2.5	
Se	82	1	No Gas	0.391	135.5	-38	-286.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1024041	0.80	1105285	92.65	70	120	
Ge	72	2	He	613075	0.46	635874	96.41	70	120	
Ge	72	1	No Gas	2173363	0.19	2313189	93.96	70	120	
In	115	1	No Gas	2918135	0.94	2972793	98.16	70	120	
Bi	209	1	No Gas	3289281	1.28	3337431	98.56	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	110_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T16:45:21-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	97.588	1.905	1529128	0.80	100	97.6	90	110	
Be	9	1	No Gas	98.605	2.392	358022	0.14	100	98.6	90	110	
V	51	2	He	94.352	0.287	534438	0.14	100	94.4	90	110	
Cr	52	2	He	93.119	1.141	633165	0.76	100	93.1	90	110	
Fe	56	2	He	9768.233	0.189	58175499	0.40	10000	97.7	90	110	
Se	78	2	He	97.628	0.357	8134	0.59	100	97.6	90	110	
As	75	2	He	94.700	0.553	89534	0.85	100	94.7	90	110	
Ca	44	2	He	9655.610	0.369	330639	0.66	10000	96.6	90	110	
Na	23	2	He	9756.737	1.122	9619414	0.82	10000	97.6	90	110	
Mg	24	2	He	9705.985	0.868	5585286	1.24	10000	97.1	90	110	
K	39	2	He	9764.083	0.117	6072619	0.27	10000	97.6	90	110	
Mn	55	2	He	95.126	0.565	463680	0.35	100	95.1	90	110	
Co	59	2	He	93.517	0.150	940659	0.53	100	93.5	90	110	
Ni	60	2	He	96.082	1.264	234097	1.14	100	96.1	90	110	
Cu	63	2	He	93.058	0.063	626070	0.33	100	93.1	90	110	
Zn	66	2	He	95.546	0.542	122432	0.16	100	95.5	90	110	
Al	27	2	He	107.256	0.672	35516	0.98	100	107.3	90	110	
B	11	1	No Gas	511.458	2.934	1095855	2.67	500	102.3	90	110	
Al	27	1	No Gas	108.169	1.484	1570677	0.99	100	108.2	90	110	
Si	28	1	No Gas	794.085	1.255	5625313	0.80	5000	15.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	96.122	1.985	1775101	0.27	100	96.1	90	110	
Cd	111	1	No Gas	93.870	1.557	361984	0.40	100	93.9	90	110	
Sr	88	1	No Gas	96.248	1.396	3213107	1.21	100	96.2	90	110	
Mo	95	1	No Gas	92.206	1.122	642664	0.61	100	92.2	90	110	
Sn	118	1	No Gas	95.494	2.304	1160023	1.41	100	95.5	90	110	
Sb	121	1	No Gas	95.243	2.292	1633695	2.64	100	95.2	90	110	
Ba	137	1	No Gas	95.100	1.859	576095	0.66	100	95.1	90	110	
Tl	205	1	No Gas	97.020	0.726	4330066	0.99	100	97.0	90	110	
Tl	203	1	No Gas	97.059	1.729	1837215	2.25	100	97.1	90	110	
Pb	208	1	No Gas	95.507	1.303	6001693	0.78	100	95.5	90	110	
U	238	1	No Gas	91.511	0.412	6166461	1.29	100	91.5	90	110	
Ca	43	2	He	9605.323	2.475	19551	2.41	10000	96.1	90	110	
Sb	121	2	He	91.057	0.314	730217	0.09	100	91.1	90	110	
Ti	47	2	He	99.732	1.088	20229	0.70	100	99.7	90	110	
Cu	63	1	No Gas	96.967	2.386	1156660	1.86	100	97.0	90	110	
Se	82	1	No Gas	95.178	1.563	19334	2.19	100	95.2	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	977331	2.38	1105285	88.42	70	120	
Ge	72	2	He	613031	0.39	635874	96.41	70	120	
Ge	72	1	No Gas	2182424	1.36	2313189	94.35	70	120	
In	115	1	No Gas	2880650	1.73	2972793	96.90	70	120	
Bi	209	1	No Gas	3225078	1.60	3337431	96.63	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	111_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T16:47:14-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.051	88.5	63633	1.1	0.5	
Be	9	1	No Gas	0.015	45.5	65	42.8	0.5	
V	51	2	He	-0.361	-4.9	2480	2.7	2.5	
Cr	52	2	He	-0.024	-95.6	933	16.3	2.5	
Fe	56	2	He	2.202	7.9	27485	2.9	100	
Se	78	2	He	-0.128	-30.9	65	6.4	2	
As	75	2	He	-0.077	-28.0	146	12.6	2.5	
Ca	44	2	He	-3.986	-9.5	340	5.1	100	
Na	23	2	He	-7.475	-32.2	82755	1.5	100	
Mg	24	2	He	-0.150	-28.8	403	7.6	100	
K	39	2	He	-16.144	-8.7	43787	1.0	100	
Mn	55	2	He	-0.022	-49.9	300	17.3	2.5	
Co	59	2	He	0.002	43.6	50	20.0	2.5	
Ni	60	2	He	0.014	225.1	203	37.6	2.5	
Cu	63	2	He	0.045	40.6	1400	7.5	2	
Zn	66	2	He	-0.003	-1308.4	473	11.6	2.5	
Al	27	2	He	-0.633	-14.4	510	5.2	5	
B	11	1	No Gas	11.860	15.1	45955	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.876	-6.6	21550	3.0	5	
Si	28	1	No Gas	3.817	7.1	449584	1.3	10	
Ag	107	1	No Gas	-0.006	-50.6	347	15.9	2.5	
Cd	111	1	No Gas	0.004	103.1	30	57.7	1	
Sr	88	1	No Gas	-0.010	-37.7	867	13.8	2.5	
Mo	95	1	No Gas	0.074	14.2	577	12.5	2.5	
Sn	118	1	No Gas	-0.012	-61.6	1944	4.7	5	
Sb	121	1	No Gas	-0.004	-24.8	1790	1.5	2.5	
Ba	137	1	No Gas	-0.038	-7.3	200	8.7	2.5	
Tl	205	1	No Gas	0.147	71.2	7190	68.1	1	
Tl	203	1	No Gas	0.133	82.7	2834	77.6	1	
Pb	208	1	No Gas	0.024	42.8	3657	18.4	2.5	
U	238	1	No Gas	0.015	48.3	1163	45.2	2.5	
Ca	43	2	He	1.764	311.8	17	69.3	100	
Sb	121	2	He	-0.005	-294.4	967	11.0	2.5	
Ti	47	2	He	0.001	6185.6	10	100.0	2.5	
Cu	63	1	No Gas	-0.029	-36.4	3100	3.5	2.5	
Se	82	1	No Gas	0.343	72.6	-47	-107.5	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1021167	2.19	1105285	92.39	70	120	
Ge	72	2	He	619419	1.37	635874	97.41	70	120	
Ge	72	1	No Gas	2179367	1.15	2313189	94.21	70	120	
In	115	1	No Gas	2892830	0.20	2972793	97.31	70	120	
Bi	209	1	No Gas	3365243	2.39	3337431	100.83	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	122_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T17:22:06-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.533	2.860	1503557	1.62	100	99.5	90	110	
Be	9	1	No Gas	101.393	1.224	355266	0.33	100	101.4	90	110	
V	51	2	He	95.407	0.479	530939	0.28	100	95.4	90	110	
Cr	52	2	He	94.668	0.400	632469	0.20	100	94.7	90	110	
Fe	56	2	He	9811.137	0.183	57412541	0.63	10000	98.1	90	110	
Se	78	2	He	97.531	1.733	7984	1.31	100	97.5	90	110	
As	75	2	He	94.642	0.438	87919	0.63	100	94.6	90	110	
Ca	44	2	He	9808.032	0.396	329997	0.86	10000	98.1	90	110	
Na	23	2	He	9786.523	0.854	9480266	0.39	10000	97.9	90	110	
Mg	24	2	He	9702.327	0.221	5485699	0.39	10000	97.0	90	110	
K	39	2	He	9785.137	0.302	5979503	0.51	10000	97.9	90	110	
Mn	55	2	He	96.133	0.318	460423	0.66	100	96.1	90	110	
Co	59	2	He	94.480	0.760	933754	0.32	100	94.5	90	110	
Ni	60	2	He	98.223	0.760	235144	1.17	100	98.2	90	110	
Cu	63	2	He	94.789	1.034	626574	1.04	100	94.8	90	110	
Zn	66	2	He	97.577	1.210	122842	0.76	100	97.6	90	110	
Al	27	2	He	106.674	0.801	34710	0.83	100	106.7	90	110	
B	11	1	No Gas	516.133	2.739	1066693	1.25	500	103.2	90	110	
Al	27	1	No Gas	112.903	0.759	1602486	0.99	100	112.9	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	794.752	2.135	5507385	1.43	5000	15.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.059	1.512	1760446	0.31	100	98.1	90	110	
Cd	111	1	No Gas	95.662	1.275	358610	0.38	100	95.7	90	110	
Sr	88	1	No Gas	97.782	1.934	3172945	0.81	100	97.8	90	110	
Mo	95	1	No Gas	94.217	1.571	638323	0.15	100	94.2	90	110	
Sn	118	1	No Gas	97.101	3.050	1146671	2.81	100	97.1	90	110	
Sb	121	1	No Gas	96.928	2.694	1626152	1.54	100	96.9	90	110	
Ba	137	1	No Gas	97.080	1.092	571711	0.55	100	97.1	90	110	
Tl	205	1	No Gas	96.586	1.051	4335156	0.20	100	96.6	90	110	
Tl	203	1	No Gas	97.040	1.644	1847435	2.41	100	97.0	90	110	
Pb	208	1	No Gas	93.796	1.300	5927940	0.55	100	93.8	90	110	
U	238	1	No Gas	90.626	1.310	6141973	2.04	100	90.6	90	110	
Ca	43	2	He	9895.942	5.646	19788	5.22	10000	99.0	90	110	
Sb	121	2	He	92.534	0.209	729112	0.40	100	92.5	90	110	
Ti	47	2	He	99.502	2.812	19831	2.98	100	99.5	90	110	
Cu	63	1	No Gas	96.371	1.549	1124642	0.47	100	96.4	90	110	
Se	82	1	No Gas	98.631	2.142	19602	1.64	100	98.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	942888	1.46	1105285	85.31	70	120	
Ge	72	2	He	602343	0.47	635874	94.73	70	120	
Ge	72	1	No Gas	2135143	1.55	2313189	92.30	70	120	
In	115	1	No Gas	2800224	1.58	2972793	94.20	70	120	
Bi	209	1	No Gas	3243363	0.88	3337431	97.18	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	123_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T17:24:00-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.090	30.8	62687	1.0	0.5	
Be	9	1	No Gas	0.017	7.7	68	8.4	0.5	
V	51	2	He	-0.436	-1.4	2028	0.5	2.5	
Cr	52	2	He	-0.026	-76.8	913	13.9	2.5	
Fe	56	2	He	1.412	7.6	22482	3.6	100	
Se	78	2	He	-0.013	-829.6	73	11.0	2	
As	75	2	He	-0.092	-37.5	130	24.5	2.5	
Ca	44	2	He	-5.041	-4.0	300	3.3	100	
Na	23	2	He	-28.836	-2.9	60987	2.1	100	
Mg	24	2	He	-0.154	-35.0	397	8.9	100	
K	39	2	He	-13.866	-3.6	44693	1.4	100	
Mn	55	2	He	-0.009	-48.8	360	4.8	2.5	
Co	59	2	He	0.002	123.8	50	60.0	2.5	
Ni	60	2	He	-0.018	-25.2	123	9.4	2.5	
Cu	63	2	He	0.017	94.8	1200	7.9	2	
Zn	66	2	He	-0.025	-290.4	440	20.8	2.5	
Al	27	2	He	-0.802	-29.1	450	17.4	5	
B	11	1	No Gas	8.752	14.3	38179	8.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.939	-9.9	20506	4.8	5	
Si	28	1	No Gas	1.739	100.3	432762	1.3	10	
Ag	107	1	No Gas	0.000	2601.4	453	26.1	2.5	
Cd	111	1	No Gas	0.002	244.5	20	86.6	1	
Sr	88	1	No Gas	-0.009	-3.3	877	0.7	2.5	
Mo	95	1	No Gas	0.079	36.0	603	32.4	2.5	
Sn	118	1	No Gas	-0.024	-26.1	1770	3.4	5	
Sb	121	1	No Gas	0.065	21.3	2964	9.2	2.5	
Ba	137	1	No Gas	-0.029	-1.3	250	0.0	2.5	
Tl	205	1	No Gas	0.166	70.7	7840	68.3	1	
Tl	203	1	No Gas	0.164	76.0	3331	72.4	1	
Pb	208	1	No Gas	0.030	26.3	3937	13.4	2.5	
U	238	1	No Gas	0.017	27.8	1217	26.8	2.5	
Ca	43	2	He	1.814	555.9	17	124.9	100	
Sb	121	2	He	0.032	19.3	1250	2.8	2.5	
Ti	47	2	He	-0.032	-88.8	3	173.2	2.5	
Cu	63	1	No Gas	-0.076	-4.7	2524	3.0	2.5	
Se	82	1	No Gas	0.622	36.3	9	490.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	996149	1.72	1105285	90.13	70	120	
Ge	72	2	He	612305	1.25	635874	96.29	70	120	
Ge	72	1	No Gas	2163793	1.69	2313189	93.54	70	120	
In	115	1	No Gas	2840537	0.90	2972793	95.55	70	120	
Bi	209	1	No Gas	3252678	1.37	3337431	97.46	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	225_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T22:02:53-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.995	2.650	1513610	1.77	100	100.0	90	110	
Be	9	1	No Gas	97.955	2.713	343901	0.88	100	98.0	90	110	
V	51	2	He	93.958	0.942	523930	0.53	100	94.0	90	110	
Cr	52	2	He	91.986	1.100	615737	0.73	100	92.0	90	110	
Fe	56	2	He	9614.544	0.835	56368602	0.68	10000	96.1	90	110	
Se	78	2	He	96.404	3.369	7907	2.93	100	96.4	90	110	
As	75	2	He	93.826	1.301	87325	0.89	100	93.8	90	110	
Ca	44	2	He	9813.999	1.011	330814	0.62	10000	98.1	90	110	
Na	23	2	He	10206.711	0.279	9902587	0.30	10000	102.1	90	110	
Mg	24	2	He	9584.995	1.020	5429576	0.66	10000	95.8	90	110	
K	39	2	He	10079.835	0.601	6169658	0.18	10000	100.8	90	110	
Mn	55	2	He	94.376	1.382	452859	1.02	100	94.4	90	110	
Co	59	2	He	92.199	1.495	912940	1.27	100	92.2	90	110	
Ni	60	2	He	94.414	1.379	226450	0.97	100	94.4	90	110	
Cu	63	2	He	91.426	1.441	605514	1.05	100	91.4	90	110	
Zn	66	2	He	92.886	0.904	117186	0.97	100	92.9	90	110	
Al	27	2	He	107.813	0.853	35141	1.25	100	107.8	90	110	
B	11	1	No Gas	617.299	2.756	1274895	0.94	500	123.5	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	111.532	1.096	1643489	1.06	100	111.5	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	823.535	0.774	5908035	0.15	5000	16.5	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	95.542	1.161	1737258	0.48	100	95.5	90	110	
Cd	111	1	No Gas	93.253	0.962	354062	0.55	100	93.3	90	110	
Sr	88	1	No Gas	100.897	3.105	3315650	2.15	100	100.9	90	110	
Mo	95	1	No Gas	93.037	1.347	638407	0.35	100	93.0	90	110	
Sn	118	1	No Gas	95.707	1.902	1144850	2.45	100	95.7	90	110	
Sb	121	1	No Gas	92.021	0.908	1602730	0.49	100	92.0	90	110	
Ba	137	1	No Gas	97.550	1.265	581823	0.62	100	97.6	90	110	
Tl	205	1	No Gas	96.675	1.674	4098578	1.00	100	96.7	90	110	
Tl	203	1	No Gas	96.223	0.686	1730255	1.29	100	96.2	90	110	
Pb	208	1	No Gas	93.593	1.075	5587314	0.40	100	93.6	90	110	
U	238	1	No Gas	88.821	1.625	5685262	1.05	100	88.8	90	110	CCV Main CR1-2 Failed
Ca	43	2	He	9819.030	2.376	19674	2.28	10000	98.2	90	110	
Sb	121	2	He	89.894	0.268	709689	0.50	100	89.9	90	110	CCV Main CR1-2 Failed
Ti	47	2	He	96.993	1.432	19367	1.22	100	97.0	90	110	
Cu	63	1	No Gas	98.513	0.779	1193276	0.73	100	98.5	90	110	
Se	82	1	No Gas	93.412	3.525	19266	3.99	100	93.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	944979	1.95	1105285	85.50	70	120	
Ge	72	2	He	603491	0.42	635874	94.91	70	120	
Ge	72	1	No Gas	2216009	0.62	2313189	95.80	70	120	
In	115	1	No Gas	2836008	1.46	2972793	95.40	70	120	
Bi	209	1	No Gas	3063583	0.73	3337431	91.79	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	226_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T22:04:47-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.801	1.1	72364	0.8	0.5	CCB Main CR1 Failed
Be	9	1	No Gas	0.014	19.5	58	17.8	0.5	
V	51	2	He	-0.391	-5.6	2292	5.3	2.5	
Cr	52	2	He	-0.046	-29.4	780	12.2	2.5	
Fe	56	2	He	1.009	7.9	20189	2.2	100	
Se	78	2	He	0.151	102.1	87	14.5	2	
As	75	2	He	-0.082	-18.8	140	10.4	2.5	
Ca	44	2	He	11.126	16.5	857	7.6	100	
Na	23	2	He	343.065	2.5	426022	1.5	100	CCB Main CR1 Failed
Mg	24	2	He	0.917	30.1	1017	15.4	100	
K	39	2	He	10.045	16.1	59726	1.4	100	
Mn	55	2	He	0.149	7.1	1130	4.6	2.5	
Co	59	2	He	0.005	47.8	73	31.5	2.5	
Ni	60	2	He	0.039	66.7	263	24.4	2.5	
Cu	63	2	He	0.171	11.4	2244	6.1	2	
Zn	66	2	He	0.221	35.8	757	13.0	2.5	
Al	27	2	He	1.463	29.4	1190	11.9	5	
B	11	1	No Gas	103.656	3.2	237778	2.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	1.494	9.0	55702	3.8	5	
Si	28	1	No Gas	15.206	4.0	528976	0.7	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.012	-27.5	227	28.7	2.5	
Cd	111	1	No Gas	0.000	3070.9	13	86.6	1	
Sr	88	1	No Gas	0.096	6.2	4357	5.8	2.5	
Mo	95	1	No Gas	0.063	38.9	493	35.2	2.5	
Sn	118	1	No Gas	-0.010	-82.8	1957	5.4	5	
Sb	121	1	No Gas	-0.067	-3.6	723	5.2	2.5	
Ba	137	1	No Gas	-0.003	-1066.1	413	43.0	2.5	
Tl	205	1	No Gas	0.154	77.4	7040	74.4	1	
Tl	203	1	No Gas	0.147	74.5	2891	70.5	1	
Pb	208	1	No Gas	0.024	52.1	3370	22.4	2.5	
U	238	1	No Gas	0.015	43.1	1080	40.6	2.5	
Ca	43	2	He	6.725	150.4	27	78.1	100	
Sb	121	2	He	-0.081	-10.7	350	19.8	2.5	
Ti	47	2	He	-0.031	-90.6	3	173.2	2.5	
Cu	63	1	No Gas	2.570	3.3	34280	2.8	2.5	CCB Main CR1 Failed
Se	82	1	No Gas	-0.160	-202.0	-151	-44.0	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	979378	0.86	1105285	88.61	70	120	
Ge	72	2	He	615512	0.48	635874	96.80	70	120	
Ge	72	1	No Gas	2199896	1.16	2313189	95.10	70	120	
In	115	1	No Gas	2865913	1.32	2972793	96.40	70	120	
Bi	209	1	No Gas	3129672	1.56	3337431	93.77	70	120	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	228LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T22:08:45-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.565	2.565	1.29	101027	0.00	2	
Be	9	1	No Gas	1.806	1.806	2.42	6715	0.03	2	
V	51	2	He	1.565	1.565	2.73	13214	0.01	2	
Cr	52	2	He	1.844	1.844	1.52	13547	0.01	2	
Fe	56	2	He	192.811	192.811	0.80	1157048	0.02	200	
Se	78	2	He	2.098	2.098	13.73	247	0.85	2	
As	75	2	He	1.981	1.981	8.01	2076	0.10	2	
Ca	44	2	He	198.612	198.612	2.62	7232	2.75	200	
Na	23	2	He	472.718	472.718	0.28	548564	0.09	200	NewName Main CR1 Failed
Mg	24	2	He	197.858	197.858	1.14	113828	0.17	200	
K	39	2	He	204.729	204.729	1.01	178717	0.11	200	
Mn	55	2	He	1.942	1.942	1.82	9817	0.02	2	
Co	59	2	He	1.886	1.886	2.86	18913	0.01	2	
Ni	60	2	He	1.908	1.908	5.35	4791	0.04	2	
Cu	63	2	He	1.922	1.922	1.95	13934	0.01	2	
Zn	66	2	He	1.888	1.888	9.13	2870	0.07	2	
Al	27	2	He	2.166	2.166	30.25	1407	0.15	2	
B	11	1	No Gas	86.234	86.234	0.72	205207	0.04	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.890	1.890	5.84	61235	0.00	2	
Si	28	1	No Gas	24.718	24.718	23.10	590150	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.863	1.863	1.16	35164	0.01	2	
Cd	111	1	No Gas	1.828	1.828	3.48	7122	0.03	2	
Sr	88	1	No Gas	1.973	1.973	1.97	67591	0.00	2	
Mo	95	1	No Gas	1.833	1.833	7.14	12937	0.01	2	
Sn	118	1	No Gas	1.765	1.765	1.99	23692	0.01	2	
Sb	121	1	No Gas	1.840	1.840	2.62	33567	0.01	2	
Ba	137	1	No Gas	1.855	1.855	2.19	11762	0.02	2	
Tl	205	1	No Gas	1.869	1.869	0.97	81361	0.00	2	
Tl	203	1	No Gas	1.831	1.831	3.53	33833	0.01	2	
Pb	208	1	No Gas	1.830	1.830	1.40	113578	0.00	2	
U	238	1	No Gas	1.813	1.813	0.30	118692	0.00	2	
Ca	43	2	He	202.775	202.775	14.07	423	47.90	200	
Sb	121	2	He	1.729	1.729	1.27	14772	0.01	2	
Ti	47	2	He	1.472	1.472	24.12	307	0.48	200	
Cu	63	1	No Gas	4.087	4.087	3.38	52361	0.01	2	NewName Main CR1 Failed
Se	82	1	No Gas	1.822	1.822	37.99	256	0.71	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	999731	0.75	1105285	90.45	70	120	
Ge	72	2	He	610345	0.27	635874	95.99	70	120	
Ge	72	1	No Gas	2194681	1.09	2313189	94.88	70	120	
In	115	1	No Gas	2905156	1.56	2972793	97.72	70	120	
Bi	209	1	No Gas	3131970	0.64	3337431	93.84	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	229LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T22:10:44-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.412	5.412	3.25	146758	0.00	5	
Be	9	1	No Gas	4.491	4.491	1.57	16909	0.03	5	
V	51	2	He	4.471	4.471	2.28	29759	0.02	5	
Cr	52	2	He	4.595	4.595	2.04	32459	0.01	5	
Fe	56	2	He	484.970	484.970	0.77	2917937	0.02	500	
Se	78	2	He	5.128	5.128	0.43	501	1.02	5	
As	75	2	He	4.862	4.862	4.15	4829	0.10	5	
Ca	44	2	He	491.686	491.686	3.35	17385	2.83	500	
Na	23	2	He	763.188	763.188	1.14	839403	0.09	500	NewName2 Main CR1 Failed
Mg	24	2	He	494.404	494.404	0.77	286558	0.17	500	
K	39	2	He	499.808	499.808	0.63	363447	0.14	500	
Mn	55	2	He	4.766	4.766	3.66	23744	0.02	5	
Co	59	2	He	4.697	4.697	1.99	47536	0.01	5	
Ni	60	2	He	4.854	4.854	1.96	12052	0.04	5	
Cu	63	2	He	4.823	4.823	1.11	33669	0.01	5	
Zn	66	2	He	4.792	4.792	1.93	6625	0.07	5	
Al	27	2	He	4.778	4.778	1.02	2274	0.21	5	
B	11	1	No Gas	92.349	92.349	1.70	221201	0.04	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	4.940	4.940	1.12	105851	0.00	5	
Si	28	1	No Gas	37.064	37.064	2.75	678381	0.01	25	NewName2 Main CR1 Failed
Ag	107	1	No Gas	4.583	4.583	1.36	87673	0.01	5	
Cd	111	1	No Gas	4.675	4.675	1.72	18593	0.03	5	
Sr	88	1	No Gas	4.791	4.791	1.53	166000	0.00	5	
Mo	95	1	No Gas	4.653	4.653	2.90	33482	0.01	5	
Sn	118	1	No Gas	4.638	4.638	0.67	60118	0.01	5	
Sb	121	1	No Gas	4.600	4.600	1.50	81952	0.01	5	
Ba	137	1	No Gas	4.741	4.741	2.10	30025	0.02	5	
Tl	205	1	No Gas	4.531	4.531	2.52	203056	0.00	5	
Tl	203	1	No Gas	4.493	4.493	2.30	85435	0.01	5	
Pb	208	1	No Gas	4.579	4.579	2.25	290380	0.00	5	
U	238	1	No Gas	4.456	4.456	1.92	301093	0.00	5	
Ca	43	2	He	472.713	472.713	7.38	980	48.23	500	
Sb	121	2	He	4.437	4.437	0.82	36735	0.01	5	
Ti	47	2	He	5.312	5.312	16.72	1093	0.49	5	
Cu	63	1	No Gas	7.062	7.062	1.26	88812	0.01	5	NewName2 Main CR1 Failed
Se	82	1	No Gas	5.159	5.159	23.77	952	0.54	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1012826	1.42	1105285	91.63	70	120	
Ge	72	2	He	616479	0.56	635874	96.95	70	120	
Ge	72	1	No Gas	2216569	0.60	2313189	95.82	70	120	
In	115	1	No Gas	2968574	0.38	2972793	99.86	70	120	
Bi	209	1	No Gas	3233200	1.05	3337431	96.88	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	230ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T22:12:44-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.260	48.0	152500	47.3	0	ICSA Main CR1 Failed
Be	9	1	No Gas	0.005	128.4	38	41.9	0	ICSA Main CR1 Failed
V	51	2	He	-0.489	-9.1	3516	29.6	0	ICSA Main CR1 Failed
Cr	52	2	He	0.323	55.5	6301	20.0	0	ICSA Main CR1 Failed
Fe	56	2	He	14531.629	34.2	166507094	18.6	0	
Se	78	2	He	-0.353	-45.1	89	21.3	0	ICSA Main CR1 Failed
As	75	2	He	-0.171	-8.2	113	42.4	0	ICSA Main CR1 Failed
Ca	44	2	He	15100.150	36.4	991739	20.6	0	
Na	23	2	He	15801.129	33.6	29900735	17.5	0	
Mg	24	2	He	15298.777	33.3	16957756	17.4	0	
K	39	2	He	15617.015	34.7	18620181	18.7	0	
Mn	55	2	He	5.832	34.8	55423	18.2	0	
Co	59	2	He	0.022	9.4	497	26.6	0	ICSA Main CR1 Failed
Ni	60	2	He	0.013	87.3	393	7.8	0	ICSA Main CR1 Failed
Cu	63	2	He	-0.039	-34.7	1640	10.6	0	ICSA Main CR1 Failed
Zn	66	2	He	-0.022	-261.0	873	5.9	0	ICSA Main CR1 Failed
Al	27	2	He	14654.131	34.0	9154463	18.0	0	
B	11	1	No Gas	26.059	87.8	140941	13.7	0	
Al	27	1	No Gas	13957.316	87.9	309186895	32.7	0	
Si	28	1	No Gas	443.922	47.0	7398259	79.6	0	
Ag	107	1	No Gas	0.028	131.3	1747	24.9	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	0.075	67.9	570	46.7	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	0.241	66.9	17304	29.1	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	252.554	82.2	3008103	33.4	0	
Sn	118	1	No Gas	0.070	99.7	6379	50.0	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.016	509.9	3621	25.0	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.369	26.6	5947	56.6	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.064	59.7	5275	19.9	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.063	49.1	2397	6.2	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.021	136.7	5631	26.7	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.010	60.8	1300	25.4	0	ICSA Main CR1 Failed
Ca	43	2	He	14628.456	34.5	57257	19.0	0	
Sb	121	2	He	-0.048	-24.0	1250	32.0	0	ICSA Main CR1 Failed
Ti	47	2	He	305.983	32.7	119603	17.1	0	
Se	82	1	No Gas	0.037	1929.3	-131	-130.1	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	2348782	49.14	1105285	212.50	70	120	ISTD Failed
Ge	72	2	He	1230314	18.09	635874	193.48	70	120	ISTD Failed
Ge	72	1	No Gas	4727125	50.85	2313189	204.36	70	120	ISTD Failed
In	115	1	No Gas	6484109	47.67	2972793	218.12	70	120	ISTD Failed
Bi	209	1	No Gas	6520718	53.05	3337431	195.38	70	120	ISTD Failed

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	231ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq Date Time	2021-06-21T22:14:43-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	086CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	5.053	83.128	381105	40.40	100	5.1	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	4.073	83.149	40661	74.18	100	4.1	80	120	ICSB Main CR1 Failed
V	51	2	He	0.632	159.745	18543	53.88	100	0.6	80	120	ICSB Main CR1 Failed
Cr	52	2	He	1.268	82.141	22283	56.80	100	1.3	80	120	ICSB Main CR1 Failed
Fe	56	2	He	1472.604	72.331	20222727	55.83	100	1472.6	80	120	ICSB Main CR1 Failed
Se	78	2	He	0.527	162.602	277	41.62	100	0.5	80	120	ICSB Main CR1 Failed
As	75	2	He	1.001	87.623	2676	54.75	100	1.0	80	120	ICSB Main CR1 Failed
Ca	44	2	He	1506.669	72.761	119793	55.62	100	1506.7	80	120	ICSB Main CR1 Failed
Na	23	2	He	1718.799	71.766	4100077	50.90	100	1718.8	80	120	ICSB Main CR1 Failed
Mg	24	2	He	1623.706	72.276	2151963	55.89	100	1623.7	80	120	ICSB Main CR1 Failed
K	39	2	He	1568.676	74.941	2353938	54.42	100	1568.7	80	120	ICSB Main CR1 Failed
Mn	55	2	He	1.372	74.173	16332	53.60	100	1.4	80	120	ICSB Main CR1 Failed
Co	59	2	He	1.371	72.836	31843	56.13	100	1.4	80	120	ICSB Main CR1 Failed
Ni	60	2	He	1.310	73.783	7756	53.32	100	1.3	80	120	ICSB Main CR1 Failed
Cu	63	2	He	1.296	78.226	22620	52.77	100	1.3	80	120	ICSB Main CR1 Failed
Zn	66	2	He	1.202	75.978	4734	39.06	100	1.2	80	120	ICSB Main CR1 Failed
Al	27	2	He	1374.049	72.130	1028357	55.66	100	1374.0	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	31.854	79.858	239179	54.87	100	31.9	80	120	ICSB Main CR1 Failed
Al	27	1	No Gas	4779.373	81.185	165511192	72.79	100	4779.4	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	74.672	97.662	2170976	39.24	100	74.7	80	120	ICSB Main CR1 Failed
Ag	107	1	No Gas	4.562	78.514	216065	72.14	100	4.6	80	120	ICSB Main CR1 Failed
Cd	111	1	No Gas	4.349	80.412	42640	73.44	100	4.3	80	120	ICSB Main CR1 Failed
Sr	88	1	No Gas	5.092	80.241	435180	72.98	100	5.1	80	120	ICSB Main CR1 Failed
Mo	95	1	No Gas	95.681	79.286	1697464	72.79	100	95.7	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	4.680	82.301	149656	72.72	100	4.7	80	120	ICSB Main CR1 Failed
Sb	121	1	No Gas	4.805	83.346	204609	72.67	100	4.8	80	120	ICSB Main CR1 Failed
Ba	137	1	No Gas	5.114	80.465	79857	72.72	100	5.1	80	120	ICSB Main CR1 Failed
Tl	205	1	No Gas	3.478	62.450	453887	62.86	100	3.5	80	120	ICSB Main CR1 Failed
Tl	203	1	No Gas	3.440	62.273	190512	62.76	100	3.4	80	120	ICSB Main CR1 Failed
Pb	208	1	No Gas	4.049	65.283	783631	72.89	100	4.0	80	120	ICSB Main CR1 Failed
U	238	1	No Gas	4.213	65.821	865829	72.76	100	4.2	80	120	ICSB Main CR1 Failed
Ca	43	2	He	1546.789	72.290	7303	54.98	100	1546.8	80	120	ICSB Main CR1 Failed
Sb	121	2	He	1.202	80.851	24449	56.90	100	1.2	80	120	ICSB Main CR1 Failed
Ti	47	2	He	29.118	71.807	13622	55.28	100	29.1	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	5.099	80.743	155965	68.22	100	5.1	80	120	ICSB Main CR1 Failed
Se	82	1	No Gas	5.285	78.963	2313	77.50	100	5.3	80	120	ICSB Main CR1 Failed

QC ISTD Table

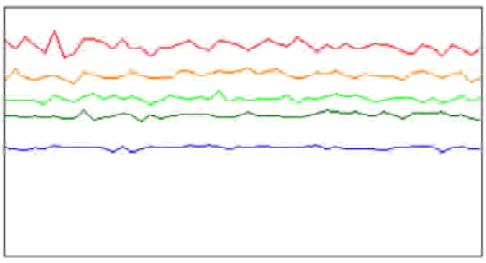
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	2795468	17.50	1105285	252.92	70	120	ISTD Failed
Ge	72	2	He	1591212	26.87	635874	250.24	70	120	ISTD Failed
Ge	72	1	No Gas	5416176	21.44	2313189	234.14	70	120	ISTD Failed
In	115	1	No Gas	7543977	13.83	2972793	253.77	70	120	ISTD Failed
Bi	209	1	No Gas	9176727	36.61	3337431	274.96	70	120	ISTD Failed

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\062121A.b
Acq. Date-Time	6/21/2021 11:22:42 AM
Report Comment	---
Instrument Name	G8421A SG18523544

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	5000	4236	42363.18		
24	20000	12696	126963.13		
59	50000	21740	217401.90		
115	50000	36470	364695.05		
208	50000	28336	283356.07		

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

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.601	5.000	
24	1.860	5.000	
59	1.650	5.000	
115	1.860	5.000	
208	1.810	5.000	

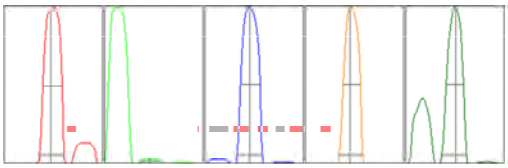
Mass	Background	Background (Required)	Background (Flag)
9	0.300		
24	0.500		
59	0.100		
115	0.500		
208	0.400		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.853 %
Doubly Charged	70 / 140 0.608 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4186.32	8.95	8.90 - 9.10	
24	12983.38	23.90	23.90 - 24.10	
59	22009.14	58.90	58.90 - 59.10	
115	36932.20	114.90	114.90 - 115.10	
208	28277.24	208.05	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.738		
24	0.65	0.741		
59	0.59	0.771		
115	0.52	0.719		
208	0.55	0.757		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.47 L/min	Dilution Gas	0.55 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.0 V	Deflect	14.0 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	135	Axis Gain	1.0009	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	1.3 mm	Torch V	-0.6 mm

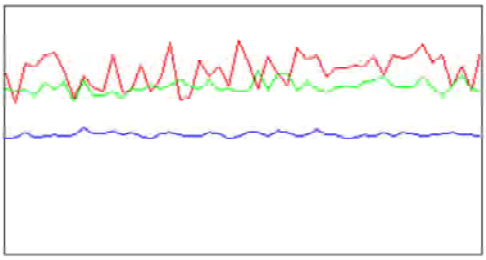
EM

Discriminator	4.4 mV	Analog HV	2547 V	Pulse HV	1302 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec] 0.306
Integration Time [sec] 0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	200	148	1483.68		
24	1000	675	6749.42		
59	20000	9629	96288.92		

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

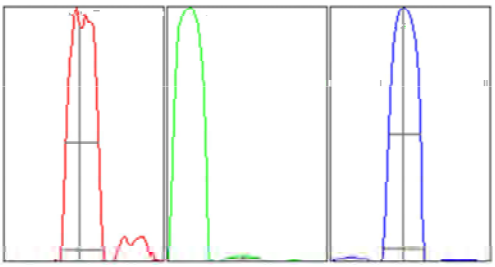
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.000	5.000	Fail
24	3.979	5.000	
59	2.103	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.000		
24	0.000		
59	0.200		

Oxide/Doubly Charged Ratio

Oxide 156 / 140 0.426 %
Doubly Charged 70 / 140 0.688 %

Resolution/Axis



Integration Time [sec] 0.1
Acquisition Time [sec] 22.24
Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	140.51	8.95	8.90 - 9.10	
24	683.19	23.95	23.90 - 24.10	
59	9739.08	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.778		
24	0.64	0.742		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.59	0.770		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.47 L/min	Dilution Gas	0.55 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.0 V	Deflect	0.2 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.1 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	135	Axis Gain	1.0009	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	1.3 mm	Torch V	-0.6 mm

EM

Discriminator	4.4 mV	Analog HV	2547 V	Pulse HV	1302 V

HS21060700 - Sub Perch IV (E2100645)

ALS WO# HS21060700

June 24, 2021 Service Request No:E2100645

Ragen Giga
ALS Environmental - US
10450 Stancliff Rd Suite 210
Houston, TX 77099

Laboratory Results for: HS21060700

Dear Ragen,

Enclosed are the results of the sample(s) submitted to our laboratory June 14, 2021
For your reference, these analyses have been assigned our service request number **E2100645.**

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.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

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

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS Houston	**Service Request No.:**	E2100645
Project:	HS21060700	**Date Received:**	06/14/21
Sample Matrix:	GW		

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

Twenty-four samples were received for analysis at ALS Environmental in Houston on 06/14/21.

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

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2100357: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS and DLCS recoveries are within QC limits. MS/MSD parent sample result 4180 ug/L (spike 0.1 ug/L).

EQ2100358: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu to a MS/MSD for this extraction batch. The LCS and DLCS recoveries are within QC limits.

DoD certification is held for the method/matrix/analytes provided in this report.

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

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

Client: ALS Environmental - US **Service Request:**E2100645
Project: HS21060700

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2100645-001	ICT2_061020	6/10/2021	0655
E2100645-002	ICT4_061020	6/10/2021	0710
E2100645-003	ICT7_061020	6/10/2021	0730
E2100645-004	ICT8_061020	6/10/2021	0745
E2100645-005	ICT8_061020_a	6/10/2021	0745
E2100645-006	EW01_061020	6/10/2021	0755
E2100645-007	ICT11_061020	6/10/2021	0815
E2100645-008	ICT11_061020_a	6/10/2021	0825
E2100645-009	ICT12A_061020	6/10/2021	0830
E2100645-010	ICT12B_061020	6/10/2021	0840
E2100645-011	ICT12C_061020	6/10/2021	0850
E2100645-012	ICT12D_061020	6/10/2021	0900
E2100645-013	ICT12E_061020	6/10/2021	0910
E2100645-014	ICT13A_061020	6/10/2021	0925
E2100645-015	ICT13B_061020	6/10/2021	0935
E2100645-016	ICT13C_061020	6/10/2021	0945
E2100645-017	ICT13D_061020	6/10/2021	0955
E2100645-018	ICT13E_061020	6/10/2021	1005
E2100645-019	ICT13F_061020	6/10/2021	1015
E2100645-020	ICT14A_061020	6/10/2021	1030
E2100645-021	ICT14B_061020	6/10/2021	1040
E2100645-022	ICT14C_061020	6/10/2021	1050
E2100645-023	ICT14D_061020	6/10/2021	1100
E2100645-024	ICT14E_061020	6/10/2021	1115

Service Request Summary

Folder #: **E2100645**
Client Name: ALS Environmental - US
Project Name: HS21060700
Project Number:

Report To: Ragen Giga
ALS Environmental - US
10450 Stancliff Rd Suite 210
Houston, TX 77099
USA
Phone Number:
Cell Number:
Fax Number:
E-mail: ragenp.giga@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/14/21
Internal Due Date: 6/25/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS21060700
EDD: No EDD Specified

26 125 mL-Plastic Bottle Plastic
Location: EHRMS-WIC 8B
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2100645-001	ICT2_061020	Water	06/10/21 0655	**IV**
E2100645-002	ICT4_061020	Water	06/10/21 0710	**IV**
E2100645-003	ICT7_061020	Water	06/10/21 0730	**IV**
E2100645-004	ICT8_061020	Water	06/10/21 0745	**IV**
E2100645-005	ICT8_061020_a	Water	06/10/21 0745	**IV**
E2100645-006	EW01_061020	Water	06/10/21 0755	**IV**
E2100645-007	ICT11_061020	Water	06/10/21 0815	**IV**
E2100645-008	ICT11_061020_a	Water	06/10/21 0825	**IV**
E2100645-009	ICT12A_061020	Water	06/10/21 0830	**IV**
E2100645-010	ICT12B_061020	Water	06/10/21 0840	**IV**
E2100645-011	ICT12C_061020	Water	06/10/21 0850	**IV**
E2100645-012	ICT12D_061020	Water	06/10/21 0900	**IV**
E2100645-013	ICT12E_061020	Water	06/10/21 0910	**IV**
E2100645-014	ICT13A_061020	Water	06/10/21 0925	**IV**
E2100645-015	ICT13B_061020	Water	06/10/21 0935	**IV**
E2100645-016	ICT13C_061020	Water	06/10/21 0945	**IV**

Service Request Summary

Folder #: **E2100645**
Client Name: ALS Environmental - US
Project Name: HS21060700
Project Number:

Report To: Ragen Giga
ALS Environmental - US
10450 Stancliff Rd Suite 210
Houston, TX 77099
USA
Phone Number:
Cell Number:
Fax Number:
E-mail: ragenp.giga@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/14/21
Internal Due Date: 6/25/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS21060700
EDD: No EDD Specified

26 125 mL-Plastic Bottle Plastic
Location: EHRMS-WIC 8B
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2100645-017	ICT13D_061020	Water	06/10/21 0955	**IV**
E2100645-018	ICT13E_061020	Water	06/10/21 1005	**IV**
E2100645-019	ICT13F_061020	Water	06/10/21 1015	**IV**
E2100645-020	ICT14A_061020	Water	06/10/21 1030	**IV**
E2100645-021	ICT14B_061020	Water	06/10/21 1040	**IV**
E2100645-022	ICT14C_061020	Water	06/10/21 1050	**IV**
E2100645-023	ICT14D_061020	Water	06/10/21 1100	**IV**
E2100645-024	ICT14E_061020	Water	06/10/21 1115	**IV**

Service Request Summary

Folder #: **E2100645**
Client Name: ALS Environmental - US
Project Name: HS21060700
Project Number:

Report To: Ragen Giga
ALS Environmental - US
10450 Stancliff Rd Suite 210
Houston, TX 77099
USA
Phone Number:
Cell Number:
Fax Number:
E-mail: ragenp.giga@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/14/21
Internal Due Date: 6/25/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS21060700
EDD: No EDD Specified

26 125 mL-Plastic Bottle Plastic
Location: EHRMS-WIC 8B
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	23	Level II due 6/25,IV due 7/2
Semivoa GCMS	ClO4 DOD/6850	1	MS/MSD

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
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.
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.

Data Qualifiers

Lab Standard

O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
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
American Association for Laboratory Accreditation	2897.01 2020	11/30/2021
Arkansas Department of Environmental Quality	21-022-0	3/26/2022
Department of Defense	A2LA 2897.01	11/30/2021
Florida Department of Health	E87611-2020	6/30/2021
Hawaii Department of Health	2021-2022	4/30/2022
Kansas Department of Health and Environment	E-10352-2020	7/31/2021
Louisiana Department of Environmental Quality	03087-2021	6/30/2022
Louisiana Department of Environmental Quality	03087-2020	6/30/2021
Louisiana Department of Health and Hospitals	LA028-2021	12/31/2021
Maine Department of Health and Human Services	2020016	6/5/2022
Maryland Department of the Environment	343-2020	6/30/2021
Minnesota Department of Health	2021671	12/31/2021
Nevada Department of Concervation and Natural Resources	TX026932021-4	7/31/2021
New Hampshire Environmental Laboratory Accreditation Program	209421	4/24/2022
New Jersey Department of Environmental Protection	TX008	6/30/2021
Oklahoma Department of Environmental Quality	2020-123	8/31/2021
Pennsylvania Department of Environmental Protection	014	6/30/2021
Tennessee Department of Environment and Concervation	04016-2021	4/30/2022
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-10	7/31/2021

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

10450 Stancliff Rd, Ste 210
Houston, TX 77099
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www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Texas** **COC ID:** **16296**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Ragen Giga
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	RagenP.Giga@ALSGlobal.com
Alternate Contact:	
Email:	

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS21060700
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS21060700-01**	**ICT2_061020**	**Groundwater**	**10 Jun 2021 06:55**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
2.	**HS21060700-02**	**ICT4_061020**	**Groundwater**	**10 Jun 2021 07:10**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
3.	**HS21060700-03**	**ICT7_061020**	**Groundwater**	**10 Jun 2021 07:30**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
4.	**HS21060700-04**	**ICT8_061020**	**Groundwater**	**10 Jun 2021 07:45**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
5.	**HS21060700-05**	**ICT8_061020_a**	**Groundwater**	**10 Jun 2021 07:45**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
6.	**HS21060700-06**	**EW01_061020**	**Groundwater**	**10 Jun 2021 07:55**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
7.	**HS21060700-07**	**ICT11_061020**	**Groundwater**	**10 Jun 2021 08:15**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
8.	**HS21060700-08**	**ICT11_061020_a**	**Groundwater**	**10 Jun 2021 08:25**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
9.	**HS21060700-09**	**ICT12A_061020**	**Groundwater**	**10 Jun 2021 08:30**

Subcontract Chain of Custody

SAMPLING STATE: Texas **COC ID: 16296**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
10.	**HS21060700-10**	**ICT12B_061020**	**Groundwater**	**10 Jun 2021 08:40**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
11.	**HS21060700-11**	**ICT12C_061020**	**Groundwater**	**10 Jun 2021 08:50**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
12.	**HS21060700-12**	**ICT12D_061020**	**Groundwater**	**10 Jun 2021 09:00**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
13.	**HS21060700-13**	**ICT12E_061020**	**Groundwater**	**10 Jun 2021 09:10**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
14.	**HS21060700-14**	**ICT13A_061020**	**Groundwater**	**10 Jun 2021 09:25**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
15.	**HS21060700-15**	**ICT13B_061020**	**Groundwater**	**10 Jun 2021 09:35**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
16.	**HS21060700-16**	**ICT13C_061020**	**Groundwater**	**10 Jun 2021 09:45**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
17.	**HS21060700-17**	**ICT13D_061020**	**Groundwater**	**10 Jun 2021 09:55**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
18.	**HS21060700-18**	**ICT13E_061020**	**Groundwater**	**10 Jun 2021 10:05**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
19.	**HS21060700-19**	**ICT13F_061020**	**Groundwater**	**10 Jun 2021 10:15**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
20.	**HS21060700-20**	**ICT14A_061020**	**Groundwater**	**10 Jun 2021 10:30**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
21.	**HS21060700-21**	**ICT14B_061020**	**Groundwater**	**10 Jun 2021 10:40**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
22.	**HS21060700-22**	**ICT14C_061020**	**Groundwater**	**10 Jun 2021 10:50**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
23.	**HS21060700-23**	**ICT14D_061020**	**Groundwater**	**10 Jun 2021 11:00**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021
24.	**HS21060700-24**	**ICT14E_061020**	**Groundwater**	**10 Jun 2021 11:15**
	Provide Level II and Level IV reports in separate pdf			25 Jun 2021

Subcontract Chain of Custody

SAMPLING STATE: **Texas** **COC ID:** **16296**

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
ANALYSIS REQUESTED			DUE DATE

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS21060700-02 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 6/14/21 0817

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

Cooler Receipt Form

ALS Environmental

Project Chemist CH

Client/Project ALS-H Thermometer ID IR31

Date/Time Received: 6/14/21 Initials: CH Date/Time Logged in: 6/14/21 Initials CH

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

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

3. Were custody seals on coolers? ○ Yes ✓ No
   Were they intact? ○ Yes ○ No ✓ N/A
   Were they signed and dated? ○ Yes ○ No ✓ N/A
   If yes, how many and where?

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

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

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		6/14/21	0857	CH	0.8	X
						☐
						☐
						☐

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

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
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SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 381328 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 6/14/21 14:49

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2100644-001	MW5_060921	.01	6850/ClO4 DOD			Water	10mL	
2	E2100644-002	18cptMW08DW_060921	.01	6850/ClO4 DOD			Water	10mL	
3	E2100644-003	18cptMW08SW_060921	.01	6850/ClO4 DOD			Water	10mL	
4	E2100644-004	18cptMW08SW_060921_a	.01	6850/ClO4 DOD			Water	10mL	
5	E2100644-005	MW6_060921	.01	6850/ClO4 DOD			Water	10mL	
6	E2100644-006	MW1_060921	.01	6850/ClO4 DOD			Water	10mL	
7	E2100644-007	18cptMW04SW_060921	.01	6850/ClO4 DOD			Water	10mL	
8	E2100644-008	18cptMW04_060921	.01	6850/ClO4 DOD			Water	10mL	
9	E2100644-009	17ww08_060921	.01	6850/ClO4 DOD			Water	10mL	
10	E2100645-001	ICT2_061020	.01	6850/ClO4 DOD			Water	10mL	
11	E2100645-002	ICT4_061020	.01	6850/ClO4 DOD			Water	10mL	
12	E2100645-003	ICT7_061020	.01	6850/ClO4 DOD			Water	10mL	
13	E2100645-004	ICT8_061020	.01	6850/ClO4 DOD			Water	10mL	
14	E2100645-005	ICT8_061020_a	.01	6850/ClO4 DOD			Water	10mL	
15	E2100645-006	EW01_061020	.01	6850/ClO4 DOD			Water	10mL	
16	E2100645-007	ICT11_061020	.01	6850/ClO4 DOD			Water	10mL	
17	E2100645-008	ICT11_061020_a	.01	6850/ClO4 DOD			Water	10mL	
18	E2100645-009	ICT12A_061020	.01	6850/ClO4 DOD			Water	10mL	
19	E2100645-010	ICT12B_061020	.01	6850/ClO4 DOD			Water	10mL	
20	E2100645-011	ICT12C_061020	.01	6850/ClO4 DOD			Water	10mL	
21	EQ2100357-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2100357-02	LCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2100357-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
24	EQ2100357-04	ICT4_061020 MS	.01	6850/ClO4 DOD			Liquid	10mL	
25	EQ2100357-05	ICT4_061020 DMS	.01	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Sodium Perchlorate 1 ug/mL (IS) (18-O) as CLO4 Inventory ID 214765 Logbook Ref: Sodium Perchlorate Expires On: 12/11/2022

E2100644-001	100.00µL	E2100644-002	100.00µL	E2100644-003	100.00µL	E2100644-004	100.00µL	E2100644-005	100.00µL	E2100644-006	100.00µL
E2100644-007	100.00µL	E2100644-008	100.00µL	E2100644-009	100.00µL	E2100645-001	100.00µL	E2100645-002	100.00µL	E2100645-003	100.00µL
E2100645-004	100.00µL	E2100645-005	100.00µL	E2100645-006	100.00µL	E2100645-007	100.00µL	E2100645-008	100.00µL	E2100645-009	100.00µL
E2100645-010	100.00µL	E2100645-011	100.00µL	EQ2100357-01	100.00µL	EQ2100357-02	100.00µL	EQ2100357-03	100.00µL	EQ2100357-04	100.00µL
EQ2100357-05	100.00µL										

Preparation Information Benchsheet

Prep Run#: 381328 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 6/14/21 14:49

Name:	Perchlorate Intermediate Stock1	Inventory ID	217422	Logbook Ref:	Perchlorate	Expires On:	11/26/2021

EQ2100357-02 1.00µL EQ2100357-03 1.00µL EQ2100357-04 1.00µL EQ2100357-05 1.00µL

Preparation Steps

Step: Preparation
Started: 6/14/21 14:49
Finished: 6/14/21 15:45
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 6/14/21

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Preparation Information Benchsheet

Prep Run#: 381329 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 6/14/21 14:50

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2100645-012	ICT12D_061020	.01	6850/ClO4 DOD			Water	10mL	
2	E2100645-013	ICT12E_061020	.01	6850/ClO4 DOD			Water	10mL	
3	E2100645-014	ICT13A_061020	.01	6850/ClO4 DOD			Water	10mL	
4	E2100645-015	ICT13B_061020	.01	6850/ClO4 DOD			Water	10mL	
5	E2100645-016	ICT13C_061020	.01	6850/ClO4 DOD			Water	10mL	
6	E2100645-017	ICT13D_061020	.01	6850/ClO4 DOD			Water	10mL	
7	E2100645-018	ICT13E_061020	.01	6850/ClO4 DOD			Water	10mL	
8	E2100645-019	ICT13F_061020	.01	6850/ClO4 DOD			Water	10mL	
9	E2100645-020	ICT14A_061020	.01	6850/ClO4 DOD			Water	10mL	
10	E2100645-021	ICT14B_061020	.01	6850/ClO4 DOD			Water	10mL	
11	E2100645-022	ICT14C_061020	.01	6850/ClO4 DOD			Water	10mL	
12	E2100645-023	ICT14D_061020	.01	6850/ClO4 DOD			Water	10mL	
13	E2100645-024	ICT14E_061020	.01	6850/ClO4 DOD			Water	10mL	
14	EQ2100358-01	MB		6850/ClO4 DOD			Liquid	10mL	
15	EQ2100358-02	LCS		6850/ClO4 DOD			Liquid	10mL	
16	EQ2100358-03	DLCS		6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Sodium Perchlorate 1 ug/mL (IS) (18-O) as CLO4 Inventory ID 214765 Logbook Ref: Sodium Perchlorate Expires On: 12/11/2022

E2100645-012	100.00µL	E2100645-013	100.00µL	E2100645-014	100.00µL	E2100645-015	100.00µL	E2100645-016	100.00µL	E2100645-017	100.00µL
E2100645-018	100.00µL	E2100645-019	100.00µL	E2100645-020	100.00µL	E2100645-021	100.00µL	E2100645-022	100.00µL	E2100645-023	100.00µL
E2100645-024	100.00µL	EQ2100358-01	100.00µL	EQ2100358-02	100.00µL	EQ2100358-03	100.00µL				

Name: Perchlorate Intermediate Stock1 Inventory ID 217422 Logbook Ref: Perchlorate Expires On: 11/26/2021

EQ2100358-02	1.00µL	EQ2100358-03	1.00µL

Preparation Steps

Step: Preparation
Started: 6/14/21 14:50
Finished: 6/14/21 15:50
By: GRIVERA
Comments

Preparation Information Benchsheet

Prep Run#: 381329
Team: Semivoa GCMS/GRIVERA

Prep WorkFlow: GenExt28Day
Prep Method: Method

Status: Prepped
Prep Date/Time: 6/14/21 14:50

Comments: _____

Reviewed By: GR Date: 6/14/21

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined
Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0655
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT2_061020	**Units:**	µg/L
Lab Code:	E2100645-001	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**1090**		10.0	5.00	2.50	100	6/14/21	6/15/21 20:26	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0710
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT4_061020	**Units:**	µg/L
Lab Code:	E2100645-002	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**4180**		10.0	5.00	2.50	100	6/14/21	6/15/21 20:34	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0730
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT7_061020	**Units:**	µg/L
Lab Code:	E2100645-003	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**137**		1.00	0.500	0.250	10	6/14/21	6/15/21 20:43	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0745
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT8_061020	**Units:**	µg/L
Lab Code:	E2100645-004	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0920**	J	0.200	0.100	0.0500	2	6/14/21	6/22/21 22:26	381328	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0745
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT8_061020_a	**Units:**	µg/L
Lab Code:	E2100645-005	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.117**	J	0.200	0.100	0.0500	2	6/14/21	6/22/21 22:34	381328	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0755
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	EW01_061020	**Units:**	µg/L
Lab Code:	E2100645-006	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**70.1**		2.00	1.00	0.500	20	6/14/21	6/22/21 22:43	381328	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0815
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT11_061020	**Units:**	µg/L
Lab Code:	E2100645-007	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**13900**		100	50.0	25.0	1000	6/14/21	6/15/21 21:08	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0825
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT11_061020_a	**Units:**	µg/L
Lab Code:	E2100645-008	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**14000**		100	50.0	25.0	1000	6/14/21	6/15/21 21:17	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0830
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT12A_061020	**Units:**	µg/L
Lab Code:	E2100645-009	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**1070**		10.0	5.00	2.50	100	6/14/21	6/22/21 23:00	381328	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0840
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT12B_061020	**Units:**	µg/L
Lab Code:	E2100645-010	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**35700**		100	50.0	25.0	1000	6/14/21	6/22/21 23:09	381328	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0850
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT12C_061020	**Units:**	µg/L
Lab Code:	E2100645-011	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**13000**		100	50.0	25.0	1000	6/14/21	6/22/21 23:17	381328	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0900
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT12D_061020	**Units:**	µg/L
Lab Code:	E2100645-012	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**28500**		100	50.0	25.0	1000	6/14/21	6/22/21 23:35	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0910
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT12E_061020	**Units:**	µg/L
Lab Code:	E2100645-013	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**29400**		100	50.0	25.0	1000	6/14/21	6/22/21 23:43	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0925
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT13A_061020	**Units:**	µg/L
Lab Code:	E2100645-014	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**58.9**		1.00	0.500	0.250	10	6/14/21	6/22/21 23:52	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0935
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT13B_061020	**Units:**	µg/L
Lab Code:	E2100645-015	**Basis:**	As Received

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

Analytical 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	6/14/21	6/23/21 00:00	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0945
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT13C_061020	**Units:**	µg/L
Lab Code:	E2100645-016	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**130**		1.00	0.500	0.250	10	6/14/21	6/23/21 00:09	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0955
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT13D_061020	**Units:**	µg/L
Lab Code:	E2100645-017	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**4.31**		0.200	0.100	0.0500	2	6/14/21	6/23/21 00:18	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 1005
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT13E_061020	**Units:**	µg/L
Lab Code:	E2100645-018	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**31.9**		1.00	0.500	0.250	10	6/14/21	6/23/21 00:35	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 1015
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT13F_061020	**Units:**	µg/L
Lab Code:	E2100645-019	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.265**		0.200	0.100	0.0500	2	6/14/21	6/23/21 00:44	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 1030
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT14A_061020	**Units:**	µg/L
Lab Code:	E2100645-020	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**42.3**		1.00	0.500	0.250	10	6/14/21	6/23/21 00:52	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 1040
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT14B_061020	**Units:**	µg/L
Lab Code:	E2100645-021	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**3450**		10.0	5.00	2.50	100	6/14/21	6/23/21 01:01	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 1050
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT14C_061020	**Units:**	µg/L
Lab Code:	E2100645-022	**Basis:**	As Received

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

Analytical 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	1.00	0.500	0.250	10	6/14/21	6/23/21 15:57	381329	728540	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 1100
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT14D_061020	**Units:**	µg/L
Lab Code:	E2100645-023	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**7.49**		1.00	0.500	0.250	10	6/14/21	6/23/21 16:06	381329	728540	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 1115
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT14E_061020	**Units:**	µg/L
Lab Code:	E2100645-024	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**816**		10.0	5.00	2.50	100	6/14/21	6/23/21 01:27	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2100357-01	**Basis:**	As Received

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

Analytical 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	6/14/21	6/15/21 22:51	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2100358-01	**Basis:**	As Received

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

Analytical 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	6/14/21	6/15/21 23:59	381329	727655	

Accuracy & Precision

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700
Sample Matrix: Water

Service Request: E2100645
Date Analyzed: 6/15/21

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: As Received

Extraction Lot: 381328

	Lab Control Sample EQ2100357-02			Duplicate Lab Control Sample EQ2100357-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.107	0.100	107	0.118	0.100	118	84 - 119	10	15

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

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2100357-02	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.107**		0.100	0.0500	0.0250	1	6/14/21	6/15/21 22:59	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2100357-03	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.118**		0.100	0.0500	0.0250	1	6/14/21	6/15/21 23:08	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/16/21 - 6/22/21
Sample Matrix:	Water		

Lab Control Sample Summary

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

Analytical Method:	6850	**Units:**	µg/L
Prep Method:	Method	**Basis:**	As Received
		Extraction Lot:	381329

	Lab Control Sample EQ2100358-02			Duplicate Lab Control Sample EQ2100358-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.118	0.100	118	0.113	0.100	113	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:**	E2100645
Project:	HS21060700	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2100358-02	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.118**		0.100	0.0500	0.0250	1	6/14/21	6/16/21 00:08	381329	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2100358-03	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.113**		0.100	0.0500	0.0250	1	6/14/21	6/22/21 23:26	381329	728385	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21
Sample Matrix:	Water	**Date Received:**	6/14/21
		Date Analyzed:	6/15/21

Matrix Spike Summary

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

Sample Name:	ICT4_061020	**Units:**	µg/L
Lab Code:	E2100645-002	**Basis:**	As Received

Analytical Method: 6850
Prep Method: Method

		ICT4_061020MS				ICT4_061020DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2100357-04				EQ2100357-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	4180	3980	0.100	-205820#	4070	0.100	-111390#	84 - 119	2	15

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0710
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT4_061020	**Units:**	µg/L
Lab Code:	EQ2100357-04	**Basis:**	As Received
Run Type:	Matrix Spike		

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**3980**		10.0	5.00	2.50	100	6/14/21	6/15/21 19:00	381328	727655	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Collected:**	6/10/21 0710
Sample Matrix:	Water	**Date Received:**	6/14/21
Sample Name:	ICT4_061020	**Units:**	µg/L
Lab Code:	EQ2100357-05	**Basis:**	As Received
Run Type:	Duplicate Matrix Spike		

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**4070**		10.0	5.00	2.50	100	6/14/21	6/15/21 19:09	381328	727655	

Initial Calibration

ALS Environmental - Houston HRMS
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20210615

ALS Environmental

ICAL Date: 6/15/2021
Cal. Std. xp: 11/26/2021
ICAL ID: **EC2100038**

1st Review: Grivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

Mobile Phases **A:** 0.75% Formic Acid/Water 3100811-07 **B:** MeOH 216350

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE1		20210615_007	Perchlorate6850c.lcm	1x	☒	3100810-05	6/15/2021 15:32
2	PERCHLORATE2		20210615_008	Perchlorate6850c.lcm	1x	☒	3100810-06	6/15/2021 15:41
3	PERCHLORATE3		20210615_009	Perchlorate6850c.lcm	1x	☒	3100810-07	6/15/2021 15:49
4	PERCHLORATE4		20210615_010	Perchlorate6850c.lcm	1x	☒	3100810-08	6/15/2021 15:58
5	PERCHLORATE5		20210615_011	Perchlorate6850c.lcm	1x	☒	3100810-09	6/15/2021 16:07
6	PERCHLORATE6		20210615_012	Perchlorate6850c.lcm	1x	☒	3100811-01	6/15/2021 16:15
7	PERCHLORATE7		20210615_013	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 16:24
8	PERCHLORATE8		20210615_014	Perchlorate6850c.lcm	1x	☒	3100811-03	6/15/2021 16:32
9	PERCHLORATE9		20210615_015	Perchlorate6850c.lcm	1x	☒	3100811-04	6/15/2021 16:41
10	PERCHLORATE10		20210615_016	Perchlorate6850c.lcm	1x	☒	3100811-05	6/15/2021 16:49
11	PERCHLORATEICV		20210615_017	Perchlorate6850c.lcm	1x	☒	3100811-06	6/15/2021 16:58
12	ICS		20210615_018	Perchlorate6850c.lcm	1x	☒		6/15/2021 17:06
13	LODV		20210615_019	Perchlorate6850c.lcm	1x	☒		6/15/2021 17:15
14	PERCHLORATE7		20210615_020	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 17:23
15	EQ2100354-01		20210615_021	Perchlorate6850c.lcm	1x	☒		6/15/2021 17:52
16	EQ2100354-02		20210615_022	Perchlorate6850c.lcm	1x	☒		6/15/2021 18:00
17	EQ2100354-03		20210615_023	Perchlorate6850c.lcm	1x	☒		6/15/2021 18:09
18	E2100631-001X100		20210615_024	Perchlorate6850c.lcm	100x	☒	DNU-over calibration range	6/15/2021 18:17
19	E2100608-001X100		20210615_025	Perchlorate6850c.lcm	100x	☒		6/15/2021 18:26
20	E2100629-001X10		20210615_026	Perchlorate6850c.lcm	10x	☒	DNU-INST low	6/15/2021 18:34
21	E2100630-001X10		20210615_027	Perchlorate6850c.lcm	10x	☒	DNU-INST low	6/15/2021 18:43
22	E2100632-006X100		20210615_028	Perchlorate6850c.lcm	100x	☒	DNU-INST low	6/15/2021 18:52
23	EQ2100357-04X100		20210615_029	Perchlorate6850c.lcm	100x	☒		6/15/2021 19:00
24	EQ2100357-05X100		20210615_030	Perchlorate6850c.lcm	100x	☒		6/15/2021 19:09
25	PERCHLORATE7		20210615_031	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 19:17
26	E2100644-001X1000		20210615_032	Perchlorate6850c.lcm	1000x	☒		6/15/2021 19:26
27	E2100644-002X100		20210615_033	Perchlorate6850c.lcm	100x	☒		6/15/2021 19:34
28	E2100644-003X1000		20210615_034	Perchlorate6850c.lcm	1000x	☒		6/15/2021 19:43
29	E2100644-004X1000		20210615_035	Perchlorate6850c.lcm	1000x	☒		6/15/2021 19:51
30	E2100644-005X100		20210615_036	Perchlorate6850c.lcm	100x	☒		6/15/2021 20:00
31	E2100644-006X100		20210615_037	Perchlorate6850c.lcm	100x	☒		6/15/2021 20:09
32	E2100644-008X10		20210615_038	Perchlorate6850c.lcm	10x	☒	DNU-INST low	6/15/2021 20:17
33	E2100645-001X100		20210615_039	Perchlorate6850c.lcm	100x	☒		6/15/2021 20:26
34	E2100645-002X100		20210615_040	Perchlorate6850c.lcm	100x	☒		6/15/2021 20:34
35	E2100645-003X10		20210615_041	Perchlorate6850c.lcm	10x	☒		6/15/2021 20:43
36	PERCHLORATE7		20210615_042	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 20:51
37	E2100645-006X10		20210615_043	Perchlorate6850c.lcm	10x	☒	DNU-INST low	6/15/2021 21:00
38	E2100645-007X1000		20210615_044	Perchlorate6850c.lcm	1000x	☒		6/15/2021 21:08
39	E2100645-008X1000		20210615_045	Perchlorate6850c.lcm	1000x	☒		6/15/2021 21:17
40	PERCHLORATE7		20210615_046	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 21:25
41	EQ2100354-04		20210615_047	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 21:34
42	EQ2100354-05		20210615_048	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 21:42
43	E2100632-001		20210615_049	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 21:51
44	E2100632-002		20210615_050	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 21:59
45	E2100632-003		20210615_051	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 22:08
46	E2100632-004		20210615_052	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 22:17
47	PERCHLORATE7		20210615_053	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 22:25
48	E2100632-005		20210615_054	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 22:34
49	E2100632-007		20210615_055	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 22:42
50	EQ2100357-01		20210615_056	Perchlorate6850c.lcm	1x	☒		6/15/2021 22:51
51	EQ2100357-02		20210615_057	Perchlorate6850c.lcm	1x	☒		6/15/2021 22:59
52	EQ2100357-03		20210615_058	Perchlorate6850c.lcm	1x	☒		6/15/2021 23:08
53	E2100644-007		20210615_059	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 23:16
54	E2100644-009		20210615_060	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 23:25
55	E2100645-004		20210615_061	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 23:33
56	E2100645-005		20210615_062	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 23:42
57	PERCHLORATE7		20210615_063	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 23:50
58	EQ2100358-01		20210615_064	Perchlorate6850c.lcm	1x	☒		6/15/2021 23:59
59	EQ2100358-02		20210615_065	Perchlorate6850c.lcm	1x	☒		6/16/2021 0:08
60	EQ2100358-03		20210615_066	Perchlorate6850c.lcm	1x	☒	Reanalyze	6/16/2021 0:16
61	E2100645-017		20210615_067	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/16/2021 0:25
62	E2100645-019		20210615_068	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/16/2021 0:33
63	E2100645-022		20210615_069	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/16/2021 0:42
64	E2100645-023		20210615_070	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/16/2021 0:50

20210615

1st Review: Grivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/15/2021
Cal. Std. xp: 11/26/2021
ICAL ID: **EC2100038**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100811-07 **B:** MeOH 216350

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
65	PERCHLORATE7		20210615_071	Perchlorate6850c.lcm	1x	☒	3100811-02	6/16/2021 0:59

Initial Calibration - Detailed Report

Calibration ID: EC2100038 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2100038-01	PERCHLORATE1	20210615_007	06/15/2021 15:32
02	EC2100038-02	PERCHLORATE2	20210615_008	06/15/2021 15:41
03	EC2100038-03	PERCHLORATE3	20210615_009	06/15/2021 15:49
04	EC2100038-04	PERCHLORATE4	20210615_010	06/15/2021 15:58
05	EC2100038-05	PERCHLORATE5	20210615_011	06/15/2021 16:07
06	EC2100038-06	PERCHLORATE6	20210615_012	06/15/2021 16:15
07	EC2100038-07	PERCHLORATE7	20210615_013	06/15/2021 16:24
08	EC2100038-08	PERCHLORATE8	20210615_014	06/15/2021 16:32
09	EC2100038-09	PERCHLORATE9	20210615_015	06/15/2021 16:41
10	EC2100038-10	PERCHLORATE10	20210615_016	06/15/2021 16:49

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

Perchlorate **Average RF** **RSD = 12.07** **Average RF = 0.1057**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1311	02	0.5000	0.1058	03	0.7000	0.1084	04	1.0000	0.1195
05	2.0000	0.1126	06	5.0000	0.1042	07	10.0000	0.09375	08	20.0000	0.09679
09	30.0000	0.0936	10	50.0000	0.09139						

Analyte

Perchlorate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.124	24.0	02	0.5000	0.501	0.1	03	0.7000	0.718	2.5
04	1.0000	1.13	13.1	05	2.0000	2.13	6.6	06	5.0000	4.93	-1.4
07	10.0000	8.87	-11.3	08	20.0000	18.3	-8.4	09	30.0000	26.6	-11.5
10	50.0000	43.2	-13.6								

Initial Calibration Verification Summary Report

Calibration ID:	EC2100038	**Instrument ID:**	E-LCMS-01
Datafile ID:	20210615_017	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2100038-11	T	Average RF	10	9.463	ng/mL	-5.4	<= 15

Insight Report

Printed at 6/17/2021 1:58:19 PM

Method File: I:\LCMS01\DATA\20210615\20210615.lcm
Project File: I:\LCMS01\DATA\20210615\20210615.damlp

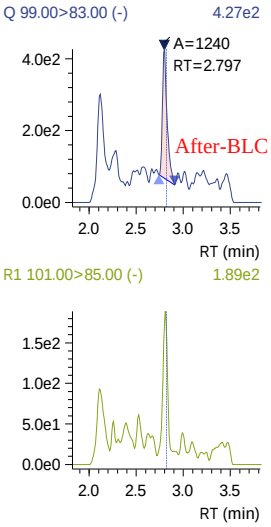
20210615_007

Sample ID: PERCHLORATE1
Date Acquired: 6/15/2021 3:32:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_007.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.797	1240	94612	1	0.1239	ng/mL	0.1000	37.61
Sodium Perchlorate-18O4 _IS	Auto	2.801	94612	94612	1	1.0000	ng/mL	1.0000	----

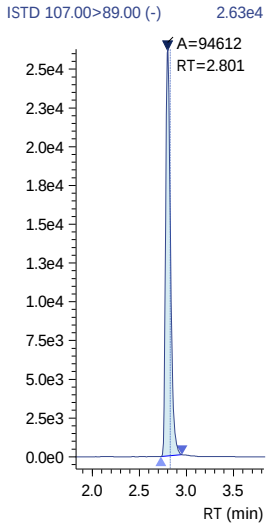
Perchlorate

Conc 0.1239
R#1 37.61 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

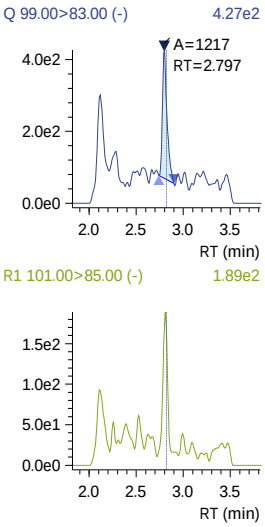
Method File: I:\LCMS01\DATA\20210615\20210615.lcm

20210615_007

Sample ID: PERCHLORATE1
Date Acquired: 6/15/2021 3:32:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_007.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

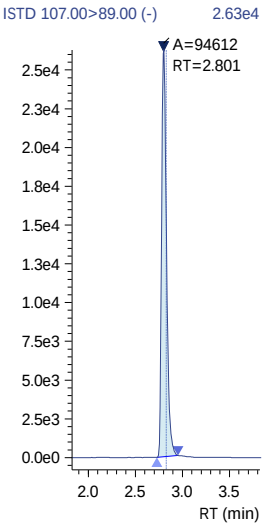
Perchlorate

Conc 0.1239
R#1 37.94 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 1:58:19 PM

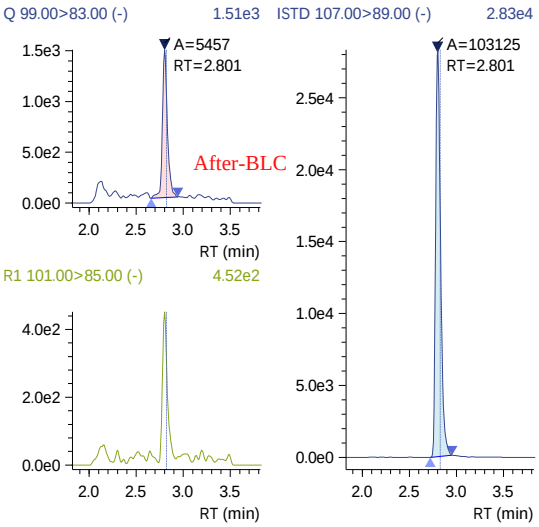
20210615_008

Sample ID: PERCHLORATE2
Date Acquired: 6/15/2021 3:41:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_008.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.801	5457	103125	1	0.5006	ng/mL	0.5000	28.85
Sodium Perchlorate-18O4 _IS	Auto	2.801	1031 25	103125	1	1.0000	ng/mL	1.0000	----

Perchlorate

Conc 0.5006
R#1 28.85 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000

Insight Report

Printed at 6/17/2021 2:00:46 PM

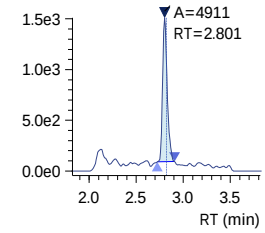
20210615_008

Sample ID: PERCHLORATE2
Date Acquired: 6/15/2021 3:41:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_008.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

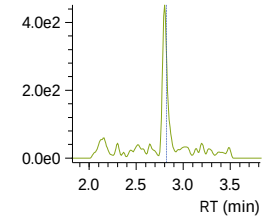
Perchlorate

Conc 0.4590
R#1 30.76 (0.00)

Q 99.00>83.00 (-) 1.51e3



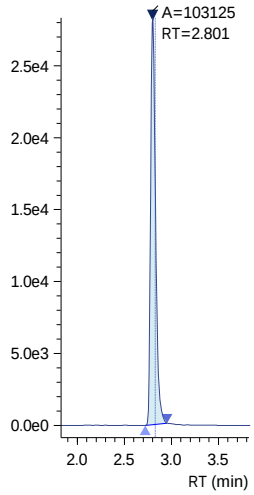
R1 101.00>85.00 (-) 4.52e2



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.83e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

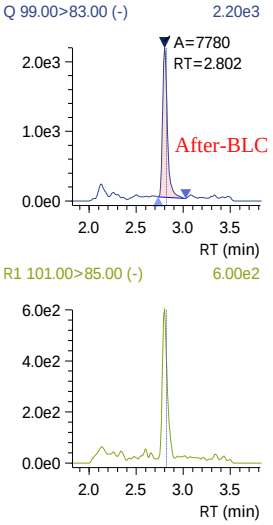
20210615_009

Sample ID: PERCHLORATE3
Date Acquired: 6/15/2021 3:49:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_009.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.802	7780	102556	1	0.7176	ng/mL	0.7000	26.99
Sodium Perchlorate-18O4 _IS	Auto	2.800	1025 56	102556	1	1.0000	ng/mL	1.0000	----

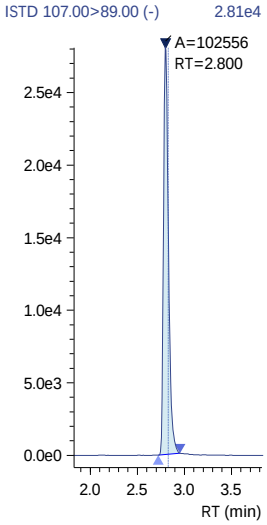
Perchlorate

Conc 0.7176
R#1 26.99 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

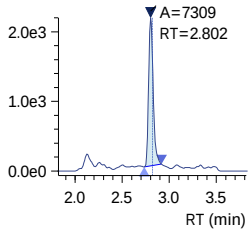
20210615_009

Sample ID: PERCHLORATE3
Date Acquired: 6/15/2021 3:49:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_009.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

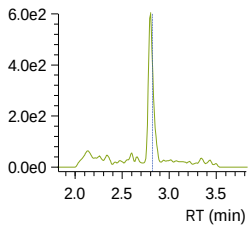
Perchlorate

Conc 0.6869
R#1 27.36 (0.00)

Q 99.00>83.00 (-) 2.20e3



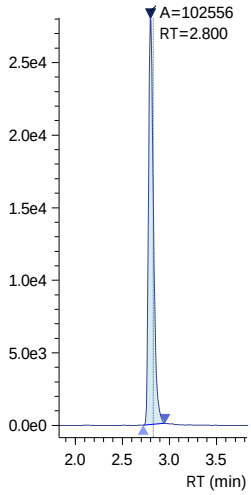
R1 101.00>85.00 (-) 6.00e2



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.81e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

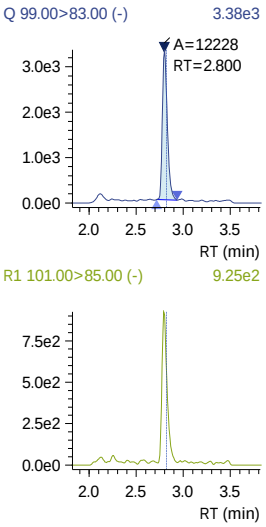
20210615_010

Sample ID: PERCHLORATE4
Date Acquired: 6/15/2021 3:58:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_010.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.800	12228	102296	1	1.1308	ng/mL	1.0000	29.18
Sodium Perchlorate-18O4 _IS	Auto	2.799	1022 96	102296	1	1.0000	ng/mL	1.0000	----

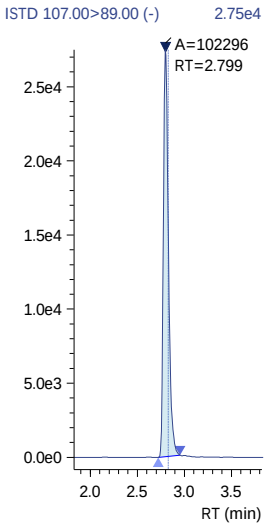
Perchlorate

Conc 1.1308
R#1 29.18 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

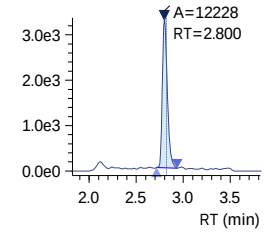
20210615_010

Sample ID: PERCHLORATE4
Date Acquired: 6/15/2021 3:58:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_010.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

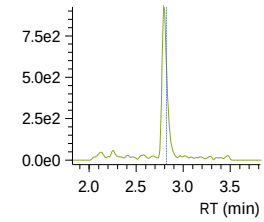
Perchlorate

Conc 1.1521
R#1 29.18 (0.00)

Q 99.00>83.00 (-) 3.38e3



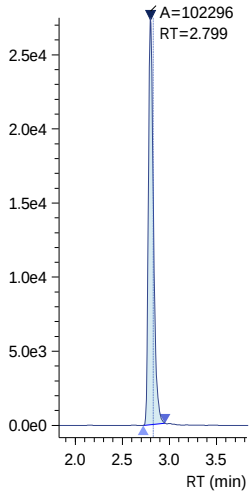
R1 101.00>85.00 (-) 9.25e2



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.75e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

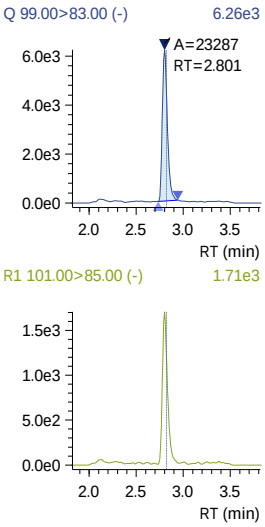
20210615_011

Sample ID: PERCHLORATE5
Date Acquired: 6/15/2021 4:07:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_011.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.801	23287	103365	1	2.1312	ng/mL	2.0000	27.30
Sodium Perchlorate-18O4 _IS	Auto	2.800	1033 65	103365	1	1.0000	ng/mL	1.0000	----

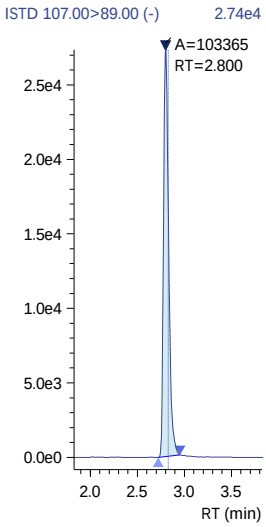
Perchlorate

Conc 2.1312
R#1 27.30 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

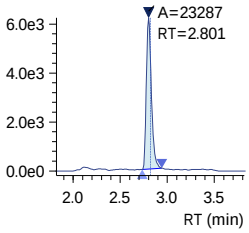
20210615_011

Sample ID: PERCHLORATE5
Date Acquired: 6/15/2021 4:07:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_011.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

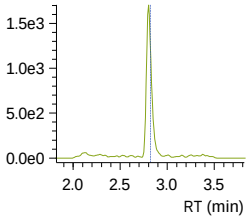
Perchlorate

Conc 2.1714
R#1 27.30 (0.00)

Q 99.00>83.00 (-) 6.26e3



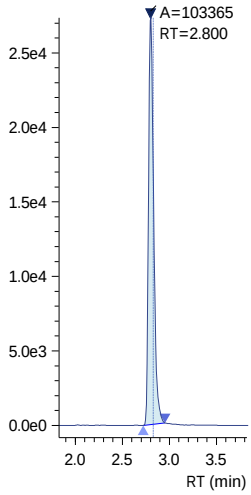
R1 101.00>85.00 (-) 1.71e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.74e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

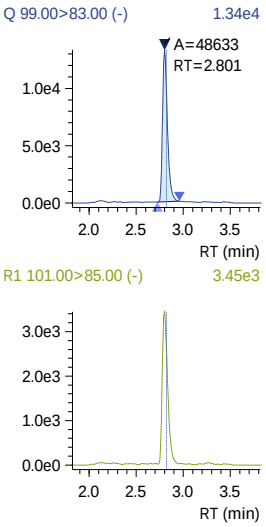
20210615_012

Sample ID: PERCHLORATE6
Date Acquired: 6/15/2021 4:15:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_012.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.801	48633	93357	1	4.9280	ng/mL	5.0000	25.88
Sodium Perchlorate-18O4 _IS	Auto	2.801	93357	93357	1	1.0000	ng/mL	1.0000	----

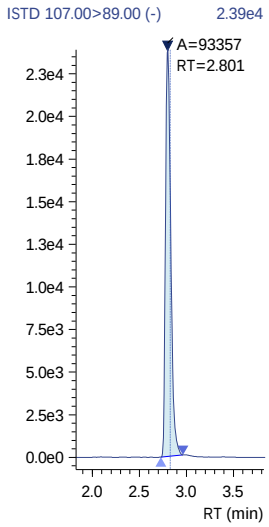
Perchlorate

Conc 4.9280
R#1 25.88 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

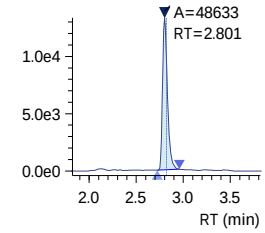
20210615_012

Sample ID: PERCHLORATE6
Date Acquired: 6/15/2021 4:15:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_012.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

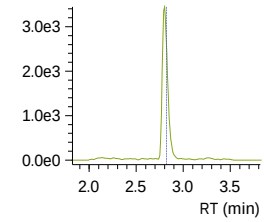
Perchlorate

Conc 5.0209
R#1 25.88 (0.00)

Q 99.00>83.00 (-) 1.34e4



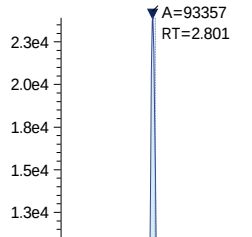
R1 101.00>85.00 (-) 3.45e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.39e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

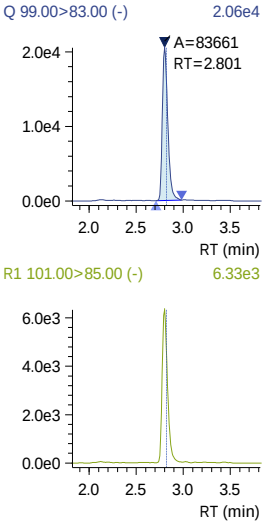
20210615_013

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 4:24:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_013.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.801	83661	89240	1	8.8684	ng/mL	10.0000	30.81
Sodium Perchlorate-18O4 _IS	Auto	2.800	89240	89240	1	1.0000	ng/mL	1.0000	----

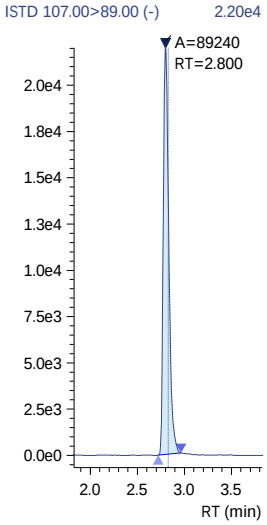
Perchlorate

Conc 8.8684
R#1 30.81 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

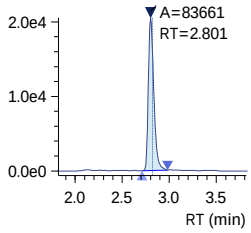
20210615_013

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 4:24:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_013.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

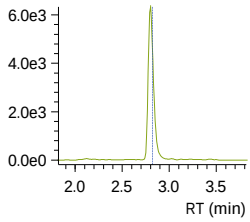
Perchlorate

Conc 9.0357
R#1 30.81 (0.00)

Q 99.00>83.00 (-) 2.06e4



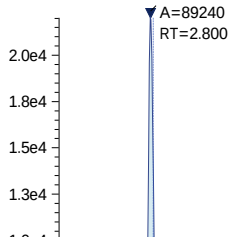
R1 101.00>85.00 (-) 6.33e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.20e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

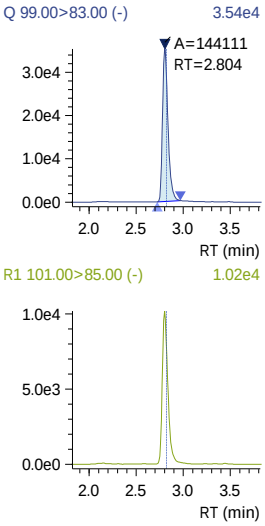
20210615_014

Sample ID: PERCHLORATE8
Date Acquired: 6/15/2021 4:32:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_014.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.804	144111	74442	1	18.3131	ng/mL	20.0000	28.75
Sodium Perchlorate-18O4_IS	Auto	2.802	74442	74442	1	1.0000	ng/mL	1.0000	----

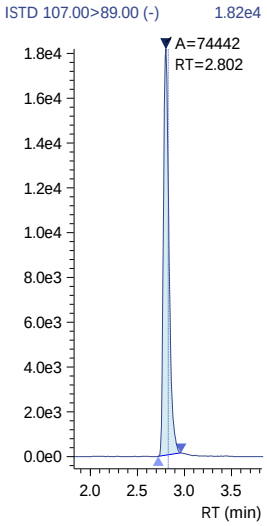
Perchlorate

Conc 18.3131
R#1 28.75 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

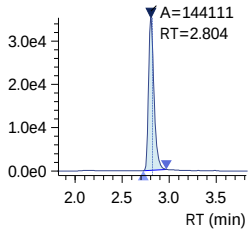
20210615_014

Sample ID: PERCHLORATE8
Date Acquired: 6/15/2021 4:32:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_014.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

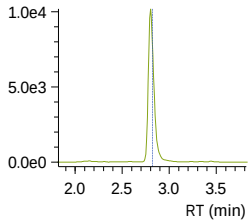
Perchlorate

Conc 18.6585
R#1 28.75 (0.00)

Q 99.00>83.00 (-) 3.54e4



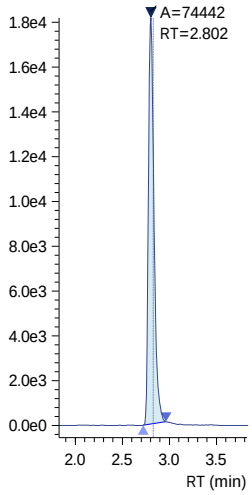
R1 101.00>85.00 (-) 1.02e4



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.82e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

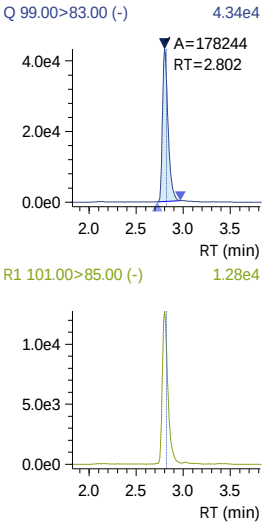
20210615_015

Sample ID: PERCHLORATE9
Date Acquired: 6/15/2021 4:41:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_015.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.802	178244	63474	1	26.5645	ng/mL	30.0000	29.37
Sodium Perchlorate-18O4_IS	Auto	2.802	63474	63474	1	1.0000	ng/mL	1.0000	----

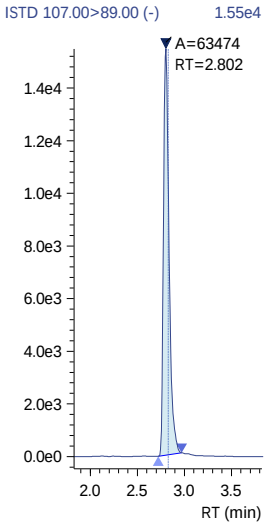
Perchlorate

Conc 26.5645
R#1 29.37 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

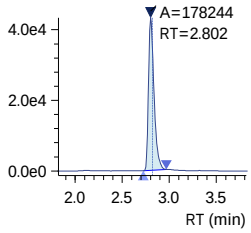
20210615_015

Sample ID: PERCHLORATE9
Date Acquired: 6/15/2021 4:41:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_015.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

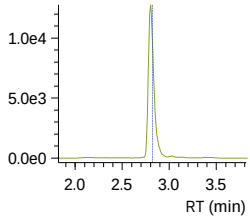
Perchlorate

Conc 27.0656
R#1 29.37 (0.00)

Q 99.00>83.00 (-) 4.34e4



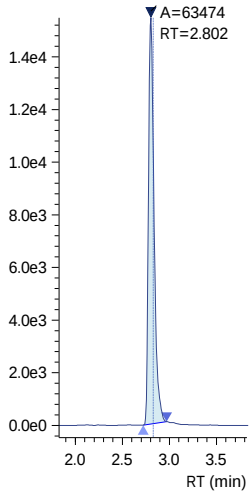
R1 101.00>85.00 (-) 1.28e4



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.55e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

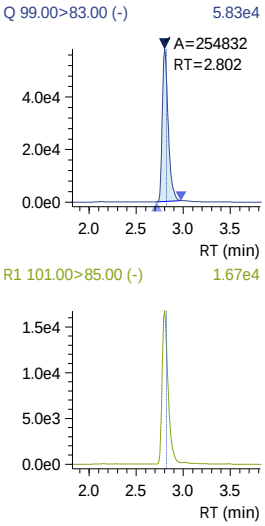
20210615_016

Sample ID: PERCHLORATE10
Date Acquired: 6/15/2021 4:49:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_016.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.802	254832	55769	1	43.2260	ng/mL	50.0000	28.69
Sodium Perchlorate-18O4_IS	Auto	2.801	55769	55769	1	1.0000	ng/mL	1.0000	----

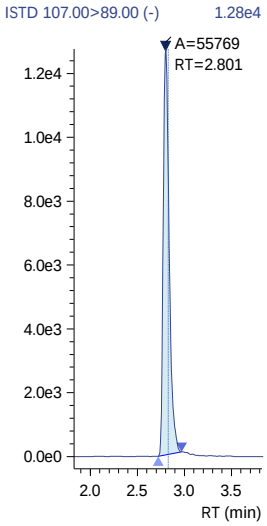
Perchlorate

Conc 43.2260
R#1 28.69 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Before

Insight Report

Printed at 6/17/2021 2:00:46 PM

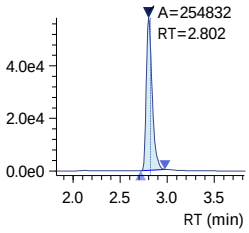
20210615_016

Sample ID: PERCHLORATE10
Date Acquired: 6/15/2021 4:49:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_016.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

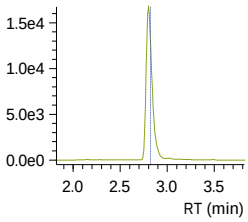
Perchlorate

Conc 44.0414
R#1 28.69 (0.00)

Q 99.00>83.00 (-) 5.83e4



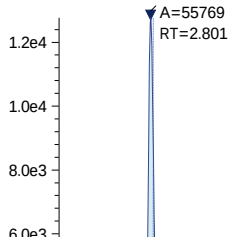
R1 101.00>85.00 (-) 1.67e4



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.28e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

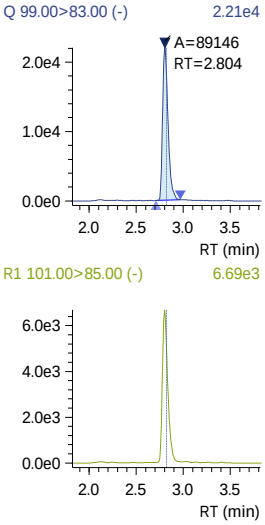
20210615_017

Sample ID: PERCHLORATEICV
Date Acquired: 6/15/2021 4:58:17 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_017.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.804	89146	89108	1	9.4639	ng/mL	10.0000	30.30
Sodium Perchlorate-18O4 _IS	Auto	2.802	89108	89108	1	1.0000	ng/mL	1.0000	----

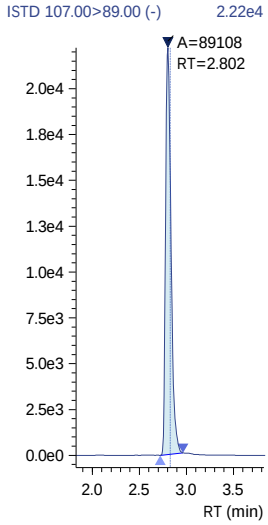
Perchlorate

Conc 9.4639
R#1 30.30 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

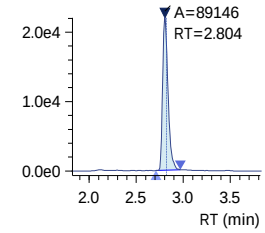
20210615_017

Sample ID: PERCHLORATEICV
Date Acquired: 6/15/2021 4:58:17 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_017.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

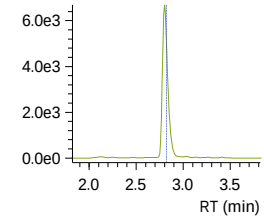
Perchlorate

Conc 9.6424
R#1 30.30 (0.00)

Q 99.00>83.00 (-) 2.21e4



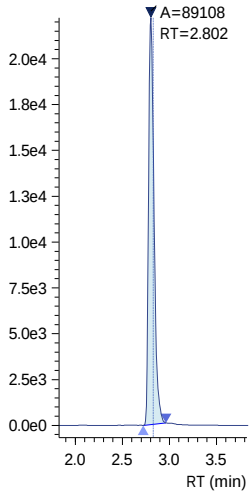
R1 101.00>85.00 (-) 6.69e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.22e4



20210622

ALS Environmental

1st Review: Grivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/22/2021
Cal. Std. xp: 11/26/2021
ICAL ID: **EC2100044**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100811-08 **B:** MeOH 216350

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE1		20210622_002	Perchlorate6850c.lcm	1x	☒	3100812-01	6/22/2021 17:16
2	PERCHLORATE2		20210622_003	Perchlorate6850c.lcm	1x	☒	3100812-02	6/22/2021 17:25
3	PERCHLORATE3		20210622_004	Perchlorate6850c.lcm	1x	☒	3100812-03	6/22/2021 17:33
4	PERCHLORATE4		20210622_006	Perchlorate6850c.lcm	1x	☒	3100812-05	6/22/2021 17:51
5	PERCHLORATE5		20210622_007	Perchlorate6850c.lcm	1x	☒	3100812-06	6/22/2021 17:59
6	PERCHLORATE6		20210622_008	Perchlorate6850c.lcm	1x	☒	3100812-07	6/22/2021 18:08
7	PERCHLORATE7		20210622_009	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 18:16
8	PERCHLORATE8		20210622_010	Perchlorate6850c.lcm	1x	☒	3100812-09	6/22/2021 18:25
9	PERCHLORATE9		20210622_011	Perchlorate6850c.lcm	1x	☒	3100813-01	6/22/2021 18:34
10	PERCHLORATEICV		20210622_012	Perchlorate6850c.lcm	1x	☒	3100811-06	6/22/2021 18:42
11	ICS		20210622_013	Perchlorate6850c.lcm	1x	☒		6/22/2021 18:51
12	LODV		20210622_014	Perchlorate6850c.lcm	1x	☒		6/22/2021 18:59
13	PERCHLORATE7		20210622_015	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 19:08
14	EQ2100354-04		20210622_016	Perchlorate6850c.lcm	1x	☒		6/22/2021 19:17
15	EQ2100354-05		20210622_017	Perchlorate6850c.lcm	1x	☒		6/22/2021 19:25
16	E2100631-001X1000		20210622_018	Perchlorate6850c.lcm	1000x	☒		6/22/2021 19:34
17	E2100629-001X20		20210622_019	Perchlorate6850c.lcm	20x	☒		6/22/2021 19:43
18	E2100630-001X20		20210622_020	Perchlorate6850c.lcm	20x	☒		6/22/2021 19:51
19	E2100632-001X10		20210622_021	Perchlorate6850c.lcm	10x	☒		6/22/2021 20:00
20	E2100632-002X10		20210622_022	Perchlorate6850c.lcm	10x	☒		6/22/2021 20:08
21	E2100632-003X2		20210622_023	Perchlorate6850c.lcm	2x	☒	DNU-INST out of range	6/22/2021 20:17
22	E2100632-004X2		20210622_024	Perchlorate6850c.lcm	2x	☒	DNU-INST out of range	6/22/2021 20:25
23	PERCHLORATE7		20210622_025	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 20:34
24	E2100608-001		20210622_026	Perchlorate6850c.lcm	1x	☒	confirmation run only	6/22/2021 20:43
25	E2100632-005X2		20210622_027	Perchlorate6850c.lcm	2x	☒		6/22/2021 20:51
26	E2100632-006X200		20210622_028	Perchlorate6850c.lcm	200x	☒		6/22/2021 21:00
27	E2100632-007X2		20210622_029	Perchlorate6850c.lcm	2x	☒		6/22/2021 21:08
28	EQ2100367-01		20210622_030	Perchlorate6850c.lcm	1x	☒		6/22/2021 21:17
29	EQ2100367-02		20210622_031	Perchlorate6850c.lcm	1x	☒		6/22/2021 21:26
30	EQ2100367-03		20210622_032	Perchlorate6850c.lcm	1x	☒		6/22/2021 21:34
31	E2100651-001		20210622_033	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/22/2021 21:43
32	PERCHLORATE7		20210622_034	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 21:52
33	E2100644-007X5		20210622_035	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	6/22/2021 22:00
34	E2100644-008X20		20210622_036	Perchlorate6850c.lcm	20x	☒	DNU-INST out of range	6/22/2021 22:09
35	E2100644-009X2		20210622_037	Perchlorate6850c.lcm	2x	☒		6/22/2021 22:17
36	E2100645-004X2		20210622_038	Perchlorate6850c.lcm	2x	☒		6/22/2021 22:26
37	E2100645-005X2		20210622_039	Perchlorate6850c.lcm	2x	☒		6/22/2021 22:34
38	E2100645-006X20		20210622_040	Perchlorate6850c.lcm	20x	☒		6/22/2021 22:43
39	PERCHLORATE7		20210622_041	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 22:52
40	E2100645-009X100		20210622_042	Perchlorate6850c.lcm	100x	☒		6/22/2021 23:00
41	E2100645-010X1000		20210622_043	Perchlorate6850c.lcm	1000x	☒		6/22/2021 23:09
42	E2100645-011X1000		20210622_044	Perchlorate6850c.lcm	1000x	☒		6/22/2021 23:17
43	EQ2100358-03		20210622_045	Perchlorate6850c.lcm	1x	☒		6/22/2021 23:26
44	E2100645-012X1000		20210622_046	Perchlorate6850c.lcm	1000x	☒		6/22/2021 23:35
45	E2100645-013X1000		20210622_047	Perchlorate6850c.lcm	1000x	☒		6/22/2021 23:43
46	E2100645-014X10		20210622_048	Perchlorate6850c.lcm	10x	☒		6/22/2021 23:52
47	E2100645-015X10		20210622_049	Perchlorate6850c.lcm	10x	☒		6/23/2021 0:00
48	E2100645-016X10		20210622_050	Perchlorate6850c.lcm	10x	☒		6/23/2021 0:09
49	E2100645-017X2		20210622_051	Perchlorate6850c.lcm	2x	☒		6/23/2021 0:18
50	PERCHLORATE7		20210622_052	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 0:26
51	E2100645-018X10		20210622_053	Perchlorate6850c.lcm	10x	☒		6/23/2021 0:35
52	E2100645-019X2		20210622_054	Perchlorate6850c.lcm	2x	☒		6/23/2021 0:44
53	E2100645-020X10		20210622_055	Perchlorate6850c.lcm	10x	☒		6/23/2021 0:52
54	E2100645-021X100		20210622_056	Perchlorate6850c.lcm	100x	☒		6/23/2021 1:01
55	E2100645-022X5		20210622_057	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	6/23/2021 1:09
56	E2100645-023X5		20210622_058	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	6/23/2021 1:18
57	E2100645-024X100		20210622_059	Perchlorate6850c.lcm	100x	☒		6/23/2021 1:27
58	PERCHLORATE7		20210622_060	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 1:35

Initial Calibration - Detailed Report

Calibration ID: EC2100044 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2100044-01	PERCHLORATE1	20210622_002	06/22/2021 17:16
02	EC2100044-02	PERCHLORATE2	20210622_003	06/22/2021 17:25
03	EC2100044-03	PERCHLORATE3	20210622_004	06/22/2021 17:33
04	EC2100044-04	PERCHLORATE4	20210622_006	06/22/2021 17:51
05	EC2100044-05	PERCHLORATE5	20210622_007	06/22/2021 17:59
06	EC2100044-06	PERCHLORATE6	20210622_008	06/22/2021 18:08
07	EC2100044-07	PERCHLORATE7	20210622_009	06/22/2021 18:16
08	EC2100044-08	PERCHLORATE8	20210622_010	06/22/2021 18:25
09	EC2100044-09	PERCHLORATE9	20210622_011	06/22/2021 18:34

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

Perchlorate **Average RF** **RSD = 11.7** **Average RF = 0.122**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1538	02	0.5000	0.1192	03	0.7000	0.1198	04	2.0000	0.1331
05	5.0000	0.1233	06	10.0000	0.1194	07	20.0000	0.1105	08	30.0000	0.1126
09	50.0000	0.1061									

Analyte

Perchlorate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.126	26.1	02	0.5000	0.489	-2.3	03	0.7000	0.688	-1.8
04	2.0000	2.18	9.1	05	5.0000	5.06	1.1	06	10.0000	9.79	-2.1
07	20.0000	18.1	-9.4	08	30.0000	27.7	-7.7	09	50.0000	43.5	-13.0

Initial Calibration Verification Summary Report

Calibration ID:	EC2100044	**Instrument ID:**	E-LCMS-01
Datafile ID:	20210622_012	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2100044-10	T	Average RF	10	8.601	ng/mL	-14.0	<= 15

Insight Report

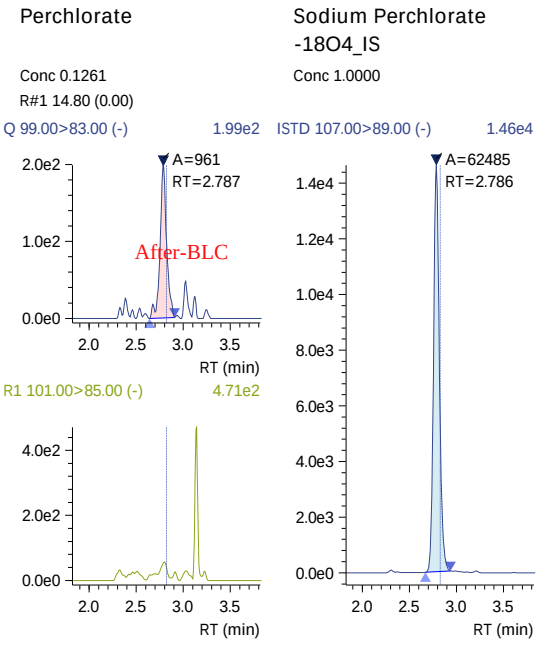
Printed at 6/24/2021 1:58:03 PM

Method File: I:\LCMS01\DATA\20210622\20210622.lcm
Project File: I:\LCMS01\DATA\20210622\20210622.damlp

20210622_002

Sample ID: PERCHLORATE1
Date Acquired: 6/22/2021 5:16:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_002.lcd
Vial: 20 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.787	961	62485	1	0.1261	ng/mL	0.1000	14.80
Sodium Perchlorate-18O4 _IS	Auto	2.786	62485	62485	1	1.0000	ng/mL	1.0000	----



Insight Report

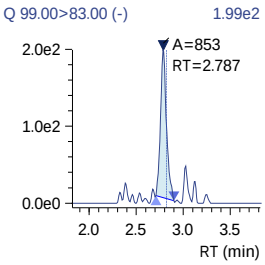
Method File: I:\LCMS01\DATA\20210622\20210622.lcm

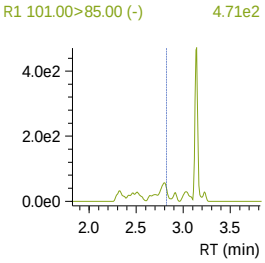
20210622_002

Sample ID: PERCHLORATE1
Date Acquired: 6/22/2021 5:16:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_002.lcd
Vial: 20 | Inj. Volume: 50.0000uL | Tray: 1

Perchlorate

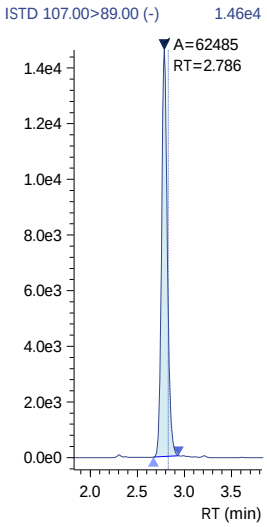
Conc 0.1181
R#1 16.93 (0.00)





Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 1:58:03 PM

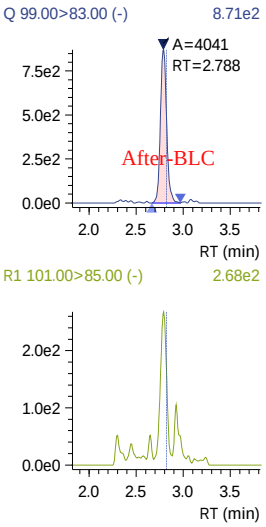
20210622_003

Sample ID: PERCHLORATE2
Date Acquired: 6/22/2021 5:25:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_003.lcd
Vial: 21 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.788	4041	67816	1	0.4886	ng/mL	0.5000	26.30
Sodium Perchlorate-18O4 _IS	M	2.788	67816	67816	1	1.0000	ng/mL	1.0000	----

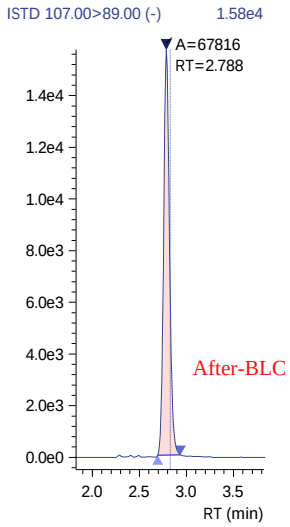
Perchlorate

Conc 0.4886
R#1 26.30 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

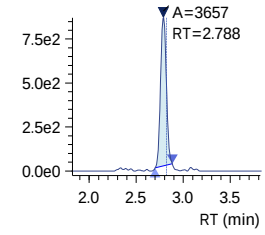
20210622_003

Sample ID: PERCHLORATE2
Date Acquired: 6/22/2021 5:25:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_003.lcd
Vial: 21 | Inj. Volume: 50.0000uL | Tray: 1

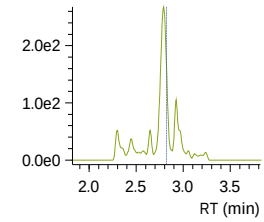
Perchlorate

Conc 0.4621
R#1 29.70 (0.00)

Q 99.00>83.00 (-) 8.71e2



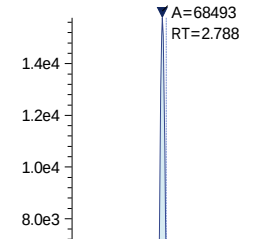
R1 101.00>85.00 (-) 2.68e2



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.58e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

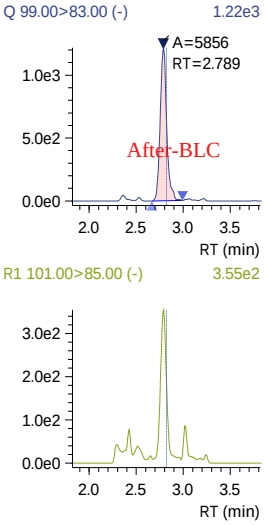
20210622_004

Sample ID: PERCHLORATE3
Date Acquired: 6/22/2021 5:33:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_004.lcd
Vial: 22 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.789	5856	69827	1	0.6876	ng/mL	0.7000	27.89
Sodium Perchlorate-18O4 _IS	Auto	2.787	69827	69827	1	1.0000	ng/mL	1.0000	----

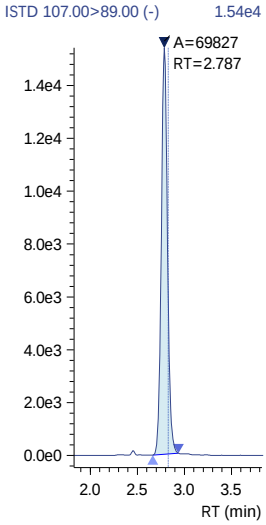
Perchlorate

Conc 0.6876
R#1 27.89 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

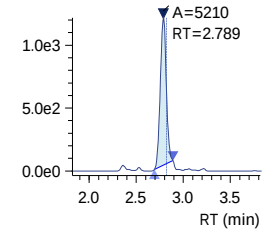
20210622_004

Sample ID: PERCHLORATE3
Date Acquired: 6/22/2021 5:33:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_004.lcd
Vial: 22 | Inj. Volume: 50.0000uL | Tray: 1

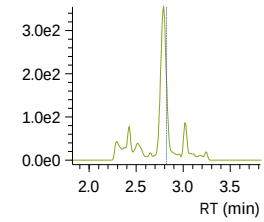
Perchlorate

Conc 0.6457
R#1 28.96 (0.00)

Q 99.00>83.00 (-) 1.22e3



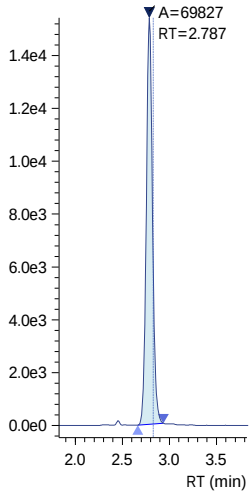
R1 101.00>85.00 (-) 3.55e2



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.54e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

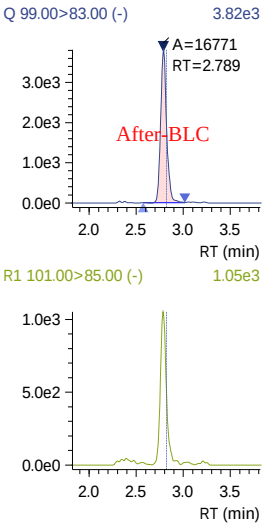
20210622_006

Sample ID: PERCHLORATE4
Date Acquired: 6/22/2021 5:51:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_006.lcd
Vial: 24 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.789	16771	63001	1	2.1825	ng/mL	2.0000	27.75
Sodium Perchlorate-18O4 _IS	Auto	2.788	63001	63001	1	1.0000	ng/mL	1.0000	----

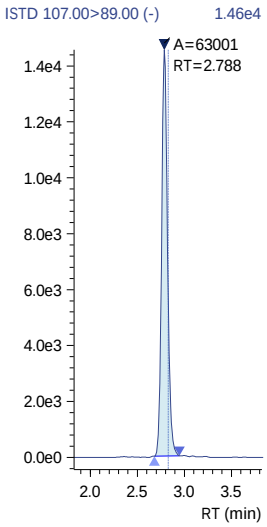
Perchlorate

Conc 2.1825
R#1 27.75 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

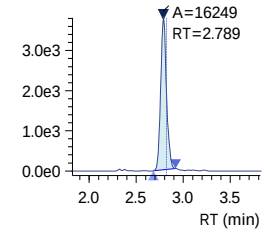
20210622_006

Sample ID: PERCHLORATE4
Date Acquired: 6/22/2021 5:51:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_006.lcd
Vial: 24 | Inj. Volume: 50.0000uL | Tray: 1

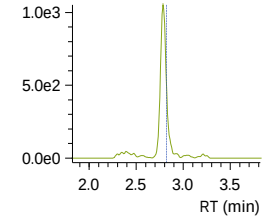
Perchlorate

Conc 2.2319
R#1 28.00 (0.00)

Q 99.00>83.00 (-) 3.82e3



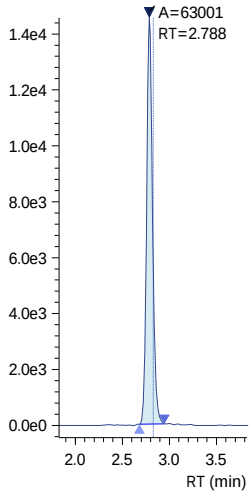
R1 101.00>85.00 (-) 1.05e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.46e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

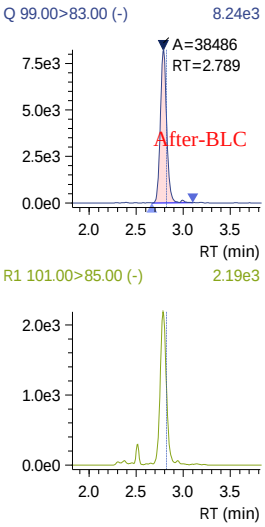
20210622_007

Sample ID: PERCHLORATE5
Date Acquired: 6/22/2021 5:59:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_007.lcd
Vial: 25 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.789	38486	62414	1	5.0555	ng/mL	5.0000	26.59
Sodium Perchlorate-18O4 _IS	M	2.788	62414	62414	1	1.0000	ng/mL	1.0000	----

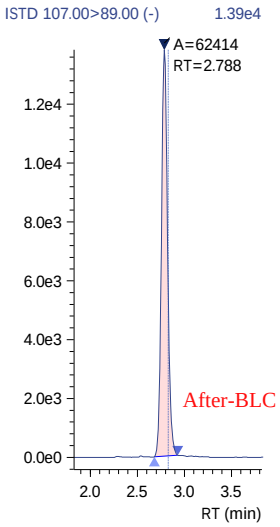
Perchlorate

Conc 5.0555
R#1 26.59 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

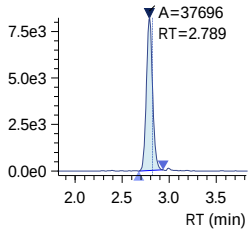
20210622_007

Sample ID: PERCHLORATE5
Date Acquired: 6/22/2021 5:59:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_007.lcd
Vial: 25 | Inj. Volume: 50.0000uL | Tray: 1

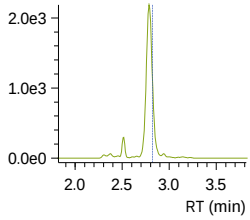
Perchlorate

Conc 5.2127
R#1 26.50 (0.00)

Q 99.00>83.00 (-) 8.24e3



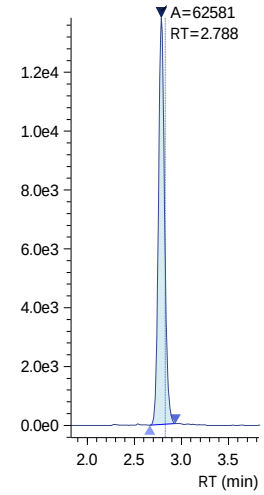
R1 101.00>85.00 (-) 2.19e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.39e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

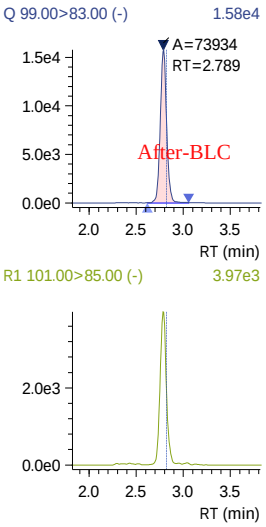
20210622_008

Sample ID: PERCHLORATE6
Date Acquired: 6/22/2021 6:08:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_008.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.789	73934	61934	1	9.7872	ng/mL	10.0000	25.43
Sodium Perchlorate-18O4 _IS	M	2.787	61934	61934	1	1.0000	ng/mL	1.0000	----

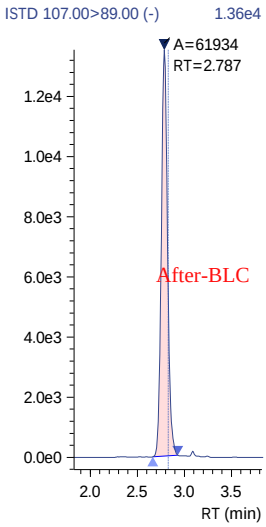
Perchlorate

Conc 9.7872
R#1 25.43 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

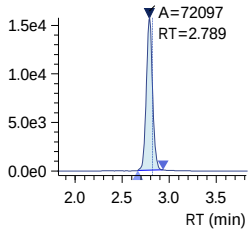
20210622_008

Sample ID: PERCHLORATE6
Date Acquired: 6/22/2021 6:08:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_008.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

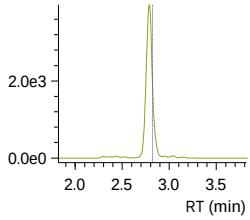
Perchlorate

Conc 10.0410
R#1 25.45 (0.00)

Q 99.00>83.00 (-) 1.58e4



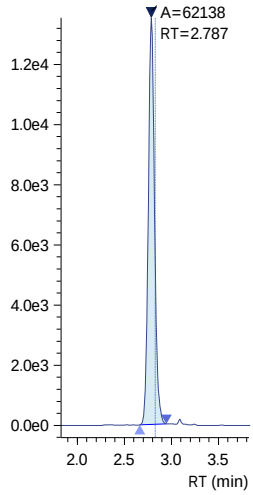
R1 101.00>85.00 (-) 3.97e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.36e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

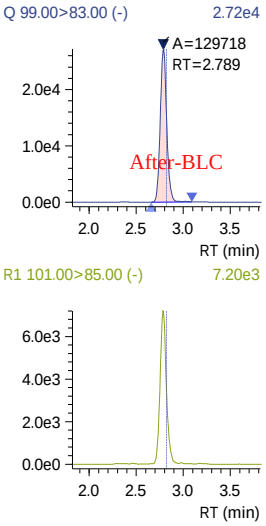
20210622_009

Sample ID: PERCHLORATE7
Date Acquired: 6/22/2021 6:16:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_009.lcd
Vial: 27 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.789	129718	58712	1	18.1141	ng/mL	20.0000	26.63
Sodium Perchlorate-18O4_IS	M	2.787	58712	58712	1	1.0000	ng/mL	1.0000	----

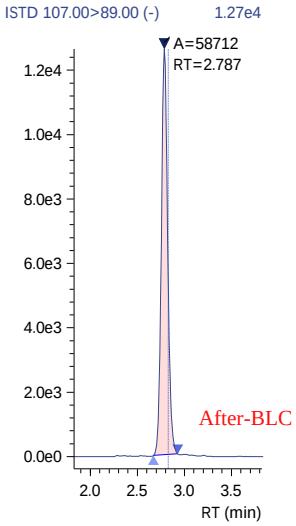
Perchlorate

Conc 18.1141
R#1 26.63 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

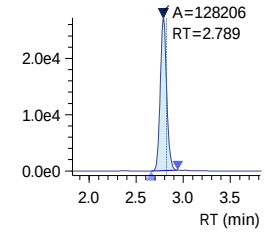
20210622_009

Sample ID: PERCHLORATE7
Date Acquired: 6/22/2021 6:16:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_009.lcd
Vial: 27 | Inj. Volume: 50.0000uL | Tray: 1

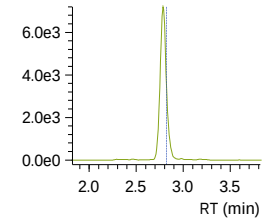
Perchlorate

Conc 18.7699
R#1 26.65 (0.00)

Q 99.00>83.00 (-) 2.72e4



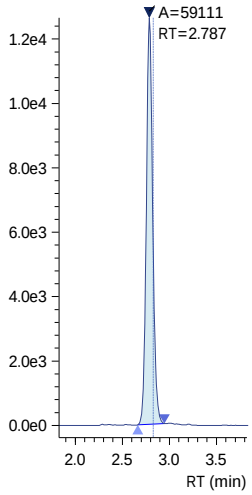
R1 101.00>85.00 (-) 7.20e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.27e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

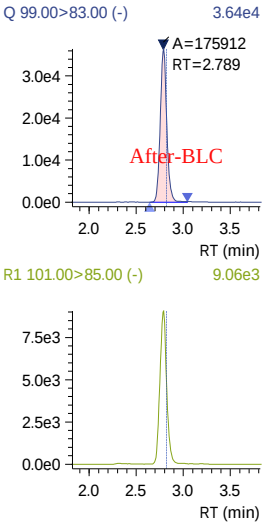
20210622_010

Sample ID: PERCHLORATE8
Date Acquired: 6/22/2021 6:25:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_010.lcd
Vial: 28 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.789	175912	52085	1	27.6902	ng/mL	30.0000	25.11
Sodium Perchlorate-18O4_IS	M	2.788	52085	52085	1	1.0000	ng/mL	1.0000	----

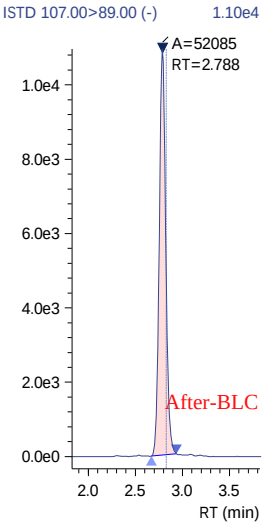
Perchlorate

Conc 27.6902
R#1 25.11 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

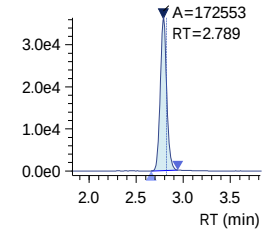
20210622_010

Sample ID: PERCHLORATE8
Date Acquired: 6/22/2021 6:25:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_010.lcd
Vial: 28 | Inj. Volume: 50.0000uL | Tray: 1

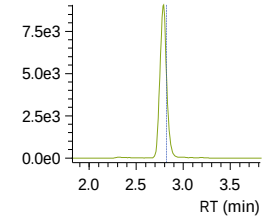
Perchlorate

Conc 28.5706
R#1 25.08 (0.00)

Q 99.00>83.00 (-) 3.64e4



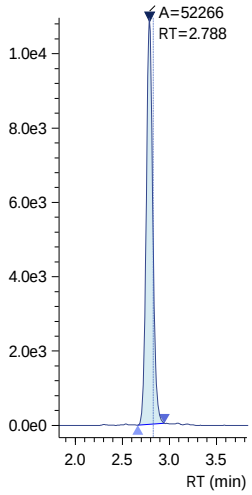
R1 101.00>85.00 (-) 9.06e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.10e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

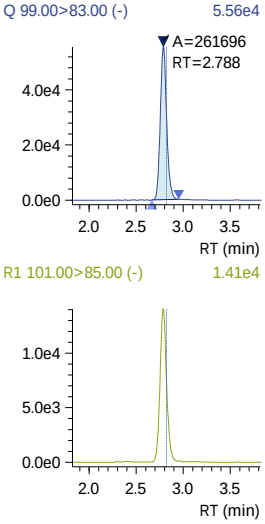
20210622_011

Sample ID: PERCHLORATE9
Date Acquired: 6/22/2021 6:34:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_011.lcd
Vial: 29 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.788	261696	49311	1	43.5110	ng/mL	50.0000	25.36
Sodium Perchlorate-18O4_IS	Auto	2.788	49311	49311	1	1.0000	ng/mL	1.0000	----

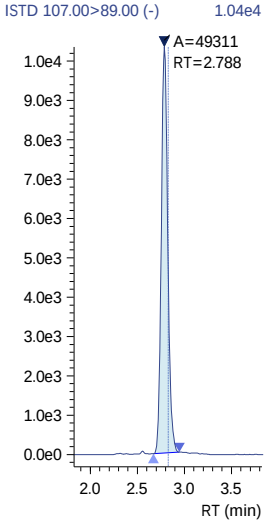
Perchlorate

Conc 43.5110
R#1 25.36 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

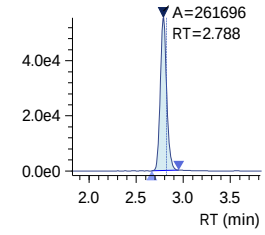
20210622_011

Sample ID: PERCHLORATE9
Date Acquired: 6/22/2021 6:34:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_011.lcd
Vial: 29 | Inj. Volume: 50.0000uL | Tray: 1

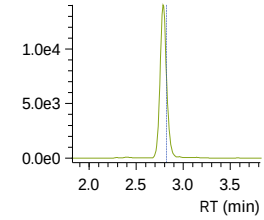
Perchlorate

Conc 45.9277
R#1 25.36 (0.00)

Q 99.00>83.00 (-) 5.56e4



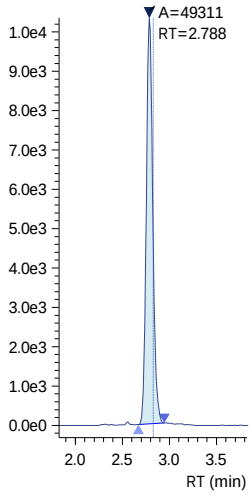
R1 101.00>85.00 (-) 1.41e4



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.04e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

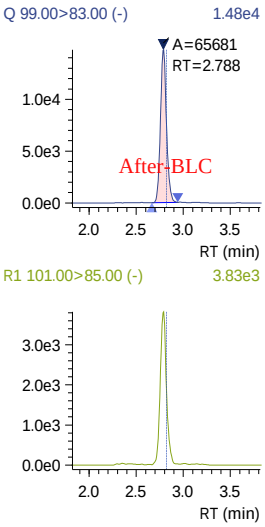
20210622_012

Sample ID: PERCHLORATEICV
Date Acquired: 6/22/2021 6:42:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_012.lcd
Vial: 30 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.788	65681	62607	1	8.6012	ng/mL	10.0000	25.84
Sodium Perchlorate-18O4 _IS	Auto	2.787	62607	62607	1	1.0000	ng/mL	1.0000	----

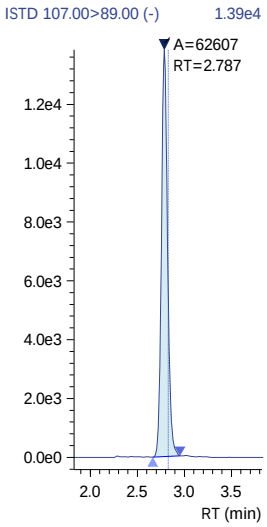
Perchlorate

Conc 8.6012
R#1 25.84 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

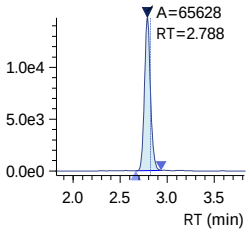
20210622_012

Sample ID: PERCHLORATEICV
Date Acquired: 6/22/2021 6:42:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_012.lcd
Vial: 30 | Inj. Volume: 50.0000uL | Tray: 1

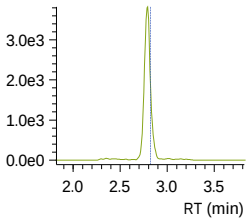
Perchlorate

Conc 9.0716
R#1 25.83 (0.00)

Q 99.00>83.00 (-) 1.48e4



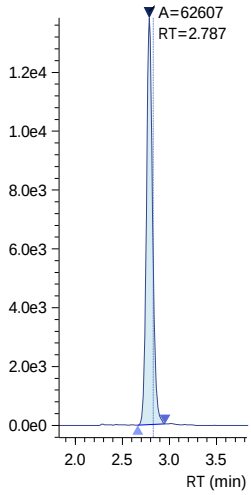
R1 101.00>85.00 (-) 3.83e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.39e4



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

20210615

1st Review: Grivera
2nd Review: Kneir

ALS Environmental

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/15/2021
Cal. Std. xp: 11/26/2021
ICAL ID: **EC2100038**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100811-07 **B:** MeOH 216350

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE1		20210615_007	Perchlorate6850c.lcm	1x	☒	3100810-05	6/15/2021 15:32
2	PERCHLORATE2		20210615_008	Perchlorate6850c.lcm	1x	☒	3100810-06	6/15/2021 15:41
3	PERCHLORATE3		20210615_009	Perchlorate6850c.lcm	1x	☒	3100810-07	6/15/2021 15:49
4	PERCHLORATE4		20210615_010	Perchlorate6850c.lcm	1x	☒	3100810-08	6/15/2021 15:58
5	PERCHLORATE5		20210615_011	Perchlorate6850c.lcm	1x	☒	3100810-09	6/15/2021 16:07
6	PERCHLORATE6		20210615_012	Perchlorate6850c.lcm	1x	☒	3100811-01	6/15/2021 16:15
7	PERCHLORATE7		20210615_013	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 16:24
8	PERCHLORATE8		20210615_014	Perchlorate6850c.lcm	1x	☒	3100811-03	6/15/2021 16:32
9	PERCHLORATE9		20210615_015	Perchlorate6850c.lcm	1x	☒	3100811-04	6/15/2021 16:41
10	PERCHLORATE10		20210615_016	Perchlorate6850c.lcm	1x	☒	3100811-05	6/15/2021 16:49
11	PERCHLORATEICV		20210615_017	Perchlorate6850c.lcm	1x	☒	3100811-06	6/15/2021 16:58
12	ICS		20210615_018	Perchlorate6850c.lcm	1x	☒		6/15/2021 17:06
13	LODV		20210615_019	Perchlorate6850c.lcm	1x	☒		6/15/2021 17:15
14	PERCHLORATE7		20210615_020	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 17:23
15	EQ2100354-01		20210615_021	Perchlorate6850c.lcm	1x	☒		6/15/2021 17:52
16	EQ2100354-02		20210615_022	Perchlorate6850c.lcm	1x	☒		6/15/2021 18:00
17	EQ2100354-03		20210615_023	Perchlorate6850c.lcm	1x	☒		6/15/2021 18:09
18	E2100631-001X100		20210615_024	Perchlorate6850c.lcm	100x	☒	DNU-over calibration range	6/15/2021 18:17
19	E2100608-001X100		20210615_025	Perchlorate6850c.lcm	100x	☒		6/15/2021 18:26
20	E2100629-001X10		20210615_026	Perchlorate6850c.lcm	10x	☒	DNU-INST low	6/15/2021 18:34
21	E2100630-001X10		20210615_027	Perchlorate6850c.lcm	10x	☒	DNU-INST low	6/15/2021 18:43
22	E2100632-006X100		20210615_028	Perchlorate6850c.lcm	100x	☒	DNU-INST low	6/15/2021 18:52
23	EQ2100357-04X100		20210615_029	Perchlorate6850c.lcm	100x	☒		6/15/2021 19:00
24	EQ2100357-05X100		20210615_030	Perchlorate6850c.lcm	100x	☒		6/15/2021 19:09
25	PERCHLORATE7		20210615_031	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 19:17
26	E2100644-001X1000		20210615_032	Perchlorate6850c.lcm	1000x	☒		6/15/2021 19:26
27	E2100644-002X100		20210615_033	Perchlorate6850c.lcm	100x	☒		6/15/2021 19:34
28	E2100644-003X1000		20210615_034	Perchlorate6850c.lcm	1000x	☒		6/15/2021 19:43
29	E2100644-004X1000		20210615_035	Perchlorate6850c.lcm	1000x	☒		6/15/2021 19:51
30	E2100644-005X100		20210615_036	Perchlorate6850c.lcm	100x	☒		6/15/2021 20:00
31	E2100644-006X100		20210615_037	Perchlorate6850c.lcm	100x	☒		6/15/2021 20:09
32	E2100644-008X10		20210615_038	Perchlorate6850c.lcm	10x	☒	DNU-INST low	6/15/2021 20:17
33	E2100645-001X100		20210615_039	Perchlorate6850c.lcm	100x	☒		6/15/2021 20:26
34	E2100645-002X100		20210615_040	Perchlorate6850c.lcm	100x	☒		6/15/2021 20:34
35	E2100645-003X10		20210615_041	Perchlorate6850c.lcm	10x	☒		6/15/2021 20:43
36	PERCHLORATE7		20210615_042	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 20:51
37	E2100645-006X10		20210615_043	Perchlorate6850c.lcm	10x	☒	DNU-INST low	6/15/2021 21:00
38	E2100645-007X1000		20210615_044	Perchlorate6850c.lcm	1000x	☒		6/15/2021 21:08
39	E2100645-008X1000		20210615_045	Perchlorate6850c.lcm	1000x	☒		6/15/2021 21:17
40	PERCHLORATE7		20210615_046	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 21:25
41	EQ2100354-04		20210615_047	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 21:34
42	EQ2100354-05		20210615_048	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 21:42
43	E2100632-001		20210615_049	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 21:51
44	E2100632-002		20210615_050	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 21:59
45	E2100632-003		20210615_051	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 22:08
46	E2100632-004		20210615_052	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 22:17
47	PERCHLORATE7		20210615_053	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 22:25
48	E2100632-005		20210615_054	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 22:34
49	E2100632-007		20210615_055	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 22:42
50	EQ2100357-01		20210615_056	Perchlorate6850c.lcm	1x	☒		6/15/2021 22:51
51	EQ2100357-02		20210615_057	Perchlorate6850c.lcm	1x	☒		6/15/2021 22:59
52	EQ2100357-03		20210615_058	Perchlorate6850c.lcm	1x	☒		6/15/2021 23:08
53	E2100644-007		20210615_059	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 23:16
54	E2100644-009		20210615_060	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 23:25
55	E2100645-004		20210615_061	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 23:33
56	E2100645-005		20210615_062	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/15/2021 23:42
57	PERCHLORATE7		20210615_063	Perchlorate6850c.lcm	1x	☒	3100811-02	6/15/2021 23:50
58	EQ2100358-01		20210615_064	Perchlorate6850c.lcm	1x	☒		6/15/2021 23:59
59	EQ2100358-02		20210615_065	Perchlorate6850c.lcm	1x	☒		6/16/2021 0:08
60	EQ2100358-03		20210615_066	Perchlorate6850c.lcm	1x	☒	Reanalyze	6/16/2021 0:16
61	E2100645-017		20210615_067	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/16/2021 0:25
62	E2100645-019		20210615_068	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/16/2021 0:33
63	E2100645-022		20210615_069	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/16/2021 0:42
64	E2100645-023		20210615_070	Perchlorate6850c.lcm	1x	☒	DNU-INST low	6/16/2021 0:50

20210615

1st Review: Grivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/15/2021
Cal. Std. xp: 11/26/2021
ICAL ID: **EC2100038**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100811-07 **B:** MeOH 216350

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
65	PERCHLORATE7		20210615_071	Perchlorate6850c.lcm	1x	☒	3100811-02	6/16/2021 0:59

20210622

ALS Environmental

ICAL Date: 6/22/2021
Cal. Std. xp: 11/26/2021
ICAL ID: **EC2100044**

1st Review: Grivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

Mobile Phases **A:** 0.75% Formic Acid/Water 3100811-08 **B:** MeOH 216350

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE1		20210622_002	Perchlorate6850c.lcm	1x	☒	3100812-01	6/22/2021 17:16
2	PERCHLORATE2		20210622_003	Perchlorate6850c.lcm	1x	☒	3100812-02	6/22/2021 17:25
3	PERCHLORATE3		20210622_004	Perchlorate6850c.lcm	1x	☒	3100812-03	6/22/2021 17:33
4	PERCHLORATE4		20210622_006	Perchlorate6850c.lcm	1x	☒	3100812-05	6/22/2021 17:51
5	PERCHLORATE5		20210622_007	Perchlorate6850c.lcm	1x	☒	3100812-06	6/22/2021 17:59
6	PERCHLORATE6		20210622_008	Perchlorate6850c.lcm	1x	☒	3100812-07	6/22/2021 18:08
7	PERCHLORATE7		20210622_009	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 18:16
8	PERCHLORATE8		20210622_010	Perchlorate6850c.lcm	1x	☒	3100812-09	6/22/2021 18:25
9	PERCHLORATE9		20210622_011	Perchlorate6850c.lcm	1x	☒	3100813-01	6/22/2021 18:34
10	PERCHLORATEICV		20210622_012	Perchlorate6850c.lcm	1x	☒	3100811-06	6/22/2021 18:42
11	ICS		20210622_013	Perchlorate6850c.lcm	1x	☒		6/22/2021 18:51
12	LODV		20210622_014	Perchlorate6850c.lcm	1x	☒		6/22/2021 18:59
13	PERCHLORATE7		20210622_015	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 19:08
14	EQ2100354-04		20210622_016	Perchlorate6850c.lcm	1x	☒		6/22/2021 19:17
15	EQ2100354-05		20210622_017	Perchlorate6850c.lcm	1x	☒		6/22/2021 19:25
16	E2100631-001X1000		20210622_018	Perchlorate6850c.lcm	1000x	☒		6/22/2021 19:34
17	E2100629-001X20		20210622_019	Perchlorate6850c.lcm	20x	☒		6/22/2021 19:43
18	E2100630-001X20		20210622_020	Perchlorate6850c.lcm	20x	☒		6/22/2021 19:51
19	E2100632-001X10		20210622_021	Perchlorate6850c.lcm	10x	☒		6/22/2021 20:00
20	E2100632-002X10		20210622_022	Perchlorate6850c.lcm	10x	☒		6/22/2021 20:08
21	E2100632-003X2		20210622_023	Perchlorate6850c.lcm	2x	☒	DNU-INST out of range	6/22/2021 20:17
22	E2100632-004X2		20210622_024	Perchlorate6850c.lcm	2x	☒	DNU-INST out of range	6/22/2021 20:25
23	PERCHLORATE7		20210622_025	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 20:34
24	E2100608-001		20210622_026	Perchlorate6850c.lcm	1x	☒	confirmation run only	6/22/2021 20:43
25	E2100632-005X2		20210622_027	Perchlorate6850c.lcm	2x	☒		6/22/2021 20:51
26	E2100632-006X200		20210622_028	Perchlorate6850c.lcm	200x	☒		6/22/2021 21:00
27	E2100632-007X2		20210622_029	Perchlorate6850c.lcm	2x	☒		6/22/2021 21:08
28	EQ2100367-01		20210622_030	Perchlorate6850c.lcm	1x	☒		6/22/2021 21:17
29	EQ2100367-02		20210622_031	Perchlorate6850c.lcm	1x	☒		6/22/2021 21:26
30	EQ2100367-03		20210622_032	Perchlorate6850c.lcm	1x	☒		6/22/2021 21:34
31	E2100651-001		20210622_033	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/22/2021 21:43
32	PERCHLORATE7		20210622_034	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 21:52
33	E2100644-007X5		20210622_035	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	6/22/2021 22:00
34	E2100644-008X20		20210622_036	Perchlorate6850c.lcm	20x	☒	DNU-INST out of range	6/22/2021 22:09
35	E2100644-009X2		20210622_037	Perchlorate6850c.lcm	2x	☒		6/22/2021 22:17
36	E2100645-004X2		20210622_038	Perchlorate6850c.lcm	2x	☒		6/22/2021 22:26
37	E2100645-005X2		20210622_039	Perchlorate6850c.lcm	2x	☒		6/22/2021 22:34
38	E2100645-006X20		20210622_040	Perchlorate6850c.lcm	20x	☒		6/22/2021 22:43
39	PERCHLORATE7		20210622_041	Perchlorate6850c.lcm	1x	☒	3100812-08	6/22/2021 22:52
40	E2100645-009X100		20210622_042	Perchlorate6850c.lcm	100x	☒		6/22/2021 23:00
41	E2100645-010X1000		20210622_043	Perchlorate6850c.lcm	1000x	☒		6/22/2021 23:09
42	E2100645-011X1000		20210622_044	Perchlorate6850c.lcm	1000x	☒		6/22/2021 23:17
43	EQ2100358-03		20210622_045	Perchlorate6850c.lcm	1x	☒		6/22/2021 23:26
44	E2100645-012X1000		20210622_046	Perchlorate6850c.lcm	1000x	☒		6/22/2021 23:35
45	E2100645-013X1000		20210622_047	Perchlorate6850c.lcm	1000x	☒		6/22/2021 23:43
46	E2100645-014X10		20210622_048	Perchlorate6850c.lcm	10x	☒		6/22/2021 23:52
47	E2100645-015X10		20210622_049	Perchlorate6850c.lcm	10x	☒		6/23/2021 0:00
48	E2100645-016X10		20210622_050	Perchlorate6850c.lcm	10x	☒		6/23/2021 0:09
49	E2100645-017X2		20210622_051	Perchlorate6850c.lcm	2x	☒		6/23/2021 0:18
50	PERCHLORATE7		20210622_052	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 0:26
51	E2100645-018X10		20210622_053	Perchlorate6850c.lcm	10x	☒		6/23/2021 0:35
52	E2100645-019X2		20210622_054	Perchlorate6850c.lcm	2x	☒		6/23/2021 0:44
53	E2100645-020X10		20210622_055	Perchlorate6850c.lcm	10x	☒		6/23/2021 0:52
54	E2100645-021X100		20210622_056	Perchlorate6850c.lcm	100x	☒		6/23/2021 1:01
55	E2100645-022X5		20210622_057	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	6/23/2021 1:09
56	E2100645-023X5		20210622_058	Perchlorate6850c.lcm	5x	☒	DNU-INST out of range	6/23/2021 1:18
57	E2100645-024X100		20210622_059	Perchlorate6850c.lcm	100x	☒		6/23/2021 1:27
58	PERCHLORATE7		20210622_060	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 1:35

20210623

1st Review: Grivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/22/2021
Cal. Std. xp: 11/26/2021
ICAL ID: **EC2100044**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100813-02 **B:** MeOH 216862

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	null		20210623_002	Perchlorate6850c.lcm	1x	☒		6/23/2021 11:38
2	null		20210623_003	Perchlorate6850c.lcm	1x	☒		6/23/2021 11:44
3	IB		20210623_004	Perchlorate6850c.lcm	1x	☒		6/23/2021 11:49
4	IB		20210623_005	Perchlorate6850c.lcm	1x	☒		6/23/2021 11:58
5	ICS		20210623_006	Perchlorate6850c.lcm	1x	☒		6/23/2021 12:07
6	PERCHLORATE7		20210623_008	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 12:24
7	LODV		20210623_009	Perchlorate6850c.lcm	1x	☒		6/23/2021 12:34
8	EQ2100367-04		20210623_010	Perchlorate6850c.lcm	1x	☒		6/23/2021 12:43
9	EQ2100367-05		20210623_011	Perchlorate6850c.lcm	1x	☒		6/23/2021 12:51
10	E2100652-001		20210623_012	Perchlorate6850c.lcm	1x	☒		6/23/2021 13:00
11	E2100652-002		20210623_013	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	6/23/2021 13:08
12	E2100652-003		20210623_014	Perchlorate6850c.lcm	1x	☒		6/23/2021 13:17
13	E2100652-004		20210623_015	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 13:26
14	E2100652-005		20210623_016	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 13:34
15	E2100652-006		20210623_017	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 13:43
16	IB		20210623_018	Perchlorate6850c.lcm	1x	☒		6/23/2021 14:23
17	PERCHLORATE7		20210623_019	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 14:31
18	E2100632-003X4		20210623_020	Perchlorate6850c.lcm	4x	☒		6/23/2021 14:40
19	E2100632-004X4		20210623_021	Perchlorate6850c.lcm	4x	☒		6/23/2021 14:49
20	E2100651-001X10		20210623_022	Perchlorate6850c.lcm	10x	☒		6/23/2021 14:57
21	PERCHLORATE7		20210623_023	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 15:06
22	E2100644-007X10		20210623_024	Perchlorate6850c.lcm	10x	☒		6/23/2021 15:14
23	EQ2100354-04X2		20210623_025	Perchlorate6850c.lcm	2x	☒		6/23/2021 15:23
24	EQ2100354-05X2		20210623_026	Perchlorate6850c.lcm	2x	☒		6/23/2021 15:32
25	PERCHLORATE7		20210623_027	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 15:40
26	E2100644-008X40		20210623_028	Perchlorate6850c.lcm	40x	☒		6/23/2021 15:49
27	E2100645-022X10		20210623_029	Perchlorate6850c.lcm	10x	☒		6/23/2021 15:57
28	E2100645-023X10		20210623_030	Perchlorate6850c.lcm	10x	☒		6/23/2021 16:06
29	PERCHLORATE7		20210623_031	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 16:14
30	E2100652-007		20210623_032	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 16:23
31	E2100652-008		20210623_033	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 16:32
32	PERCHLORATE7		20210623_034	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 16:40
33	E2100654-001		20210623_035	Perchlorate6850c.lcm	1x	☒	confirmed hit on 06/25	6/23/2021 16:49
34	E2100654-002		20210623_036	Perchlorate6850c.lcm	1x	☒	confirmed hit on 06/25	6/23/2021 16:57
35	E2100654-003		20210623_037	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 17:06
36	E2100654-004		20210623_038	Perchlorate6850c.lcm	1x	☒	confirmed hit on 06/25	6/23/2021 17:19
37	E2100654-005		20210623_039	Perchlorate6850c.lcm	1x	☒		6/23/2021 17:28
38	E2100654-006		20210623_040	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 17:36
39	E2100654-007		20210623_041	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	6/23/2021 17:45
40	E2100654-008		20210623_042	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	6/23/2021 17:53
41	E2100654-009		20210623_043	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 18:02
42	PERCHLORATE7		20210623_044	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 18:11
43	EQ2100368-01		20210623_045	Perchlorate6850c.lcm	1x	☒		6/23/2021 18:19
44	EQ2100368-02		20210623_046	Perchlorate6850c.lcm	1x	☒		6/23/2021 18:28
45	EQ2100368-03		20210623_047	Perchlorate6850c.lcm	1x	☒		6/23/2021 18:36
46	K2106807-001		20210623_048	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	6/23/2021 18:45
47	PERCHLORATE7		20210623_049	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 18:54
48	EQ2100379-01		20210623_050	Perchlorate6850c.lcm	1x	☒		6/23/2021 19:02
49	EQ2100379-02		20210623_051	Perchlorate6850c.lcm	1x	☒		6/23/2021 19:11
50	EQ2100379-03		20210623_052	Perchlorate6850c.lcm	1x	☒		6/23/2021 19:19
51	E2100665-001		20210623_053	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 19:28
52	E2100665-002		20210623_054	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 19:37
53	E2100665-003		20210623_055	Perchlorate6850c.lcm	1x	☒	RR-carryover	6/23/2021 19:45
54	E2100665-004		20210623_056	Perchlorate6850c.lcm	1x	☒	RR-carryover	6/23/2021 19:54
55	E2100665-005		20210623_057	Perchlorate6850c.lcm	1x	☒	RR-carryover	6/23/2021 20:03
56	E2100665-006		20210623_058	Perchlorate6850c.lcm	1x	☒	RR-carryover	6/23/2021 20:11
57	E2100665-007		20210623_059	Perchlorate6850c.lcm	1x	☒		6/23/2021 20:20
58	PERCHLORATE7		20210623_060	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 20:28
59	E2100665-008		20210623_061	Perchlorate6850c.lcm	1x	☒		6/23/2021 20:37
60	E2100665-009		20210623_062	Perchlorate6850c.lcm	1x	☒	Reanalyze	6/23/2021 20:46
61	E2100672-001		20210623_063	Perchlorate6850c.lcm	1x	☒		6/23/2021 20:54
62	E2100673-001		20210623_064	Perchlorate6850c.lcm	1x	☒		6/23/2021 21:03
63	E2100673-002		20210623_065	Perchlorate6850c.lcm	1x	☒		6/23/2021 21:11
64	E2100673-003		20210623_066	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	6/23/2021 21:20

20210623

1st Review: Grivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/22/2021
Cal. Std. xp: 11/26/2021
ICAL ID: **EC2100044**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100813-02 **B:** MeOH 216862

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
65	E2100673-004		20210623_067	Perchlorate6850c.lcm	1x	☒		6/23/2021 21:29
66	E2100673-005		20210623_068	Perchlorate6850c.lcm	1x	☒		6/23/2021 21:37
67	E2100673-006		20210623_069	Perchlorate6850c.lcm	1x	☒	DNU-over calibration range	6/23/2021 21:46
68	PERCHLORATE7		20210623_070	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 21:54
69	E2100673-007		20210623_071	Perchlorate6850c.lcm	1x	☒		6/23/2021 22:03
70	E2100673-008		20210623_072	Perchlorate6850c.lcm	1x	☒		6/23/2021 22:12
71	E2100673-009		20210623_073	Perchlorate6850c.lcm	1x	☒		6/23/2021 22:20
72	PERCHLORATE7		20210623_074	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 22:29
73	EQ2100378-01		20210623_075	Perchlorate6850c.lcm	1x	☒	Reanalyze	6/23/2021 22:37
74	EQ2100378-02		20210623_076	Perchlorate6850c.lcm	1x	☒	Reanalyze	6/23/2021 22:46
75	EQ2100378-03		20210623_077	Perchlorate6850c.lcm	1x	☒	Reanalyze	6/23/2021 22:55
76	E2100678-001		20210623_078	Perchlorate6850c.lcm	1x	☒		6/23/2021 23:03
77	E2100678-002		20210623_079	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	6/23/2021 23:12
78	E2100678-003		20210623_080	Perchlorate6850c.lcm	1x	☒		6/23/2021 23:20
79	E2100678-004		20210623_081	Perchlorate6850c.lcm	1x	☒		6/23/2021 23:29
80	E2100678-005		20210623_082	Perchlorate6850c.lcm	1x	☒		6/23/2021 23:38
81	PERCHLORATE7		20210623_083	Perchlorate6850c.lcm	1x	☒	3100812-08	6/23/2021 23:46
82	E2100678-006		20210623_084	Perchlorate6850c.lcm	1x	☒		6/23/2021 23:55
83	E2100678-007		20210623_085	Perchlorate6850c.lcm	1x	☒		6/24/2021 0:04
84	E2100678-008		20210623_086	Perchlorate6850c.lcm	1x	☒		6/24/2021 0:12
85	E2100678-009		20210623_087	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	6/24/2021 0:21
86	PERCHLORATE7		20210623_088	Perchlorate6850c.lcm	1x	☒	3100812-08	6/24/2021 0:29
87								
88								

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/15/21

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\20210615\20210615_020

Calibration Date: 6/15/21
Calibration ID: EC2100038
Analysis Lot: 727655
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.14	0.1057	0.09659	-8.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/15/21

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\20210615\20210615_031

Calibration Date: 6/15/21
Calibration ID: EC2100038
Analysis Lot: 727655
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.15	0.1057	0.09669	-8.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/15/21

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\20210615\20210615_042

Calibration Date: 6/15/21
Calibration ID: EC2100038
Analysis Lot: 727655
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.09	0.1057	0.09609	-9.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/15/21

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\20210615\20210615_046

Calibration Date: 6/15/21
Calibration ID: EC2100038
Analysis Lot: 727655
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.03	0.1057	0.09546	-9.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/15/21

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\20210615\20210615_053

Calibration Date: 6/15/21
Calibration ID: EC2100038
Analysis Lot: 727655
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	8.82	0.1057	0.09319	-11.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/15/21

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

Analytical Method:	6850	**Calibration Date:**	6/15/21
File ID:	I:\LCMS01\DATA\20210615\20210615_063	**Calibration ID:**	EC2100038
		Analysis Lot:	727655
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.34	0.1057	0.09869	-6.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/16/21

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

Analytical Method:	6850	**Calibration Date:**	6/15/21
File ID:	I:\LCMS01\DATA\20210615\20210615_071	**Calibration ID:**	EC2100038
		Analysis Lot:	727655
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.17	0.1057	0.09692	-8.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/22/21

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

Analytical Method:	6850	**Calibration Date:**	6/22/21
File ID:	I:\LCMS01\DATA\20210622\20210622_015	**Calibration ID:**	EC2100044
		Analysis Lot:	728385
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.66	0.1220	0.1179	-3.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/22/21

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

Analytical Method:	6850	**Calibration Date:**	6/22/21
File ID:	I:\LCMS01\DATA\20210622\20210622_025	**Calibration ID:**	EC2100044
		Analysis Lot:	728385
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.34	0.1220	0.1140	-6.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/22/21

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

Analytical Method:	6850	**Calibration Date:**	6/22/21
File ID:	I:\LCMS01\DATA\20210622\20210622_034	**Calibration ID:**	EC2100044
		Analysis Lot:	728385
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.38	0.1220	0.1144	-6.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/22/21

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

Analytical Method:	6850	**Calibration Date:**	6/22/21
File ID:	I:\LCMS01\DATA\20210622\20210622_041	**Calibration ID:**	EC2100044
		Analysis Lot:	728385
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.25	0.1220	0.1128	-7.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21

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

Analytical Method:	6850	**Calibration Date:**	6/22/21
File ID:	I:\LCMS01\DATA\20210622\20210622_052	**Calibration ID:**	EC2100044
		Analysis Lot:	728385
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.17	0.1220	0.1119	-8.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21

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

Analytical Method:	6850	**Calibration Date:**	6/22/21
File ID:	I:\LCMS01\DATA\20210622\20210622_060	**Calibration ID:**	EC2100044
		Analysis Lot:	728385
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.54	0.1220	0.1164	-4.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/23/21

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\20210623\20210623_008

Calibration Date: 6/22/21
Calibration ID: EC2100044
Analysis Lot: 728540
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	8.98	0.1220	0.1095	-10.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21

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

Analytical Method:	6850	**Calibration Date:**	6/22/21
File ID:	I:\LCMS01\DATA\20210623\20210623_019	**Calibration ID:**	EC2100044
		Analysis Lot:	728540
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.21	0.1220	0.1124	-7.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/23/21

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\20210623\20210623_023

Calibration Date: 6/22/21
Calibration ID: EC2100044
Analysis Lot: 728540
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.31	0.1220	0.1136	-6.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/23/21

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\20210623\20210623_027

Calibration Date: 6/22/21
Calibration ID: EC2100044
Analysis Lot: 728540
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.06	0.1220	0.1105	-9.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS21060700

Service Request: E2100645
Date Analyzed: 6/23/21

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\20210623\20210623_031

Calibration Date: 6/22/21
Calibration ID: EC2100044
Analysis Lot: 728540
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.19	0.1220	0.1121	-8.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/15/21 17:23

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

File ID:	I:\LCMS01\DATA\20210615\20210615_020	**Lab Code:**	EQ2100361-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	727655
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	88,224	2.80
	Upper Limit ==>	132,336	4.80
	Lower Limit ==>	44,112	0.80
Associated Analyses			
Continuing Calibration Verification	EQ2100361-01	91,410	2.80
ICT4_061020MS	EQ2100357-04	49,037	2.79
ICT4_061020DMS	EQ2100357-05	48,364	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/15/21 19:17

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

File ID:	I:\LCMS01\DATA\20210615\20210615_031	**Lab Code:**	EQ2100361-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	727655
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	88,224	2.80
	Upper Limit ==>	132,336	4.80
	Lower Limit ==>	44,112	0.80
Associated Analyses			
Continuing Calibration Verification	EQ2100361-02	98,763	2.78
ICT2_061020	E2100645-001	82,471	2.78
ICT4_061020	E2100645-002	48,724	2.79
ICT7_061020	E2100645-003	69,978	2.78

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/15/21 20:51

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

File ID:	I:\LCMS01\DATA\20210615\20210615_042	**Lab Code:**	EQ2100361-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	727655
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	88,224	2.80
	Upper Limit ==>	132,336	4.80
	Lower Limit ==>	44,112	0.80
Associated Analyses			
Continuing Calibration Verification	EQ2100361-03	96,816	2.78
ICT11_061020	E2100645-007	82,748	2.78
ICT11_061020_a	E2100645-008	84,504	2.78

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/15/21 21:25

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

File ID:	I:\LCMS01\DATA\20210615\20210615_046	**Lab Code:**	EQ2100361-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	727655
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	88,224	2.80
	Upper Limit ==>	132,336	4.80
	Lower Limit ==>	44,112	0.80
Associated Analyses			
Continuing Calibration Verification	EQ2100361-04	94,189	2.78

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/15/21 22:25

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

File ID:	I:\LCMS01\DATA\20210615\20210615_053	**Lab Code:**	EQ2100361-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	727655
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	88,224	2.80
	Upper Limit ==>	132,336	4.80
	Lower Limit ==>	44,112	0.80
Associated Analyses			
Continuing Calibration Verification	EQ2100361-05	61,947	2.78
Method Blank	EQ2100357-01	80,821	2.78
Lab Control Sample	EQ2100357-02	88,987	2.78
Duplicate Lab Control Sample	EQ2100357-03	90,358	2.78

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/15/21 23:50

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

File ID:	I:\LCMS01\DATA\20210615\20210615_063	**Lab Code:**	EQ2100361-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	727655
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	88,224	2.80
	Upper Limit ==>	132,336	4.80
	Lower Limit ==>	44,112	0.80
Associated Analyses			
Continuing Calibration Verification	EQ2100361-06	55,999	2.78
Method Blank	EQ2100358-01	73,690	2.78
Lab Control Sample	EQ2100358-02	73,472	2.78

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/16/21 00:59

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

File ID:	I:\LCMS01\DATA\20210615\20210615_071	**Lab Code:**	EQ2100361-07
Instrument ID:	E-LCMS-01	**Analysis Lot:**	727655
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	88,224	2.80
	Upper Limit ==>	132,336	4.80
	Lower Limit ==>	44,112	0.80
Associated Analyses			
Continuing Calibration Verification	EQ2100361-07	51,074	2.78

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/22/21 19:08

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

File ID:	I:\LCMS01\DATA\20210622\20210622_015	**Lab Code:**	EQ2100376-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728385
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100376-01	59,737	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/22/21 20:34

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

File ID:	I:\LCMS01\DATA\20210622\20210622_025	**Lab Code:**	EQ2100376-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728385
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100376-02	49,224	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/22/21 21:52

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20210622\20210622_034	**Lab Code:**	EQ2100376-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728385
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100376-03	49,936	2.79
ICT8_061020	E2100645-004	30,488	2.79
ICT8_061020_a	E2100645-005	30,470	2.79
EW01_061020	E2100645-006	30,624	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/22/21 22:52

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20210622\20210622_041	**Lab Code:**	EQ2100376-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728385
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100376-04	48,761	2.79
ICT12A_061020	E2100645-009	45,377	2.79
ICT12B_061020	E2100645-010	41,178	2.79
ICT12C_061020	E2100645-011	49,194	2.79
Duplicate Lab Control Sample	EQ2100358-03	54,148	2.79
ICT12D_061020	E2100645-012	43,919	2.79
ICT12E_061020	E2100645-013	42,921	2.79
ICT13A_061020	E2100645-014	37,751	2.79
ICT13B_061020	E2100645-015	30,561	2.79
ICT13C_061020	E2100645-016	32,556	2.79
ICT13D_061020	E2100645-017	32,743	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21 00:26

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

File ID:	I:\LCMS01\DATA\20210622\20210622_052	**Lab Code:**	EQ2100376-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728385
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100376-05	51,508	2.79
ICT13E_061020	E2100645-018	53,687	2.79
ICT13F_061020	E2100645-019	42,071	2.79
ICT14A_061020	E2100645-020	42,165	2.79
ICT14B_061020	E2100645-021	38,990	2.79
ICT14E_061020	E2100645-024	36,822	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21 01:35

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

File ID:	I:\LCMS01\DATA\20210622\20210622_060	**Lab Code:**	EQ2100376-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728385
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100376-06	48,454	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21 12:24

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

File ID:	I:\LCMS01\DATA\20210623\20210623_008	**Lab Code:**	EQ2100380-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728540
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100380-01	78,703	2.80

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21 14:31

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

File ID:	I:\LCMS01\DATA\20210623\20210623_019	**Lab Code:**	EQ2100380-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728540
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100380-02	63,044	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21 15:06

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20210623\20210623_023	**Lab Code:**	EQ2100380-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728540
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100380-03	59,627	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21 15:40

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

File ID:	I:\LCMS01\DATA\20210623\20210623_027	**Lab Code:**	EQ2100380-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728540
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100380-04	63,183	2.79
ICT14C_061020	E2100645-022	55,773	2.80
ICT14D_061020	E2100645-023	45,669	2.79

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:**	E2100645
Project:	HS21060700	**Date Analyzed:**	6/23/21 16:14

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20210623\20210623_031	**Lab Code:**	EQ2100380-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	728540
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	60,843	2.79
	Upper Limit ==>	91,265	4.79
	Lower Limit ==>	30,422	0.79
Associated Analyses			
Continuing Calibration Verification	EQ2100380-05	60,272	2.79

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

Insight Report

Printed at 6/17/2021 1:58:19 PM

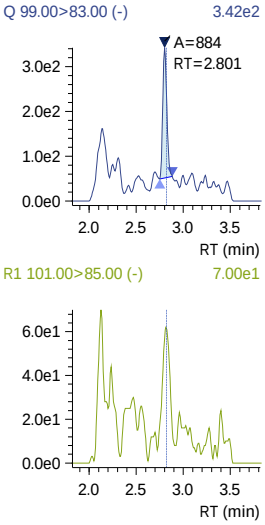
20210615_019

Sample ID: LODV
Date Acquired: 6/15/2021 5:15:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_019.lcd
Vial: 31 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.801	884	129435	1	0.0646	ng/mL	----	13.59
Sodium Perchlorate-18O4 _IS	Auto	2.803	1294 35	129435	1	1.0000	ng/mL	----	----

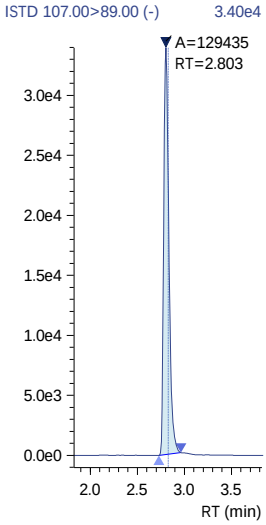
Perchlorate

Conc 0.0646
R#1 13.59 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

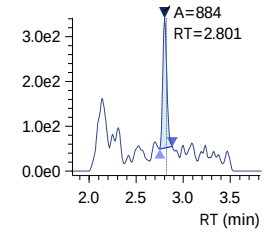
20210615_019

Sample ID: LODV
Date Acquired: 6/15/2021 5:15:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_019.lcd
Vial: 31 | Inj. Volume: 25.0000uL | Tray: 1

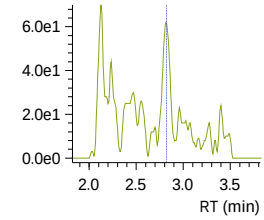
Perchlorate

Conc 0.0658
R#1 13.59 (0.00)

Q 99.00>83.00 (-) 3.42e2



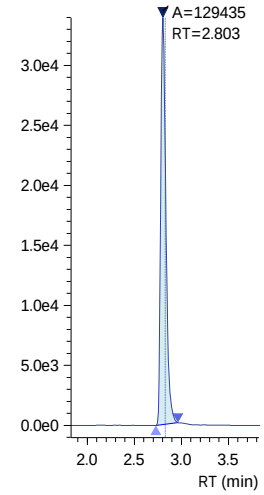
R1 101.00>85.00 (-) 7.00e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.40e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

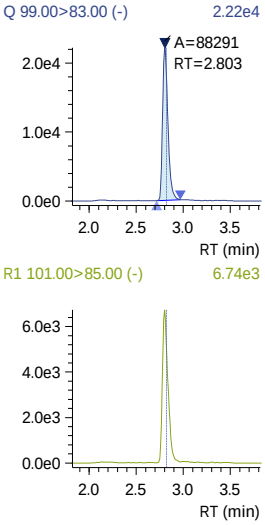
20210615_020

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 5:23:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_020.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.803	88291	91410	1	9.1371	ng/mL	10.0000	30.31
Sodium Perchlorate-18O4 _IS	Auto	2.802	91410	91410	1	1.0000	ng/mL	1.0000	----

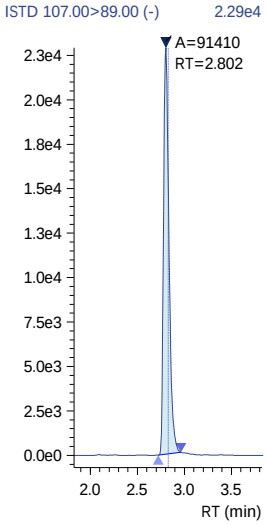
Perchlorate

Conc 9.1371
R#1 30.31 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

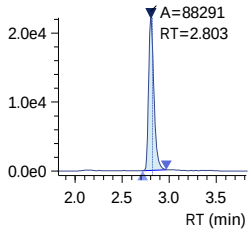
20210615_020

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 5:23:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_020.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

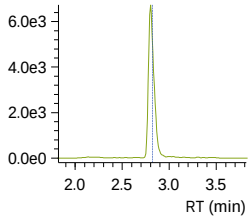
Perchlorate

Conc 9.3094
R#1 30.31 (0.00)

Q 99.00>83.00 (-) 2.22e4



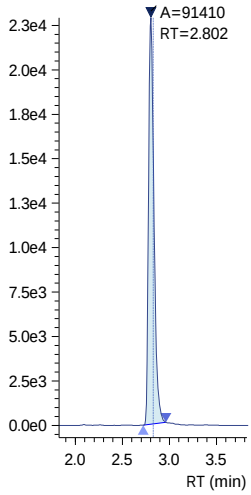
R1 101.00>85.00 (-) 6.74e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.29e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

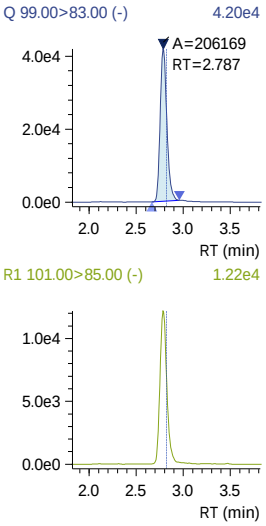
20210615_029

Sample ID: EQ2100357-04X100
Date Acquired: 6/15/2021 7:00:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_029.lcd
Vial: 46 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.787	206169	49037	1	39.7729	ng/mL	----	29.00
Sodium Perchlorate-18O4_IS	Auto	2.786	49037	49037	1	1.0000	ng/mL	----	----

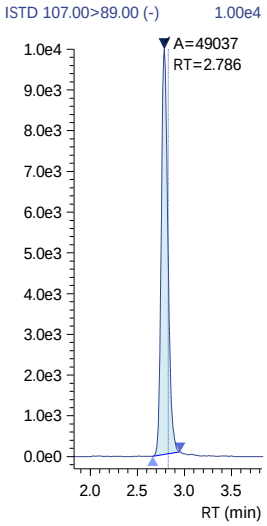
Perchlorate

Conc 39.7729
R#1 29.00 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

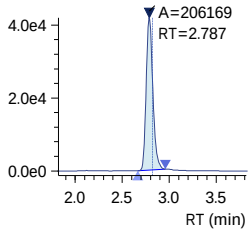
20210615_029

Sample ID: EQ2100357-04X100
Date Acquired: 6/15/2021 7:00:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_029.lcd
Vial: 46 | Inj. Volume: 25.0000uL | Tray: 2

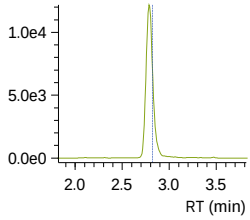
Perchlorate

Conc 40.5232
R#1 29.00 (0.00)

Q 99.00>83.00 (-) 4.20e4



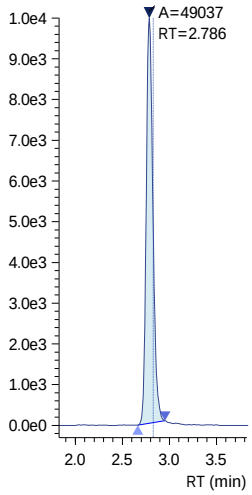
R1 101.00>85.00 (-) 1.22e4



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.00e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

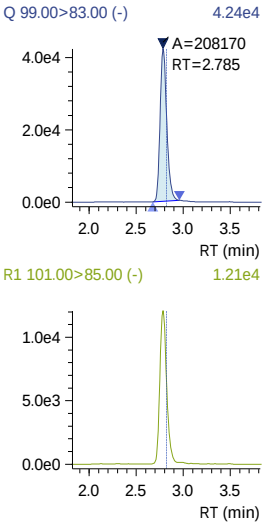
20210615_030

Sample ID: EQ2100357-05X100
Date Acquired: 6/15/2021 7:09:14 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_030.lcd
Vial: 47 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.785	208170	48364	1	40.7172	ng/mL	----	28.51
Sodium Perchlorate-18O4_IS	Auto	2.785	48364	48364	1	1.0000	ng/mL	----	----

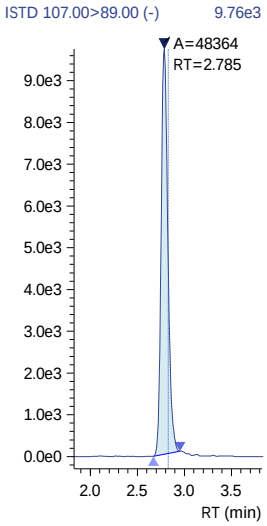
Perchlorate

Conc 40.7172
R#1 28.51 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

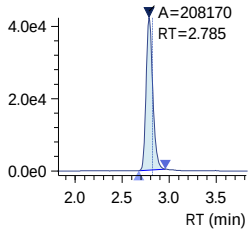
20210615_030

Sample ID: EQ2100357-05X100
Date Acquired: 6/15/2021 7:09:14 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_030.lcd
Vial: 47 | Inj. Volume: 25.0000uL | Tray: 2

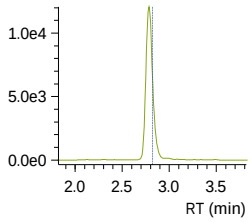
Perchlorate

Conc 41.4853
R#1 28.51 (0.00)

Q 99.00>83.00 (-) 4.24e4



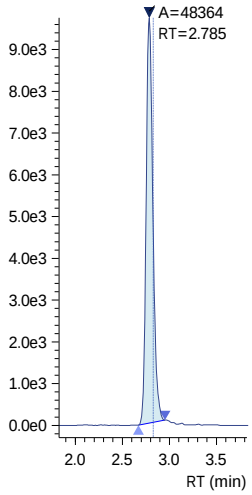
R1 101.00>85.00 (-) 1.21e4



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 9.76e3



Insight Report

Printed at 6/17/2021 1:58:19 PM

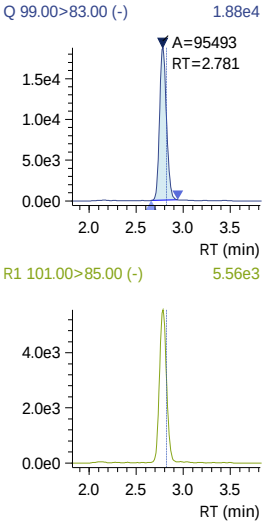
20210615_031

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 7:17:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_031.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.781	95493	98763	1	9.1466	ng/mL	10.0000	29.24
Sodium Perchlorate-18O4 _IS	Auto	2.781	98763	98763	1	1.0000	ng/mL	1.0000	----

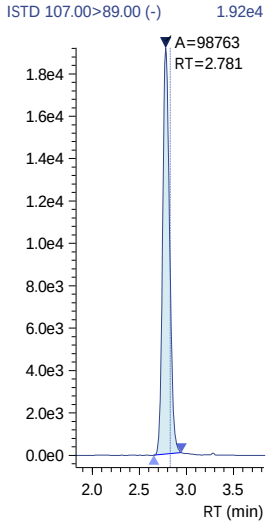
Perchlorate

Conc 9.1466
R#1 29.24 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

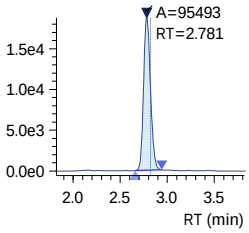
20210615_031

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 7:17:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_031.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

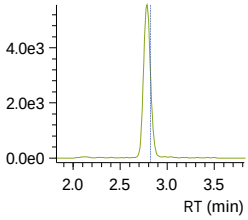
Perchlorate

Conc 9.3192
R#1 29.24 (0.00)

Q 99.00>83.00 (-) 1.88e4



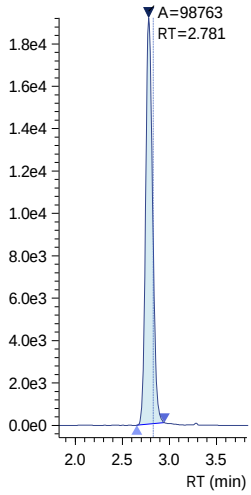
R1 101.00>85.00 (-) 5.56e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.92e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

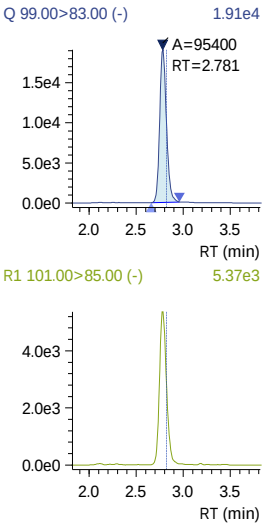
20210615_039

Sample ID: E2100645-001X100
Date Acquired: 6/15/2021 8:26:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_039.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.781	95400	82471	1	10.9429	ng/mL	----	28.42
Sodium Perchlorate-18O4 _IS	Auto	2.781	82471	82471	1	1.0000	ng/mL	----	----

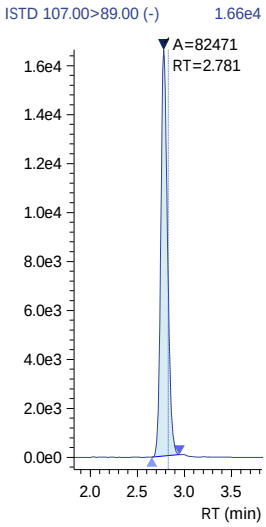
Perchlorate

Conc 10.9429
R#1 28.42 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

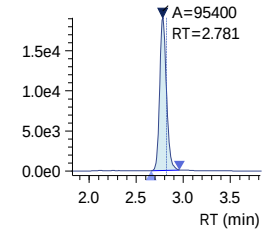
20210615_039

Sample ID: E2100645-001X100
Date Acquired: 6/15/2021 8:26:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_039.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 3

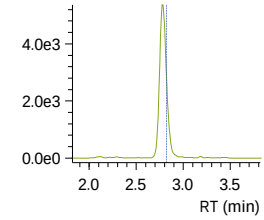
Perchlorate

Conc 11.1494
R#1 28.42 (0.00)

Q 99.00>83.00 (-) 1.91e4



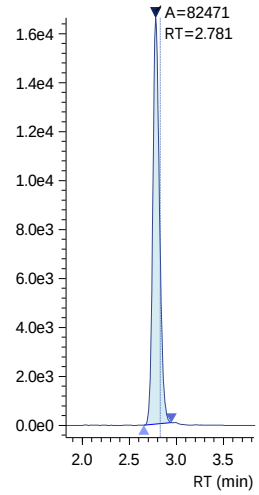
R1 101.00>85.00 (-) 5.37e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.66e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

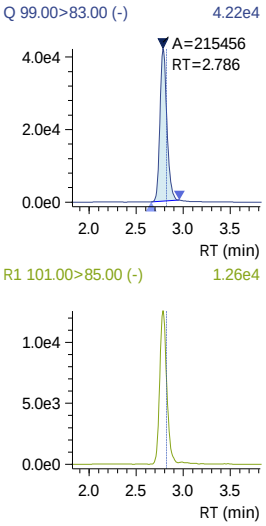
20210615_040

Sample ID: E2100645-002X100
Date Acquired: 6/15/2021 8:34:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_040.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.786	215456	48724	1	41.8311	ng/mL	----	29.83
Sodium Perchlorate-18O4_IS	Auto	2.785	48724	48724	1	1.0000	ng/mL	----	----

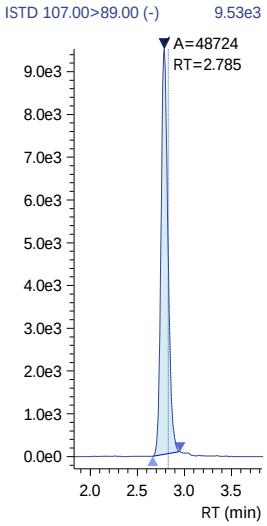
Perchlorate

Conc 41.8311
R#1 29.83 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

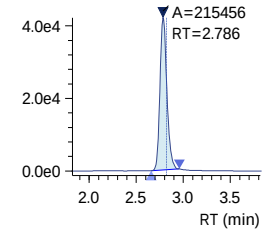
20210615_040

Sample ID: E2100645-002X100
Date Acquired: 6/15/2021 8:34:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_040.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 3

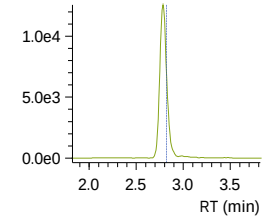
Perchlorate

Conc 42.6202
R#1 29.83 (0.00)

Q 99.00>83.00 (-) 4.22e4



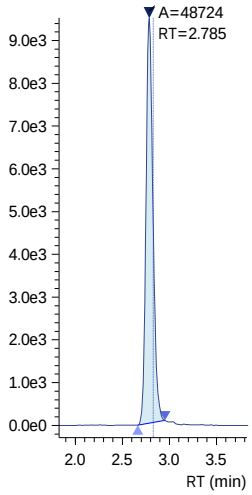
R1 101.00>85.00 (-) 1.26e4



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 9.53e3



Insight Report

Printed at 6/17/2021 1:58:19 PM

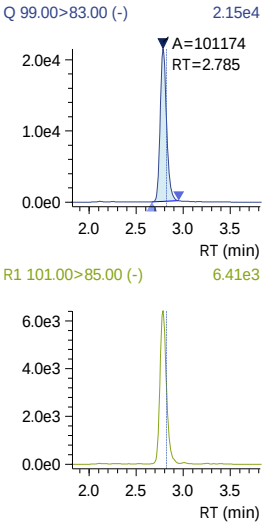
20210615_041

Sample ID: E2100645-003X10
Date Acquired: 6/15/2021 8:43:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_041.lcd
Vial: 5 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.785	101174	69978	1	13.6770	ng/mL	----	29.84
Sodium Perchlorate-18O4_IS	Auto	2.784	69978	69978	1	1.0000	ng/mL	----	----

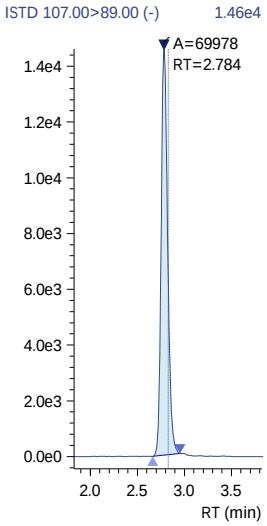
Perchlorate

Conc 13.6770
R#1 29.84 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

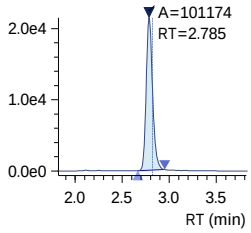
20210615_041

Sample ID: E2100645-003X10
Date Acquired: 6/15/2021 8:43:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_041.lcd
Vial: 5 | Inj. Volume: 25.0000uL | Tray: 3

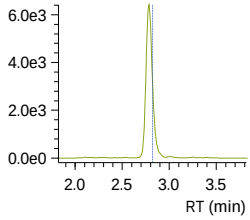
Perchlorate

Conc 13.9350
R#1 29.84 (0.00)

Q 99.00>83.00 (-) 2.15e4



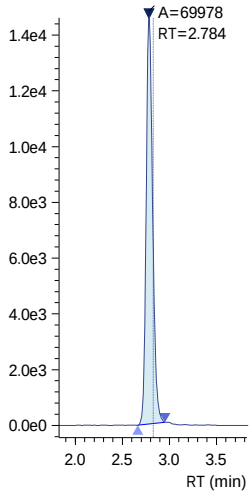
R1 101.00>85.00 (-) 6.41e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.46e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

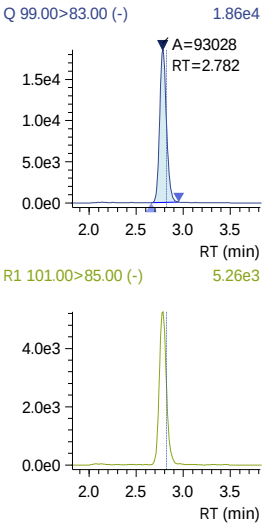
20210615_042

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 8:51:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_042.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.782	93028	96816	1	9.0897	ng/mL	10.0000	28.73
Sodium Perchlorate-18O4 _IS	Auto	2.781	96816	96816	1	1.0000	ng/mL	1.0000	----

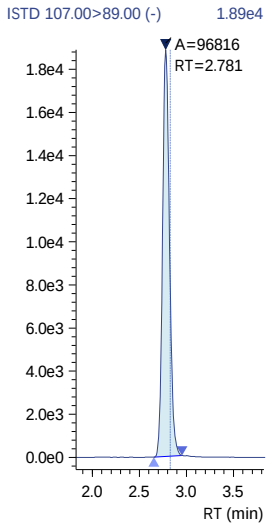
Perchlorate

Conc 9.0897
R#1 28.73 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

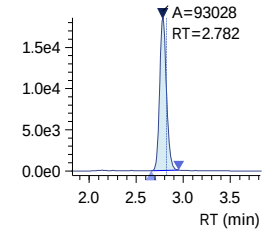
20210615_042

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 8:51:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_042.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

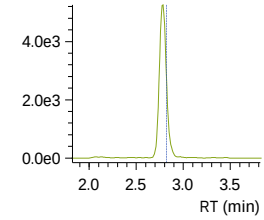
Perchlorate

Conc 9.2611
R#1 28.73 (0.00)

Q 99.00>83.00 (-) 1.86e4



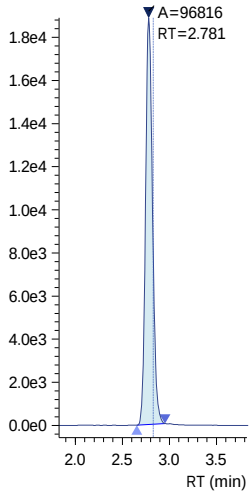
R1 101.00>85.00 (-) 5.26e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.89e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

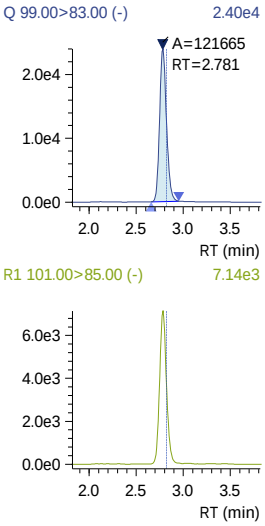
20210615_044

Sample ID: E2100645-007X1000
Date Acquired: 6/15/2021 9:08:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_044.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.781	121665	82748	1	13.9089	ng/mL	----	29.25
Sodium Perchlorate-18O4_IS	Auto	2.781	82748	82748	1	1.0000	ng/mL	----	----

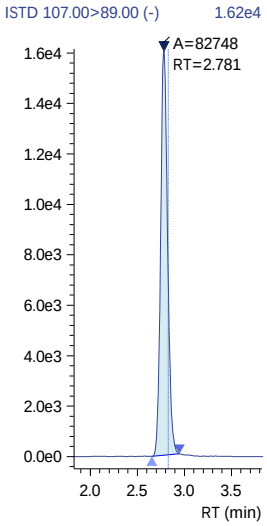
Perchlorate

Conc 13.9089
R#1 29.25 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

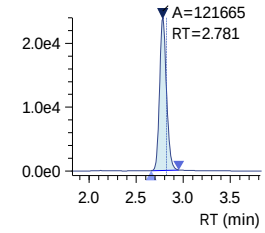
20210615_044

Sample ID: E2100645-007X1000
Date Acquired: 6/15/2021 9:08:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_044.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 3

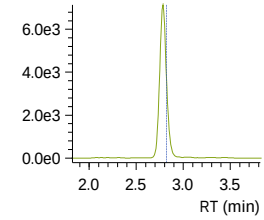
Perchlorate

Conc 14.1713
R#1 29.25 (0.00)

Q 99.00>83.00 (-) 2.40e4



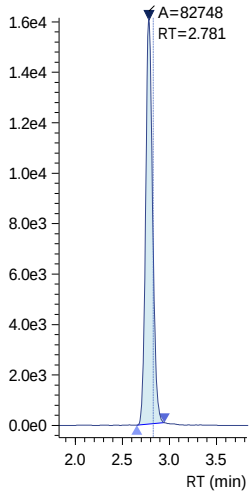
R1 101.00>85.00 (-) 7.14e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.62e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

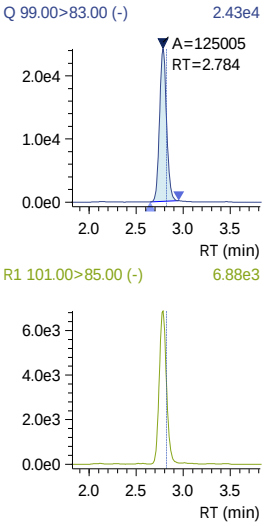
20210615_045

Sample ID: E2100645-008X1000
Date Acquired: 6/15/2021 9:17:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_045.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.784	125005	84504	1	13.9937	ng/mL	----	28.37
Sodium Perchlorate-18O4_IS	Auto	2.781	84504	84504	1	1.0000	ng/mL	----	----

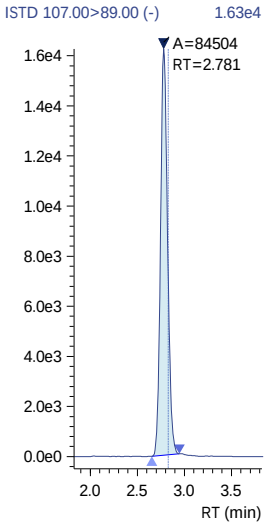
Perchlorate

Conc 13.9937
R#1 28.37 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

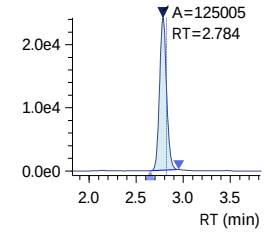
20210615_045

Sample ID: E2100645-008X1000
Date Acquired: 6/15/2021 9:17:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_045.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 3

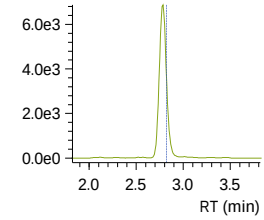
Perchlorate

Conc 14.2577
R#1 28.37 (0.00)

Q 99.00>83.00 (-) 2.43e4



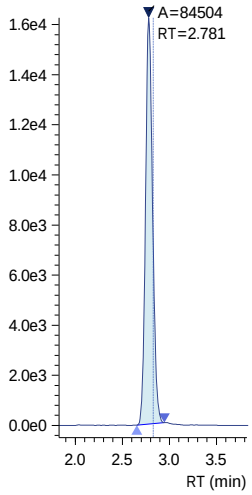
R1 101.00>85.00 (-) 6.88e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.63e4



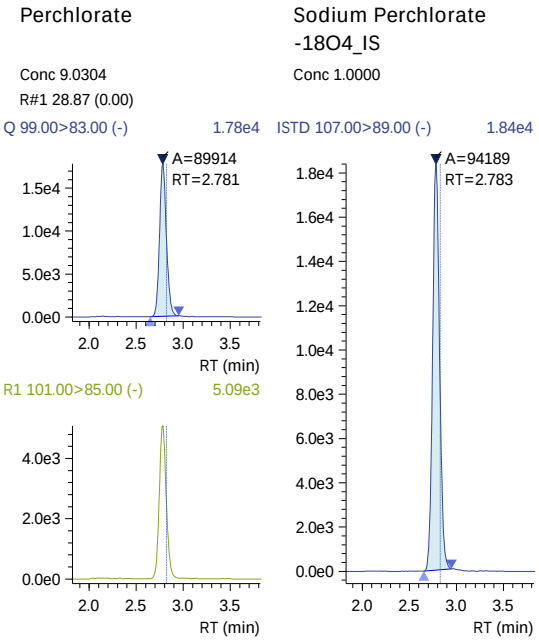
Insight Report

Printed at 6/17/2021 1:58:19 PM

20210615_046

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 9:25:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_046.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.781	89914	94189	1	9.0304	ng/mL	10.0000	28.87
Sodium Perchlorate-18O4 _IS	Auto	2.783	94189	94189	1	1.0000	ng/mL	1.0000	----



Insight Report

Printed at 6/17/2021 2:00:46 PM

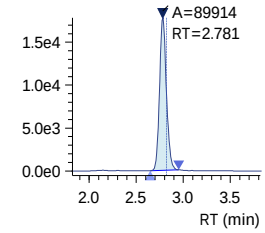
20210615_046

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 9:25:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_046.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

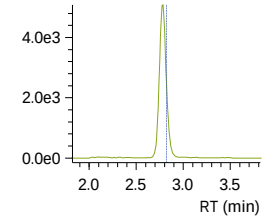
Perchlorate

Conc 9.2008
R#1 28.87 (0.00)

Q 99.00>83.00 (-) 1.78e4



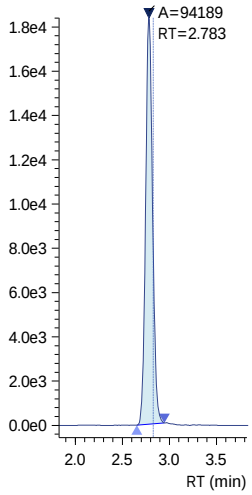
R1 101.00>85.00 (-) 5.09e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.84e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

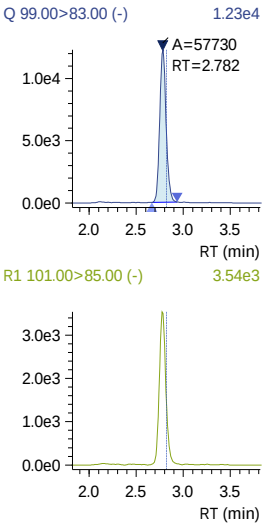
20210615_053

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 10:25:31 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_053.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.782	57730	61947	1	8.8159	ng/mL	10.0000	29.47
Sodium Perchlorate-18O4 _IS	Auto	2.779	61947	61947	1	1.0000	ng/mL	1.0000	----

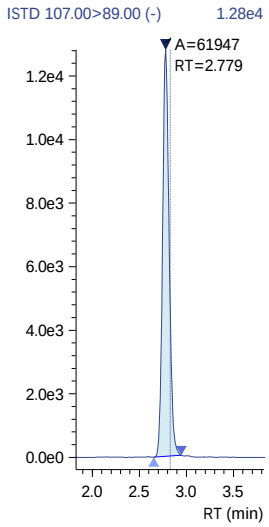
Perchlorate

Conc 8.8159
R#1 29.47 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

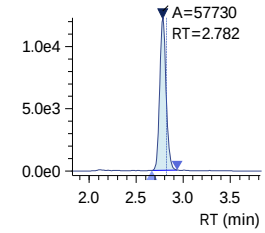
20210615_053

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 10:25:31 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_053.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

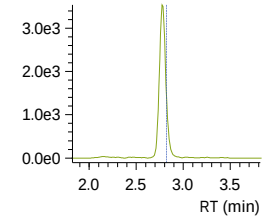
Perchlorate

Conc 8.9822
R#1 29.47 (0.00)

Q 99.00>83.00 (-) 1.23e4



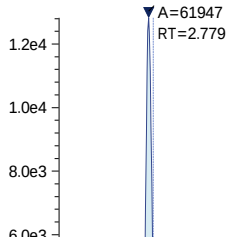
R1 101.00>85.00 (-) 3.54e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.28e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

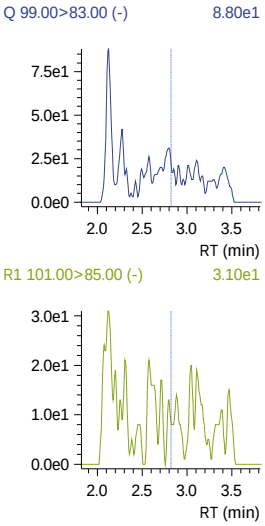
20210615_056

Sample ID: EQ2100357-01
Date Acquired: 6/15/2021 10:51:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_056.lcd
Vial: 43 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	ND(W/B)	----	----	80821	1	----	ng/mL	----	----
Sodium Perchlorate-18O4_IS	Auto	2.781	80821	80821	1	1.0000	ng/mL	----	----

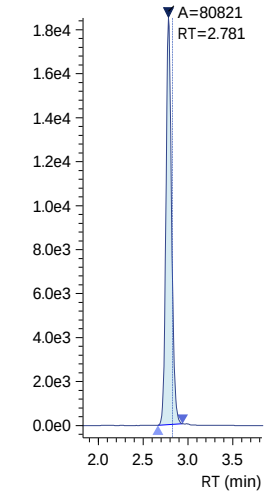
Perchlorate

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



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

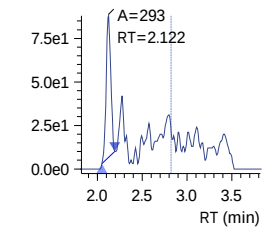
20210615_056

Sample ID: EQ2100357-01
Date Acquired: 6/15/2021 10:51:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_056.lcd
Vial: 43 | Inj. Volume: 25.0000uL | Tray: 2

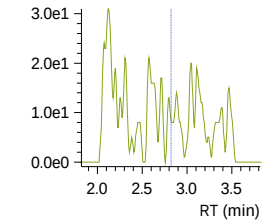
Perchlorate

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

Q 99.00>83.00 (-) 8.80e1



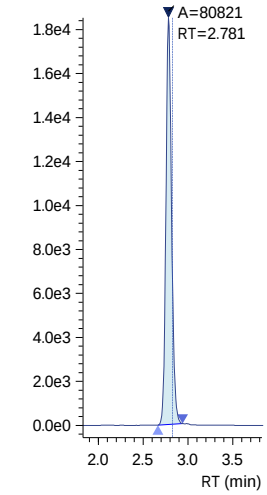
R1 101.00>85.00 (-) 3.10e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.85e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

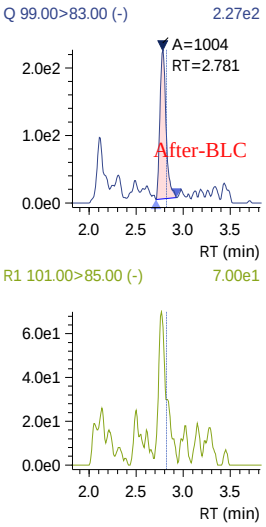
20210615_057

Sample ID: EQ2100357-02
Date Acquired: 6/15/2021 10:59:42 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_057.lcd
Vial: 44 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.781	1004	88987	1	0.1067	ng/mL	----	26.85
Sodium Perchlorate-18O4 _IS	Auto	2.781	88987	88987	1	1.0000	ng/mL	----	----

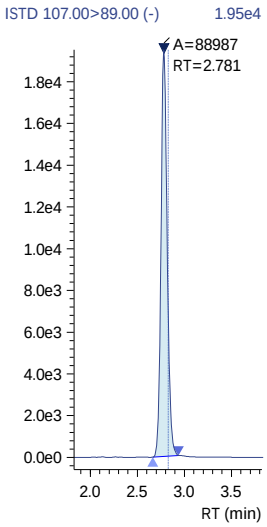
Perchlorate

Conc 0.1067
R#1 26.85 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

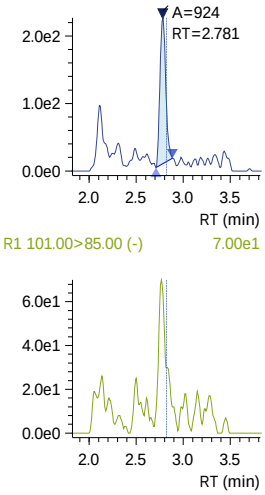
Printed at 6/17/2021 2:00:46 PM

20210615_057

Sample ID: EQ2100357-02
Date Acquired: 6/15/2021 10:59:42 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_057.lcd
Vial: 44 | Inj. Volume: 25.0000uL | Tray: 2

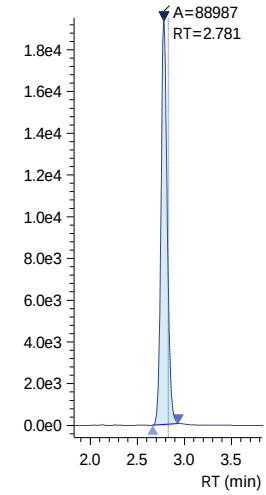
Perchlorate

Conc 0.1001
R#1 27.01 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 1:58:19 PM

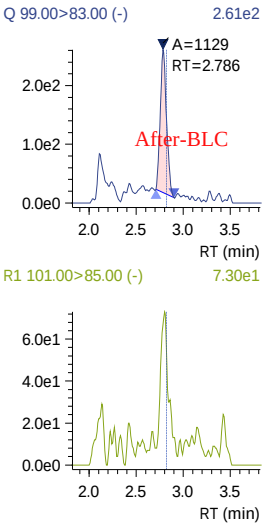
20210615_058

Sample ID: EQ2100357-03
Date Acquired: 6/15/2021 11:08:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_058.lcd
Vial: 45 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.786	1129	90358	1	0.1181	ng/mL	----	23.65
Sodium Perchlorate-18O4 _IS	M	2.782	90358	90358	1	1.0000	ng/mL	----	----

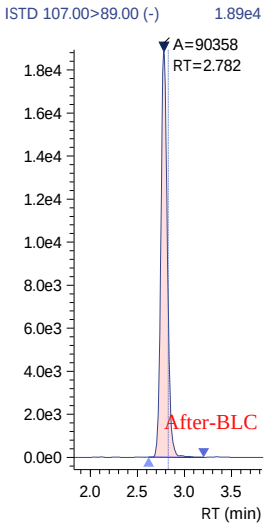
Perchlorate

Conc 0.1181
R#1 23.65 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

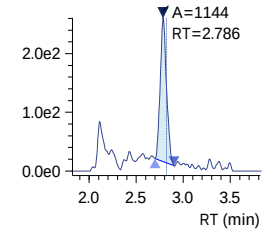
20210615_058

Sample ID: EQ2100357-03
Date Acquired: 6/15/2021 11:08:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_058.lcd
Vial: 45 | Inj. Volume: 25.0000uL | Tray: 2

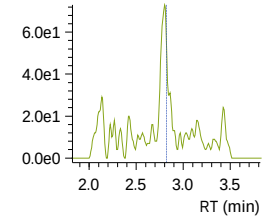
Perchlorate

Conc 0.1235
R#1 23.05 (0.00)

Q 99.00>83.00 (-) 2.61e2



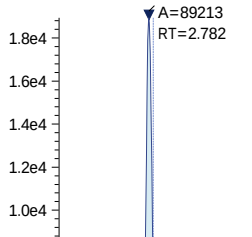
R1 101.00>85.00 (-) 7.30e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.89e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

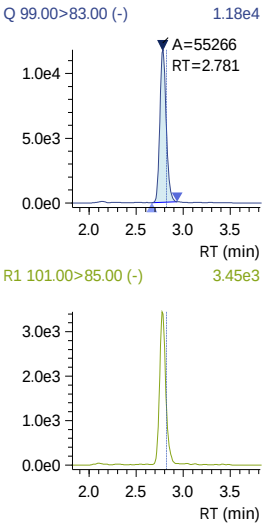
20210615_063

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 11:50:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_063.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.781	55266	55999	1	9.3361	ng/mL	10.0000	29.56
Sodium Perchlorate-18O4 _IS	Auto	2.780	55999	55999	1	1.0000	ng/mL	1.0000	----

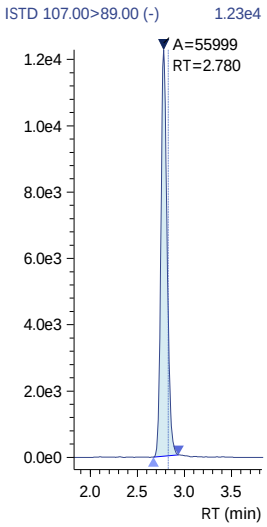
Perchlorate

Conc 9.3361
R#1 29.56 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

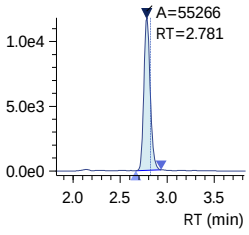
20210615_063

Sample ID: PERCHLORATE7
Date Acquired: 6/15/2021 11:50:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_063.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

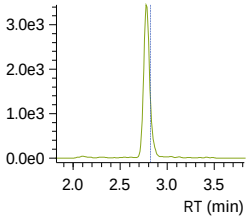
Perchlorate

Conc 9.5122
R#1 29.56 (0.00)

Q 99.00>83.00 (-) 1.18e4



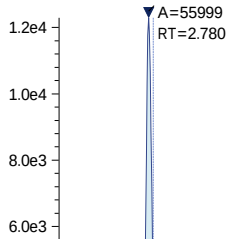
R1 101.00>85.00 (-) 3.45e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.23e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

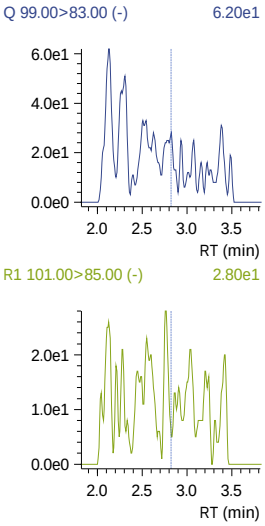
20210615_064

Sample ID: EQ2100358-01
Date Acquired: 6/15/2021 11:59:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_064.lcd
Vial: 14 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	ND(W/B)	----	----	73690	1	----	ng/mL	----	----
Sodium Perchlorate-18O4_IS	Auto	2.781	73690	73690	1	1.0000	ng/mL	----	----

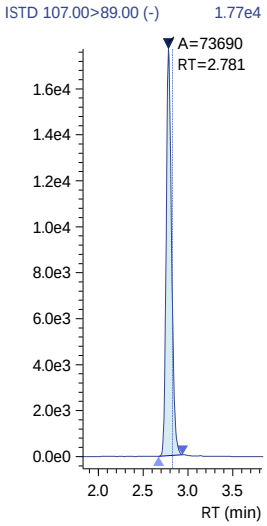
Perchlorate

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



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

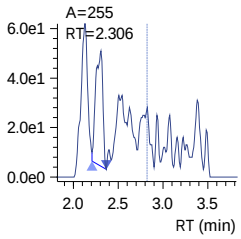
20210615_064

Sample ID: EQ2100358-01
Date Acquired: 6/15/2021 11:59:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_064.lcd
Vial: 14 | Inj. Volume: 25.0000uL | Tray: 3

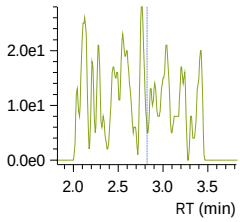
Perchlorate

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

Q 99.00>83.00 (-) 6.20e1



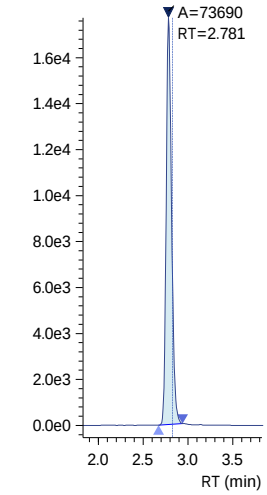
R1 101.00>85.00 (-) 2.80e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.77e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

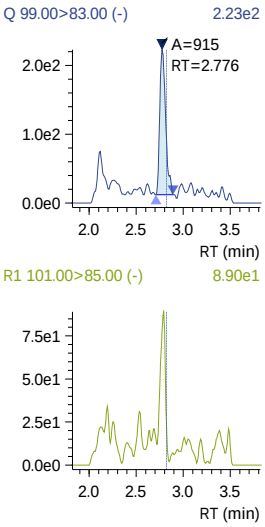
20210615_065

Sample ID: EQ2100358-02
Date Acquired: 6/16/2021 12:08:01 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_065.lcd
Vial: 15 | Inj. Volume: 25.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.776	915	73472	1	0.1178	ng/mL	----	31.58
Sodium Perchlorate-18O4 _IS	Auto	2.780	73472	73472	1	1.0000	ng/mL	----	----

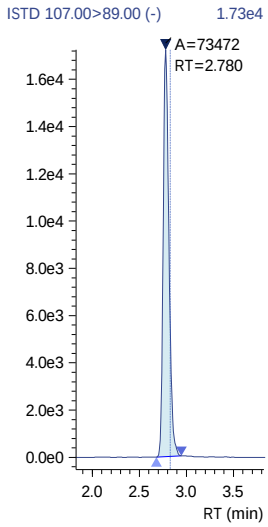
Perchlorate

Conc 0.1178
R#1 31.58 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

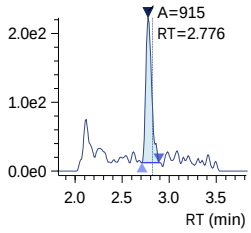
20210615_065

Sample ID: EQ2100358-02
Date Acquired: 6/16/2021 12:08:01 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_065.lcd
Vial: 15 | Inj. Volume: 25.0000uL | Tray: 3

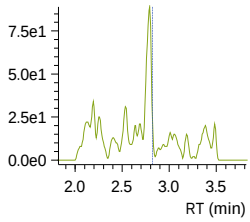
Perchlorate

Conc 0.1200
R#1 31.58 (0.00)

Q 99.00>83.00 (-) 2.23e2



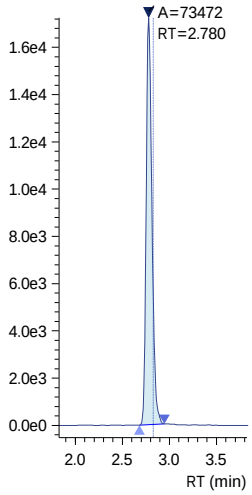
R1 101.00>85.00 (-) 8.90e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.73e4



Insight Report

Printed at 6/17/2021 1:58:19 PM

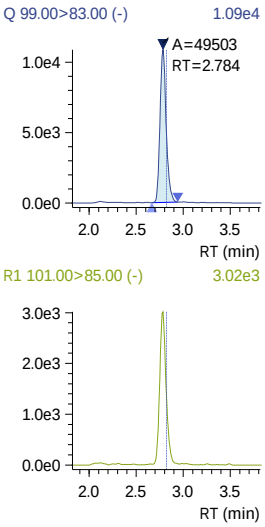
20210615_071

Sample ID: PERCHLORATE7
Date Acquired: 6/16/2021 12:59:06 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\20210615_071.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.784	49503	51074	1	9.1689	ng/mL	10.0000	27.58
Sodium Perchlorate-18O4 _IS	Auto	2.781	51074	51074	1	1.0000	ng/mL	1.0000	----

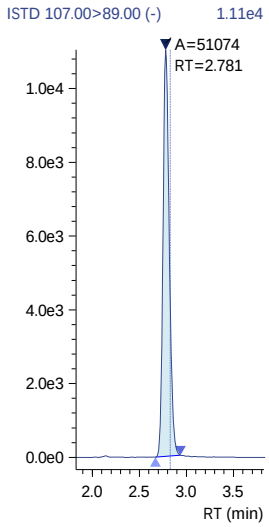
Perchlorate

Conc 9.1689
R#1 27.58 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/17/2021 2:00:46 PM

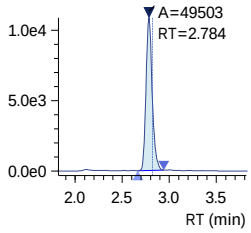
20210615_071

Sample ID: PERCHLORATE7
Date Acquired: 6/16/2021 12:59:06 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210615\Before\20210615_071.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

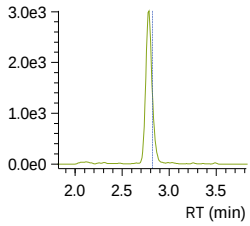
Perchlorate

Conc 9.3418
R#1 27.58 (0.00)

Q 99.00>83.00 (-) 1.09e4



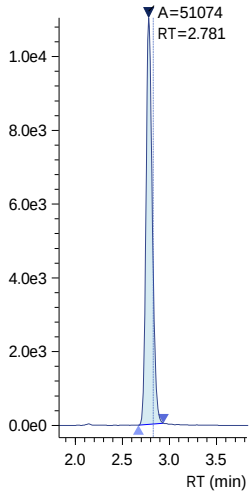
R1 101.00>85.00 (-) 3.02e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.11e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

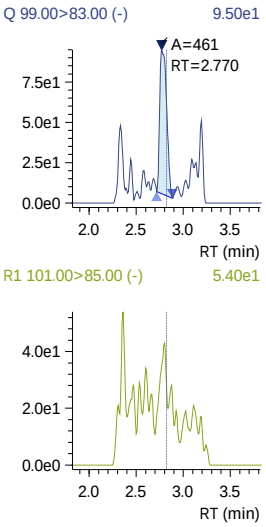
20210622_014

Sample ID: LODV
Date Acquired: 6/22/2021 6:59:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_014.lcd
Vial: 31 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.770	461	60632	1	0.0623	ng/mL	----	16.09
Sodium Perchlorate-18O4 _IS	Auto	2.787	60632	60632	1	1.0000	ng/mL	----	----

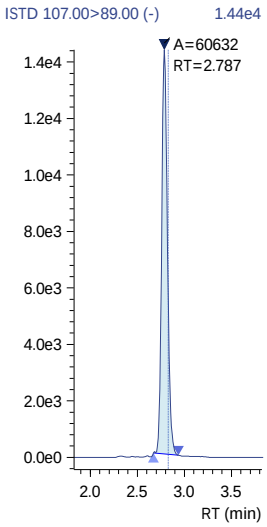
Perchlorate

Conc 0.0623
R#1 16.09 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

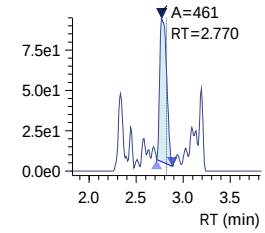
20210622_014

Sample ID: LODV
Date Acquired: 6/22/2021 6:59:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_014.lcd
Vial: 31 | Inj. Volume: 50.0000uL | Tray: 1

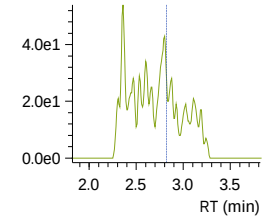
Perchlorate

Conc 0.0657
R#1 16.09 (0.00)

Q 99.00>83.00 (-) 9.50e1



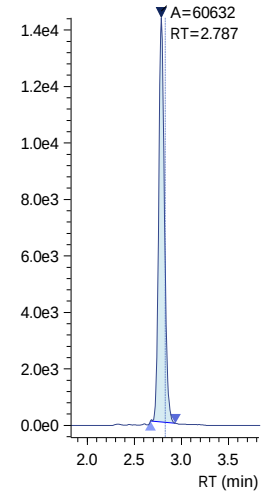
R1 101.00>85.00 (-) 5.40e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.44e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

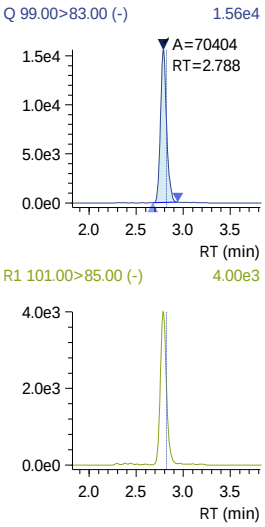
20210622_015

Sample ID: PERCHLORATE7
Date Acquired: 6/22/2021 7:08:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_015.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.788	70404	59737	1	9.6627	ng/mL	10.0000	25.75
Sodium Perchlorate-18O4 _IS	Auto	2.789	59737	59737	1	1.0000	ng/mL	1.0000	----

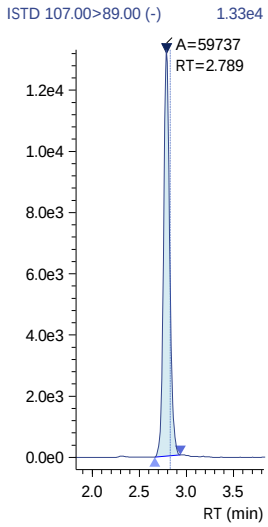
Perchlorate

Conc 9.6627
R#1 25.75 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

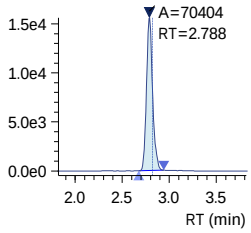
20210622_015

Sample ID: PERCHLORATE7
Date Acquired: 6/22/2021 7:08:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_015.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

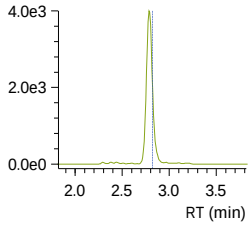
Perchlorate

Conc 10.1994
R#1 25.75 (0.00)

Q 99.00>83.00 (-) 1.56e4



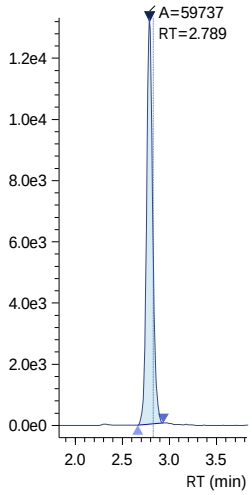
R1 101.00>85.00 (-) 4.00e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.33e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

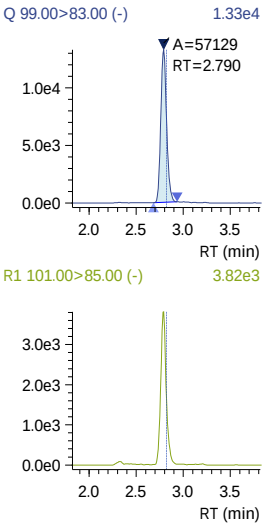
20210622_034

Sample ID: PERCHLORATE7
Date Acquired: 6/22/2021 9:52:02 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_034.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.790	57129	49936	1	9.3796	ng/mL	10.0000	29.15
Sodium Perchlorate-18O4 _IS	Auto	2.788	49936	49936	1	1.0000	ng/mL	1.0000	----

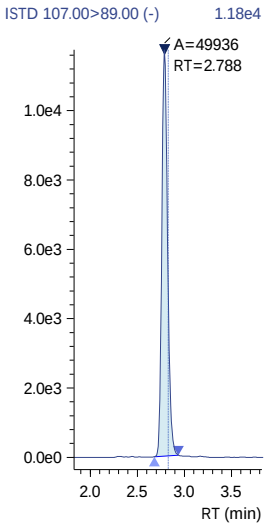
Perchlorate

Conc 9.3796
R#1 29.15 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

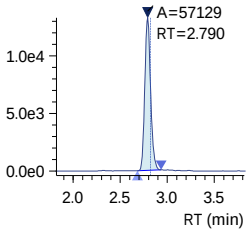
20210622_034

Sample ID: PERCHLORATE7
Date Acquired: 6/22/2021 9:52:02 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_034.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

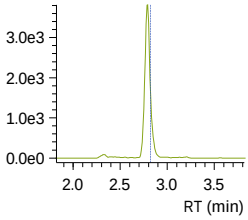
Perchlorate

Conc 9.9006
R#1 29.15 (0.00)

Q 99.00>83.00 (-) 1.33e4



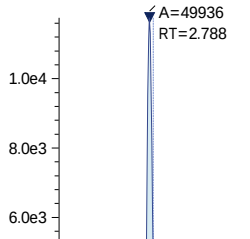
R1 101.00>85.00 (-) 3.82e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.18e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

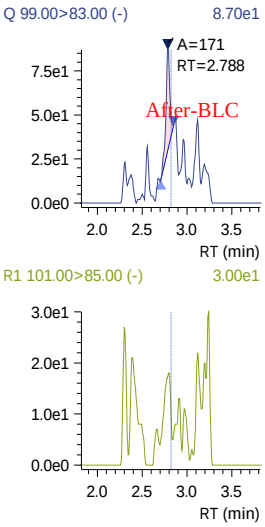
20210622_038

Sample ID: E2100645-004X2
Date Acquired: 6/22/2021 10:26:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_038.lcd
Vial: 6 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.788	171	30488	1	0.0460	ng/mL	----	19.30
Sodium Perchlorate-18O4 _IS	M	2.793	30488	30488	1	1.0000	ng/mL	----	----

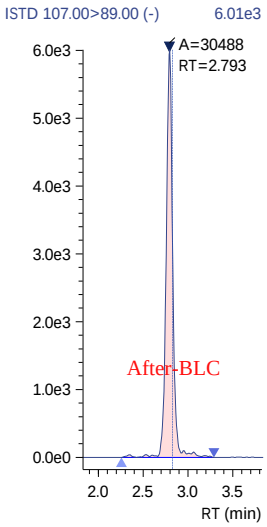
Perchlorate

Conc 0.0460
R#1 19.30 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

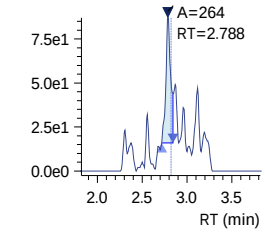
20210622_038

Sample ID: E2100645-004X2
Date Acquired: 6/22/2021 10:26:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_038.lcd
Vial: 6 | Inj. Volume: 50.0000uL | Tray: 3

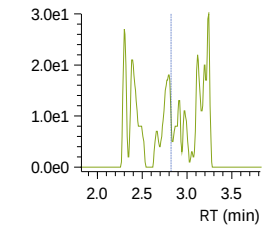
Perchlorate

Conc 0.0802
R#1 17.86 (0.00)

Q 99.00>83.00 (-) 8.70e1



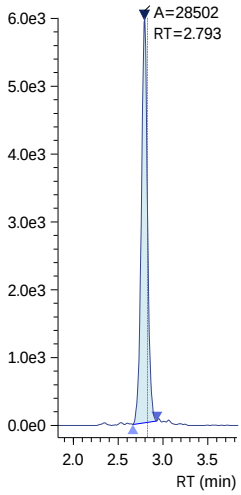
R1 101.00>85.00 (-) 3.00e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.01e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

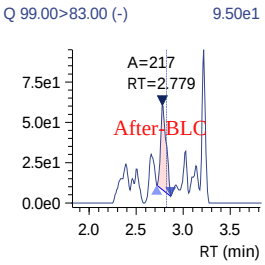
20210622_039

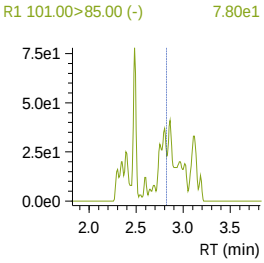
Sample ID: E2100645-005X2
Date Acquired: 6/22/2021 10:34:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_039.lcd
Vial: 7 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.779	217	30470	1	0.0585	ng/mL	----	18.37
Sodium Perchlorate-18O4_IS	M	2.791	30470	30470	1	1.0000	ng/mL	----	----

Perchlorate

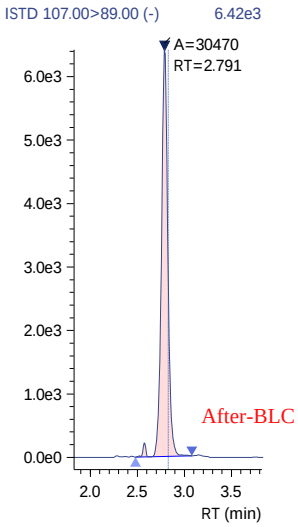
Conc 0.0585
R#1 18.37 (0.00)





Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

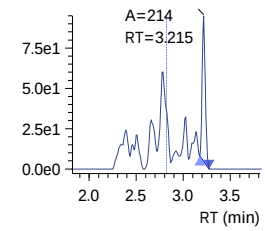
20210622_039

Sample ID: E2100645-005X2
Date Acquired: 6/22/2021 10:34:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_039.lcd
Vial: 7 | Inj. Volume: 50.0000uL | Tray: 3

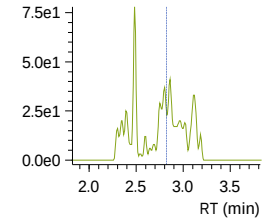
Perchlorate

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

Q 99.00>83.00 (-) 9.50e1



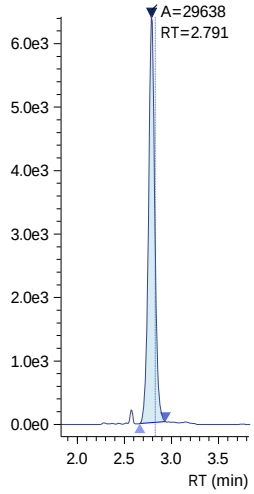
R1 101.00>85.00 (-) 7.80e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.42e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

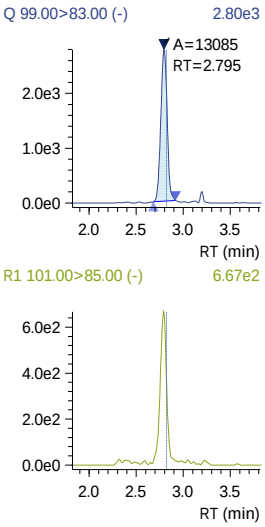
20210622_040

Sample ID: E2100645-006X20
Date Acquired: 6/22/2021 10:43:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_040.lcd
Vial: 8 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.795	13085	30624	1	3.5032	ng/mL	----	23.47
Sodium Perchlorate-18O4 _IS	M	2.792	30624	30624	1	1.0000	ng/mL	----	----

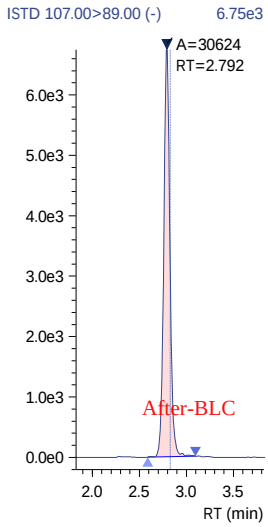
Perchlorate

Conc 3.5032
R#1 23.47 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

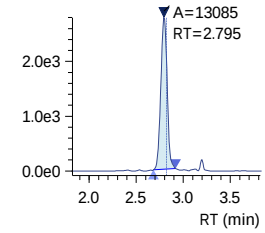
20210622_040

Sample ID: E2100645-006X20
Date Acquired: 6/22/2021 10:43:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_040.lcd
Vial: 8 | Inj. Volume: 50.0000uL | Tray: 3

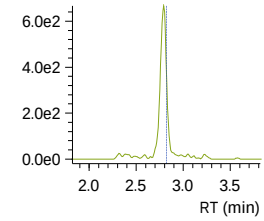
Perchlorate

Conc 3.7748
R#1 23.47 (0.00)

Q 99.00>83.00 (-) 2.80e3



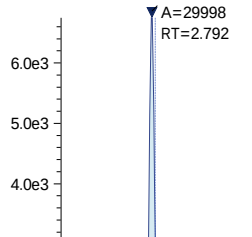
R1 101.00>85.00 (-) 6.67e2



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.75e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

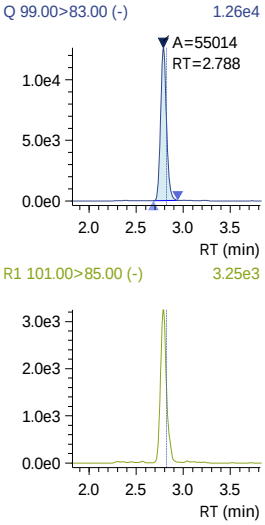
20210622_041

Sample ID: PERCHLORATE7
Date Acquired: 6/22/2021 10:52:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_041.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.788	55014	48761	1	9.2501	ng/mL	10.0000	25.84
Sodium Perchlorate-18O4 _IS	Auto	2.788	48761	48761	1	1.0000	ng/mL	1.0000	----

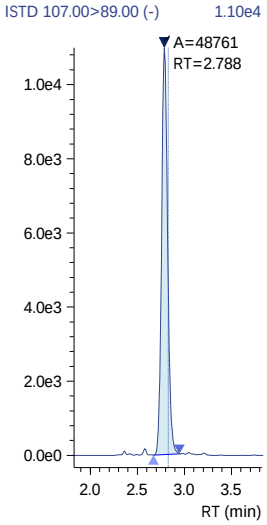
Perchlorate

Conc 9.2501
R#1 25.84 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

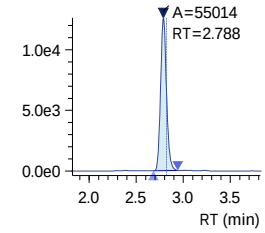
20210622_041

Sample ID: PERCHLORATE7
Date Acquired: 6/22/2021 10:52:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_041.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

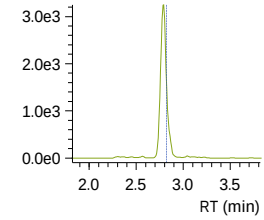
Perchlorate

Conc 9.7639
R#1 25.84 (0.00)

Q 99.00>83.00 (-) 1.26e4



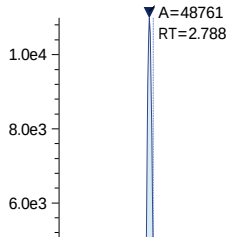
R1 101.00>85.00 (-) 3.25e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.10e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

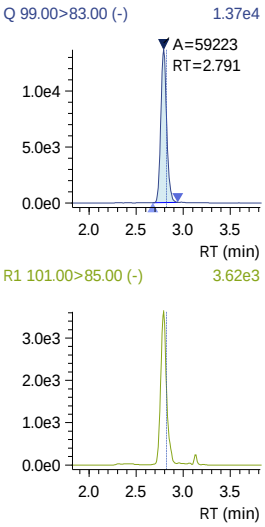
20210622_042

Sample ID: E2100645-009X100
Date Acquired: 6/22/2021 11:00:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_042.lcd
Vial: 11 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.791	59223	45377	1	10.7003	ng/mL	----	26.49
Sodium Perchlorate-18O4 _IS	Auto	2.789	45377	45377	1	1.0000	ng/mL	----	----

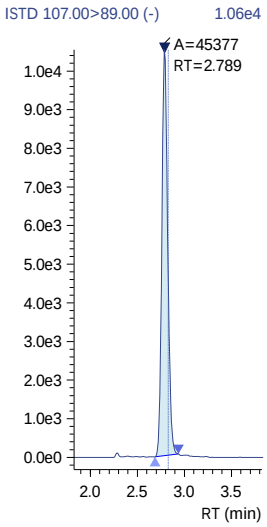
Perchlorate

Conc 10.7003
R#1 26.49 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

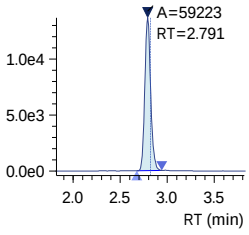
20210622_042

Sample ID: E2100645-009X100
Date Acquired: 6/22/2021 11:00:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_042.lcd
Vial: 11 | Inj. Volume: 50.0000uL | Tray: 3

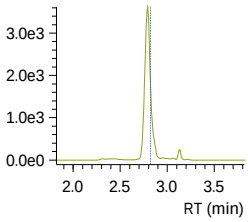
Perchlorate

Conc 11.2947
R#1 26.49 (0.00)

Q 99.00>83.00 (-) 1.37e4



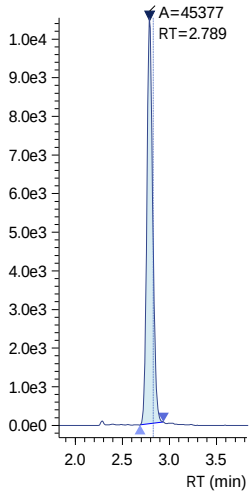
R1 101.00>85.00 (-) 3.62e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.06e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

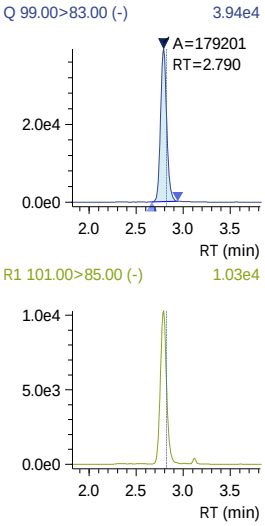
20210622_043

Sample ID: E2100645-010X1000
Date Acquired: 6/22/2021 11:09:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_043.lcd
Vial: 12 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.790	179201	41178	1	35.6791	ng/mL	----	26.43
Sodium Perchlorate-18O4_IS	Auto	2.788	41178	41178	1	1.0000	ng/mL	----	----

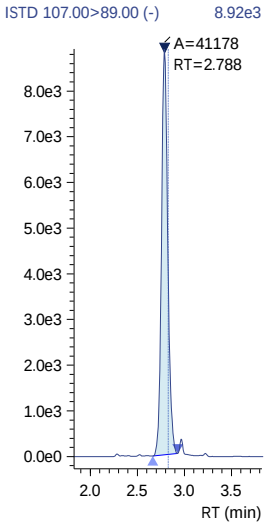
Perchlorate

Conc 35.6791
R#1 26.43 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

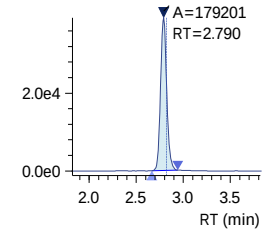
20210622_043

Sample ID: E2100645-010X1000
Date Acquired: 6/22/2021 11:09:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_043.lcd
Vial: 12 | Inj. Volume: 50.0000uL | Tray: 3

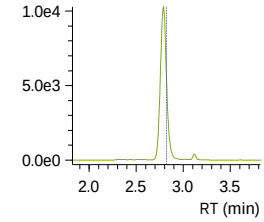
Perchlorate

Conc 37.6609
R#1 26.43 (0.00)

Q 99.00>83.00 (-) 3.94e4



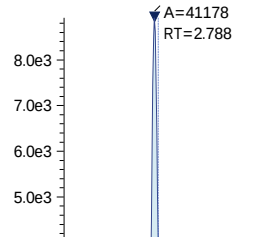
R1 101.00>85.00 (-) 1.03e4



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 8.92e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

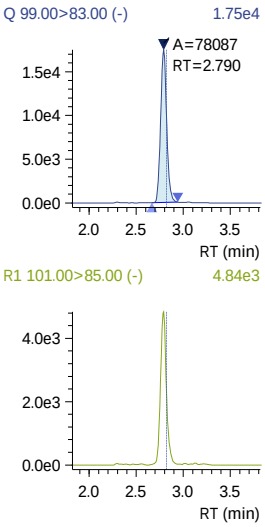
20210622_044

Sample ID: E2100645-011X1000
Date Acquired: 6/22/2021 11:17:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_044.lcd
Vial: 13 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.790	78087	49194	1	13.0140	ng/mL	----	28.16
Sodium Perchlorate-18O4 _IS	Auto	2.790	49194	49194	1	1.0000	ng/mL	----	----

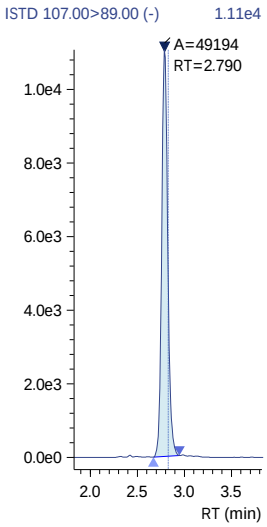
Perchlorate

Conc 13.0140
R#1 28.16 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

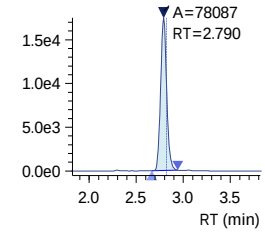
20210622_044

Sample ID: E2100645-011X1000
Date Acquired: 6/22/2021 11:17:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_044.lcd
Vial: 13 | Inj. Volume: 50.0000uL | Tray: 3

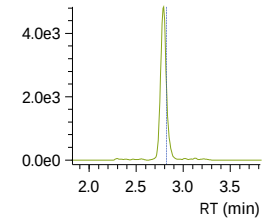
Perchlorate

Conc 13.7368
R#1 28.16 (0.00)

Q 99.00>83.00 (-) 1.75e4



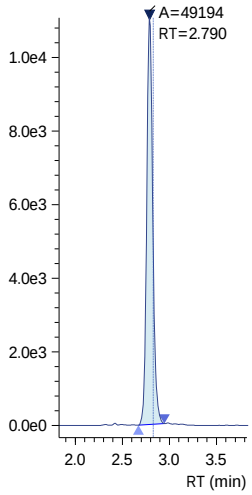
R1 101.00>85.00 (-) 4.84e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.11e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

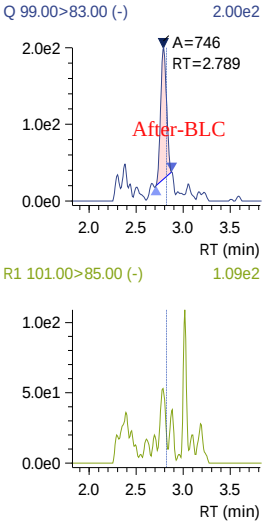
20210622_045

Sample ID: EQ2100358-03
Date Acquired: 6/22/2021 11:26:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_045.lcd
Vial: 16 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.789	746	54148	1	0.1129	ng/mL	----	15.39
Sodium Perchlorate-18O4 _IS	Auto	2.788	54148	54148	1	1.0000	ng/mL	----	----

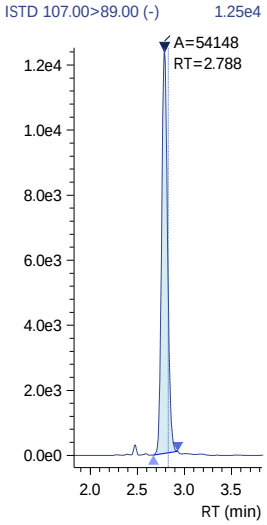
Perchlorate

Conc 0.1129
R#1 15.39 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

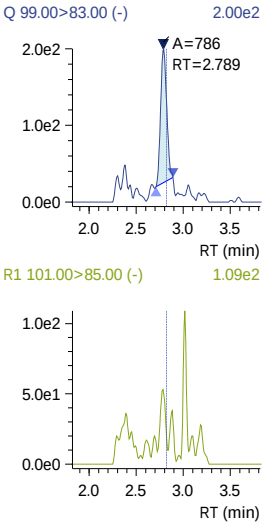
Printed at 6/24/2021 2:00:30 PM

20210622_045

Sample ID: EQ2100358-03
Date Acquired: 6/22/2021 11:26:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_045.lcd
Vial: 16 | Inj. Volume: 50.0000uL | Tray: 3

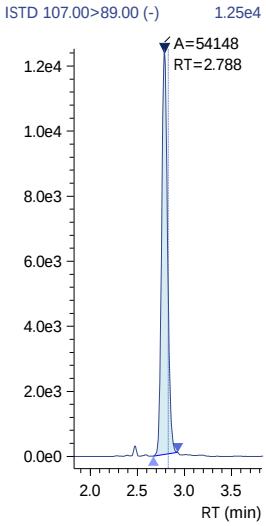
Perchlorate

Conc 0.1255
R#1 16.96 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 1:58:03 PM

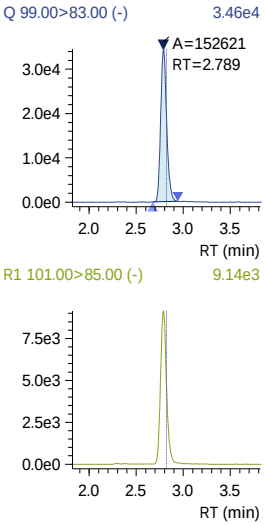
20210622_046

Sample ID: E2100645-012X1000
Date Acquired: 6/22/2021 11:35:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_046.lcd
Vial: 17 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.789	152621	43919	1	28.4907	ng/mL	----	26.62
Sodium Perchlorate-18O4_IS	Auto	2.789	43919	43919	1	1.0000	ng/mL	----	----

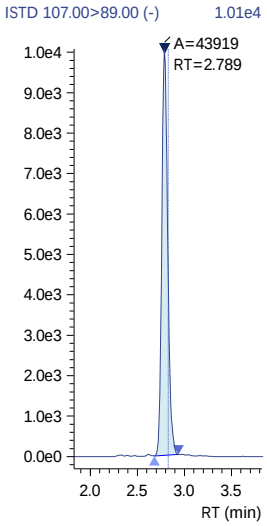
Perchlorate

Conc 28.4907
R#1 26.62 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

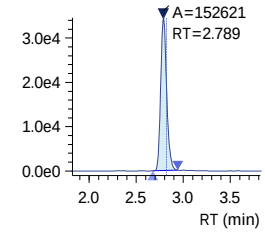
20210622_046

Sample ID: E2100645-012X1000
Date Acquired: 6/22/2021 11:35:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_046.lcd
Vial: 17 | Inj. Volume: 50.0000uL | Tray: 3

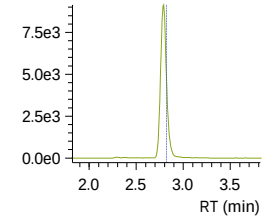
Perchlorate

Conc 30.0732
R#1 26.62 (0.00)

Q 99.00>83.00 (-) 3.46e4



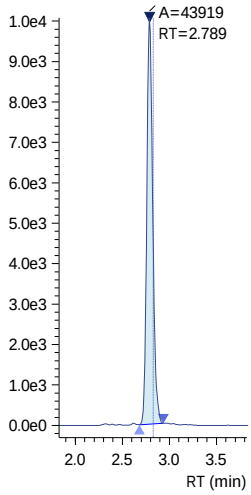
R1 101.00>85.00 (-) 9.14e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.01e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

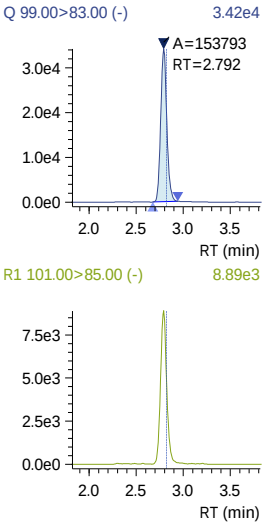
20210622_047

Sample ID: E2100645-013X1000
Date Acquired: 6/22/2021 11:43:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_047.lcd
Vial: 18 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.792	153793	42921	1	29.3769	ng/mL	----	26.45
Sodium Perchlorate-18O4_IS	Auto	2.790	42921	42921	1	1.0000	ng/mL	----	----

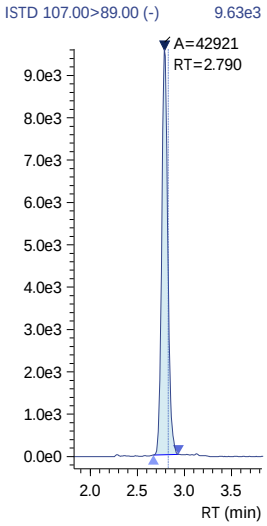
Perchlorate

Conc 29.3769
R#1 26.45 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

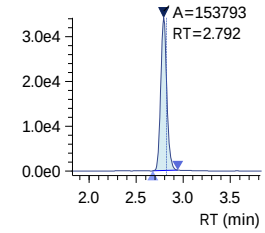
20210622_047

Sample ID: E2100645-013X1000
Date Acquired: 6/22/2021 11:43:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_047.lcd
Vial: 18 | Inj. Volume: 50.0000uL | Tray: 3

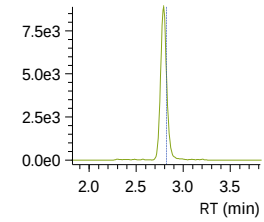
Perchlorate

Conc 31.0086
R#1 26.45 (0.00)

Q 99.00>83.00 (-) 3.42e4



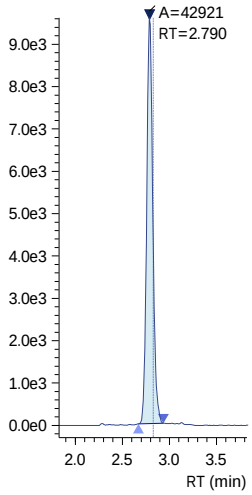
R1 101.00>85.00 (-) 8.89e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 9.63e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

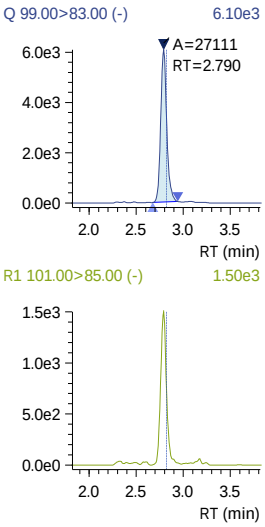
20210622_048

Sample ID: E2100645-014X10
Date Acquired: 6/22/2021 11:52:16 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_048.lcd
Vial: 19 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.790	27111	37751	1	5.8879	ng/mL	----	24.77
Sodium Perchlorate-18O4 _IS	Auto	2.790	37751	37751	1	1.0000	ng/mL	----	----

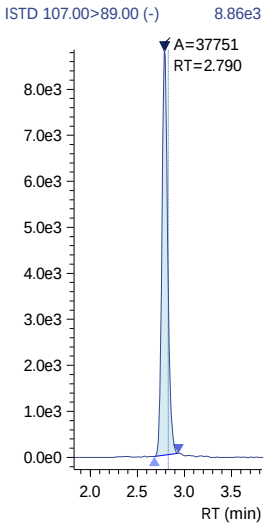
Perchlorate

Conc 5.8879
R#1 24.77 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

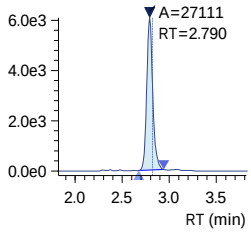
20210622_048

Sample ID: E2100645-014X10
Date Acquired: 6/22/2021 11:52:16 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_048.lcd
Vial: 19 | Inj. Volume: 50.0000uL | Tray: 3

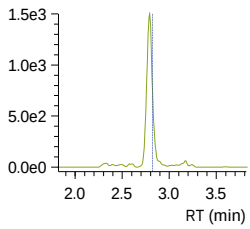
Perchlorate

Conc 6.2150
R#1 24.77 (0.00)

Q 99.00>83.00 (-) 6.10e3



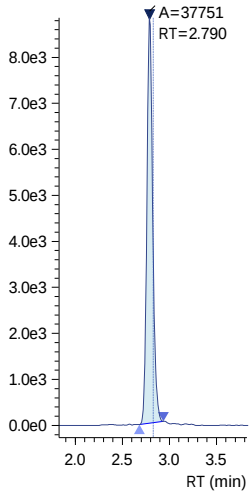
R1 101.00>85.00 (-) 1.50e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 8.86e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

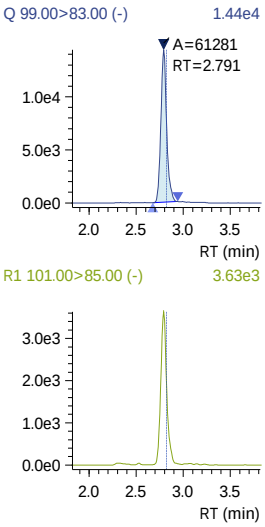
20210622_049

Sample ID: E2100645-015X10
Date Acquired: 6/23/2021 12:00:52 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_049.lcd
Vial: 20 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.791	61281	30561	1	16.4402	ng/mL	----	25.55
Sodium Perchlorate-18O4 _IS	Auto	2.789	30561	30561	1	1.0000	ng/mL	----	----

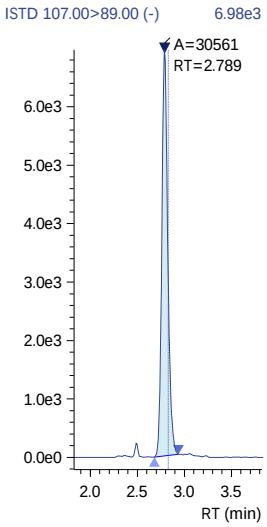
Perchlorate

Conc 16.4402
R#1 25.55 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

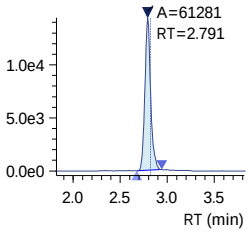
20210622_049

Sample ID: E2100645-015X10
Date Acquired: 6/23/2021 12:00:52 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_049.lcd
Vial: 20 | Inj. Volume: 50.0000uL | Tray: 3

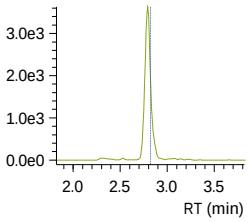
Perchlorate

Conc 17.3533
R#1 25.55 (0.00)

Q 99.00>83.00 (-) 1.44e4



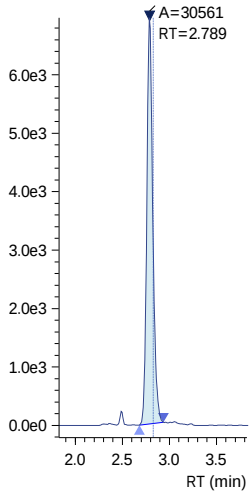
R1 101.00>85.00 (-) 3.63e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.98e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

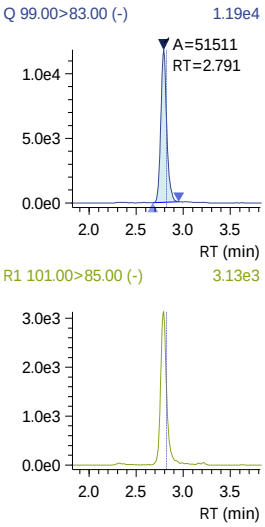
20210622_050

Sample ID: E2100645-016X10
Date Acquired: 6/23/2021 12:09:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_050.lcd
Vial: 21 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.791	51511	32556	1	12.9721	ng/mL	----	27.16
Sodium Perchlorate-18O4 _IS	Auto	2.790	32556	32556	1	1.0000	ng/mL	----	----

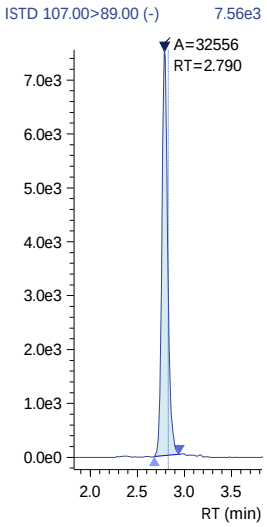
Perchlorate

Conc 12.9721
R#1 27.16 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

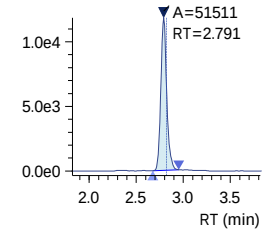
20210622_050

Sample ID: E2100645-016X10
Date Acquired: 6/23/2021 12:09:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_050.lcd
Vial: 21 | Inj. Volume: 50.0000uL | Tray: 3

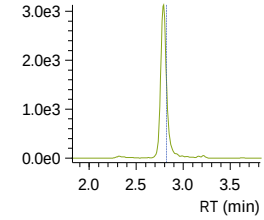
Perchlorate

Conc 13.6926
R#1 27.16 (0.00)

Q 99.00>83.00 (-) 1.19e4



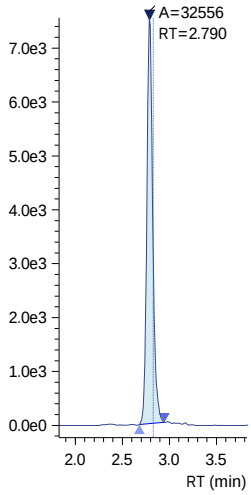
R1 101.00>85.00 (-) 3.13e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.56e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

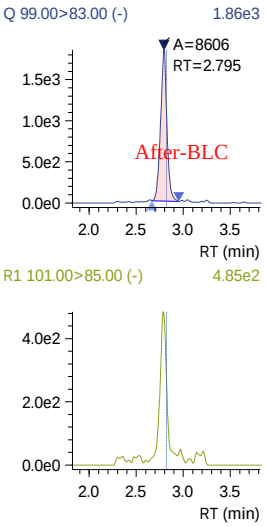
20210622_051

Sample ID: E2100645-017X2
Date Acquired: 6/23/2021 12:18:06 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_051.lcd
Vial: 22 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.795	8606	32743	1	2.1549	ng/mL	----	24.86
Sodium Perchlorate-18O4 _IS	Auto	2.793	32743	32743	1	1.0000	ng/mL	----	----

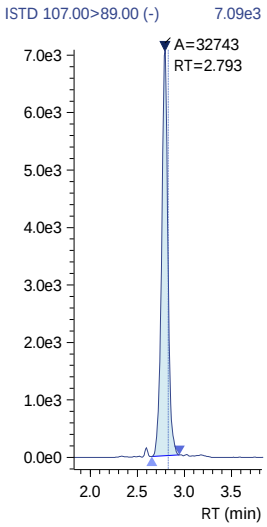
Perchlorate

Conc 2.1549
R#1 24.86 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

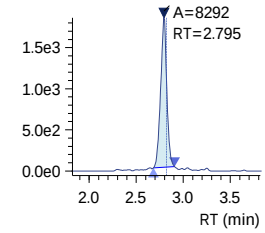
20210622_051

Sample ID: E2100645-017X2
Date Acquired: 6/23/2021 12:18:06 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_051.lcd
Vial: 22 | Inj. Volume: 50.0000uL | Tray: 3

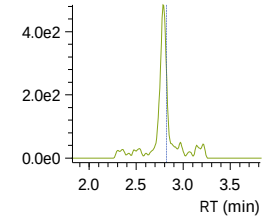
Perchlorate

Conc 2.1915
R#1 24.96 (0.00)

Q 99.00>83.00 (-) 1.86e3



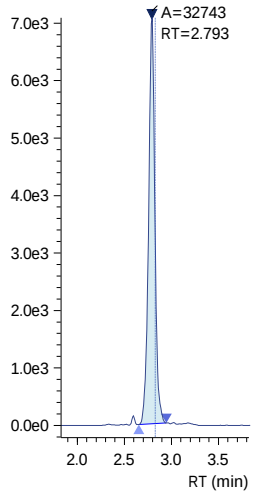
R1 101.00>85.00 (-) 4.85e2



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.09e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

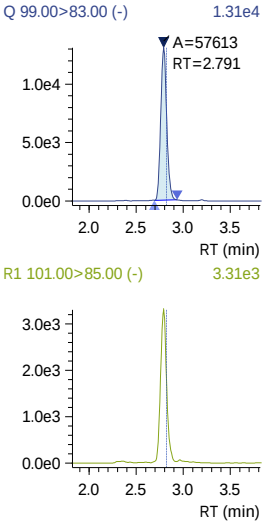
20210622_052

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 12:26:46 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_052.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.791	57613	51508	1	9.1703	ng/mL	10.0000	25.30
Sodium Perchlorate-18O4 _IS	Auto	2.789	51508	51508	1	1.0000	ng/mL	1.0000	----

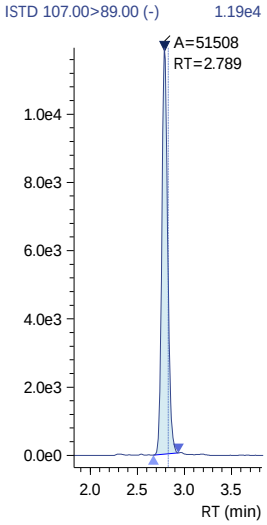
Perchlorate

Conc 9.1703
R#1 25.30 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

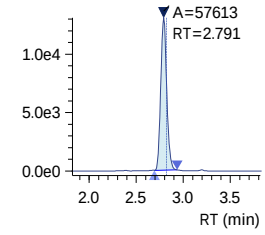
20210622_052

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 12:26:46 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_052.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

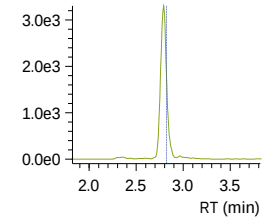
Perchlorate

Conc 9.6797
R#1 25.30 (0.00)

Q 99.00>83.00 (-) 1.31e4



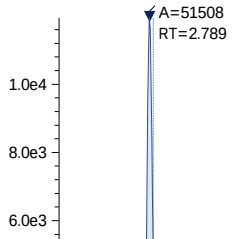
R1 101.00>85.00 (-) 3.31e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.19e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

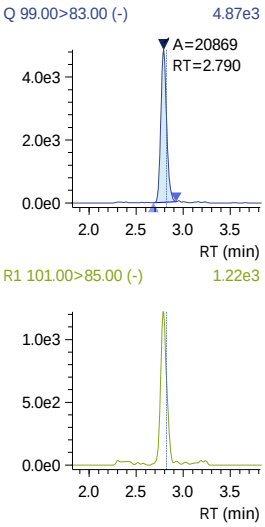
20210622_053

Sample ID: E2100645-018X10
Date Acquired: 6/23/2021 12:35:23 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_053.lcd
Vial: 23 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.790	20869	53687	1	3.1869	ng/mL	----	25.39
Sodium Perchlorate-18O4 _IS	Auto	2.789	53687	53687	1	1.0000	ng/mL	----	----

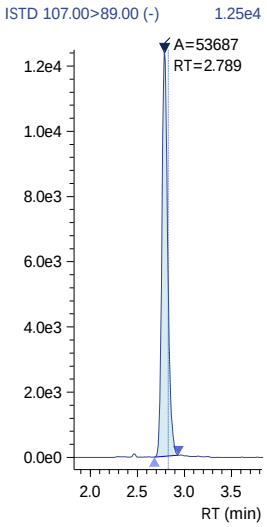
Perchlorate

Conc 3.1869
R#1 25.39 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

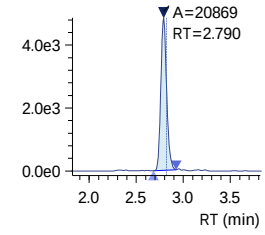
20210622_053

Sample ID: E2100645-018X10
Date Acquired: 6/23/2021 12:35:23 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_053.lcd
Vial: 23 | Inj. Volume: 50.0000uL | Tray: 3

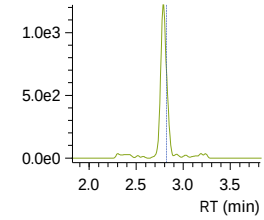
Perchlorate

Conc 3.3639
R#1 25.39 (0.00)

Q 99.00>83.00 (-) 4.87e3



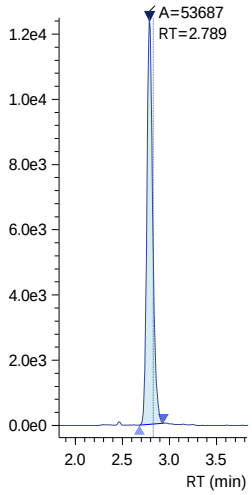
R1 101.00>85.00 (-) 1.22e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.25e4



Insight Report

Printed at 6/24/2021 1:58:03 PM

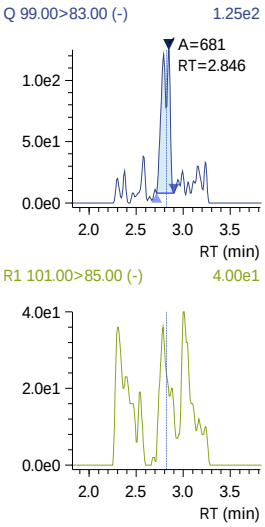
20210622_054

Sample ID: E2100645-019X2
Date Acquired: 6/23/2021 12:44:03 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_054.lcd
Vial: 24 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.846	681	42071	1	0.1326	ng/mL	----	7.83
Sodium Perchlorate-18O4 _IS	Auto	2.788	42071	42071	1	1.0000	ng/mL	----	----

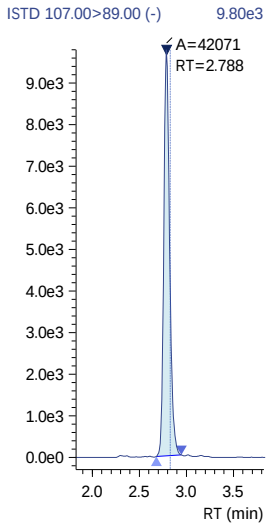
Perchlorate

Conc 0.1326
R#1 7.83 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

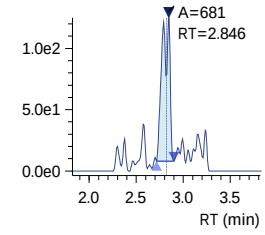
20210622_054

Sample ID: E2100645-019X2
Date Acquired: 6/23/2021 12:44:03 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_054.lcd
Vial: 24 | Inj. Volume: 50.0000uL | Tray: 3

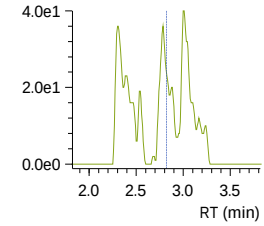
Perchlorate

Conc 0.1400
R#1 7.83 (0.00)

Q 99.00>83.00 (-) 1.25e2



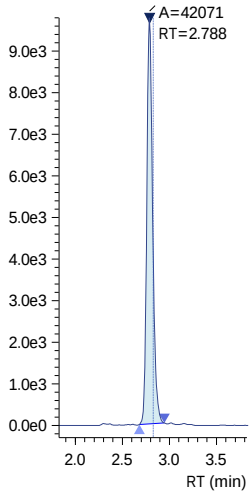
R1 101.00>85.00 (-) 4.00e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 9.80e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

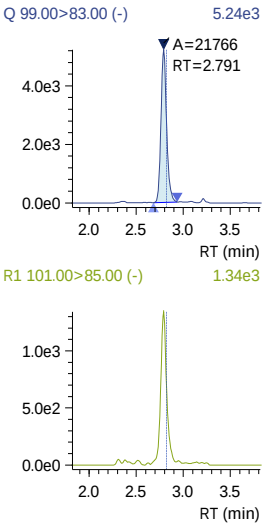
20210622_055

Sample ID: E2100645-020X10
Date Acquired: 6/23/2021 12:52:41 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_055.lcd
Vial: 25 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.791	21766	42165	1	4.2322	ng/mL	----	25.32
Sodium Perchlorate-18O4 _IS	Auto	2.789	42165	42165	1	1.0000	ng/mL	----	----

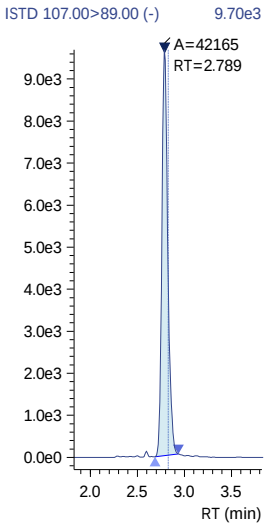
Perchlorate

Conc 4.2322
R#1 25.32 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

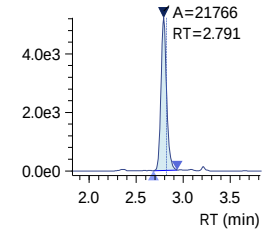
20210622_055

Sample ID: E2100645-020X10
Date Acquired: 6/23/2021 12:52:41 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_055.lcd
Vial: 25 | Inj. Volume: 50.0000uL | Tray: 3

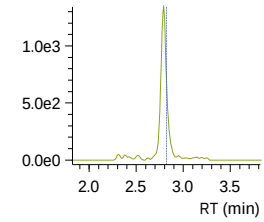
Perchlorate

Conc 4.4673
R#1 25.32 (0.00)

Q 99.00>83.00 (-) 5.24e3



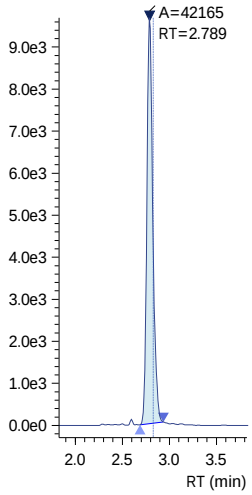
R1 101.00>85.00 (-) 1.34e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 9.70e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

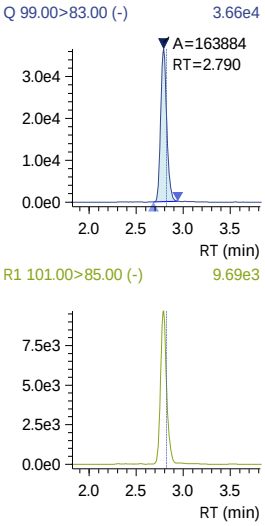
20210622_056

Sample ID: E2100645-021X100
Date Acquired: 6/23/2021 1:01:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_056.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.790	163884	38990	1	34.4607	ng/mL	----	26.91
Sodium Perchlorate-18O4_IS	Auto	2.788	38990	38990	1	1.0000	ng/mL	----	----

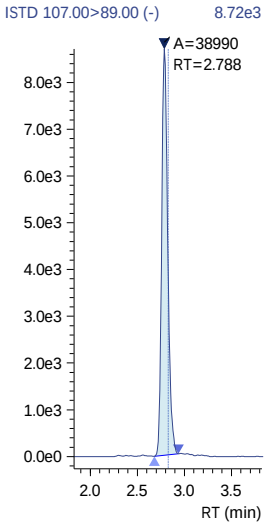
Perchlorate

Conc 34.4607
R#1 26.91 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

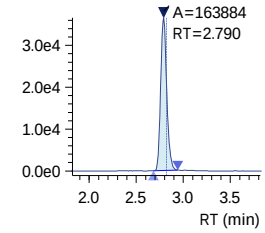
20210622_056

Sample ID: E2100645-021X100
Date Acquired: 6/23/2021 1:01:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_056.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 3

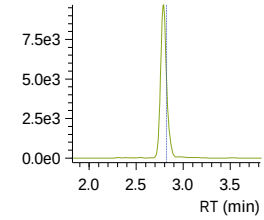
Perchlorate

Conc 36.3747
R#1 26.91 (0.00)

Q 99.00>83.00 (-) 3.66e4



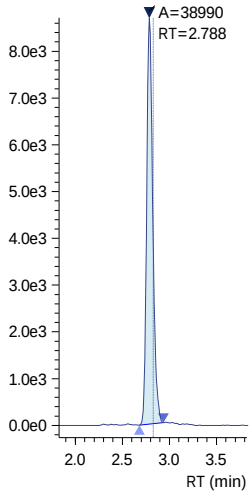
R1 101.00>85.00 (-) 9.69e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 8.72e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

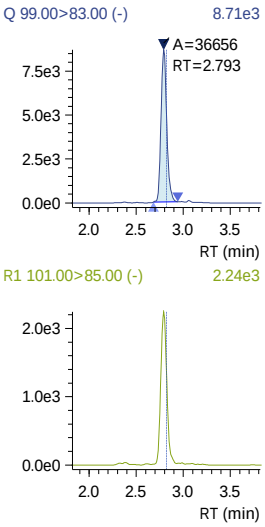
20210622_059

Sample ID: E2100645-024X100
Date Acquired: 6/23/2021 1:27:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_059.lcd
Vial: 29 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.793	36656	36822	1	8.1617	ng/mL	----	25.75
Sodium Perchlorate-18O4 _IS	Auto	2.790	36822	36822	1	1.0000	ng/mL	----	----

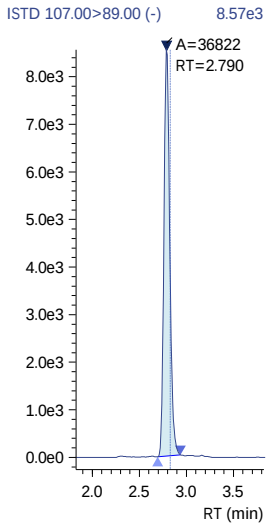
Perchlorate

Conc 8.1617
R#1 25.75 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

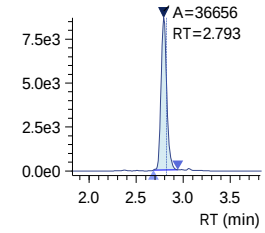
20210622_059

Sample ID: E2100645-024X100
Date Acquired: 6/23/2021 1:27:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_059.lcd
Vial: 29 | Inj. Volume: 50.0000uL | Tray: 3

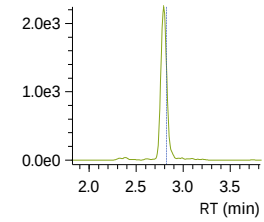
Perchlorate

Conc 8.6150
R#1 25.75 (0.00)

Q 99.00>83.00 (-) 8.71e3



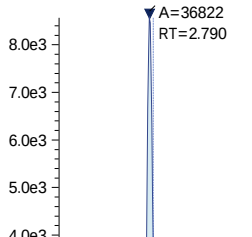
R1 101.00>85.00 (-) 2.24e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 8.57e3



Insight Report

Printed at 6/24/2021 1:58:03 PM

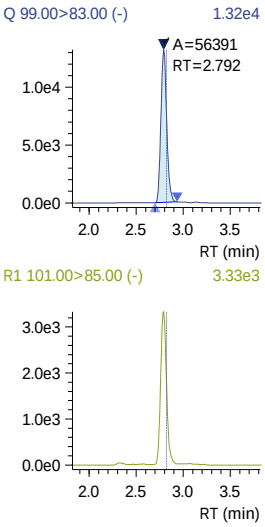
20210622_060

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 1:35:44 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\20210622_060.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.792	56391	48454	1	9.5417	ng/mL	10.0000	25.09
Sodium Perchlorate-18O4 _IS	Auto	2.789	48454	48454	1	1.0000	ng/mL	1.0000	----

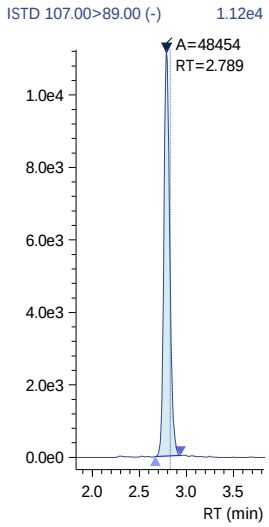
Perchlorate

Conc 9.5417
R#1 25.09 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 6/24/2021 2:00:30 PM

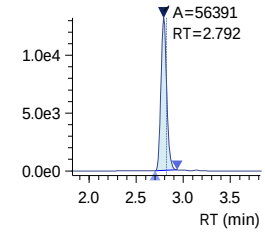
20210622_060

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 1:35:44 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210622\Before\20210622_060.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

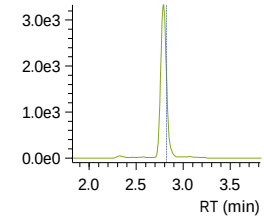
Perchlorate

Conc 10.0716
R#1 25.09 (0.00)

Q 99.00>83.00 (-) 1.32e4



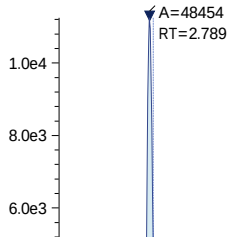
R1 101.00>85.00 (-) 3.33e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.12e4



Insight Report

Printed at 7/8/2021 10:50:53 AM

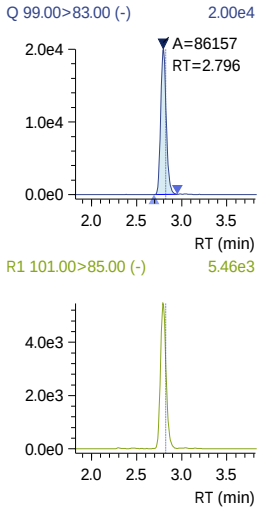
20210623_008

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 12:24:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\20210623_008.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.796	86157	78703	1	8.9751	ng/mL	10.0000	27.40
Sodium Perchlorate-18O4 _IS	Auto	2.795	78703	78703	1	1.0000	ng/mL	1.0000	----

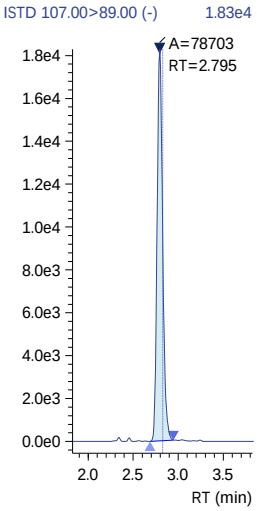
Perchlorate

Conc 8.9751
R#1 27.40 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

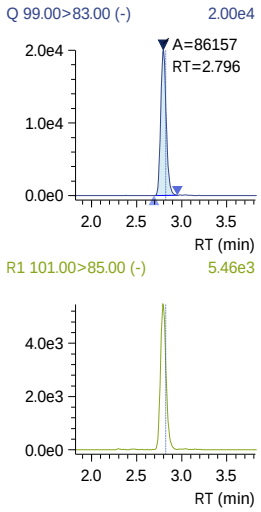
Printed at 7/8/2021 11:01:05 AM

20210623_008

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 12:24:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\Before\20210623_008.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

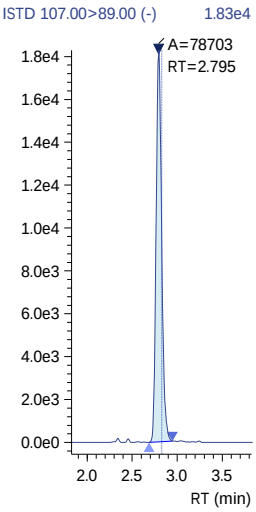
Perchlorate

Conc 9.4736
R#1 27.40 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2021 10:50:53 AM

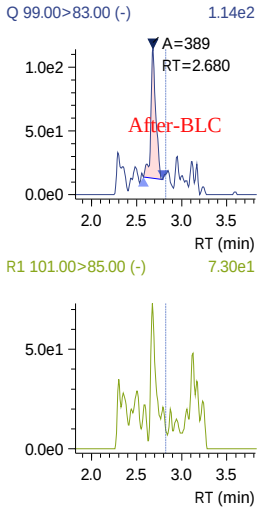
20210623_009

Sample ID: LODV
Date Acquired: 6/23/2021 12:34:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\20210623_009.lcd
Vial: 31 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.680	389	68709	1	0.0464	ng/mL	----	52.04
Sodium Perchlorate-18O4 _IS	Auto	2.687	68709	68709	1	1.0000	ng/mL	----	----

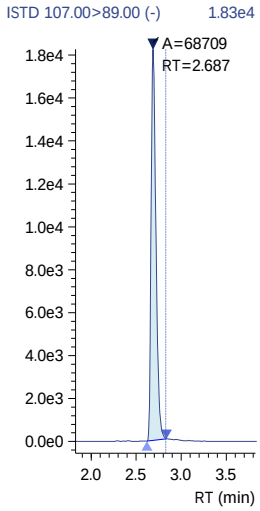
Perchlorate

Conc 0.0464
R#1 52.04 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2021 11:01:05 AM

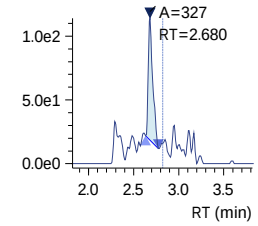
20210623_009

Sample ID: LODV
Date Acquired: 6/23/2021 12:34:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\Before\20210623_009.lcd
Vial: 31 | Inj. Volume: 50.0000uL | Tray: 1

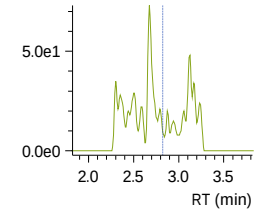
Perchlorate

Conc 0.0412
R#1 71.43 (0.00)

Q 99.00>83.00 (-) 1.14e2



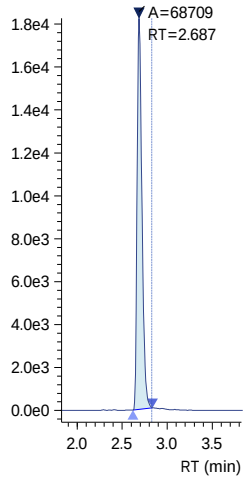
R1 101.00>85.00 (-) 7.30e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.83e4



Insight Report

Printed at 7/8/2021 10:50:53 AM

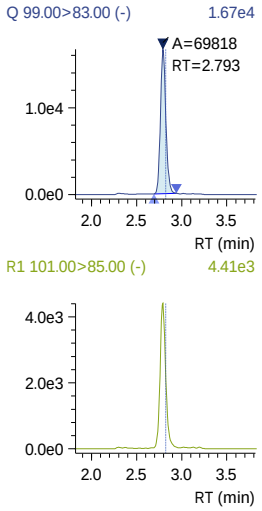
20210623_027

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 3:40:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\20210623_027.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.793	69818	63183	1	9.0596	ng/mL	10.0000	26.31
Sodium Perchlorate-18O4 _IS	Auto	2.791	63183	63183	1	1.0000	ng/mL	1.0000	----

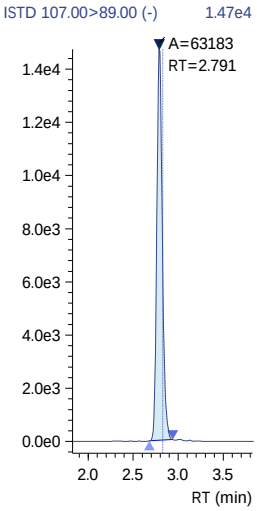
Perchlorate

Conc 9.0596
R#1 26.31 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

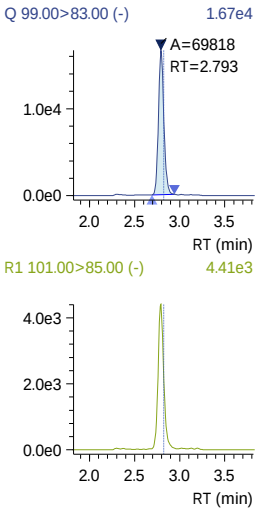
Printed at 7/8/2021 11:01:05 AM

20210623_027

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 3:40:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\Before\20210623_027.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

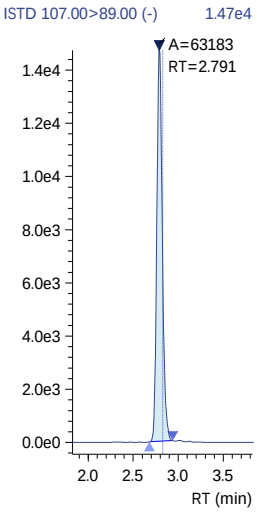
Perchlorate

Conc 9.5628
R#1 26.31 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2021 10:50:53 AM

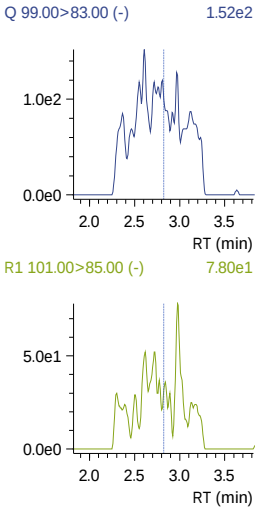
20210623_029

Sample ID: E2100645-022X10
Date Acquired: 6/23/2021 3:57:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\20210623_029.lcd
Vial: 27 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	ND(W/B)	----	----	55773	1	----	ng/mL	----	----
Sodium Perchlorate-18O4_IS	Auto	2.798	55773	55773	1	1.0000	ng/mL	----	----

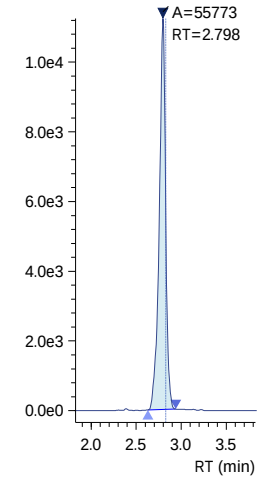
Perchlorate

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



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2021 11:01:05 AM

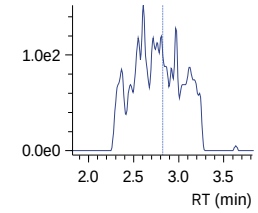
20210623_029

Sample ID: E2100645-022X10
Date Acquired: 6/23/2021 3:57:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\Before\20210623_029.lcd
Vial: 27 | Inj. Volume: 50.0000uL | Tray: 3

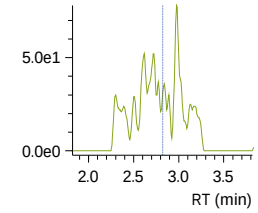
Perchlorate

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

Q 99.00>83.00 (-) 1.52e2



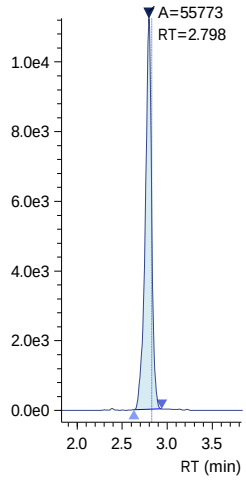
R1 101.00>85.00 (-) 7.80e1



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.13e4



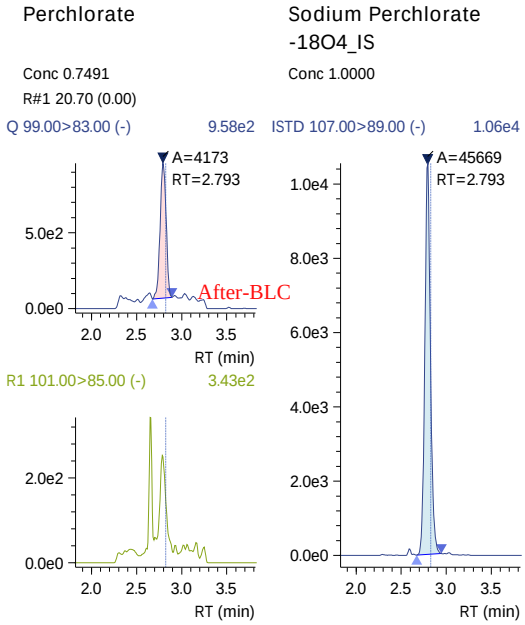
Insight Report

Printed at 7/8/2021 10:50:53 AM

20210623_030

Sample ID: E2100645-023X10
Date Acquired: 6/23/2021 4:06:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\20210623_030.lcd
Vial: 28 | Inj. Volume: 50.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	M	2.793	4173	45669	1	0.7491	ng/mL	----	20.70
Sodium Perchlorate-18O4 _IS	Auto	2.793	45669	45669	1	1.0000	ng/mL	----	----



Insight Report

Printed at 7/8/2021 11:01:05 AM

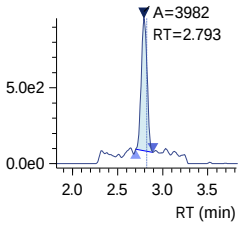
20210623_030

Sample ID: E2100645-023X10
Date Acquired: 6/23/2021 4:06:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\Before\20210623_030.lcd
Vial: 28 | Inj. Volume: 50.0000uL | Tray: 3

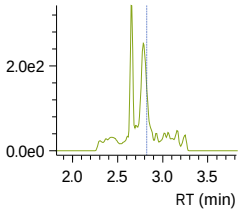
Perchlorate

Conc 0.7545
R#1 23.15 (0.00)

Q 99.00>83.00 (-) 9.58e2



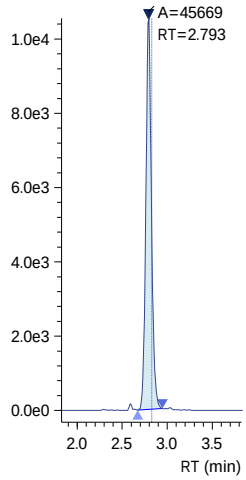
R1 101.00>85.00 (-) 3.43e2



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.06e4



Insight Report

Printed at 7/8/2021 10:50:53 AM

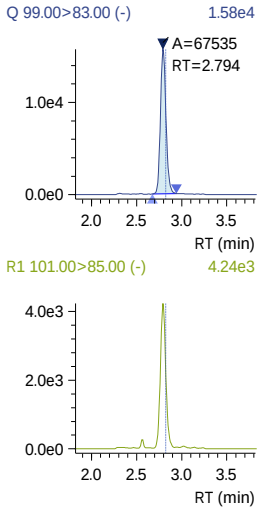
20210623_031

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 4:14:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\20210623_031.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	ISTD Group	Conc.	Unit	Std. Conc.	Ref 1 Actual Ratio
Perchlorate	Auto	2.794	67535	60272	1	9.1866	ng/mL	10.0000	26.80
Sodium Perchlorate-18O4 _IS	Auto	2.792	60272	60272	1	1.0000	ng/mL	1.0000	----

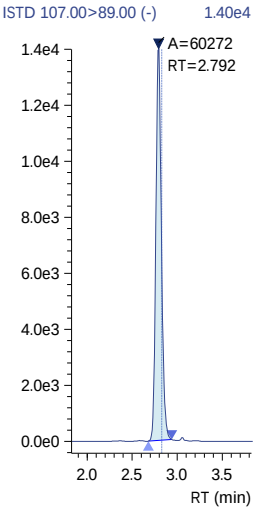
Perchlorate

Conc 9.1866
R#1 26.80 (0.00)



Sodium Perchlorate -18O4_IS

Conc 1.0000



Insight Report

Printed at 7/8/2021 11:01:05 AM

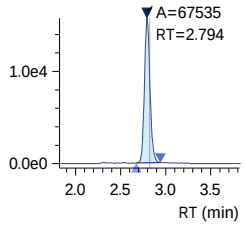
20210623_031

Sample ID: PERCHLORATE7
Date Acquired: 6/23/2021 4:14:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20210623\Before\20210623_031.lcd
Vial: 26 | Inj. Volume: 50.0000uL | Tray: 1

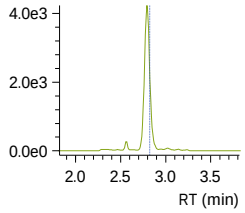
Perchlorate

Conc 9.6969
R#1 26.80 (0.00)

Q 99.00>83.00 (-) 1.58e4



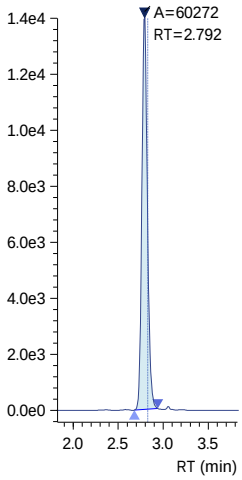
R1 101.00>85.00 (-) 4.24e3



Sodium Perchlorate -18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 1.40e4



HS21060908 LHAAP 18 24 Cover Page

ALS WO# HS21060908

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- Chain of Custody
- Preparation Sheets
- Analytical Results
- Accuracy and Precision
- Initial Calibration
- Chromatogram

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WorkOrder: HS21060908

LHAAP 18 24

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

31-Aug-2021

HS21060908 LHAAP 18 24 Final

ALS WO# HS21060908

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Houston, TX 77099
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June 30, 2021

Marcia Olive
Bhate Environmental Associates, Inc.
445 Union Blvd Ste 129
Lakewood, CO 80228

Work Order: **HS21060908**

Laboratory Results for: **LHAAP 18 24**

Dear Marcia Olive,

ALS Environmental received 9 sample(s) on Jun 16, 2021 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
Ragen Giga
Project Manager

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Work Order: HS21060908

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS21060908-01	MW2_061521	Groundwater		15-Jun-2021 07:20	16-Jun-2021 10:00	☐
HS21060908-02	18CPTMW01DW_061521	Groundwater		15-Jun-2021 08:05	16-Jun-2021 10:00	☐
HS21060908-03	18CPTMW01SW_061521	Groundwater		15-Jun-2021 08:55	16-Jun-2021 10:00	☐
HS21060908-04	125_061521	Groundwater		15-Jun-2021 09:55	16-Jun-2021 10:00	☐
HS21060908-05	109_061521	Groundwater		15-Jun-2021 10:40	16-Jun-2021 10:00	☐
HS21060908-06	MW21_061521	Groundwater		15-Jun-2021 11:30	16-Jun-2021 10:00	☐
HS21060908-07	MW23_061521	Groundwater		15-Jun-2021 12:25	16-Jun-2021 10:00	☐
HS21060908-08	129_061521	Groundwater		15-Jun-2021 13:15	16-Jun-2021 10:00	☐
HS21060908-09	Trip Blank	Water	CG-051121-47	15-Jun-2021 00:00	16-Jun-2021 10:00	☐

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP 18 24
Work Order: HS21060908

Work Order Comments

- The analysis for Perchlorate was subcontracted to ALS High Res Lab Houston, TX. Final report attached.

GCMS Semivolatiles by Method SW8270SIM

Batch ID: 167083

Sample ID: LCSD-167083

- The RPD between the LCS and LCSD was outside of the control limit.

GCMS Volatiles by Method SW8260

Batch ID: R385924

Sample ID: CCV

- 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene and Hexachlorobutadiene exceeded %D limits for CCV. Samples are ND for these compounds.

Sample ID: VLCSW-210619

- 1,2,3-Trichlorobenzene is also high for LCS. Samples are ND for this compound

Sample ID: HS21060937-04MS

- MS and MSD are for an unrelated sample

Batch ID: R386068

Sample ID: VLCSW-210622/CCV

- Hexachorobutadiene by high in CCV and LCS, no sample reported this compound in this batch.

Sample ID: MW2_061521 (HS21060908-01MS)

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

Sample ID: MW2_061521 (HS21060908-01MSD)

- The recovery of the Matrix Spike Duplicate (MSD) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The failed recovery of the MSD may be due to sample matrix interference.

Metals by Method SW6020A

Batch ID: 167071

Sample ID: HS21060495-07MS

- MS/MSD and DUPs are for an unrelated sample

Metals by Method SW7470A

Batch ID: 167023

Sample ID: HS21060495-07MSD

- MSD is for an unrelated sample

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_061521
Collection Date: 15-Jun-2021 07:20

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
1,1,1-Trichloroethane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
1,1,2,2-Tetrachloroethane	100	U	50	100	100	ug/L	100	19-Jun-2021 21:45
1,1,2-Trichloroethane	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
1,1-Dichloroethane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
1,1-Dichloroethene	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
1,1-Dichloropropene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
1,2,3-Trichlorobenzene	100	U	40	100	100	ug/L	100	19-Jun-2021 21:45
1,2,3-Trichloropropane	100	U	50	100	100	ug/L	100	19-Jun-2021 21:45
1,2,4-Trichlorobenzene	100	U	50	100	100	ug/L	100	19-Jun-2021 21:45
1,2,4-Trimethylbenzene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
1,2-Dibromo-3-chloropropane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
1,2-Dibromoethane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
1,2-Dichlorobenzene	100	U	50	100	100	ug/L	100	19-Jun-2021 21:45
1,2-Dichloroethane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
1,2-Dichloropropane	100	U	50	100	100	ug/L	100	19-Jun-2021 21:45
1,3,5-Trimethylbenzene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
1,3-Dichlorobenzene	100	U	40	100	100	ug/L	100	19-Jun-2021 21:45
1,3-Dichloropropane	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
1,4-Dichlorobenzene	100	U	40	100	100	ug/L	100	19-Jun-2021 21:45
2,2-Dichloropropane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
2-Butanone	100	U	50	100	200	ug/L	100	19-Jun-2021 21:45
2-Chlorotoluene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
2-Hexanone	200	U	100	200	200	ug/L	100	19-Jun-2021 21:45
4-Chlorotoluene	100	U	40	100	100	ug/L	100	19-Jun-2021 21:45
4-Isopropyltoluene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
4-Methyl-2-pentanone	200	U	70	200	200	ug/L	100	19-Jun-2021 21:45
Acetone	200	U	40	200	200	ug/L	100	19-Jun-2021 21:45
Benzene	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
Bromobenzene	100	U	40	100	100	ug/L	100	19-Jun-2021 21:45
Bromochloromethane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
Bromodichloromethane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
Bromoform	100	U	40	100	100	ug/L	100	19-Jun-2021 21:45
Bromomethane	100	U	40	100	100	ug/L	100	19-Jun-2021 21:45
Carbon disulfide	200	U	60	200	200	ug/L	100	19-Jun-2021 21:45
Carbon tetrachloride	100	U	50	100	100	ug/L	100	19-Jun-2021 21:45
Chlorobenzene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Chloroethane	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Chloroform	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_061521
Collection Date: 15-Jun-2021 07:20

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
cis-1,2-Dichloroethene	**20,000**		**50**	**120**	**250**	**ug/L**	250	22-Jun-2021 14:17
cis-1,3-Dichloropropene	50	U	10	50	100	ug/L	100	19-Jun-2021 21:45
Dibromochloromethane	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Dibromomethane	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
Dichlorodifluoromethane	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Ethylbenzene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Hexachlorobutadiene	100	U	100	100	100	ug/L	100	19-Jun-2021 21:45
Isopropylbenzene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
m,p-Xylene	100	U	50	100	200	ug/L	100	19-Jun-2021 21:45
Methylene chloride	**6,400**		**40**	**200**	**200**	**ug/L**	100	19-Jun-2021 21:45
n-Butylbenzene	100	U	40	100	100	ug/L	100	19-Jun-2021 21:45
n-Propylbenzene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Naphthalene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
o-Xylene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
sec-Butylbenzene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Styrene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
tert-Butylbenzene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Tetrachloroethene	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Toluene	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
trans-1,2-Dichloroethene	**66**	J	**20**	**50**	**100**	**ug/L**	100	19-Jun-2021 21:45
trans-1,3-Dichloropropene	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
Trichloroethene	**6,200**		**20**	**50**	**100**	**ug/L**	100	19-Jun-2021 21:45
Trichlorofluoromethane	100	U	30	100	100	ug/L	100	19-Jun-2021 21:45
Vinyl chloride	50	U	20	50	100	ug/L	100	19-Jun-2021 21:45
Surr: 1,2-Dichloroethane-d4	*91.6*			**0**	*81-118*	*%REC*	*100*	*19-Jun-2021 21:45*
Surr: 1,2-Dichloroethane-d4	*90.7*			**0**	*81-118*	*%REC*	*250*	*22-Jun-2021 14:17*
Surr: 4-Bromofluorobenzene	*98.1*			**0**	*85-114*	*%REC*	*100*	*19-Jun-2021 21:45*
Surr: 4-Bromofluorobenzene	*95.2*			**0**	*85-114*	*%REC*	*250*	*22-Jun-2021 14:17*
Surr: Dibromofluoromethane	*89.4*			**0**	*80-119*	*%REC*	*100*	*19-Jun-2021 21:45*
Surr: Dibromofluoromethane	*86.7*			**0**	*80-119*	*%REC*	*250*	*22-Jun-2021 14:17*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*100*	*19-Jun-2021 21:45*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*250*	*22-Jun-2021 14:17*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 21-Jun-2021		Analyst: ACN
1,4-Dioxane	**6.1**		**0.50**	**0.50**	**0.50**	**ug/L**	50	25-Jun-2021 12:23
Surr: 2-Fluorobiphenyl	*70.4*			**0**	*40-140*	*%REC*	*50*	*25-Jun-2021 12:23*
Surr: 4-Terphenyl-d14	*137*			**0**	*40-140*	*%REC*	*50*	*25-Jun-2021 12:23*
Surr: Nitrobenzene-d5	*118*			**0**	*40-140*	*%REC*	*50*	*25-Jun-2021 12:23*

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW2_061521
Collection Date: 15-Jun-2021 07:20

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	30-Jun-2021 18:40

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01DW_061521
Collection Date: 15-Jun-2021 08:05

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,2-Dibromo-3-chloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:35
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	19-Jun-2021 18:35
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	19-Jun-2021 18:35
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:35
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	19-Jun-2021 18:35
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	19-Jun-2021 18:35
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	19-Jun-2021 18:35
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01DW_061521
Collection Date: 15-Jun-2021 08:05

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
cis-1,2-Dichloroethene	**1.0**		**0.20**	**0.50**	**1.0**	**ug/L**	1	19-Jun-2021 18:35
cis-1,3-Dichloropropene	0.50	U	0.10	0.50	1.0	ug/L	1	19-Jun-2021 18:35
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	19-Jun-2021 18:35
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	19-Jun-2021 18:35
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:35
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
Trichloroethene	**1.1**		**0.20**	**0.50**	**1.0**	**ug/L**	1	19-Jun-2021 18:35
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:35
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:35
Surr: 1,2-Dichloroethane-d4	*92.2*			**0**	*81-118*	*%REC*	*1*	*19-Jun-2021 18:35*
Surr: 4-Bromofluorobenzene	*97.5*			**0**	*85-114*	*%REC*	*1*	*19-Jun-2021 18:35*
Surr: Dibromofluoromethane	*88.2*			**0**	*80-119*	*%REC*	*1*	*19-Jun-2021 18:35*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*19-Jun-2021 18:35*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 21-Jun-2021		Analyst: ACN
1,4-Dioxane	**0.39**		**0.010**	**0.010**	**0.010**	**ug/L**	1	23-Jun-2021 14:08
Surr: 2-Fluorobiphenyl	*66.2*			**0**	*40-140*	*%REC*	*1*	*23-Jun-2021 14:08*
Surr: 4-Terphenyl-d14	*96.4*			**0**	*40-140*	*%REC*	*1*	*23-Jun-2021 14:08*
Surr: Nitrobenzene-d5	*55.8*			**0**	*40-140*	*%REC*	*1*	*23-Jun-2021 14:08*

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01DW_061521
Collection Date: 15-Jun-2021 08:05

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 21-Jun-2021		Analyst: JHD
Aluminum	**0.0193**		**0.00180**	**0.00500**	**0.0100**	**mg/L**	1	23-Jun-2021 15:41
Antimony	0.00100	U	0.000400	0.00100	0.00500	mg/L	1	23-Jun-2021 15:41
Arsenic	**0.00313**	J	**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:41
Barium	**0.288**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:41
Beryllium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:41
Cadmium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:41
Calcium	**21.8**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Jun-2021 15:41
Chromium	**0.00886**		**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:41
Cobalt	**0.000308**	J	**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Jun-2021 15:41
Copper	0.00250	U	0.00100	0.00250	0.00500	mg/L	1	23-Jun-2021 15:41
Iron	**1.05**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:41
Lead	0.00100	U	0.000600	0.00100	0.00500	mg/L	1	23-Jun-2021 15:41
Magnesium	**11.6**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:41
Manganese	**0.0526**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:41
Nickel	**0.00144**	J	**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:41
Potassium	**87.9**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:41
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Jun-2021 15:41
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Jun-2021 15:41
Sodium	**402**		**0.140**	**0.500**	**2.00**	**mg/L**	10	24-Jun-2021 10:52
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:41
Vanadium	0.00100	U	0.000600	0.00100	0.00500	mg/L	1	23-Jun-2021 15:41
Zinc	**0.00221**	J	**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:41
MERCURY BY SW7470A		**Method:SW7470A**				Prep:SW7470A / 18-Jun-2021		Analyst: MSC
Mercury	0.000100	U	0.0000300	0.000100	0.000200	mg/L	1	18-Jun-2021 16:38
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	30-Jun-2021 18:40

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01SW_061521
Collection Date: 15-Jun-2021 08:55

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: QX
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
1,1-Dichloroethene	**26**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 16:23
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,2-Dibromo-3-chloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 16:23
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	22-Jun-2021 16:23
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	22-Jun-2021 16:23
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 16:23
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	22-Jun-2021 16:23
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	22-Jun-2021 16:23
Benzene	**3.0**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 16:23
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Bromochloromethane	**8.2**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 16:23
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	22-Jun-2021 16:23
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Chloroform	**1.5**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 16:23

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01SW_061521
Collection Date: 15-Jun-2021 08:55

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: QX
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
cis-1,2-Dichloroethene	**230**		**10**	**25**	**50**	**ug/L**	50	22-Jun-2021 14:38
cis-1,3-Dichloropropene	0.50	U	0.10	0.50	1.0	ug/L	1	22-Jun-2021 16:23
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	22-Jun-2021 16:23
Methylene chloride	**3,300**		**20**	**100**	**100**	**ug/L**	50	22-Jun-2021 14:38
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 16:23
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Toluene	**1.5**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 16:23
trans-1,2-Dichloroethene	**1.2**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 16:23
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
Trichloroethene	**180**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 16:23
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 16:23
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 16:23
Surr: 1,2-Dichloroethane-d4	*92.2*			**0**	*81-118*	*%REC*	*50*	*22-Jun-2021 14:38*
Surr: 1,2-Dichloroethane-d4	*93.4*			**0**	*81-118*	*%REC*	*1*	*22-Jun-2021 16:23*
Surr: 4-Bromofluorobenzene	*96.2*			**0**	*85-114*	*%REC*	*50*	*22-Jun-2021 14:38*
Surr: 4-Bromofluorobenzene	*99.0*			**0**	*85-114*	*%REC*	*1*	*22-Jun-2021 16:23*
Surr: Dibromofluoromethane	*89.8*			**0**	*80-119*	*%REC*	*50*	*22-Jun-2021 14:38*
Surr: Dibromofluoromethane	*89.5*			**0**	*80-119*	*%REC*	*1*	*22-Jun-2021 16:23*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*50*	*22-Jun-2021 14:38*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*22-Jun-2021 16:23*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 21-Jun-2021		Analyst: ACN
1,4-Dioxane	**0.70**		**0.10**	**0.10**	**0.10**	**ug/L**	10	23-Jun-2021 14:44
Surr: 2-Fluorobiphenyl	*78.8*			**0**	*40-140*	*%REC*	*10*	*23-Jun-2021 14:44*
Surr: 4-Terphenyl-d14	*96.6*			**0**	*40-140*	*%REC*	*10*	*23-Jun-2021 14:44*
Surr: Nitrobenzene-d5	*52.8*			**0**	*40-140*	*%REC*	*10*	*23-Jun-2021 14:44*

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 18CPTMW01SW_061521
Collection Date: 15-Jun-2021 08:55

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 21-Jun-2021		Analyst: JHD
Aluminum	**0.0764**		**0.00180**	**0.00500**	**0.0100**	**mg/L**	1	23-Jun-2021 15:43
Antimony	0.00100	U	0.000400	0.00100	0.00500	mg/L	1	23-Jun-2021 15:43
Arsenic	**0.00662**		**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:43
Barium	**1.05**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:43
Beryllium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:43
Cadmium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:43
Calcium	**37.0**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Jun-2021 15:43
Chromium	**0.01000**		**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:43
Cobalt	**0.000457**	J	**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Jun-2021 15:43
Copper	0.00250	U	0.00100	0.00250	0.00500	mg/L	1	23-Jun-2021 15:43
Iron	**47.0**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:43
Lead	0.00100	U	0.000600	0.00100	0.00500	mg/L	1	23-Jun-2021 15:43
Magnesium	**21.5**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:43
Manganese	**0.582**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:43
Nickel	**0.00191**	J	**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:43
Potassium	**10.0**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:43
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Jun-2021 15:43
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Jun-2021 15:43
Sodium	**105**		**0.0140**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:43
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:43
Vanadium	0.00100	U	0.000600	0.00100	0.00500	mg/L	1	23-Jun-2021 15:43
Zinc	**0.00530**		**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:43
MERCURY BY SW7470A		**Method:SW7470A**				Prep:SW7470A / 18-Jun-2021		Analyst: MSC
Mercury	0.000100	U	0.0000300	0.000100	0.000200	mg/L	1	18-Jun-2021 16:39
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	30-Jun-2021 18:40

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 125_061521
Collection Date: 15-Jun-2021 09:55

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,2-Dibromo-3-chloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:56
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	19-Jun-2021 18:56
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	19-Jun-2021 18:56
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:56
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	19-Jun-2021 18:56
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	19-Jun-2021 18:56
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	19-Jun-2021 18:56
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 125_061521
Collection Date: 15-Jun-2021 09:55

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
cis-1,3-Dichloropropene	0.50	U	0.10	0.50	1.0	ug/L	1	19-Jun-2021 18:56
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	19-Jun-2021 18:56
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	19-Jun-2021 18:56
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 18:56
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 18:56
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 18:56
Surr: 1,2-Dichloroethane-d4	*91.8*			**0**	*81-118*	*%REC*	*1*	*19-Jun-2021 18:56*
Surr: 4-Bromofluorobenzene	*97.2*			**0**	*85-114*	*%REC*	*1*	*19-Jun-2021 18:56*
Surr: Dibromofluoromethane	*87.7*			**0**	*80-119*	*%REC*	*1*	*19-Jun-2021 18:56*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*19-Jun-2021 18:56*

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 125_061521
Collection Date: 15-Jun-2021 09:55

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 21-Jun-2021		Analyst: JHD
Aluminum	**1.93**		**0.0180**	**0.0500**	**0.100**	**mg/L**	10	24-Jun-2021 10:54
Antimony	**0.000498**	J	**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Arsenic	**0.00510**		**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Barium	**0.113**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Beryllium	**0.000399**	J	**0.000200**	**0.000500**	**0.00200**	**mg/L**	1	23-Jun-2021 15:45
Cadmium	**0.000472**	J	**0.000200**	**0.000500**	**0.00200**	**mg/L**	1	23-Jun-2021 15:45
Calcium	**1.84**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Jun-2021 15:45
Chromium	**0.00988**		**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Cobalt	**0.00349**	J	**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Copper	**0.00439**	J	**0.00100**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Iron	**6.82**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:45
Lead	**0.00436**	J	**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Magnesium	**2.07**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:45
Manganese	**0.0493**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Nickel	**0.00726**		**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Potassium	**1.12**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:45
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Jun-2021 15:45
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Jun-2021 15:45
Sodium	**46.4**		**0.0140**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:45
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:45
Vanadium	**0.0153**		**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
Zinc	**0.0208**		**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:45
MERCURY BY SW7470A		**Method:SW7470A**				Prep:SW7470A / 18-Jun-2021		Analyst: MSC
Mercury	**0.0000490**	J	**0.0000300**	**0.000100**	**0.000200**	**mg/L**	1	18-Jun-2021 16:41
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	30-Jun-2021 18:40

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 109_061521
Collection Date: 15-Jun-2021 10:40

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: QX
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,1-Dichloroethane	**0.74**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 13:56
1,1-Dichloroethene	**2.4**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 13:56
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,2-Dibromo-3-chloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 13:56
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	22-Jun-2021 13:56
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	22-Jun-2021 13:56
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 13:56
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	22-Jun-2021 13:56
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	22-Jun-2021 13:56
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	22-Jun-2021 13:56
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Chloroform	**0.97**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 13:56

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 109_061521
Collection Date: 15-Jun-2021 10:40

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: QX
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
cis-1,2-Dichloroethene	**83**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 13:56
cis-1,3-Dichloropropene	0.50	U	0.10	0.50	1.0	ug/L	1	22-Jun-2021 13:56
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	22-Jun-2021 13:56
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	22-Jun-2021 13:56
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 13:56
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
trans-1,2-Dichloroethene	**0.76**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 13:56
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 13:56
Trichloroethene	**240**		**1.0**	**2.5**	**5.0**	**ug/L**	5	22-Jun-2021 17:26
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 13:56
Vinyl chloride	**0.88**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 13:56
Surr: 1,2-Dichloroethane-d4	*92.3*			**0**	*81-118*	*%REC*	*1*	*22-Jun-2021 13:56*
Surr: 1,2-Dichloroethane-d4	*92.2*			**0**	*81-118*	*%REC*	*5*	*22-Jun-2021 17:26*
Surr: 4-Bromofluorobenzene	*92.2*			**0**	*85-114*	*%REC*	*5*	*22-Jun-2021 17:26*
Surr: 4-Bromofluorobenzene	*97.1*			**0**	*85-114*	*%REC*	*1*	*22-Jun-2021 13:56*
Surr: Dibromofluoromethane	*88.0*			**0**	*80-119*	*%REC*	*1*	*22-Jun-2021 13:56*
Surr: Dibromofluoromethane	*89.0*			**0**	*80-119*	*%REC*	*5*	*22-Jun-2021 17:26*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*5*	*22-Jun-2021 17:26*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*1*	*22-Jun-2021 13:56*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 21-Jun-2021		Analyst: ACN
1,4-Dioxane	**1.1**		**0.050**	**0.050**	**0.050**	**ug/L**	5	25-Jun-2021 15:22
Surr: 2-Fluorobiphenyl	*89.8*			**0**	*40-140*	*%REC*	*5*	*25-Jun-2021 15:22*
Surr: 4-Terphenyl-d14	*108*			**0**	*40-140*	*%REC*	*5*	*25-Jun-2021 15:22*
Surr: Nitrobenzene-d5	*87.4*			**0**	*40-140*	*%REC*	*5*	*25-Jun-2021 15:22*

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 109_061521
Collection Date: 15-Jun-2021 10:40

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	30-Jun-2021 18:40

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW21_061521
Collection Date: 15-Jun-2021 11:30

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,1,1-Trichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
1,1,2,2-Tetrachloroethane	5.0	U	2.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,1,2-Trichloroethane	**5.2**		**1.5**	**5.0**	**5.0**	**ug/L**	5	19-Jun-2021 20:42
1,1-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
1,1-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
1,1-Dichloropropene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,2,3-Trichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,2,3-Trichloropropane	5.0	U	2.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,2,4-Trichlorobenzene	5.0	U	2.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,2,4-Trimethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,2-Dibromo-3-chloropropane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
1,2-Dibromoethane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
1,2-Dichlorobenzene	5.0	U	2.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,2-Dichloroethane	**16**		**1.0**	**2.5**	**5.0**	**ug/L**	5	19-Jun-2021 20:42
1,2-Dichloropropane	5.0	U	2.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,3,5-Trimethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,3-Dichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,3-Dichloropropane	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
1,4-Dichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
2,2-Dichloropropane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
2-Butanone	5.0	U	2.5	5.0	10	ug/L	5	19-Jun-2021 20:42
2-Chlorotoluene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
2-Hexanone	10	U	5.0	10	10	ug/L	5	19-Jun-2021 20:42
4-Chlorotoluene	5.0	U	2.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
4-Isopropyltoluene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
4-Methyl-2-pentanone	10	U	3.5	10	10	ug/L	5	19-Jun-2021 20:42
Acetone	10	U	2.0	10	10	ug/L	5	19-Jun-2021 20:42
Benzene	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
Bromobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Bromochloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
Bromodichloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
Bromoform	5.0	U	2.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Bromomethane	5.0	U	2.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Carbon disulfide	10	U	3.0	10	10	ug/L	5	19-Jun-2021 20:42
Carbon tetrachloride	5.0	U	2.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Chlorobenzene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Chloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Chloroform	**5.2**		**1.0**	**2.5**	**5.0**	**ug/L**	5	19-Jun-2021 20:42

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW21_061521
Collection Date: 15-Jun-2021 11:30

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
Chloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
cis-1,2-Dichloroethene	**210**		**1.0**	**2.5**	**5.0**	**ug/L**	5	19-Jun-2021 20:42
cis-1,3-Dichloropropene	2.5	U	0.50	2.5	5.0	ug/L	5	19-Jun-2021 20:42
Dibromochloromethane	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Dibromomethane	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
Dichlorodifluoromethane	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Ethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Hexachlorobutadiene	5.0	U	5.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Isopropylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
m,p-Xylene	5.0	U	2.5	5.0	10	ug/L	5	19-Jun-2021 20:42
Methylene chloride	10	U	2.0	10	10	ug/L	5	19-Jun-2021 20:42
n-Butylbenzene	5.0	U	2.0	5.0	5.0	ug/L	5	19-Jun-2021 20:42
n-Propylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Naphthalene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
o-Xylene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
sec-Butylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Styrene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
tert-Butylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Tetrachloroethene	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Toluene	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
trans-1,2-Dichloroethene	**3.3**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	19-Jun-2021 20:42
trans-1,3-Dichloropropene	2.5	U	1.0	2.5	5.0	ug/L	5	19-Jun-2021 20:42
Trichloroethene	**3,900**		**10**	**25**	**50**	**ug/L**	50	19-Jun-2021 21:03
Trichlorofluoromethane	5.0	U	1.5	5.0	5.0	ug/L	5	19-Jun-2021 20:42
Vinyl chloride	**13**		**1.0**	**2.5**	**5.0**	**ug/L**	5	19-Jun-2021 20:42
Surr: 1,2-Dichloroethane-d4	*90.8*			**0**	*81-118*	*%REC*	*5*	*19-Jun-2021 20:42*
Surr: 1,2-Dichloroethane-d4	*92.5*			**0**	*81-118*	*%REC*	*50*	*19-Jun-2021 21:03*
Surr: 4-Bromofluorobenzene	*95.7*			**0**	*85-114*	*%REC*	*5*	*19-Jun-2021 20:42*
Surr: 4-Bromofluorobenzene	*98.4*			**0**	*85-114*	*%REC*	*50*	*19-Jun-2021 21:03*
Surr: Dibromofluoromethane	*88.1*			**0**	*80-119*	*%REC*	*5*	*19-Jun-2021 20:42*
Surr: Dibromofluoromethane	*89.1*			**0**	*80-119*	*%REC*	*50*	*19-Jun-2021 21:03*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*5*	*19-Jun-2021 20:42*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*50*	*19-Jun-2021 21:03*
SEMIVOLATILES SIM	**Method:SW8270SIM**					Prep:SW3510 / 21-Jun-2021		Analyst: ACN
1,4-Dioxane	**2.2**		**0.10**	**0.10**	**0.10**	**ug/L**	10	23-Jun-2021 15:20
Surr: 2-Fluorobiphenyl	*76.2*			**0**	*40-140*	*%REC*	*10*	*23-Jun-2021 15:20*
Surr: 4-Terphenyl-d14	*92.0*			**0**	*40-140*	*%REC*	*10*	*23-Jun-2021 15:20*
Surr: Nitrobenzene-d5	*50.9*			**0**	*40-140*	*%REC*	*10*	*23-Jun-2021 15:20*

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW21_061521
Collection Date: 15-Jun-2021 11:30

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 21-Jun-2021		Analyst: JHD
Aluminum	**0.0159**		**0.00180**	**0.00500**	**0.0100**	**mg/L**	1	23-Jun-2021 15:47
Antimony	0.00100	U	0.000400	0.00100	0.00500	mg/L	1	23-Jun-2021 15:47
Arsenic	**0.000420**	J	**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:47
Barium	**4.27**		**0.0190**	**0.0250**	**0.0500**	**mg/L**	10	24-Jun-2021 10:56
Beryllium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:47
Cadmium	**0.000428**	J	**0.000200**	**0.000500**	**0.00200**	**mg/L**	1	23-Jun-2021 15:47
Calcium	**159**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Jun-2021 15:47
Chromium	**0.221**		**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:47
Cobalt	**0.0320**		**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Jun-2021 15:47
Copper	**0.0158**		**0.00100**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:47
Iron	**1.88**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:47
Lead	0.00100	U	0.000600	0.00100	0.00500	mg/L	1	23-Jun-2021 15:47
Magnesium	**102**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:47
Manganese	**1.17**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:47
Nickel	**0.399**		**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:47
Potassium	**1.90**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:47
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	23-Jun-2021 15:47
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Jun-2021 15:47
Sodium	**387**		**0.140**	**0.500**	**2.00**	**mg/L**	10	24-Jun-2021 10:56
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:47
Vanadium	**0.00144**	J	**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:47
Zinc	**0.00970**		**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:47
MERCURY BY SW7470A		**Method:SW7470A**				Prep:SW7470A / 18-Jun-2021		Analyst: MSC
Mercury	0.000100	U	0.0000300	0.000100	0.000200	mg/L	1	18-Jun-2021 16:43
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	30-Jun-2021 18:40

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW23_061521
Collection Date: 15-Jun-2021 12:25

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: QX
1,1,1,2-Tetrachloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,1,1-Trichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
1,1,2,2-Tetrachloroethane	5.0	U	2.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,1-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
1,1-Dichloroethene	**8.0**		**1.0**	**2.5**	**5.0**	**ug/L**	5	22-Jun-2021 14:59
1,1-Dichloropropene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,2,3-Trichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,2,3-Trichloropropane	5.0	U	2.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,2,4-Trichlorobenzene	5.0	U	2.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,2,4-Trimethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,2-Dibromo-3-chloropropane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
1,2-Dibromoethane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
1,2-Dichlorobenzene	5.0	U	2.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,2-Dichloroethane	**58**		**1.0**	**2.5**	**5.0**	**ug/L**	5	22-Jun-2021 14:59
1,2-Dichloropropane	5.0	U	2.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,3,5-Trimethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,3-Dichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,3-Dichloropropane	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
1,4-Dichlorobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
2,2-Dichloropropane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
2-Butanone	5.0	U	2.5	5.0	10	ug/L	5	22-Jun-2021 14:59
2-Chlorotoluene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
2-Hexanone	10	U	5.0	10	10	ug/L	5	22-Jun-2021 14:59
4-Chlorotoluene	5.0	U	2.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
4-Isopropyltoluene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
4-Methyl-2-pentanone	10	U	3.5	10	10	ug/L	5	22-Jun-2021 14:59
Acetone	10	U	2.0	10	10	ug/L	5	22-Jun-2021 14:59
Benzene	**3.5**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	22-Jun-2021 14:59
Bromobenzene	5.0	U	2.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Bromochloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
Bromodichloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
Bromoform	5.0	U	2.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Bromomethane	5.0	U	2.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Carbon disulfide	10	U	3.0	10	10	ug/L	5	22-Jun-2021 14:59
Carbon tetrachloride	**4.5**	J	**2.5**	**5.0**	**5.0**	**ug/L**	5	22-Jun-2021 14:59
Chlorobenzene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Chloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Chloroform	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: MW23_061521
Collection Date: 15-Jun-2021 12:25

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: QX
Chloromethane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
cis-1,2-Dichloroethene	**14**		**1.0**	**2.5**	**5.0**	**ug/L**	5	22-Jun-2021 14:59
cis-1,3-Dichloropropene	2.5	U	0.50	2.5	5.0	ug/L	5	22-Jun-2021 14:59
Dibromochloromethane	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Dibromomethane	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
Dichlorodifluoromethane	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Ethylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Hexachlorobutadiene	5.0	U	5.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Isopropylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
m,p-Xylene	5.0	U	2.5	5.0	10	ug/L	5	22-Jun-2021 14:59
Methylene chloride	10	U	2.0	10	10	ug/L	5	22-Jun-2021 14:59
n-Butylbenzene	5.0	U	2.0	5.0	5.0	ug/L	5	22-Jun-2021 14:59
n-Propylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Naphthalene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
o-Xylene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
sec-Butylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Styrene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
tert-Butylbenzene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Tetrachloroethene	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Toluene	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
trans-1,2-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
trans-1,3-Dichloropropene	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
Trichloroethene	**2,200**		**10**	**25**	**50**	**ug/L**	50	22-Jun-2021 15:20
Trichlorofluoromethane	5.0	U	1.5	5.0	5.0	ug/L	5	22-Jun-2021 14:59
Vinyl chloride	2.5	U	1.0	2.5	5.0	ug/L	5	22-Jun-2021 14:59
Surr: 1,2-Dichloroethane-d4	*93.3*			**0**	*81-118*	*%REC*	*5*	*22-Jun-2021 14:59*
Surr: 1,2-Dichloroethane-d4	*91.9*			**0**	*81-118*	*%REC*	*50*	*22-Jun-2021 15:20*
Surr: 4-Bromofluorobenzene	*96.3*			**0**	*85-114*	*%REC*	*50*	*22-Jun-2021 15:20*
Surr: 4-Bromofluorobenzene	*96.3*			**0**	*85-114*	*%REC*	*5*	*22-Jun-2021 14:59*
Surr: Dibromofluoromethane	*89.0*			**0**	*80-119*	*%REC*	*5*	*22-Jun-2021 14:59*
Surr: Dibromofluoromethane	*90.0*			**0**	*80-119*	*%REC*	*50*	*22-Jun-2021 15:20*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*50*	*22-Jun-2021 15:20*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*5*	*22-Jun-2021 14:59*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	30-Jun-2021 18:40

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 129_061521
Collection Date: 15-Jun-2021 13:15

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: QX
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,1,2-Trichloroethane	**0.60**	J	**0.30**	**1.0**	**1.0**	**ug/L**	1	22-Jun-2021 15:41
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
1,1-Dichloroethene	**0.58**	J	**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 15:41
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,2-Dibromo-3-chloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,2-Dichloroethane	**26**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 15:41
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 15:41
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	22-Jun-2021 15:41
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	22-Jun-2021 15:41
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 15:41
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	22-Jun-2021 15:41
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	22-Jun-2021 15:41
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	22-Jun-2021 15:41
Carbon tetrachloride	**0.97**	J	**0.50**	**1.0**	**1.0**	**ug/L**	1	22-Jun-2021 15:41
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Chloroform	**2.5**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 15:41

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 129_061521
Collection Date: 15-Jun-2021 13:15

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: QX
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
cis-1,2-Dichloroethene	**4.6**		**0.20**	**0.50**	**1.0**	**ug/L**	1	22-Jun-2021 15:41
cis-1,3-Dichloropropene	0.50	U	0.10	0.50	1.0	ug/L	1	22-Jun-2021 15:41
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	22-Jun-2021 15:41
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	22-Jun-2021 15:41
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	22-Jun-2021 15:41
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
Trichloroethene	**770**		**2.0**	**5.0**	**10**	**ug/L**	10	22-Jun-2021 16:02
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	22-Jun-2021 15:41
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	22-Jun-2021 15:41
Surr: 1,2-Dichloroethane-d4	*91.7*			**0**	*81-118*	*%REC*	*1*	*22-Jun-2021 15:41*
Surr: 1,2-Dichloroethane-d4	*93.6*			**0**	*81-118*	*%REC*	*10*	*22-Jun-2021 16:02*
Surr: 4-Bromofluorobenzene	*96.4*			**0**	*85-114*	*%REC*	*1*	*22-Jun-2021 15:41*
Surr: 4-Bromofluorobenzene	*95.5*			**0**	*85-114*	*%REC*	*10*	*22-Jun-2021 16:02*
Surr: Dibromofluoromethane	*88.6*			**0**	*80-119*	*%REC*	*1*	*22-Jun-2021 15:41*
Surr: Dibromofluoromethane	*88.9*			**0**	*80-119*	*%REC*	*10*	*22-Jun-2021 16:02*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*22-Jun-2021 15:41*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*10*	*22-Jun-2021 16:02*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 21-Jun-2021		Analyst: ACN
1,4-Dioxane	**7.3**		**0.50**	**0.50**	**0.50**	**ug/L**	50	25-Jun-2021 12:59
Surr: 2-Fluorobiphenyl	*83.4*			**0**	*40-140*	*%REC*	*50*	*25-Jun-2021 12:59*
Surr: 4-Terphenyl-d14	*137*			**0**	*40-140*	*%REC*	*50*	*25-Jun-2021 12:59*
Surr: Nitrobenzene-d5	*71.9*			**0**	*40-140*	*%REC*	*50*	*25-Jun-2021 12:59*

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: 129_061521
Collection Date: 15-Jun-2021 13:15

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 21-Jun-2021		Analyst: JHD
Aluminum	**2.78**		**0.0180**	**0.0500**	**0.100**	**mg/L**	10	24-Jun-2021 10:58
Antimony	**0.000594**	J	**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Arsenic	**0.00165**	J	**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Barium	**0.148**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Beryllium	**0.000344**	J	**0.000200**	**0.000500**	**0.00200**	**mg/L**	1	23-Jun-2021 15:49
Cadmium	**0.000302**	J	**0.000200**	**0.000500**	**0.00200**	**mg/L**	1	23-Jun-2021 15:49
Calcium	**4.09**		**0.0340**	**0.0500**	**0.500**	**mg/L**	1	23-Jun-2021 15:49
Chromium	**0.0171**		**0.000400**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Cobalt	**0.00608**		**0.000100**	**0.000500**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Copper	**0.00549**		**0.00100**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Iron	**7.98**		**0.0120**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:49
Lead	**0.00433**	J	**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Magnesium	**3.89**		**0.0100**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:49
Manganese	**0.109**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Nickel	**0.0117**		**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Potassium	**1.43**		**0.0180**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:49
Selenium	**0.00116**	J	**0.00110**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	23-Jun-2021 15:49
Sodium	**63.4**		**0.0140**	**0.0500**	**0.200**	**mg/L**	1	23-Jun-2021 15:49
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	23-Jun-2021 15:49
Vanadium	**0.0227**		**0.000600**	**0.00100**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
Zinc	**0.0265**		**0.00200**	**0.00250**	**0.00500**	**mg/L**	1	23-Jun-2021 15:49
MERCURY BY SW7470A		**Method:SW7470A**				Prep:SW7470A / 18-Jun-2021		Analyst: MSC
Mercury	0.000100	U	0.0000300	0.000100	0.000200	mg/L	1	18-Jun-2021 16:44
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: GR
Subcontract Analysis	See Attached		0	0		NA	1	30-Jun-2021 18:40

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: Trip Blank
Collection Date: 15-Jun-2021 00:00

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,2-Dibromo-3-chloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 16:50
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	19-Jun-2021 16:50
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	19-Jun-2021 16:50
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 16:50
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	19-Jun-2021 16:50
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	19-Jun-2021 16:50
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	19-Jun-2021 16:50
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50

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

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Sample ID: Trip Blank
Collection Date: 15-Jun-2021 00:00

ANALYTICAL REPORT
WorkOrder:HS21060908
Lab ID:HS21060908-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
cis-1,3-Dichloropropene	0.50	U	0.10	0.50	1.0	ug/L	1	19-Jun-2021 16:50
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	19-Jun-2021 16:50
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	19-Jun-2021 16:50
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	19-Jun-2021 16:50
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jun-2021 16:50
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	19-Jun-2021 16:50
Surr: 1,2-Dichloroethane-d4	*91.4*			**0**	*81-118*	*%REC*	*1*	*19-Jun-2021 16:50*
Surr: 4-Bromofluorobenzene	*96.6*			**0**	*85-114*	*%REC*	*1*	*19-Jun-2021 16:50*
Surr: Dibromofluoromethane	*88.9*			**0**	*80-119*	*%REC*	*1*	*19-Jun-2021 16:50*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*19-Jun-2021 16:50*

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

Weight / Prep Log

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Batch ID: 167023 **Start Date:** 18 Jun 2021 08:30 **End Date:** 18 Jun 2021 11:30
Method: MERCURY PREP BY 7470A- WATER **Prep Code:** HG_WPR

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21060908-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21060908-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21060908-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21060908-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21060908-08		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 167071 **Start Date:** 21 Jun 2021 09:00 **End Date:** 21 Jun 2021 13:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21060908-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21060908-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21060908-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21060908-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21060908-08		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 167083 **Start Date:** 21 Jun 2021 08:00 **End Date:** 21 Jun 2021 14:00
Method: SV AQ SEP FUN EXTRACT-LOWLEV - 3510C **Prep Code:** 3510_B_SIM

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21060908-01	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS21060908-02	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS21060908-03	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS21060908-05	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS21060908-06	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat
HS21060908-08	1	1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 167023 (0)	**Test Name :** MERCURY BY SW7470A				**Matrix:** Groundwater	
HS21060908-02	18CPTMW01DW_061521	15 Jun 2021 08:05		18 Jun 2021 11:30	18 Jun 2021 16:38	1
HS21060908-03	18CPTMW01SW_061521	15 Jun 2021 08:55		18 Jun 2021 11:30	18 Jun 2021 16:39	1
HS21060908-04	125_061521	15 Jun 2021 09:55		18 Jun 2021 11:30	18 Jun 2021 16:41	1
HS21060908-06	MW21_061521	15 Jun 2021 11:30		18 Jun 2021 11:30	18 Jun 2021 16:43	1
HS21060908-08	129_061521	15 Jun 2021 13:15		18 Jun 2021 11:30	18 Jun 2021 16:44	1
Batch ID: 167071 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Groundwater	
HS21060908-02	18CPTMW01DW_061521	15 Jun 2021 08:05		21 Jun 2021 13:00	24 Jun 2021 10:52	10
HS21060908-02	18CPTMW01DW_061521	15 Jun 2021 08:05		21 Jun 2021 13:00	23 Jun 2021 15:41	1
HS21060908-03	18CPTMW01SW_061521	15 Jun 2021 08:55		21 Jun 2021 13:00	23 Jun 2021 15:43	1
HS21060908-04	125_061521	15 Jun 2021 09:55		21 Jun 2021 13:00	24 Jun 2021 10:54	10
HS21060908-04	125_061521	15 Jun 2021 09:55		21 Jun 2021 13:00	23 Jun 2021 15:45	1
HS21060908-06	MW21_061521	15 Jun 2021 11:30		21 Jun 2021 13:00	24 Jun 2021 10:56	10
HS21060908-06	MW21_061521	15 Jun 2021 11:30		21 Jun 2021 13:00	23 Jun 2021 15:47	1
HS21060908-08	129_061521	15 Jun 2021 13:15		21 Jun 2021 13:00	24 Jun 2021 10:58	10
HS21060908-08	129_061521	15 Jun 2021 13:15		21 Jun 2021 13:00	23 Jun 2021 15:49	1
Batch ID: 167083 (0)	**Test Name :** SEMIVOLATILES SIM				**Matrix:** Groundwater	
HS21060908-01	MW2_061521	15 Jun 2021 07:20		21 Jun 2021 14:04	25 Jun 2021 12:23	50
HS21060908-02	18CPTMW01DW_061521	15 Jun 2021 08:05		21 Jun 2021 14:04	23 Jun 2021 14:08	1
HS21060908-03	18CPTMW01SW_061521	15 Jun 2021 08:55		21 Jun 2021 14:04	23 Jun 2021 14:44	10
HS21060908-05	109_061521	15 Jun 2021 10:40		21 Jun 2021 14:04	25 Jun 2021 15:22	5
HS21060908-06	MW21_061521	15 Jun 2021 11:30		21 Jun 2021 14:04	23 Jun 2021 15:20	10
HS21060908-08	129_061521	15 Jun 2021 13:15		21 Jun 2021 14:04	25 Jun 2021 12:59	50
Batch ID: R385924 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS21060908-09	Trip Blank	15 Jun 2021 00:00			19 Jun 2021 16:50	1
Batch ID: R385924 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS21060908-01	MW2_061521	15 Jun 2021 07:20			19 Jun 2021 21:45	100
HS21060908-02	18CPTMW01DW_061521	15 Jun 2021 08:05			19 Jun 2021 18:35	1
HS21060908-04	125_061521	15 Jun 2021 09:55			19 Jun 2021 18:56	1
HS21060908-06	MW21_061521	15 Jun 2021 11:30			19 Jun 2021 21:03	50
HS21060908-06	MW21_061521	15 Jun 2021 11:30			19 Jun 2021 20:42	5

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R386068 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS21060908-01	MW2_061521	15 Jun 2021 07:20			22 Jun 2021 14:17	250
HS21060908-03	18CPTMW01SW_061521	15 Jun 2021 08:55			22 Jun 2021 16:23	1
HS21060908-03	18CPTMW01SW_061521	15 Jun 2021 08:55			22 Jun 2021 14:38	50
HS21060908-05	109_061521	15 Jun 2021 10:40			22 Jun 2021 17:26	5
HS21060908-05	109_061521	15 Jun 2021 10:40			22 Jun 2021 13:56	1
HS21060908-07	MW23_061521	15 Jun 2021 12:25			22 Jun 2021 15:20	50
HS21060908-07	MW23_061521	15 Jun 2021 12:25			22 Jun 2021 14:59	5
HS21060908-08	129_061521	15 Jun 2021 13:15			22 Jun 2021 16:02	10
HS21060908-08	129_061521	15 Jun 2021 13:15			22 Jun 2021 15:41	1
Batch ID: R386722 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS21060908-01	MW2_061521	15 Jun 2021 07:20			30 Jun 2021 18:40	1
HS21060908-02	18CPTMW01DW_061521	15 Jun 2021 08:05			30 Jun 2021 18:40	1
HS21060908-03	18CPTMW01SW_061521	15 Jun 2021 08:55			30 Jun 2021 18:40	1
HS21060908-04	125_061521	15 Jun 2021 09:55			30 Jun 2021 18:40	1
HS21060908-05	109_061521	15 Jun 2021 10:40			30 Jun 2021 18:40	1
HS21060908-06	MW21_061521	15 Jun 2021 11:30			30 Jun 2021 18:40	1
HS21060908-07	MW23_061521	15 Jun 2021 12:25			30 Jun 2021 18:40	1
HS21060908-08	129_061521	15 Jun 2021 13:15			30 Jun 2021 18:40	1

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: 167023 (0) **Instrument: HG03** **Method: MERCURY BY SW7470A**

MBLK Sample ID: **MBLK-167023** Units: **mg/L** Analysis Date: **18-Jun-2021 15:51**
Client ID: Run ID: **HG03_385824** SeqNo: **6144197** PrepDate: **18-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.000100	0.000200								U

LCS Sample ID: **LCS-167023** Units: **mg/L** Analysis Date: **18-Jun-2021 15:53**
Client ID: Run ID: **HG03_385824** SeqNo: **6144198** PrepDate: **18-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00516	0.000200	0.005	0	103	82 - 119				

MS Sample ID: **HS21060495-07MS** Units: **mg/L** Analysis Date: **18-Jun-2021 15:56**
Client ID: Run ID: **HG03_385824** SeqNo: **6144200** PrepDate: **18-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00589	0.000200	0.005	-0.00003800	119	82 - 119				

MSD Sample ID: **HS21060495-07MSD** Units: **mg/L** Analysis Date: **18-Jun-2021 15:58**
Client ID: Run ID: **HG03_385824** SeqNo: **6144201** PrepDate: **18-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00605	0.000200	0.005	-0.00003800	122	82 - 119	0.005890	2.68	20	S

The following samples were analyzed in this batch: HS21060908-02 HS21060908-03 HS21060908-04 HS21060908-06 HS21060908-08

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: 167071 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-167071** Units: **mg/L** Analysis Date: **23-Jun-2021 11:33**
Client ID: Run ID: **ICPMS06_386127** SeqNo: **6150921** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.00500	0.0100								U
Antimony	0.00100	0.00500								U
Arsenic	0.00100	0.00500								U
Barium	0.00250	0.00500								U
Beryllium	0.000500	0.00200								U
Cadmium	0.000500	0.00200								U
Calcium	0.0500	0.500								U
Chromium	0.00100	0.00500								U
Cobalt	0.000500	0.00500								U
Copper	0.00250	0.00500								U
Iron	0.0500	0.200								U
Lead	0.00100	0.00500								U
Magnesium	0.0500	0.200								U
Manganese	0.00250	0.00500								U
Nickel	0.00100	0.00500								U
Potassium	0.0500	0.200								U
Selenium	0.00250	0.00500								U
Silver	0.000500	0.00500								U
Sodium	0.0500	0.200								U
Thallium	0.000500	0.00200								U
Vanadium	0.000875	0.00500								J
Zinc	0.00250	0.00500								U

LCS Sample ID: **LCS-167071** Units: **mg/L** Analysis Date: **23-Jun-2021 12:09**
Client ID: Run ID: **ICPMS06_386127** SeqNo: **6151409** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1074	0.0100	0.1	0	107	84 - 117				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: 167071 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

LCS Sample ID: **LCS-167071** Units: **mg/L** Analysis Date: **23-Jun-2021 11:35**
Client ID: Run ID: **ICPMS06_386127** SeqNo: **6150922** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.05169	0.00500	0.05	0	103	85 - 117				
Arsenic	0.05053	0.00500	0.05	0	101	84 - 116				
Barium	0.05242	0.00500	0.05	0	105	86 - 114				
Beryllium	0.05102	0.00200	0.05	0	102	83 - 121				
Cadmium	0.05355	0.00200	0.05	0	107	87 - 115				
Calcium	5.152	0.500	5	0	103	87 - 118				
Chromium	0.05239	0.00500	0.05	0	105	85 - 116				
Cobalt	0.05253	0.00500	0.05	0	105	86 - 115				
Copper	0.05453	0.00500	0.05	0	109	85 - 118				
Iron	5.311	0.200	5	0	106	87 - 118				
Lead	0.05139	0.00500	0.05	0	103	88 - 115				
Magnesium	5.343	0.200	5	0	107	83 - 118				
Manganese	0.05259	0.00500	0.05	0	105	87 - 115				
Nickel	0.05472	0.00500	0.05	0	109	85 - 117				
Potassium	5.425	0.200	5	0	109	87 - 115				
Selenium	0.05395	0.00500	0.05	0	108	80 - 120				
Silver	0.05278	0.00500	0.05	0	106	85 - 116				
Sodium	5.329	0.200	5	0	107	85 - 117				
Thallium	0.05273	0.00200	0.05	0	105	82 - 116				
Vanadium	0.05336	0.00500	0.05	0	107	86 - 115				
Zinc	0.05544	0.00500	0.05	0	111	83 - 119				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: 167071 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

MS Sample ID: **HS21060495-07MS** Units: **mg/L** Analysis Date: **23-Jun-2021 11:41**
Client ID: Run ID: **ICPMS06_386127** SeqNo: **6150925** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.729	0.0100	0.1	1.439	290	84 - 117				SO
Antimony	0.05044	0.00500	0.05	0.000171	101	85 - 117				
Arsenic	0.05039	0.00500	0.05	0.000463	99.8	84 - 116				
Barium	0.4844	0.00500	0.05	0.4104	148	86 - 114				SO
Beryllium	0.05057	0.00200	0.05	0.000062	101	83 - 121				
Cadmium	0.05276	0.00200	0.05	0.000271	105	87 - 115				
Calcium	50.41	0.500	5	44.52	118	87 - 118				O
Chromium	0.07558	0.00500	0.05	0.0241	103	85 - 116				
Cobalt	0.0618	0.00500	0.05	0.01108	101	86 - 115				
Copper	0.05597	0.00500	0.05	0.00431	103	85 - 118				
Iron	6.392	0.200	5	1.246	103	87 - 118				
Lead	0.05117	0.00500	0.05	0.000459	101	88 - 115				
Magnesium	16.72	0.200	5	10.93	116	83 - 118				
Manganese	0.3112	0.00500	0.05	0.2495	124	87 - 115				SO
Nickel	0.4904	0.00500	0.05	0.4336	114	85 - 117				O
Potassium	6.065	0.200	5	0.5814	110	87 - 115				
Selenium	0.05251	0.00500	0.05	0.000146	105	80 - 120				
Silver	0.0511	0.00500	0.05	-0.000003	102	85 - 116				
Sodium	48.14	0.200	5	41.43	134	85 - 117				SO
Thallium	0.05288	0.00200	0.05	0.000349	105	82 - 116				
Vanadium	0.05423	0.00500	0.05	0.00181	105	86 - 115				
Zinc	0.06262	0.00500	0.05	0.01093	103	83 - 119				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: 167071 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

MSD Sample ID: **HS21060495-07MSD** Units: **mg/L** Analysis Date: **23-Jun-2021 11:43**
Client ID: Run ID: **ICPMS06_386127** SeqNo: **6150926** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.535	0.0100	0.1	1.439	95.6	84 - 117	1.729	11.9	20	O
Antimony	0.05024	0.00500	0.05	0.000171	100	85 - 117	0.05044	0.385	20	
Arsenic	0.0509	0.00500	0.05	0.000463	101	84 - 116	0.05039	1.02	20	
Barium	0.4883	0.00500	0.05	0.4104	156	86 - 114	0.4844	0.804	20	SO
Beryllium	0.05038	0.00200	0.05	0.000062	101	83 - 121	0.05057	0.392	20	
Cadmium	0.05327	0.00200	0.05	0.000271	106	87 - 115	0.05276	0.953	20	
Calcium	50.11	0.500	5	44.52	112	87 - 118	50.41	0.597	20	O
Chromium	0.07404	0.00500	0.05	0.0241	99.9	85 - 116	0.07558	2.06	20	
Cobalt	0.06158	0.00500	0.05	0.01108	101	86 - 115	0.0618	0.349	20	
Copper	0.05566	0.00500	0.05	0.00431	103	85 - 118	0.05597	0.559	20	
Iron	6.36	0.200	5	1.246	102	87 - 118	6.392	0.503	20	
Lead	0.05135	0.00500	0.05	0.000459	102	88 - 115	0.05117	0.349	20	
Magnesium	16.48	0.200	5	10.93	111	83 - 118	16.72	1.45	20	
Manganese	0.3124	0.00500	0.05	0.2495	126	87 - 115	0.3112	0.384	20	SO
Nickel	0.4913	0.00500	0.05	0.4336	115	85 - 117	0.4904	0.168	20	O
Potassium	5.863	0.200	5	0.5814	106	87 - 115	6.065	3.38	20	
Selenium	0.05216	0.00500	0.05	0.000146	104	80 - 120	0.05251	0.661	20	
Silver	0.05145	0.00500	0.05	-0.000003	103	85 - 116	0.0511	0.677	20	
Sodium	47.52	0.200	5	41.43	122	85 - 117	48.14	1.3	20	SO
Thallium	0.0521	0.00200	0.05	0.000349	104	82 - 116	0.05288	1.48	20	
Vanadium	0.05391	0.00500	0.05	0.00181	104	86 - 115	0.05423	0.59	20	
Zinc	0.0627	0.00500	0.05	0.01093	104	83 - 119	0.06262	0.131	20	

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: 167071 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

PDS Sample ID: **HS21060495-07PDS** Units: **mg/L** Analysis Date: **23-Jun-2021 11:45**
Client ID: Run ID: **ICPMS06_386127** SeqNo: **6150927** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.521	0.0100	0.1	1.439	82.1	80 - 120				O
Antimony	0.1141	0.00500	0.1	0.000171	114	80 - 120				
Arsenic	0.1169	0.00500	0.1	0.000463	116	80 - 120				
Barium	0.5412	0.00500	0.1	0.4104	131	80 - 120				SO
Beryllium	0.1159	0.00200	0.1	0.000062	116	80 - 120				
Calcium	56.01	0.500	10	44.52	115	80 - 120				O
Chromium	0.1422	0.00500	0.1	0.0241	118	80 - 120				
Cobalt	0.1269	0.00500	0.1	0.01108	116	80 - 120				
Copper	0.1229	0.00500	0.1	0.00431	119	80 - 120				
Iron	13.04	0.200	10	1.246	118	80 - 120				
Lead	0.1178	0.00500	0.1	0.000459	117	80 - 120				
Magnesium	22.83	0.200	10	10.93	119	80 - 120				
Nickel	0.5555	0.00500	0.1	0.4336	122	80 - 120				SO
Potassium	12.53	0.200	10	0.5814	120	80 - 120				
Silver	0.1144	0.00500	0.1	-0.000003	114	80 - 120				
Sodium	54.4	0.200	10	41.43	130	80 - 120				SO
Thallium	0.1192	0.00200	0.1	0.000349	119	80 - 120				

PDS Sample ID: **HS21060495-07PDS** Units: **mg/L** Analysis Date: **23-Jun-2021 12:10**
Client ID: Run ID: **ICPMS06_386127** SeqNo: **6151410** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cadmium	0.09555	0.00200	0.1	0.000271	95.3	80 - 120				
Manganese	0.336	0.00500	0.1	0.2495	86.5	80 - 120				
Selenium	0.09581	0.00500	0.1	0	95.8	80 - 120				
Vanadium	0.09643	0.00500	0.1	0.00181	94.6	80 - 120				
Zinc	0.1055	0.00500	0.1	0.01093	94.6	80 - 120				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: 167071 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

SD Sample ID: **HS21060495-07SD** Units: **mg/L** Analysis Date: **23-Jun-2021 11:39**
Client ID: Run ID: **ICPMS06_386127** SeqNo: **6150924** PrepDate: **21-Jun-2021** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Aluminum	1.366	0.0500					1.439	5.1	10	
Antimony	0.00500	0.0250					0.000171	0	10	U
Arsenic	0.00500	0.0250					0.000463	0	10	U
Barium	0.4054	0.0250					0.4104	1.22	10	
Beryllium	0.00250	0.0100					0.000062	0	10	U
Cadmium	0.00250	0.0100					0.000271	0	10	U
Calcium	43.43	2.50					44.52	2.45	10	
Chromium	0.02416	0.0250					0.0241	0	10	J
Cobalt	0.01127	0.0250					0.01108	0	10	J
Copper	0.0125	0.0250					0.00431	0	10	U
Iron	1.332	1.00					1.246	6.95	10	
Lead	0.00500	0.0250					0.000459	0	10	U
Magnesium	11.68	1.00					10.93	6.86	10	
Manganese	0.2521	0.0250					0.2495	1.03	10	
Nickel	0.4485	0.0250					0.4336	3.43	10	
Potassium	0.5942	1.00					0.5814	0	10	J
Selenium	0.0125	0.0250					0.000146	0	10	U
Silver	0.00250	0.0250					-0.000003	0	10	U
Sodium	43.96	1.00					41.43	6.11	10	
Thallium	0.00250	0.0100					0.000349	0	10	U
Vanadium	0.009468	0.0250					0.00181	0	10	J
Zinc	0.01122	0.0250					0.01093	0	10	J

The following samples were analyzed in this batch: HS21060908-02 HS21060908-03 HS21060908-04 HS21060908-06 HS21060908-08

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: 167083 (0) **Instrument: SV-6** **Method: SEMIVOLATILES SIM**

MBLK Sample ID: **MBLK-167083** Units: **ug/L** Analysis Date: **23-Jun-2021 11:08**
Client ID: Run ID: **SV-6_386248** SeqNo: **6156654** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.010	0.010								U
Surr: 2-Fluorobiphenyl	*0.06718*	*0*	*0.08*	*0*	*84.0*	*40 - 140*				
Surr: 4-Terphenyl-d14	*0.07486*	*0*	*0.08*	*0*	*93.6*	*40 - 140*				
Surr: Nitrobenzene-d5	*0.0648*	*0*	*0.08*	*0*	*81.0*	*40 - 140*				

LCS Sample ID: **LCS-167083** Units: **ug/L** Analysis Date: **23-Jun-2021 11:26**
Client ID: Run ID: **SV-6_386248** SeqNo: **6156655** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.0963	0.010	0.08	0	120	40 - 140				
Surr: 2-Fluorobiphenyl	*0.05563*	*0*	*0.08*	*0*	*69.5*	*40 - 140*				
Surr: 4-Terphenyl-d14	*0.04645*	*0*	*0.08*	*0*	*58.1*	*40 - 140*				
Surr: Nitrobenzene-d5	*0.04265*	*0*	*0.08*	*0*	*53.3*	*40 - 140*				

LCSD Sample ID: **LCSD-167083** Units: **ug/L** Analysis Date: **23-Jun-2021 13:50**
Client ID: Run ID: **SV-6_386248** SeqNo: **6156656** PrepDate: **21-Jun-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.09641	0.010	0.08	0	121	40 - 140	0.0963	0.112	20	
Surr: 2-Fluorobiphenyl	*0.0657*	*0*	*0.08*	*0*	*82.1*	*40 - 140*	*0.05563*	*16.6*	*20*	
Surr: 4-Terphenyl-d14	*0.0968*	*0*	*0.08*	*0*	*121*	*40 - 140*	*0.04645*	*70.3*	*20*	R
Surr: Nitrobenzene-d5	*0.04919*	*0*	*0.08*	*0*	*61.5*	*40 - 140*	*0.04265*	*14.2*	*20*	

The following samples were analyzed in this batch: HS21060908-01 HS21060908-02 HS21060908-03 HS21060908-05 HS21060908-06 HS21060908-08

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-210619** Units: **ug/L** Analysis Date: **19-Jun-2021 13:41**
Client ID: Run ID: **VOA6_385924** SeqNo: **6146095** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1.0	1.0								U
1,1,1-Trichloroethane	0.50	1.0								U
1,1,2,2-Tetrachloroethane	1.0	1.0								U
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethane	0.50	1.0								U
1,1-Dichloroethene	0.50	1.0								U
1,1-Dichloropropene	1.0	1.0								U
1,2,3-Trichlorobenzene	1.0	1.0								U
1,2,3-Trichloropropane	1.0	1.0								U
1,2,4-Trichlorobenzene	1.0	1.0								U
1,2,4-Trimethylbenzene	1.0	1.0								U
1,2-Dibromo-3-chloropropane	0.50	1.0								U
1,2-Dibromoethane	0.50	1.0								U
1,2-Dichlorobenzene	1.0	1.0								U
1,2-Dichloroethane	0.50	1.0								U
1,2-Dichloropropane	1.0	1.0								U
1,3,5-Trimethylbenzene	1.0	1.0								U
1,3-Dichlorobenzene	1.0	1.0								U
1,3-Dichloropropane	1.0	1.0								U
1,4-Dichlorobenzene	1.0	1.0								U
2,2-Dichloropropane	0.50	1.0								U
2-Butanone	1.0	2.0								U
2-Chlorotoluene	1.0	1.0								U
2-Hexanone	2.0	2.0								U
4-Chlorotoluene	1.0	1.0								U
4-Isopropyltoluene	1.0	1.0								U
4-Methyl-2-pentanone	2.0	2.0								U
Acetone	2.0	2.0								U
Benzene	0.50	1.0								U
Bromobenzene	1.0	1.0								U
Bromochloromethane	0.50	1.0								U
Bromodichloromethane	0.50	1.0								U
Bromoform	1.0	1.0								U
Bromomethane	1.0	1.0								U

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-210619** Units: **ug/L** Analysis Date: **19-Jun-2021 13:41**
Client ID: Run ID: **VOA6_385924** SeqNo: **6146095** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	2.0	2.0								U
Carbon tetrachloride	1.0	1.0								U
Chlorobenzene	1.0	1.0								U
Chloroethane	1.0	1.0								U
Chloroform	0.50	1.0								U
Chloromethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
cis-1,3-Dichloropropene	0.50	1.0								U
Dibromochloromethane	1.0	1.0								U
Dibromomethane	0.50	1.0								U
Dichlorodifluoromethane	1.0	1.0								U
Ethylbenzene	1.0	1.0								U
Hexachlorobutadiene	1.0	1.0								U
Isopropylbenzene	1.0	1.0								U
m,p-Xylene	1.0	2.0								U
Methylene chloride	2.0	2.0								U
Naphthalene	1.0	1.0								U
n-Butylbenzene	1.0	1.0								U
n-Propylbenzene	1.0	1.0								U
o-Xylene	1.0	1.0								U
sec-Butylbenzene	1.0	1.0								U
Styrene	1.0	1.0								U
tert-Butylbenzene	1.0	1.0								U
Tetrachloroethene	1.0	1.0								U
Toluene	0.50	1.0								U
trans-1,2-Dichloroethene	0.50	1.0								U
trans-1,3-Dichloropropene	0.50	1.0								U
Trichloroethene	0.50	1.0								U
Trichlorofluoromethane	1.0	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*47.49*	*1.0*	*50*	*0*	*95.0*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.54*	*1.0*	*50*	*0*	*99.1*	*85 - 114*				
Surr: Dibromofluoromethane	*44.34*	*1.0*	*50*	*0*	*88.7*	*80 - 119*				
Surr: Toluene-d8	*50.99*	*1.0*	*50*	*0*	*102*	*89 - 112*				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-210619** Units: **ug/L** Analysis Date: **19-Jun-2021 12:59**
Client ID: Run ID: **VOA6_385924** SeqNo: **6146094** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	18.9	1.0	20	0	94.5	78 - 124				
1,1,1-Trichloroethane	16.89	1.0	20	0	84.5	74 - 131				
1,1,2,2-Tetrachloroethane	21.16	1.0	20	0	106	71 - 121				
1,1,2-Trichloroethane	19.13	1.0	20	0	95.7	80 - 119				
1,1-Dichloroethane	16.91	1.0	20	0	84.6	77 - 125				
1,1-Dichloroethene	16.47	1.0	20	0	82.3	71 - 131				
1,1-Dichloropropene	18.75	1.0	20	0	93.8	78 - 125				
1,2,3-Trichlorobenzene	27.26	1.0	20	0	136	69 - 129				S
1,2,3-Trichloropropane	19.31	1.0	20	0	96.6	73 - 122				
1,2,4-Trichlorobenzene	25.18	1.0	20	0	126	69 - 130				
1,2,4-Trimethylbenzene	17.46	1.0	20	0	87.3	76 - 124				
1,2-Dibromo-3-chloropropane	24.28	1.0	20	0	121	62 - 128				
1,2-Dibromoethane	19.31	1.0	20	0	96.6	77 - 121				
1,2-Dichlorobenzene	18.5	1.0	20	0	92.5	80 - 119				
1,2-Dichloroethane	20.24	1.0	20	0	101	73 - 128				
1,2-Dichloropropane	18.63	1.0	20	0	93.2	78 - 122				
1,3,5-Trimethylbenzene	17.15	1.0	20	0	85.7	75 - 124				
1,3-Dichlorobenzene	18.14	1.0	20	0	90.7	80 - 119				
1,3-Dichloropropane	19.29	1.0	20	0	96.4	80 - 119				
1,4-Dichlorobenzene	17.92	1.0	20	0	89.6	79 - 118				
2,2-Dichloropropane	17.25	1.0	20	0	86.3	60 - 139				
2-Butanone	37.08	2.0	40	0	92.7	56 - 143				
2-Chlorotoluene	17.73	1.0	20	0	88.6	79 - 122				
2-Hexanone	42.28	2.0	40	0	106	57 - 139				
4-Chlorotoluene	17.17	1.0	20	0	85.8	78 - 122				
4-Isopropyltoluene	17.49	1.0	20	0	87.4	77 - 127				
4-Methyl-2-pentanone	39.71	2.0	40	0	99.3	67 - 130				
Acetone	38.06	2.0	40	0	95.1	39 - 160				
Benzene	18.54	1.0	20	0	92.7	79 - 120				
Bromobenzene	19.05	1.0	20	0	95.3	80 - 120				
Bromochloromethane	18.08	1.0	20	0	90.4	78 - 123				
Bromodichloromethane	18.7	1.0	20	0	93.5	79 - 125				
Bromoform	20.22	1.0	20	0	101	66 - 130				
Bromomethane	19.91	1.0	20	0	99.6	53 - 141				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-210619** Units: **ug/L** Analysis Date: **19-Jun-2021 12:59**
Client ID: Run ID: **VOA6_385924** SeqNo: **6146094** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	30.36	2.0	40	0	75.9	64 - 133				
Carbon tetrachloride	18.89	1.0	20	0	94.4	72 - 136				
Chlorobenzene	17.72	1.0	20	0	88.6	82 - 118				
Chloroethane	15.71	1.0	20	0	78.5	60 - 138				
Chloroform	17.16	1.0	20	0	85.8	79 - 124				
Chloromethane	15.58	1.0	20	0	77.9	50 - 139				
cis-1,2-Dichloroethene	17.53	1.0	20	0	87.7	78 - 123				
cis-1,3-Dichloropropene	19.76	1.0	20	0	98.8	75 - 124				
Dibromochloromethane	19.75	1.0	20	0	98.8	74 - 126				
Dibromomethane	19.78	1.0	20	0	98.9	79 - 123				
Dichlorodifluoromethane	18.21	1.0	20	0	91.0	32 - 152				
Ethylbenzene	18.69	1.0	20	0	93.4	79 - 121				
Hexachlorobutadiene	23.94	1.0	20	0	120	66 - 134				
Isopropylbenzene	17.79	1.0	20	0	89.0	72 - 131				
m,p-Xylene	36.06	2.0	40	0	90.2	80 - 121				
Methylene chloride	17.5	2.0	20	0	87.5	74 - 124				
Naphthalene	25.42	1.0	20	0	127	61 - 128				
n-Butylbenzene	17.26	1.0	20	0	86.3	75 - 128				
n-Propylbenzene	16.95	1.0	20	0	84.8	76 - 126				
o-Xylene	18.21	1.0	20	0	91.1	78 - 122				
sec-Butylbenzene	17.25	1.0	20	0	86.2	77 - 126				
Styrene	18.2	1.0	20	0	91.0	78 - 123				
tert-Butylbenzene	17.01	1.0	20	0	85.0	78 - 124				
Tetrachloroethene	18.98	1.0	20	0	94.9	74 - 129				
Toluene	17.6	1.0	20	0	88.0	80 - 121				
trans-1,2-Dichloroethene	16.65	1.0	20	0	83.3	75 - 124				
trans-1,3-Dichloropropene	19.85	1.0	20	0	99.3	73 - 127				
Trichloroethene	19.95	1.0	20	0	99.7	79 - 123				
Trichlorofluoromethane	16.54	1.0	20	0	82.7	65 - 141				
Vinyl chloride	17.23	1.0	20	0	86.1	58 - 137				
Surr: 1,2-Dichloroethane-d4	*51.07*	*1.0*	*50*	*0*	*102*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.43*	*1.0*	*50*	*0*	*98.9*	*85 - 114*				
Surr: Dibromofluoromethane	*47.37*	*1.0*	*50*	*0*	*94.7*	*80 - 119*				
Surr: Toluene-d8	*47.31*	*1.0*	*50*	*0*	*94.6*	*89 - 112*				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS21060937-04MS** Units: **ug/L** Analysis Date: **19-Jun-2021 15:26**
Client ID: Run ID: **VOA6_385924** SeqNo: **6146100** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	18.65	1.0	20	0	93.2	78 - 124				
1,1,1-Trichloroethane	16.56	1.0	20	0	82.8	74 - 131				
1,1,2,2-Tetrachloroethane	20.01	1.0	20	0	100	71 - 121				
1,1,2-Trichloroethane	17.68	1.0	20	0	88.4	80 - 119				
1,1-Dichloroethane	15.63	1.0	20	0	78.2	77 - 125				
1,1-Dichloroethene	16.77	1.0	20	0	83.8	71 - 131				
1,1-Dichloropropene	20.04	1.0	20	0	100	78 - 125				
1,2,3-Trichlorobenzene	26.13	1.0	20	0	131	69 - 129				S
1,2,3-Trichloropropane	18.89	1.0	20	0	94.4	73 - 122				
1,2,4-Trichlorobenzene	24.46	1.0	20	0	122	69 - 130				
1,2,4-Trimethylbenzene	18.75	1.0	20	0	93.7	76 - 124				
1,2-Dibromo-3-chloropropane	23.27	1.0	20	0	116	62 - 128				
1,2-Dibromoethane	17.83	1.0	20	0	89.2	77 - 121				
1,2-Dichlorobenzene	18.43	1.0	20	0	92.2	80 - 119				
1,2-Dichloroethane	18.54	1.0	20	0	92.7	73 - 128				
1,2-Dichloropropane	18	1.0	20	0	90.0	78 - 122				
1,3,5-Trimethylbenzene	18.68	1.0	20	0	93.4	75 - 124				
1,3-Dichlorobenzene	18.81	1.0	20	0	94.1	80 - 119				
1,3-Dichloropropane	17.83	1.0	20	0	89.2	80 - 119				
1,4-Dichlorobenzene	18.2	1.0	20	0	91.0	79 - 118				
2,2-Dichloropropane	16.79	1.0	20	0	83.9	60 - 139				
2-Butanone	31.61	2.0	40	0	79.0	56 - 143				
2-Chlorotoluene	18.75	1.0	20	0	93.7	79 - 122				
2-Hexanone	37.67	2.0	40	0	94.2	57 - 139				
4-Chlorotoluene	17.74	1.0	20	0	88.7	78 - 122				
4-Isopropyltoluene	20.14	1.0	20	0	101	77 - 127				
4-Methyl-2-pentanone	36.12	2.0	40	0	90.3	67 - 130				
Acetone	27.72	2.0	40	0	69.3	39 - 160				
Benzene	18.15	1.0	20	0	90.8	79 - 120				
Bromobenzene	18.85	1.0	20	0	94.2	80 - 120				
Bromochloromethane	15.61	1.0	20	0	78.0	78 - 123				
Bromodichloromethane	17.29	1.0	20	0	86.4	79 - 125				
Bromoform	18.9	1.0	20	0	94.5	66 - 130				
Bromomethane	17.74	1.0	20	0	88.7	53 - 141				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS21060937-04MS** Units: **ug/L** Analysis Date: **19-Jun-2021 15:26**
Client ID: Run ID: **VOA6_385924** SeqNo: **6146100** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	30.95	2.0	40	0	77.4	64 - 133				
Carbon tetrachloride	20.26	1.0	20	0	101	72 - 136				
Chlorobenzene	17.77	1.0	20	0	88.8	82 - 118				
Chloroethane	19.11	1.0	20	0	95.6	60 - 138				
Chloroform	15.52	1.0	20	0	77.6	79 - 124				S
Chloromethane	14.55	1.0	20	0	72.8	50 - 139				
cis-1,2-Dichloroethene	15.88	1.0	20	0	79.4	78 - 123				
cis-1,3-Dichloropropene	18.15	1.0	20	0	90.8	75 - 124				
Dibromochloromethane	18.26	1.0	20	0	91.3	74 - 126				
Dibromomethane	17.72	1.0	20	0	88.6	79 - 123				
Dichlorodifluoromethane	17.41	1.0	20	0	87.1	32 - 152				
Ethylbenzene	19.79	1.0	20	0	98.9	79 - 121				
Hexachlorobutadiene	26.98	1.0	20	0	135	66 - 134				S
Isopropylbenzene	19.78	1.0	20	0	98.9	72 - 131				
m,p-Xylene	37.7	2.0	40	0	94.2	80 - 121				
Methylene chloride	15.76	2.0	20	0	78.8	74 - 124				
Naphthalene	22.88	1.0	20	0	114	61 - 128				
n-Butylbenzene	20.21	1.0	20	0	101	75 - 128				
n-Propylbenzene	19.25	1.0	20	0	96.3	76 - 126				
o-Xylene	18.2	1.0	20	0	91.0	78 - 122				
sec-Butylbenzene	20.07	1.0	20	0	100	77 - 126				
Styrene	18.07	1.0	20	0	90.4	78 - 123				
tert-Butylbenzene	19.7	1.0	20	0	98.5	78 - 124				
Tetrachloroethene	21.55	1.0	20	0	108	74 - 129				
Toluene	18.06	1.0	20	0	90.3	80 - 121				
trans-1,2-Dichloroethene	15.6	1.0	20	0	78.0	75 - 124				
trans-1,3-Dichloropropene	18.15	1.0	20	0	90.7	73 - 127				
Trichloroethene	24.54	1.0	20	1.34	116	79 - 123				
Trichlorofluoromethane	17.29	1.0	20	0	86.5	65 - 141				
Vinyl chloride	16.88	1.0	20	0	84.4	58 - 137				
Surr: 1,2-Dichloroethane-d4	*45.5*	*1.0*	*50*	*0*	*91.0*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.69*	*1.0*	*50*	*0*	*99.4*	*85 - 114*				
Surr: Dibromofluoromethane	*44.45*	*1.0*	*50*	*0*	*88.9*	*80 - 119*				
Surr: Toluene-d8	*49.84*	*1.0*	*50*	*0*	*99.7*	*89 - 112*				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS21060937-04MSD** Units: **ug/L** Analysis Date: **19-Jun-2021 15:47**
Client ID: Run ID: **VOA6_385924** SeqNo: **6146101** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	18	1.0	20	0	90.0	78 - 124	18.65	3.53	20	
1,1,1-Trichloroethane	15.97	1.0	20	0	79.9	74 - 131	16.56	3.65	20	
1,1,2,2-Tetrachloroethane	21.79	1.0	20	0	109	71 - 121	20.01	8.5	20	
1,1,2-Trichloroethane	17.83	1.0	20	0	89.2	80 - 119	17.68	0.86	20	
1,1-Dichloroethane	15.12	1.0	20	0	75.6	77 - 125	15.63	3.31	20	S
1,1-Dichloroethene	15.26	1.0	20	0	76.3	71 - 131	16.77	9.41	20	
1,1-Dichloropropene	18.59	1.0	20	0	92.9	78 - 125	20.04	7.54	20	
1,2,3-Trichlorobenzene	29.12	1.0	20	0	146	69 - 129	26.13	10.8	20	S
1,2,3-Trichloropropane	19.88	1.0	20	0	99.4	73 - 122	18.89	5.09	20	
1,2,4-Trichlorobenzene	25.97	1.0	20	0	130	69 - 130	24.46	5.97	20	
1,2,4-Trimethylbenzene	18.91	1.0	20	0	94.6	76 - 124	18.75	0.871	20	
1,2-Dibromo-3-chloropropane	25.86	1.0	20	0	129	62 - 128	23.27	10.5	20	S
1,2-Dibromoethane	17.84	1.0	20	0	89.2	77 - 121	17.83	0.0436	20	
1,2-Dichlorobenzene	19.35	1.0	20	0	96.7	80 - 119	18.43	4.84	20	
1,2-Dichloroethane	17.49	1.0	20	0	87.4	73 - 128	18.54	5.83	20	
1,2-Dichloropropane	17.48	1.0	20	0	87.4	78 - 122	18	2.93	20	
1,3,5-Trimethylbenzene	19.22	1.0	20	0	96.1	75 - 124	18.68	2.87	20	
1,3-Dichlorobenzene	19.41	1.0	20	0	97.0	80 - 119	18.81	3.1	20	
1,3-Dichloropropane	17.78	1.0	20	0	88.9	80 - 119	17.83	0.273	20	
1,4-Dichlorobenzene	18.75	1.0	20	0	93.7	79 - 118	18.2	2.97	20	
2,2-Dichloropropane	16	1.0	20	0	80.0	60 - 139	16.79	4.79	20	
2-Butanone	32.46	2.0	40	0	81.2	56 - 143	31.61	2.66	20	
2-Chlorotoluene	19.09	1.0	20	0	95.4	79 - 122	18.75	1.8	20	
2-Hexanone	39.06	2.0	40	0	97.6	57 - 139	37.67	3.62	20	
4-Chlorotoluene	18.38	1.0	20	0	91.9	78 - 122	17.74	3.55	20	
4-Isopropyltoluene	20.53	1.0	20	0	103	77 - 127	20.14	1.9	20	
4-Methyl-2-pentanone	36.7	2.0	40	0	91.7	67 - 130	36.12	1.59	20	
Acetone	29.62	2.0	40	0	74.1	39 - 160	27.72	6.63	20	
Benzene	17.19	1.0	20	0	85.9	79 - 120	18.15	5.45	20	
Bromobenzene	19.19	1.0	20	0	96.0	80 - 120	18.85	1.81	20	
Bromochloromethane	15.19	1.0	20	0	76.0	78 - 123	15.61	2.71	20	S
Bromodichloromethane	17.04	1.0	20	0	85.2	79 - 125	17.29	1.45	20	
Bromoform	18.68	1.0	20	0	93.4	66 - 130	18.9	1.17	20	
Bromomethane	16.6	1.0	20	0	83.0	53 - 141	17.74	6.66	20	

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS21060937-04MSD** Units: **ug/L** Analysis Date: **19-Jun-2021 15:47**
Client ID: Run ID: **VOA6_385924** SeqNo: **6146101** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Carbon disulfide	29.43	2.0	40	0	73.6	64 - 133	30.95	5.06	20	
Carbon tetrachloride	19.06	1.0	20	0	95.3	72 - 136	20.26	6.11	20	
Chlorobenzene	16.93	1.0	20	0	84.6	82 - 118	17.77	4.85	20	
Chloroethane	14.49	1.0	20	0	72.5	60 - 138	19.11	27.5	20	R
Chloroform	14.9	1.0	20	0	74.5	79 - 124	15.52	4.07	20	S
Chloromethane	14.3	1.0	20	0	71.5	50 - 139	14.55	1.75	20	
cis-1,2-Dichloroethene	15.38	1.0	20	0	76.9	78 - 123	15.88	3.18	20	S
cis-1,3-Dichloropropene	17.79	1.0	20	0	88.9	75 - 124	18.15	2.04	20	
Dibromochloromethane	18.23	1.0	20	0	91.1	74 - 126	18.26	0.197	20	
Dibromomethane	17.22	1.0	20	0	86.1	79 - 123	17.72	2.86	20	
Dichlorodifluoromethane	16.64	1.0	20	0	83.2	32 - 152	17.41	4.55	20	
Ethylbenzene	19.59	1.0	20	0	98.0	79 - 121	19.79	0.985	20	
Hexachlorobutadiene	27.87	1.0	20	0	139	66 - 134	26.98	3.23	20	S
Isopropylbenzene	19.22	1.0	20	0	96.1	72 - 131	19.78	2.92	20	
m,p-Xylene	36.75	2.0	40	0	91.9	80 - 121	37.7	2.53	20	
Methylene chloride	14.94	2.0	20	0	74.7	74 - 124	15.76	5.36	20	
Naphthalene	26.86	1.0	20	0	134	61 - 128	22.88	16	20	S
n-Butylbenzene	20.75	1.0	20	0	104	75 - 128	20.21	2.66	20	
n-Propylbenzene	19.79	1.0	20	0	99.0	76 - 126	19.25	2.77	20	
o-Xylene	17.88	1.0	20	0	89.4	78 - 122	18.2	1.81	20	
sec-Butylbenzene	20.54	1.0	20	0	103	77 - 126	20.07	2.35	20	
Styrene	17.79	1.0	20	0	89.0	78 - 123	18.07	1.58	20	
tert-Butylbenzene	19.64	1.0	20	0	98.2	78 - 124	19.7	0.307	20	
Tetrachloroethene	21.04	1.0	20	0	105	74 - 129	21.55	2.41	20	
Toluene	16.98	1.0	20	0	84.9	80 - 121	18.06	6.16	20	
trans-1,2-Dichloroethene	15.21	1.0	20	0	76.0	75 - 124	15.6	2.56	20	
trans-1,3-Dichloropropene	17.92	1.0	20	0	89.6	73 - 127	18.15	1.27	20	
Trichloroethene	20.47	1.0	20	1.34	95.6	79 - 123	24.54	18.1	20	
Trichlorofluoromethane	16.02	1.0	20	0	80.1	65 - 141	17.29	7.62	20	
Vinyl chloride	15.9	1.0	20	0	79.5	58 - 137	16.88	5.97	20	
Surr: 1,2-Dichloroethane-d4	*45.1*	*1.0*	*50*	*0*	*90.2*	*81 - 118*	*45.5*	*0.891*	*20*	
Surr: 4-Bromofluorobenzene	*49.68*	*1.0*	*50*	*0*	*99.4*	*85 - 114*	*49.69*	*0.0182*	*20*	
Surr: Dibromofluoromethane	*44.44*	*1.0*	*50*	*0*	*88.9*	*80 - 119*	*44.45*	*0.00536*	*20*	
Surr: Toluene-d8	*49.52*	*1.0*	*50*	*0*	*99.0*	*89 - 112*	*49.84*	*0.641*	*20*	

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R385924 (0)	Instrument: VOA6	Method: VOLATILES ORGANICS BY METHOD 8260C

The following samples were analyzed in this batch:				
HS21060908-01	HS21060908-02	HS21060908-04	HS21060908-06	
HS21060908-09				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-210622** Units: **ug/L** Analysis Date: **22-Jun-2021 13:35**
Client ID: Run ID: **VOA6_386068** SeqNo: **6149198** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1.0	1.0								U
1,1,1-Trichloroethane	0.50	1.0								U
1,1,2,2-Tetrachloroethane	1.0	1.0								U
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethane	0.50	1.0								U
1,1-Dichloroethene	0.50	1.0								U
1,1-Dichloropropene	1.0	1.0								U
1,2,3-Trichlorobenzene	1.0	1.0								U
1,2,3-Trichloropropane	1.0	1.0								U
1,2,4-Trichlorobenzene	1.0	1.0								U
1,2,4-Trimethylbenzene	1.0	1.0								U
1,2-Dibromo-3-chloropropane	0.50	1.0								U
1,2-Dibromoethane	0.50	1.0								U
1,2-Dichlorobenzene	1.0	1.0								U
1,2-Dichloroethane	0.50	1.0								U
1,2-Dichloropropane	1.0	1.0								U
1,3,5-Trimethylbenzene	1.0	1.0								U
1,3-Dichlorobenzene	1.0	1.0								U
1,3-Dichloropropane	1.0	1.0								U
1,4-Dichlorobenzene	1.0	1.0								U
2,2-Dichloropropane	0.50	1.0								U
2-Butanone	1.0	2.0								U
2-Chlorotoluene	1.0	1.0								U
2-Hexanone	2.0	2.0								U
4-Chlorotoluene	1.0	1.0								U
4-Isopropyltoluene	1.0	1.0								U
4-Methyl-2-pentanone	2.0	2.0								U
Acetone	2.0	2.0								U
Benzene	0.50	1.0								U
Bromobenzene	1.0	1.0								U
Bromochloromethane	0.50	1.0								U
Bromodichloromethane	0.50	1.0								U
Bromoform	1.0	1.0								U
Bromomethane	1.0	1.0								U

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-210622** Units: **ug/L** Analysis Date: **22-Jun-2021 13:35**
Client ID: Run ID: **VOA6_386068** SeqNo: **6149198** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	2.0	2.0								U
Carbon tetrachloride	1.0	1.0								U
Chlorobenzene	1.0	1.0								U
Chloroethane	1.0	1.0								U
Chloroform	0.50	1.0								U
Chloromethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
cis-1,3-Dichloropropene	0.50	1.0								U
Dibromochloromethane	1.0	1.0								U
Dibromomethane	0.50	1.0								U
Dichlorodifluoromethane	1.0	1.0								U
Ethylbenzene	1.0	1.0								U
Hexachlorobutadiene	1.0	1.0								U
Isopropylbenzene	1.0	1.0								U
m,p-Xylene	1.0	2.0								U
Methylene chloride	2.0	2.0								U
Naphthalene	1.0	1.0								U
n-Butylbenzene	1.0	1.0								U
n-Propylbenzene	1.0	1.0								U
o-Xylene	1.0	1.0								U
sec-Butylbenzene	1.0	1.0								U
Styrene	1.0	1.0								U
tert-Butylbenzene	1.0	1.0								U
Tetrachloroethene	1.0	1.0								U
Toluene	0.50	1.0								U
trans-1,2-Dichloroethene	0.50	1.0								U
trans-1,3-Dichloropropene	0.50	1.0								U
Trichloroethene	0.50	1.0								U
Trichlorofluoromethane	1.0	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*45.77*	*1.0*	*50*	*0*	*91.5*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.09*	*1.0*	*50*	*0*	*100*	*85 - 114*				
Surr: Dibromofluoromethane	*44.11*	*1.0*	*50*	*0*	*88.2*	*80 - 119*				
Surr: Toluene-d8	*51.2*	*1.0*	*50*	*0*	*102*	*89 - 112*				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-210622** Units: **ug/L** Analysis Date: **22-Jun-2021 11:50**
Client ID: Run ID: **VOA6_386068** SeqNo: **6149256** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	17.56	1.0	20	0	87.8	78 - 124				
1,1,1-Trichloroethane	16.21	1.0	20	0	81.0	74 - 131				
1,1,2,2-Tetrachloroethane	19.98	1.0	20	0	99.9	71 - 121				
1,1,2-Trichloroethane	17.58	1.0	20	0	87.9	80 - 119				
1,1-Dichloroethane	15.54	1.0	20	0	77.7	77 - 125				
1,1-Dichloroethene	16.12	1.0	20	0	80.6	71 - 131				
1,1-Dichloropropene	18.42	1.0	20	0	92.1	78 - 125				
1,2,3-Trichlorobenzene	25.52	1.0	20	0	128	69 - 129				
1,2,3-Trichloropropane	18.12	1.0	20	0	90.6	73 - 122				
1,2,4-Trichlorobenzene	23.3	1.0	20	0	117	69 - 130				
1,2,4-Trimethylbenzene	17.23	1.0	20	0	86.1	76 - 124				
1,2-Dibromo-3-chloropropane	22.54	1.0	20	0	113	62 - 128				
1,2-Dibromoethane	17.75	1.0	20	0	88.7	77 - 121				
1,2-Dichlorobenzene	17.9	1.0	20	0	89.5	80 - 119				
1,2-Dichloroethane	17.89	1.0	20	0	89.5	73 - 128				
1,2-Dichloropropane	18.07	1.0	20	0	90.4	78 - 122				
1,3,5-Trimethylbenzene	17.5	1.0	20	0	87.5	75 - 124				
1,3-Dichlorobenzene	17.81	1.0	20	0	89.0	80 - 119				
1,3-Dichloropropane	17.34	1.0	20	0	86.7	80 - 119				
1,4-Dichlorobenzene	17.58	1.0	20	0	87.9	79 - 118				
2,2-Dichloropropane	17.09	1.0	20	0	85.5	60 - 139				
2-Butanone	31.71	2.0	40	0	79.3	56 - 143				
2-Chlorotoluene	17.49	1.0	20	0	87.5	79 - 122				
2-Hexanone	36.69	2.0	40	0	91.7	57 - 139				
4-Chlorotoluene	16.55	1.0	20	0	82.8	78 - 122				
4-Isopropyltoluene	18.49	1.0	20	0	92.5	77 - 127				
4-Methyl-2-pentanone	35.18	2.0	40	0	87.9	67 - 130				
Acetone	30.32	2.0	40	0	75.8	39 - 160				
Benzene	19.11	1.0	20	0	95.5	79 - 120				
Bromobenzene	18.68	1.0	20	0	93.4	80 - 120				
Bromochloromethane	16.9	1.0	20	0	84.5	78 - 123				
Bromodichloromethane	17.35	1.0	20	0	86.7	79 - 125				
Bromoform	18.5	1.0	20	0	92.5	66 - 130				
Bromomethane	17.44	1.0	20	0	87.2	53 - 141				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-210622** Units: **ug/L** Analysis Date: **22-Jun-2021 11:50**
Client ID: Run ID: **VOA6_386068** SeqNo: **6149256** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	30.8	2.0	40	0	77.0	64 - 133				
Carbon tetrachloride	18.71	1.0	20	0	93.6	72 - 136				
Chlorobenzene	16.79	1.0	20	0	83.9	82 - 118				
Chloroethane	16.95	1.0	20	0	84.7	60 - 138				
Chloroform	15.85	1.0	20	0	79.2	79 - 124				
Chloromethane	15.2	1.0	20	0	76.0	50 - 139				
cis-1,2-Dichloroethene	16.08	1.0	20	0	80.4	78 - 123				
cis-1,3-Dichloropropene	18	1.0	20	0	90.0	75 - 124				
Dibromochloromethane	18.28	1.0	20	0	91.4	74 - 126				
Dibromomethane	17.99	1.0	20	0	90.0	79 - 123				
Dichlorodifluoromethane	17.04	1.0	20	0	85.2	32 - 152				
Ethylbenzene	18.08	1.0	20	0	90.4	79 - 121				
Hexachlorobutadiene	28.15	1.0	20	0	141	66 - 134				S
Isopropylbenzene	17.77	1.0	20	0	88.8	72 - 131				
m,p-Xylene	34.41	2.0	40	0	86.0	80 - 121				
Methylene chloride	15.72	2.0	20	0	78.6	74 - 124				
Naphthalene	23.5	1.0	20	0	117	61 - 128				
n-Butylbenzene	18.71	1.0	20	0	93.6	75 - 128				
n-Propylbenzene	17.72	1.0	20	0	88.6	76 - 126				
o-Xylene	17.13	1.0	20	0	85.6	78 - 122				
sec-Butylbenzene	18.23	1.0	20	0	91.1	77 - 126				
Styrene	16.94	1.0	20	0	84.7	78 - 123				
tert-Butylbenzene	17.84	1.0	20	0	89.2	78 - 124				
Tetrachloroethene	19.53	1.0	20	0	97.7	74 - 129				
Toluene	16.85	1.0	20	0	84.2	80 - 121				
trans-1,2-Dichloroethene	15.71	1.0	20	0	78.5	75 - 124				
trans-1,3-Dichloropropene	17.82	1.0	20	0	89.1	73 - 127				
Trichloroethene	18.81	1.0	20	0	94.0	79 - 123				
Trichlorofluoromethane	16.71	1.0	20	0	83.5	65 - 141				
Vinyl chloride	16.32	1.0	20	0	81.6	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.68*	*1.0*	*50*	*0*	*97.4*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.94*	*1.0*	*50*	*0*	*99.9*	*85 - 114*				
Surr: Dibromofluoromethane	*46.94*	*1.0*	*50*	*0*	*93.9*	*80 - 119*				
Surr: Toluene-d8	*47.53*	*1.0*	*50*	*0*	*95.1*	*89 - 112*				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS21060908-01MS** Units: **ug/L** Analysis Date: **22-Jun-2021 16:44**
Client ID: **MW2_061521** Run ID: **VOA6_386068** SeqNo: **6149989** PrepDate: DF: **250**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	4744	250	5000	0	94.9	78 - 124				
1,1,1-Trichloroethane	4371	250	5000	0	87.4	74 - 131				
1,1,2,2-Tetrachloroethane	5560	250	5000	0	111	71 - 121				
1,1,2-Trichloroethane	4933	250	5000	0	98.7	80 - 119				
1,1-Dichloroethane	4241	250	5000	0	84.8	77 - 125				
1,1-Dichloroethene	4614	250	5000	207	88.1	71 - 131				
1,1-Dichloropropene	4792	250	5000	0	95.8	78 - 125				
1,2,3-Trichlorobenzene	6338	250	5000	0	127	69 - 129				
1,2,3-Trichloropropane	4951	250	5000	0	99.0	73 - 122				
1,2,4-Trichlorobenzene	5803	250	5000	0	116	69 - 130				
1,2,4-Trimethylbenzene	4387	250	5000	0	87.7	76 - 124				
1,2-Dibromo-3-chloropropane	6350	250	5000	0	127	62 - 128				
1,2-Dibromoethane	4730	250	5000	0	94.6	77 - 121				
1,2-Dichlorobenzene	4698	250	5000	0	94.0	80 - 119				
1,2-Dichloroethane	4961	250	5000	0	99.2	73 - 128				
1,2-Dichloropropane	4654	250	5000	0	93.1	78 - 122				
1,3,5-Trimethylbenzene	4401	250	5000	0	88.0	75 - 124				
1,3-Dichlorobenzene	4697	250	5000	0	93.9	80 - 119				
1,3-Dichloropropane	4745	250	5000	0	94.9	80 - 119				
1,4-Dichlorobenzene	4599	250	5000	0	92.0	79 - 118				
2,2-Dichloropropane	4486	250	5000	0	89.7	60 - 139				
2-Butanone	9133	500	10000	0	91.3	56 - 143				
2-Chlorotoluene	4549	250	5000	0	91.0	79 - 122				
2-Hexanone	10450	500	10000	0	105	57 - 139				
4-Chlorotoluene	4331	250	5000	0	86.6	78 - 122				
4-Isopropyltoluene	4309	250	5000	0	86.2	77 - 127				
4-Methyl-2-pentanone	9637	500	10000	0	96.4	67 - 130				
Acetone	8646	500	10000	0	86.5	39 - 160				
Benzene	4793	250	5000	0	95.9	79 - 120				
Bromobenzene	4797	250	5000	0	95.9	80 - 120				
Bromochloromethane	4387	250	5000	0	87.7	78 - 123				
Bromodichloromethane	4822	250	5000	0	96.4	79 - 125				
Bromoform	5075	250	5000	0	102	66 - 130				
Bromomethane	4136	250	5000	0	82.7	53 - 141				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS21060908-01MS** Units: **ug/L** Analysis Date: **22-Jun-2021 16:44**
Client ID: **MW2_061521** Run ID: **VOA6_386068** SeqNo: **6149989** PrepDate: DF: **250**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	7927	500	10000	0	79.3	64 - 133				
Carbon tetrachloride	4882	250	5000	0	97.6	72 - 136				
Chlorobenzene	4414	250	5000	0	88.3	82 - 118				
Chloroethane	4702	250	5000	0	94.0	60 - 138				
Chloroform	4254	250	5000	0	85.1	79 - 124				
Chloromethane	4930	250	5000	0	98.6	50 - 139				
cis-1,2-Dichloroethene	31340	250	5000	19870	229	78 - 123				S
cis-1,3-Dichloropropene	4896	250	5000	0	97.9	75 - 124				
Dibromochloromethane	4883	250	5000	0	97.7	74 - 126				
Dibromomethane	4868	250	5000	0	97.4	79 - 123				
Dichlorodifluoromethane	4789	250	5000	0	95.8	32 - 152				
Ethylbenzene	4678	250	5000	0	93.6	79 - 121				
Hexachlorobutadiene	6202	250	5000	0	124	66 - 134				
Isopropylbenzene	4373	250	5000	0	87.5	72 - 131				
m,p-Xylene	9009	500	10000	0	90.1	80 - 121				
Methylene chloride	13520	500	5000	5850	153	74 - 124				S
Naphthalene	6187	250	5000	0	124	61 - 128				
n-Butylbenzene	4208	250	5000	0	84.2	75 - 128				
n-Propylbenzene	4282	250	5000	0	85.6	76 - 126				
o-Xylene	4482	250	5000	0	89.6	78 - 122				
sec-Butylbenzene	4282	250	5000	0	85.6	77 - 126				
Styrene	4428	250	5000	0	88.6	78 - 123				
tert-Butylbenzene	4266	250	5000	0	85.3	78 - 124				
Tetrachloroethene	4908	250	5000	0	98.2	74 - 129				
Toluene	4448	250	5000	0	89.0	80 - 121				
trans-1,2-Dichloroethene	4291	250	5000	0	85.8	75 - 124				
trans-1,3-Dichloropropene	4937	250	5000	0	98.7	73 - 127				
Trichloroethene	12790	250	5000	6020	135	79 - 123				S
Trichlorofluoromethane	4519	250	5000	0	90.4	65 - 141				
Vinyl chloride	4421	250	5000	0	88.4	58 - 137				
Surr: 1,2-Dichloroethane-d4	*12620*	*250*	*12500*	*0*	*101*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*12410*	*250*	*12500*	*0*	*99.3*	*85 - 114*				
Surr: Dibromofluoromethane	*11820*	*250*	*12500*	*0*	*94.6*	*80 - 119*				
Surr: Toluene-d8	*11700*	*250*	*12500*	*0*	*93.6*	*89 - 112*				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS21060908-01MSD** Units: **ug/L** Analysis Date: **22-Jun-2021 17:05**
Client ID: **MW2_061521** Run ID: **VOA6_386068** SeqNo: **6149990** PrepDate: DF: **250**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	4856	250	5000	0	97.1	78 - 124	4744	2.34	20	
1,1,1-Trichloroethane	4346	250	5000	0	86.9	74 - 131	4371	0.571	20	
1,1,2,2-Tetrachloroethane	5855	250	5000	0	117	71 - 121	5560	5.18	20	
1,1,2-Trichloroethane	5031	250	5000	0	101	80 - 119	4933	1.97	20	
1,1-Dichloroethane	4283	250	5000	0	85.7	77 - 125	4241	0.98	20	
1,1-Dichloroethene	4430	250	5000	207	84.5	71 - 131	4614	4.06	20	
1,1-Dichloropropene	4786	250	5000	0	95.7	78 - 125	4792	0.14	20	
1,2,3-Trichlorobenzene	7292	250	5000	0	146	69 - 129	6338	14	20	S
1,2,3-Trichloropropane	5209	250	5000	0	104	73 - 122	4951	5.08	20	
1,2,4-Trichlorobenzene	6325	250	5000	0	127	69 - 130	5803	8.61	20	
1,2,4-Trimethylbenzene	4328	250	5000	0	86.6	76 - 124	4387	1.36	20	
1,2-Dibromo-3-chloropropane	7154	250	5000	0	143	62 - 128	6350	11.9	20	S
1,2-Dibromoethane	5053	250	5000	0	101	77 - 121	4730	6.59	20	
1,2-Dichlorobenzene	4778	250	5000	0	95.6	80 - 119	4698	1.68	20	
1,2-Dichloroethane	5034	250	5000	0	101	73 - 128	4961	1.46	20	
1,2-Dichloropropane	4839	250	5000	0	96.8	78 - 122	4654	3.88	20	
1,3,5-Trimethylbenzene	4229	250	5000	0	84.6	75 - 124	4401	4.01	20	
1,3-Dichlorobenzene	4695	250	5000	0	93.9	80 - 119	4697	0.0502	20	
1,3-Dichloropropane	4800	250	5000	0	96.0	80 - 119	4745	1.15	20	
1,4-Dichlorobenzene	4560	250	5000	0	91.2	79 - 118	4599	0.848	20	
2,2-Dichloropropane	4367	250	5000	0	87.3	60 - 139	4486	2.7	20	
2-Butanone	10130	500	10000	0	101	56 - 143	9133	10.3	20	
2-Chlorotoluene	4447	250	5000	0	88.9	79 - 122	4549	2.28	20	
2-Hexanone	11140	500	10000	0	111	57 - 139	10450	6.34	20	
4-Chlorotoluene	4279	250	5000	0	85.6	78 - 122	4331	1.21	20	
4-Isopropyltoluene	4133	250	5000	0	82.7	77 - 127	4309	4.17	20	
4-Methyl-2-pentanone	10290	500	10000	0	103	67 - 130	9637	6.59	20	
Acetone	9189	500	10000	0	91.9	39 - 160	8646	6.09	20	
Benzene	4734	250	5000	0	94.7	79 - 120	4793	1.25	20	
Bromobenzene	4788	250	5000	0	95.8	80 - 120	4797	0.199	20	
Bromochloromethane	4680	250	5000	0	93.6	78 - 123	4387	6.47	20	
Bromodichloromethane	4792	250	5000	0	95.8	79 - 125	4822	0.617	20	
Bromoform	5323	250	5000	0	106	66 - 130	5075	4.77	20	
Bromomethane	4323	250	5000	0	86.5	53 - 141	4136	4.42	20	

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS21060908-01MSD** Units: **ug/L** Analysis Date: **22-Jun-2021 17:05**
Client ID: **MW2_061521** Run ID: **VOA6_386068** SeqNo: **6149990** PrepDate: DF: **250**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Carbon disulfide	7935	500	10000	0	79.4	64 - 133	7927	0.104	20	
Carbon tetrachloride	4749	250	5000	0	95.0	72 - 136	4882	2.76	20	
Chlorobenzene	4477	250	5000	0	89.5	82 - 118	4414	1.42	20	
Chloroethane	4442	250	5000	0	88.8	60 - 138	4702	5.69	20	
Chloroform	4298	250	5000	0	86.0	79 - 124	4254	1.02	20	
Chloromethane	4780	250	5000	0	95.6	50 - 139	4930	3.09	20	
cis-1,2-Dichloroethene	31490	250	5000	19870	232	78 - 123	31340	0.488	20	S
cis-1,3-Dichloropropene	4943	250	5000	0	98.9	75 - 124	4896	0.954	20	
Dibromochloromethane	5026	250	5000	0	101	74 - 126	4883	2.9	20	
Dibromomethane	5112	250	5000	0	102	79 - 123	4868	4.89	20	
Dichlorodifluoromethane	4551	250	5000	0	91.0	32 - 152	4789	5.1	20	
Ethylbenzene	4783	250	5000	0	95.7	79 - 121	4678	2.22	20	
Hexachlorobutadiene	5495	250	5000	0	110	66 - 134	6202	12.1	20	
Isopropylbenzene	4427	250	5000	0	88.5	72 - 131	4373	1.23	20	
m,p-Xylene	8977	500	10000	0	89.8	80 - 121	9009	0.354	20	
Methylene chloride	13010	500	5000	5850	143	74 - 124	13520	3.82	20	S
Naphthalene	7223	250	5000	0	144	61 - 128	6187	15.5	20	S
n-Butylbenzene	4082	250	5000	0	81.6	75 - 128	4208	3.04	20	
n-Propylbenzene	4220	250	5000	0	84.4	76 - 126	4282	1.46	20	
o-Xylene	4512	250	5000	0	90.2	78 - 122	4482	0.662	20	
sec-Butylbenzene	4073	250	5000	0	81.5	77 - 126	4282	5.01	20	
Styrene	4525	250	5000	0	90.5	78 - 123	4428	2.16	20	
tert-Butylbenzene	4218	250	5000	0	84.4	78 - 124	4266	1.13	20	
Tetrachloroethene	4979	250	5000	0	99.6	74 - 129	4908	1.45	20	
Toluene	4511	250	5000	0	90.2	80 - 121	4448	1.42	20	
trans-1,2-Dichloroethene	4330	250	5000	0	86.6	75 - 124	4291	0.894	20	
trans-1,3-Dichloropropene	4956	250	5000	0	99.1	73 - 127	4937	0.369	20	
Trichloroethene	12620	250	5000	6020	132	79 - 123	12790	1.34	20	S
Trichlorofluoromethane	4355	250	5000	0	87.1	65 - 141	4519	3.71	20	
Vinyl chloride	4391	250	5000	0	87.8	58 - 137	4421	0.686	20	
Surr: 1,2-Dichloroethane-d4	*13020*	*250*	*12500*	*0*	*104*	*81 - 118*	*12620*	*3.07*	*20*	
Surr: 4-Bromofluorobenzene	*12530*	*250*	*12500*	*0*	*100*	*85 - 114*	*12410*	*0.962*	*20*	
Surr: Dibromofluoromethane	*11920*	*250*	*12500*	*0*	*95.3*	*80 - 119*	*11820*	*0.828*	*20*	
Surr: Toluene-d8	*11840*	*250*	*12500*	*0*	*94.7*	*89 - 112*	*11700*	*1.2*	*20*	

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

QC BATCH REPORT

Batch ID: R386068 (0)	Instrument: VOA6	Method: VOLATILES ORGANICS BY METHOD 8260C

The following samples were analyzed in this batch:				
HS21060908-01	HS21060908-03	HS21060908-05	HS21060908-07	
HS21060908-08				

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: **HS21060908**

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	21-022-0	26-Mar-2022
Dept of Defense	PJLA L20-507-R2	22-Dec-2021
Illinois	2000322021-7	09-May-2022
Kansas	E-10352 2020-2021	31-Jul-2021
Kentucky	123043, 2021-2022	30-Apr-2022
Louisiana	03087, 2021-2022	30-Jun-2022
North Carolina	624-2021	31-Dec-2021
Oklahoma	2020-165	31-Aug-2021
Texas	T104704231-21-27	30-Apr-2022
Utah	TX026932021-10	31-Jul-2021

ALS Houston, US Date: 30-Jun-21

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
Work Order: HS21060908

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS21060908-01	MW2_061521	Login	6/16/2021 9:20:21 PM	JML	Sub
HS21060908-01	MW2_061521	Login	6/16/2021 9:20:21 PM	JML	EXT085
HS21060908-01	MW2_061521	Login	6/16/2021 9:20:21 PM	JML	VOA043
HS21060908-02	18CPTMW01DW_061521	Login	6/16/2021 9:22:12 PM	JML	MET096
HS21060908-02	18CPTMW01DW_061521	Login	6/16/2021 9:22:12 PM	JML	Sub
HS21060908-02	18CPTMW01DW_061521	Login	6/16/2021 9:22:12 PM	JML	EXT085
HS21060908-02	18CPTMW01DW_061521	Login	6/16/2021 9:22:12 PM	JML	VOA043
HS21060908-03	18CPTMW01SW_061521	Login	6/16/2021 9:23:25 PM	JML	MET096
HS21060908-03	18CPTMW01SW_061521	Login	6/16/2021 9:23:25 PM	JML	Sub
HS21060908-03	18CPTMW01SW_061521	Login	6/16/2021 9:23:25 PM	JML	EXT085
HS21060908-03	18CPTMW01SW_061521	Login	6/16/2021 9:23:25 PM	JML	VOA043
HS21060908-04	125_061521	Login	6/16/2021 9:23:47 PM	JML	MET096
HS21060908-04	125_061521	Login	6/16/2021 9:23:47 PM	JML	Sub
HS21060908-04	125_061521	Login	6/16/2021 9:23:47 PM	JML	VOA043
HS21060908-05	109_061521	Login	6/16/2021 9:25:34 PM	JML	Sub
HS21060908-05	109_061521	Login	6/16/2021 9:25:34 PM	JML	EXT085
HS21060908-05	109_061521	Login	6/16/2021 9:25:34 PM	JML	VOA043
HS21060908-06	MW21_061521	Login	6/16/2021 9:26:42 PM	JML	MET096
HS21060908-06	MW21_061521	Login	6/16/2021 9:26:42 PM	JML	Sub
HS21060908-06	MW21_061521	Login	6/16/2021 9:26:42 PM	JML	EXT085
HS21060908-06	MW21_061521	Login	6/16/2021 9:26:42 PM	JML	VOA043
HS21060908-07	MW23_061521	Login	6/16/2021 9:27:15 PM	JML	Sub
HS21060908-07	MW23_061521	Login	6/16/2021 9:27:15 PM	JML	VOA043
HS21060908-08	129_061521	Login	6/16/2021 9:27:55 PM	JML	MET096
HS21060908-08	129_061521	Login	6/16/2021 9:27:55 PM	JML	Sub
HS21060908-08	129_061521	Login	6/16/2021 9:27:55 PM	JML	EXT085
HS21060908-08	129_061521	Login	6/16/2021 9:27:55 PM	JML	VOA043
HS21060908-09	Trip Blank	Login	6/16/2021 9:28:25 PM	JML	VOA043

ALS Houston, US Date: 30-Jun-21

Sample Receipt Checklist

Work Order ID: HS21060908 **Date/Time Received:** 16-Jun-2021 10:00

Client Name: Bhate Environmental **Received by:** Jared R. Makan

Completed By:	/S/ Paresh M. Giga	16-Jun-2021 21:29	**Reviewed by:**	/S/ Ragen Giga	20-Jun-2021 13:19
	eSignature	Date/Time		eSignature	Date/Time

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

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

Temperature(s)/Thermometer(s):	1.9C U/C	IR31
Cooler(s)/Kit(s):	46489	
Date/Time sample(s) sent to storage:	6/16/2021 21:45	

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

bhate

Page: ____ of ____

Project/Phase No: NWO1312.0150

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

HS21060908

Bhate Environmental Associates, Inc.
LHAAP 18 24

Facility/Base I.D.: LHAAP

Project/Site Name: LHAAP / Site 18/24

Client Name:

Collected by: Scott Beesinger

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Sample Analysis Requested [5]: Number of containers	VOC	PERCHLORATE	TOTAL METALS	1, 4 - DIOXANE					Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
MW2_061521	15 JUN 2021	0720	-	N		WG	5	X	X		X								
18CptMW01DW_061521	15 JUN 2021	0805	-	N		WG	6	X	X	X	X								
18cptmw01SW_061521	15 JUN 2021	0855	-	N		WG	6	X	X	X	X								
125_061521	15 JUN 2021	0955		N		WG	5	X	X	X									
109_061521	15 JUN 2021	1040		N		WG	5	X	X		X								
MW21_061521	15 JUN 2021	1130	-	N		WG	6	X	X	X	X								
MW23_061521	15 JUN 2021	1225	-	N		WG	4	X	X										
129_061521	15 JUN 2021	1315	-	N		WG	6	X	X	X	X								
TRIP BLANK	15 JUN 2021		-	TB		W	2	X											
			-																
			-																

COMMENTS: STANDARD TAT

Cooler 46489 11231
Temp 1.9°C CFO

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	6/16/21	1430	1. J. Nimmo	6/16/21	10:00
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped ____ No.:
____ Method of Shipment: ____
____ Fed Ex ____ Airbill Number:
____ Analytical Lab: ALS 10450 Stanciff Rd. Suite 210 Houston, TX 77099 (281) 530-5656
ATTN: SONJA WEST 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

46489

CUSTODY SEAL

Date: 6/15/21 Time: 1430
Name: [illegible]
Company: [illegible]

Seal Broken By:
Date: 06/16/21

46489 JUN 16 2021

46489

ORIGIN ID:SGRA (903) 930-6193
SCOTT BEESINER
BHATE ENVIRONMENTAL ASSOCIATES
1203-B EAST GRAND AVE. PMB202

MARSHALL, TX 75670
UNITED STATES US

SHIP DATE: 14MAY21
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3409
DIMS: 26x14x14 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
(281) 530-5656
REF: LHAAP - 10/24 - BO 78339 - RG

AMA:

FedEx Express

FedEx
TRK# 0221 9473 0843 5843

WED - 16 JUN AA
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
IAH

June 30, 2021 Service Request No:E2100652

Ragen Giga
ALS Environmental - US
10450 Stancliff Rd Suite 210
Houston, TX 77099

Laboratory Results for: HS21060908

Dear Ragen,

Enclosed are the results of the sample(s) submitted to our laboratory June 17, 2021
For your reference, these analyses have been assigned our service request number **E2100652.**

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.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

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

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS Houston	**Service Request No.:**	E2100652
Project:	HS21060908	**Date Received:**	06/17/21
Sample Matrix:	W		

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

Eight samples were received for analysis at ALS Environmental in Houston on 06/17/21.

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

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2100367: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS and DLCS recoveries are within QC limits. MS/MSD was performed on an unrelated sample.

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:**E2100652
Project: HS21060908

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2100652-001	MW2_061521	6/15/2021	0720
E2100652-002	18CPTMW01DW_061521	6/15/2021	0805
E2100652-003	18CPTMW01SW_061521	6/15/2021	0855
E2100652-004	125_061521	6/15/2021	0955
E2100652-005	109_061521	6/15/2021	1040
E2100652-006	MW21_061521	6/15/2021	1130
E2100652-007	MW23_061521	6/15/2021	1225
E2100652-008	129_061521	6/15/2021	1315

Service Request Summary

Folder #: **E2100652**
Client Name: ALS Environmental - US
Project Name: HS21060908
Project Number:

Report To: Ragen Giga
ALS Environmental - US
10450 Stancliff Rd Suite 210
Houston, TX 77099
USA
Phone Number:
Cell Number:
Fax Number:
E-mail: ragenp.giga@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/17/21
Internal Due Date: 6/30/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS21060908
EDD: No EDD Specified

8 125 mL-Plastic Bottle Plastic
Location: EHRMS-WIC 8C
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2100652-001	MW2_061521	Ground Water	06/15/21 0720	**IV**
E2100652-002	18CPTMW01DW_061521	Ground Water	06/15/21 0805	**IV**
E2100652-003	18CPTMW01SW_061521	Ground Water	06/15/21 0855	**IV**
E2100652-004	125_061521	Ground Water	06/15/21 0955	**IV**
E2100652-005	109_061521	Ground Water	06/15/21 1040	**IV**
E2100652-006	MW21_061521	Ground Water	06/15/21 1130	**IV**
E2100652-007	MW23_061521	Ground Water	06/15/21 1225	**IV**
E2100652-008	129_061521	Ground Water	06/15/21 1315	**IV**

Service Request Summary

Folder #: **E2100652**
Client Name: ALS Environmental - US
Project Name: HS21060908
Project Number:

Report To: Ragen Giga
ALS Environmental - US
10450 Stancliff Rd Suite 210
Houston, TX 77099
USA
Phone Number:
Cell Number:
Fax Number:
E-mail: ragenp.giga@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 06/17/21
Internal Due Date: 6/30/2021
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS21060908
EDD: No EDD Specified

8 125 mL-Plastic Bottle Plastic
Location: EHRMS-WIC 8C
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	8	Level II due 6/30,IV due 7/8

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	Internal standard not within the specified limits. See case narrative.
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.
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.

Data Qualifiers

Lab Standard

O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
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
American Association for Laboratory Accreditation	2897.01 2020	11/30/2021
Arkansas Department of Environmental Quality	21-022-0	3/26/2022
Department of Defense	A2LA 2897.01	11/30/2021
Hawaii Department of Health	2021-2022	4/30/2022
Kansas Department of Health and Environment	E-10352-2020	7/31/2021
Louisiana Department of Environmental Quality	03087-2021	6/30/2022
Louisiana Department of Health and Hospitals	LA028-2021	12/31/2021
Maine Department of Health and Human Services	2020016	6/5/2022
Minnesota Department of Health	2021671	12/31/2021
Nevada Department of Concervation and Natural Resources	TX026932021-4	7/31/2021
New Hampshire Environmental Laboratory Accreditation Program	209421	4/24/2022
Oklahoma Department of Environmental Quality	2020-123	8/31/2021
Tennessee Department of Environment and Concervation	04016-2021	4/30/2022
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-10	7/31/2021

ALS

Chain of Custody

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Subcontract Chain of Custody

SAMPLING STATE: **Texas** **COC ID:** **16320**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Ragen Giga
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	RagenP.Giga@ALSGlobal.com
Alternate Contact:	
Email:	

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS21060908
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS21060908-01**	**MW2_061521**	**Groundwater**	**15 Jun 2021 07:20**
	Provide Level II and Level IV reports in separate pdf			30 Jun 2021
2.	**HS21060908-02**	**18CPTMW01DW_061521**	**Groundwater**	**15 Jun 2021 08:05**
	Provide Level II and Level IV reports in separate pdf			30 Jun 2021
3.	**HS21060908-03**	**18CPTMW01SW_061521**	**Groundwater**	**15 Jun 2021 08:55**
	Provide Level II and Level IV reports in separate pdf			30 Jun 2021
4.	**HS21060908-04**	**125_061521**	**Groundwater**	**15 Jun 2021 09:55**
	Provide Level II and Level IV reports in separate pdf			30 Jun 2021
5.	**HS21060908-05**	**109_061521**	**Groundwater**	**15 Jun 2021 10:40**
	Provide Level II and Level IV reports in separate pdf			30 Jun 2021
6.	**HS21060908-06**	**MW21_061521**	**Groundwater**	**15 Jun 2021 11:30**
	Provide Level II and Level IV reports in separate pdf			30 Jun 2021
7.	**HS21060908-07**	**MW23_061521**	**Groundwater**	**15 Jun 2021 12:25**
	Provide Level II and Level IV reports in separate pdf			30 Jun 2021
8.	**HS21060908-08**	**129_061521**	**Groundwater**	**15 Jun 2021 13:15**
	Provide Level II and Level IV reports in separate pdf			30 Jun 2021

Subcontract Chain of Custody

SAMPLING STATE: **Texas** **COC ID:** **16320**

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: 6/17/21 0932

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

ALS Environmental

Cooler Receipt Form

Project Chemist CH

Client/Project ALS-H

Thermometer ID IR#1

Date/Time Received: 6/17/21 Initials: CH Date/Time Logged in: 6/17/21 Initials CH

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

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

3. Were custody seals on coolers? ○ Yes ✓ No
   Were they intact? ○ Yes ○ No ✓ N/A
   Were they signed and dated? ○ Yes ○ No ✓ N/A
   If yes, how many and where?

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

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

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		6/17/21	0952	CH	2.8	✓
						☐
						☐
						☐

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

Notes, Discrepancies, & Resolutions:

Service request Label:

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www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 381671 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 6/21/21 10:30

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2100651-001	LH18/24-SP650_061521_BIX	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2100652-001	MW2_061521	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2100652-002	18CPTMW01DW_061521	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2100652-003	18CPTMW01SW_061521	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2100652-004	125_061521	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2100652-005	109_061521	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2100652-006	MW21_061521	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2100652-007	MW23_061521	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2100652-008	129_061521	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2100654-001	18CPTMW12SW_061421	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2100654-002	18CPTMW12DW_061421	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2100654-003	MW7_061421	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2100654-004	18CPTMW10DW_061421	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2100654-005	18CPTMW10SW_061421	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2100654-006	MW9_061421	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2100654-007	AWD3_061421	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2100654-008	AWD3_061421_a	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2100654-009	18WW17_061421	.01	6850/ClO4 DOD			Ground Water	10mL	
19	EQ2100367-01	MB		6850/ClO4 DOD			Liquid	10mL	
20	EQ2100367-02	LCS		6850/ClO4 DOD			Liquid	10mL	
21	EQ2100367-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
22	EQ2100367-04	18CPTMW10DW_061421 MS	.01	6850/ClO4 DOD			Liquid	10mL	
23	EQ2100367-05	18CPTMW10DW_061421 DMS	.01	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Sodium Perchlorate 1 ug/mL (IS) (18-O) as CLO4 Inventory ID 214765 Logbook Ref: Sodium Perchlorate Expires On: 12/11/2022

E2100651-001	100.00µL	E2100652-001	100.00µL	E2100652-003	100.00µL	EQ2100367-01	100.00µL	EQ2100367-02	100.00µL	EQ2100367-03	100.00µL
EQ2100367-04	100.00µL	EQ2100367-05	100.00µL								

Name: Perchlorate Intermediate Stock1 Inventory ID 217422 Logbook Ref: Perchlorate Expires On: 11/26/2021

EQ2100367-01	1.00µL	EQ2100367-02	1.00µL	EQ2100367-03	1.00µL	EQ2100367-04	1.00µL	EQ2100367-05	1.00µL

Preparation Information Benchsheet

Prep Run#: 381671 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 6/21/21 10:30

Preparation Steps

Step: Preparation
Started: 6/21/21 10:30
Finished: 6/21/21 11:30
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 6/21/21

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	6/15/21 0720
Sample Matrix:	Ground Water	**Date Received:**	6/17/21
Sample Name:	MW2_061521	**Units:**	µg/L
Lab Code:	E2100652-001	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.124**		0.100	0.0500	0.0250	1	6/21/21	6/23/21 13:00	381671	728540	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	6/15/21 0805
Sample Matrix:	Ground Water	**Date Received:**	6/17/21
Sample Name:	18CPTMW01DW_061521	**Units:**	µg/L
Lab Code:	E2100652-002	**Basis:**	As Received

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

Analytical 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	2.00	1.00	0.500	20	6/21/21	6/30/21 15:02	381671	729447	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	6/15/21 0855
Sample Matrix:	Ground Water	**Date Received:**	6/17/21
Sample Name:	18CPTMW01SW_061521	**Units:**	µg/L
Lab Code:	E2100652-003	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0286**	J	0.100	0.0500	0.0250	1	6/21/21	6/23/21 13:17	381671	728540	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	6/15/21 0955
Sample Matrix:	Ground Water	**Date Received:**	6/17/21
Sample Name:	125_061521	**Units:**	µg/L
Lab Code:	E2100652-004	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**140**		1.00	0.500	0.250	10	6/21/21	6/29/21 18:09	381671	729362	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	6/15/21 1040
Sample Matrix:	Ground Water	**Date Received:**	6/17/21
Sample Name:	109_061521	**Units:**	µg/L
Lab Code:	E2100652-005	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**20400**		100	50.0	25.0	1000	6/21/21	6/25/21 17:51	381671	729005	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	6/15/21 1130
Sample Matrix:	Ground Water	**Date Received:**	6/17/21
Sample Name:	MW21_061521	**Units:**	µg/L
Lab Code:	E2100652-006	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**10600**		100	50.0	25.0	1000	6/21/21	6/25/21 18:00	381671	729005	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	6/15/21 1225
Sample Matrix:	Ground Water	**Date Received:**	6/17/21
Sample Name:	MW23_061521	**Units:**	µg/L
Lab Code:	E2100652-007	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**76800**		200	100	50.0	2000	6/21/21	6/29/21 18:27	381671	729362	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	6/15/21 1315
Sample Matrix:	Ground Water	**Date Received:**	6/17/21
Sample Name:	129_061521	**Units:**	µg/L
Lab Code:	E2100652-008	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**7780**		20.0	10.0	5.00	200	6/21/21	6/25/21 18:17	381671	729005	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2100367-01	**Basis:**	As Received

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

Analytical 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	6/21/21	6/22/21 21:17	381671	728385	

Accuracy & Precision

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10450 Stancliff Rd., Suite 210, Houston TX 77099
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www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Analyzed:**	6/22/21
Sample Matrix:	Ground Water		

Lab Control Sample Summary

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

Analytical Method:	6850	**Units:**	µg/L
Prep Method:	Method	**Basis:**	As Received
		Extraction Lot:	381671

	Lab Control Sample EQ2100367-02			Duplicate Lab Control Sample EQ2100367-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.103	0.100	103	0.115	0.100	115	84 - 119	11	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:**	E2100652
Project:	HS21060908	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2100367-02	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.103**		0.100	0.0500	0.0250	1	6/21/21	6/22/21 21:26	381671	728385	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2100652
Project:	HS21060908	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2100367-03	**Basis:**	As Received

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.115**		0.100	0.0500	0.0250	1	6/21/21	6/22/21 21:34	381671	728385	

HS21060908 8260 Raw Data

ALS WO# HS21060908

FORM 3
WATER VOLATILE METHOD SPIKE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Matrix Spike - Sample No.: ICV

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE AMOUNT ()	% REC #	QC. LIMITS REC.
cis-1,3-Dichloropropene	50.00	49.32	99	80-120
trans-1,3-Dichloroprope	50.00	49.93	100	80-120
1,3-Dichlorobenzene	50.00	48.33	97	80-120
2,2-Dichloropropane	50.00	46.54	93	80-120
1,1-Dichloropropene	50.00	47.74	95	80-120
Dibromomethane	50.00	47.09	94	80-120
1,2-Dibromoethane	50.00	46.02	92	80-120
trans-1,2-Dichloroethen	50.00	45.39	91	80-120
1,1,1,2-Tetrachloroetha	50.00	49.25	98	80-120
1,1,1-Trichloroethane	50.00	45.35	91	80-120
1,1,2,2-Tetrachloroetha	50.00	48.29	96	80-120
1,1,2-Trichloroethane	50.00	46.80	94	80-120
1,1-Dichloroethane	50.00	43.31	87	80-120
1,1-Dichloroethene	50.00	47.05	94	80-120
Trichloroethene	50.00	49.64	99	80-120
1,2,3-Trichlorobenzene	50.00	54.27	108	80-120
Trichlorofluoromethane	50.00	49.37	99	80-120
1,2,4-Trichlorobenzene	50.00	54.38	109	80-120
1,2,4-Trimethylbenzene	50.00	47.26	94	80-120
Tetrachloroethene	50.00	51.72	103	80-120
1,2-Dichlorobenzene	50.00	48.14	96	80-120
1,2-Dichloroethane	50.00	48.52	97	80-120
1,2-Dichloropropane	50.00	47.14	94	80-120
1,3,5-Trimethylbenzene	50.00	48.76	98	80-120
1,3-Dichloropropane	50.00	45.62	91	80-120
1,4-Dichlorobenzene	50.00	47.04	94	80-120
Toluene	50.00	45.98	92	80-120
2-Butanone	100.00	88.97	89	80-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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FORM 3
WATER VOLATILE METHOD SPIKE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Matrix Spike - Sample No.: ICV

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE AMOUNT ()	% REC #	QC. LIMITS REC.
2-Chlorotoluene	50.00	46.15	92	80-120
2-Hexanone	100.00	93.39	93	80-120
4-Chlorotoluene	50.00	47.27	94	80-120
tert-Butylbenzene	50.00	48.13	96	80-120
4-Methyl-2-Pentanone	100.00	86.96	87	80-120
Acetone	100.00	105.10	105	80-120
Benzene	50.00	47.37	95	80-120
Bromobenzene	50.00	48.43	97	80-120
Bromochloromethane	50.00	45.06	90	80-120
Bromodichloromethane	50.00	46.92	94	80-120
Bromoform	50.00	50.57	101	80-120
Bromomethane	50.00	55.55	111	80-120
Carbon Disulfide	100.00	90.27	90	80-120
Carbon Tetrachloride	50.00	48.83	98	80-120
Chlorobenzene	50.00	46.21	92	80-120
Chloroethane	50.00	50.92	102	80-120
Chloroform	50.00	44.19	88	80-120
Chloromethane	50.00	51.24	102	80-120
cis-1,2-Dichloroethene	50.00	46.52	93	80-120
Dibromochloromethane	50.00	47.87	96	80-120
Dichlorodifluoromethane	50.00	51.43	103	80-120
Ethylbenzene	50.00	50.46	101	80-120
Hexachlorobutadiene	50.00	59.59	119	80-120
Isopropylbenzene	50.00	50.27	100	80-120
m,p-Xylenes	100.00	98.28	98	80-120
Methylene Chloride	50.00	47.68	95	80-120
n-Butylbenzene	50.00	51.17	102	80-120
n-Propylbenzene	50.00	47.26	94	80-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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FORM 3
WATER VOLATILE METHOD SPIKE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Matrix Spike - Sample No.: ICV

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE AMOUNT ()	% REC #	QC. LIMITS REC.
Naphthalene	50.00	52.05	104	80-120
o-Xylene	50.00	48.77	98	80-120
sec-Butylbenzene	50.00	47.77	96	80-120
Styrene	50.00	50.71	101	80-120
Vinyl Chloride	50.00	47.03	94	80-120
1,2,3-Trichloropropane	50.00	59.56	119	80-120
p-Isopropyltoluene	50.00	49.53	99	80-120
1,2-Dibromo-3-Chloropro	50.00	51.36	103	80-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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FORM III VOA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID: X052601 BFB Injection Date: 05/26/21

Instrument ID: VOA6 BFB Injection Time: 1213

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	47.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	1.2 (1.6)1
174	Greater than 50.0% of mass 95	73.7
175	5.0 - 9.0% of mass 174	5.5 (7.5)1
176	95.0 - 101.0% of mass 174	71.7 (97.3)1
177	5.0 - 9.0% of mass 176	5.8 (8.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD000.25	VSTD000.25	X052602	05/26/21	1234
02	VSTD000.5	VSTD000.5	X052603	05/26/21	1255
03	VSTD001	VSTD001	X052604	05/26/21	1337
04	VSTD002	VSTD002	X052605	05/26/21	1358
05	VSTD005	VSTD005	X052606	05/26/21	1419
06	VSTD020	VSTD020	X052607	05/26/21	1440
07	VSTD050	VSTD050	X052608	05/26/21	1501
08	VSTD100	VSTD100	X052609	05/26/21	1522
09	VSTD150	VSTD150	X052610	05/26/21	1543
10	VSTD200	VSTD200	X052611	05/26/21	1604
11	ICV	ICV	X052614	05/26/21	1707
12					
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FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: VOA6 Calibration Date(s): 05/26/21 05/26/21

Column: DB624 ID: 0.18 (mm) Calibration Time(s): 1234 1604

LAB FILE ID: RF0.25: X052602 RF0.5: X052603 RF1: X052604
RF2: X052605 RF5: X052606 RF20: X052607

COMPOUND	RF0.25	RF0.5	RF1	RF2	RF5	RF20
cis-1,3-Dichloropropene		0.563	0.482	0.444	0.530	0.514
trans-1,3-Dichloropropene		0.459	0.430	0.391	0.438	0.433
1,3-Dichlorobenzene		1.679	1.474	1.452	1.411	1.338
2,2-Dichloropropane		0.729	0.753	0.719	0.743	0.655
1,1-Dichloropropene		0.430	0.438	0.392	0.370	0.369
Dibromomethane		0.247	0.229	0.195	0.240	0.226
1,2-Dibromoethane		0.438	0.372	0.348	0.382	0.354
trans-1,2-Dichloroethene		0.556	0.483	0.471	0.493	0.442
1,1,1,2-Tetrachloroethane		0.429	0.362	0.340	0.364	0.354
1,1,1-Trichloroethane		0.869	0.768	0.758	0.755	0.696
1,1,2,2-Tetrachloroethane		2582	4348	9638	24326	94744
1,1,2-Trichloroethane		0.288	0.267	0.276	0.308	0.262
1,1-Dichloroethane		0.943	0.782	0.838	0.854	0.788
1,1-Dichloroethene		0.564	0.533	0.567	0.525	0.492
Trichloroethene		0.403	0.316	0.338	0.346	0.338
1,2,3-Trichlorobenzene		0.283	0.329	0.316	0.285	0.294
Trichlorofluoromethane		0.970	0.796	1.036	0.976	0.871
1,2,4-Trichlorobenzene		0.471	0.460	0.455	0.471	0.497
1,2,4-Trimethylbenzene		2.805	2.419	2.374	2.134	2.172
Tetrachloroethene		0.340	0.285	0.310	0.288	0.279
1,2-Dichlorobenzene		1.530	1.282	1.414	1.353	1.296
1,2-Dichloroethane		0.458	0.385	0.386	0.421	0.392
1,2-Dichloropropane		0.341	0.282	0.302	0.315	0.285
1,3,5-Trimethylbenzene		2.808	2.273	2.406	2.134	2.139
1,3-Dichloropropane		0.640	0.561	0.508	0.574	0.527
1,4-Dichlorobenzene		1.766	1.630	1.520	1.456	1.390
Toluene		1.818	1.510	1.502	1.457	1.334
2-Butanone		0.176	0.151	0.149	0.151	0.148
2-Chlorotoluene		2.084	2.024	2.165	1.975	1.822
2-Hexanone		0.202	0.181	0.159	0.197	0.181
4-Chlorotoluene		2.618	2.412	2.415	2.145	2.100
tert-Butylbenzene		2.327	1.957	2.145	1.845	1.855
4-Methyl-2-Pentanone		0.338	0.320	0.271	0.292	0.269
Acetone		5938	6356	9004	15534	45478
Benzene		1.346	1.154	1.195	1.196	1.116
Bromobenzene		0.907	0.845	0.895	0.828	0.820
Bromochloromethane		0.324	0.327	0.293	0.333	0.304
Bromodichloromethane		0.478	0.441	0.440	0.454	0.419
Bromoform		0.270	0.286	0.249	0.247	0.258
Bromomethane		2714	5134	10705	24597	81986
Carbon Disulfide		1.596	1.170	1.322	1.248	1.165
Carbon Tetrachloride		0.452	0.426	0.444	0.402	0.386
Chlorobenzene		1.360	1.043	1.008	1.031	0.964
Chloroethane		1981	3557	6715	15071	58283

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date(s): 05/26/21 05/26/21

Column: DB624 ID: 0.18 (mm) Calibration Time(s): 1234 1604

LAB FILE ID: RF0.25: X052602 RF0.5: X052603 RF1: X052604
RF2: X052605 RF5: X052606 RF20: X052607

COMPOUND	RF0.25	RF0.5	RF1	RF2	RF5	RF20
Chloroform		1.051	0.854	0.901	0.981	0.851
Chloromethane		2318	4657	9388	23565	83965
cis-1,2-Dichloroethene		0.434	0.571	0.579	0.574	0.536
Dibromochloromethane		0.477	0.388	0.368	0.408	0.398
Dichlorodifluoromethane		2066	3382	8466	18295	78750
Ethylbenzene		0.530	0.453	0.476	0.484	0.469
Hexachlorobutadiene		1178	1684	3790	8556	34297
Isopropylbenzene		1.794	1.329	1.481	1.308	1.350
m,p-Xylenes		0.748	0.576	0.610	0.589	0.586
Methylene Chloride		3718	5537	9737	21744	78742
n-Butylbenzene		2.088	1.860	1.974	1.724	1.817
n-Propylbenzene		3.822	3.401	3.438	2.900	2.957
Naphthalene		0.732	0.741	0.714	0.673	0.734
o-Xylene		0.712	0.592	0.576	0.596	0.571
sec-Butylbenzene		3.355	2.559	2.858	2.427	2.460
Styrene		1.143	0.928	0.885	0.945	0.954
Vinyl Chloride		0.488	0.725	0.692	0.637	0.574
1,2,3-Trichloropropane		0.744	0.649	0.642	0.654	0.633
p-Isopropyltoluene		2.903	2.250	2.461	2.047	2.138
1,2-Dibromo-3-Chloropropane		75	420	630	2323	9854
1,2-Dichloroethane-d4		2577	4768	8542	21575	79438
Dibromofluoromethane		2388	4774	8033	21089	83421
Toluene-d8		1.572	1.496	1.177	1.238	1.162
4-Bromofluorobenzene		3467	6016	10368	25524	97463

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date(s): 05/26/21 05/26/21

Column: DB624 ID: 0.18 (mm) Calibration Time(s): 1234 1604

LAB FILE ID: RF50: X052608 RF100: X052609 RF150: X052610
RF200: X052611

COMPOUND	RF50	RF100	RF150	RF200
cis-1,3-Dichloropropene	0.503	0.509	0.502	0.512
trans-1,3-Dichloropropene	0.431	0.448	0.444	0.458
1,3-Dichlorobenzene	1.264	1.366	1.320	1.389
2,2-Dichloropropane	0.630	0.646	0.622	0.659
1,1-Dichloropropene	0.341	0.377	0.354	0.374
Dibromomethane	0.213	0.216	0.210	0.213
1,2-Dibromoethane	0.352	0.359	0.349	0.358
trans-1,2-Dichloroethene	0.443	0.444	0.425	0.445
1,1,1,2-Tetrachloroethane	0.352	0.375	0.367	0.384
1,1,1-Trichloroethane	0.673	0.710	0.688	0.733
1,1,2,2-Tetrachloroethane	241138	539471	832157	1217789
1,1,2-Trichloroethane	0.257	0.260	0.256	0.263
1,1-Dichloroethane	0.746	0.727	0.699	0.736
1,1-Dichloroethene	0.466	0.492	0.481	0.515
Trichloroethene	0.332	0.345	0.328	0.343
1,2,3-Trichlorobenzene	0.281	0.298	0.309	0.329
Trichlorofluoromethane	0.817	0.903	0.857	0.896
1,2,4-Trichlorobenzene	0.472	0.524	0.533	0.564
1,2,4-Trimethylbenzene	2.004	2.223	2.158	2.235
Tetrachloroethene	0.268	0.331	0.323	0.345
1,2-Dichlorobenzene	1.250	1.367	1.343	1.372
1,2-Dichloroethane	0.383	0.384	0.380	0.396
1,2-Dichloropropane	0.280	0.283	0.276	0.286
1,3,5-Trimethylbenzene	1.957	2.236	2.185	2.288
1,3-Dichloropropane	0.505	0.513	0.502	0.518
1,4-Dichlorobenzene	1.310	1.404	1.357	1.411
Toluene	1.302	1.393	1.361	1.459
2-Butanone	0.155	0.153	0.140	0.145
2-Chlorotoluene	1.630	1.741	1.680	1.723
2-Hexanone	0.175	0.193	0.186	0.196
4-Chlorotoluene	1.957	2.131	2.093	2.186
tert-Butylbenzene	1.600	1.949	1.866	1.966
4-Methyl-2-Pentanone	0.260	0.279	0.275	0.287
Acetone	109289	231561	361295	519345
Benzene	1.090	1.098	1.059	1.083
Bromobenzene	0.755	0.805	0.796	0.816
Bromochloromethane	0.294	0.284	0.277	0.285
Bromodichloromethane	0.409	0.408	0.406	0.413
Bromoform	0.276	0.304	0.304	0.314
Bromomethane	208957	464431	786302	
Carbon Disulfide	1.136	1.147	1.072	1.137
Carbon Tetrachloride	0.366	0.424	0.405	0.425
Chlorobenzene	0.930	1.002	0.987	1.042
Chloroethane	169882	322237	494207	731139

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date(s): 05/26/21 05/26/21

Column: DB624 ID: 0.18 (mm) Calibration Time(s): 1234 1604

LAB FILE ID: RF50: X052608 RF100: X052609 RF150: X052610
RF200: X052611

COMPOUND	RF50	RF100	RF150	RF200
Chloroform	0.830	0.818	0.796	0.831
Chloromethane	214824	427715	633860	908675
cis-1,2-Dichloroethene	0.516	0.508	0.488	0.510
Dibromochloromethane	0.401	0.420	0.413	0.431
Dichlorodifluoromethane	189027	442975	654875	978413
Ethylbenzene	0.442	0.494	0.472	0.502
Hexachlorobutadiene	87915	268099	433230	655226
Isopropylbenzene	1.289	1.551	1.510	1.593
m,p-Xylenes	0.565	0.650	0.634	0.674
Methylene Chloride	199728	421178	646121	946394
n-Butylbenzene	1.665	2.125	2.071	2.181
n-Propylbenzene	2.652	3.027	2.828	3.045
Naphthalene	0.682	0.703	0.703	0.749
o-Xylene	0.556	0.621	0.618	0.651
sec-Butylbenzene	2.130	2.640	2.537	2.663
Styrene	0.978	1.102	1.092	1.152
Vinyl Chloride	0.550	0.558	0.537	0.564
1,2,3-Trichloropropane	0.581	0.580	0.556	0.570
p-Isopropyltoluene	1.968	2.363	2.285	2.392
1,2-Dibromo-3-Chloropropane	26546	62281	97075	144783
1,2-Dichloroethane-d4	202707	450261	696836	998694
Dibromofluoromethane	198305	469782	715769	1043408
Toluene-d8	1.035	1.206	1.127	1.195
4-Bromofluorobenzene	243279	606080	931244	1352939

FORM VI VOA

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date(s): 05/26/21 05/26/21

Column: DB624 ID: 0.18 (mm) Calibration Time(s): 1234 1604

COMPOUND	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
cis-1,3-Dichloropropene	AVRG		0.50650854		6.388	15.000
trans-1,3-Dichloropropene	AVRG		0.43694869		4.647	15.000
1,3-Dichlorobenzene	AVRG		1.41029902		8.507	15.000
2,2-Dichloropropane	AVRG		0.68406039		7.525	15.000
1,1-Dichloropropene	AVRG		0.38294444		8.481	15.000
Dibromomethane	AVRG		0.22118034		7.360	15.000
1,2-Dibromoethane	AVRG		0.36812214		7.741	15.000
trans-1,2-Dichloroethene	AVRG		0.46686379		8.551	15.000
1,1,1,2-Tetrachloroethane	AVRG		0.36976577		6.936	15.000
1,1,1-Trichloroethane	AVRG		0.73890640		8.017	15.000
1,1,2,2-Tetrachloroethane	LINR	-2.39e-002	1.48234879		0.9995765	0.9900000
1,1,2-Trichloroethane	AVRG		0.27085272		6.305	15.000
1,1-Dichloroethane	AVRG		0.79045824		9.700	15.000
1,1-Dichloroethene	AVRG		0.51503132		6.878	15.000
Trichloroethene	AVRG		0.34316996		7.076	15.000
1,2,3-Trichlorobenzene	AVRG		0.30268951		6.244	15.000
Trichlorofluoromethane	AVRG		0.90253943		8.713	15.000
1,2,4-Trichlorobenzene	AVRG		0.49434198		7.710	15.000
1,2,4-Trimethylbenzene	AVRG		2.28052238		10.202	15.000
Tetrachloroethene	AVRG		0.30780299		9.261	15.000
1,2-Dichlorobenzene	AVRG		1.35618432		6.087	15.000
1,2-Dichloroethane	AVRG		0.39838777		6.393	15.000
1,2-Dichloropropane	AVRG		0.29431649		7.228	15.000
1,3,5-Trimethylbenzene	AVRG		2.26957979		10.449	15.000
1,3-Dichloropropane	AVRG		0.53857857		8.492	15.000
1,4-Dichlorobenzene	AVRG		1.47165689		9.862	15.000
Toluene	AVRG		1.45969768		10.489	15.000
2-Butanone	AVRG		0.15212279		6.497	15.000
2-Chlorotoluene	AVRG		1.87147769		10.382	15.000
2-Hexanone	AVRG		0.18573488		7.212	15.000
4-Chlorotoluene	AVRG		2.22871518		9.348	15.000
tert-Butylbenzene	AVRG		1.94574941		10.438	15.000
4-Methyl-2-Pentanone	AVRG		0.28792795		8.880	15.000
Acetone	LINR	-0.1192488	8.29690774		0.9998328	0.9900000
Benzene	AVRG		1.14864603		7.713	15.000
Bromobenzene	AVRG		0.82956540		5.737	15.000
Bromochloromethane	AVRG		0.30233090		6.875	15.000
Bromodichloromethane	AVRG		0.42984419		5.798	15.000
Bromoform	AVRG		0.27881115		8.919	15.000
Bromomethane	LINR	3.056e-003	1.93039335		0.9986047	0.9900000
Carbon Disulfide	AVRG		1.22136627		12.937	15.000
Carbon Tetrachloride	AVRG		0.41448436		6.639	15.000
Chlorobenzene	AVRG		1.04086521		12.054	15.000
Chloroethane	LINR	-2.83e-002	2.93277028		0.9979846	0.9900000

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date(s): 05/26/21 05/26/21

Column: DB624 ID: 0.18 (mm) Calibration Time(s): 1234 1604

COMPOUND	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
Chloroform	AVRG		0.87928016		9.604	15.000
Chloromethane	LINR	-5.49e-002	2.33480241		0.9978695	0.9900000
cis-1,2-Dichloroethene	AVRG		0.52406781		8.954	15.000
Dibromochloromethane	AVRG		0.41152986		7.456	15.000
Dichlorodifluoromethane	LINR	-4.2e-003	2.18637335		0.9985940	0.9900000
Ethylbenzene	AVRG		0.48019388		5.533	15.000
Hexachlorobutadiene	2ORDR	1.978e-002	3.30529341	-0.4157995	0.9978942	0.9900000
Isopropylbenzene	AVRG		1.46719468		11.350	15.000
m,p-Xylenes	AVRG		0.62598444		9.328	15.000
Methylene Chloride	LINR	-2.66e-002	2.26403519		0.9993950	0.9900000
n-Butylbenzene	AVRG		1.94513549		9.549	15.000
n-Propylbenzene	AVRG		3.11891495		11.698	15.000
Naphthalene	AVRG		0.71451827		3.699	15.000
o-Xylene	AVRG		0.61039840		7.858	15.000
sec-Butylbenzene	AVRG		2.62550633		12.857	15.000
Styrene	AVRG		1.01998348		9.987	15.000
Vinyl Chloride	AVRG		0.59185680		13.042	15.000
1,2,3-Trichloropropane	AVRG		0.62337735		9.428	15.000
p-Isopropyltoluene	AVRG		2.31190973		11.883	15.000
1,2-Dibromo-3-Chloropropane	LINR	1.025e-002	12.4779790		0.9993248	0.9900000
1,2-Dichloroethane-d4	LINR	-1.39e-002	2.12273607		0.9998254	0.9900000
Dibromofluoromethane	LINR	-3.3e-003	2.03856572		0.9993599	0.9900000
Toluene-d8	AVRG		1.24546498		14.000	15.000
4-Bromofluorobenzene	LINR	1.501e-002	2.24316621		0.9989319	0.9900000

FORM VI VOA

MSVOA06 -Logbook

Batch: 44971
Date: 05-26-2021
Method: 8260
Comments:

Analyst: Presenta Cabascango
Reviewer:
Laboratory: Houston

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	05-26-2021 12:13 pm	1.00	50 mL	50 mL	X052601.D	Liquid	Y	NA
2	VSTD000.25	ICAL1	05-26-2021 12:34 pm	1.00	50 mL	50 mL	X052602.D	Liquid	Y	NA
3	VSTD000.5	ICAL2	05-26-2021 12:55 pm	1.00	50 mL	50 mL	X052603.D	Liquid	Y	NA
4	VSTD001	ICAL3	05-26-2021 01:37 pm	1.00	50 mL	50 mL	X052604.D	Liquid	Y	NA
5	VSTD002	ICAL4	05-26-2021 01:58 pm	1.00	50 mL	50 mL	X052605.D	Liquid	Y	NA
6	VSTD005	ICAL5	05-26-2021 02:19 pm	1.00	50 mL	50 mL	X052606.D	Liquid	Y	NA
7	VSTD020	ICAL6	05-26-2021 02:40 pm	1.00	50 mL	50 mL	X052607.D	Liquid	Y	NA
8	VSTD050	ICAL7	05-26-2021 03:01 pm	1.00	50 mL	50 mL	X052608.D	Liquid	Y	NA
9	VSTD100	ICAL8	05-26-2021 03:22 pm	1.00	50 mL	50 mL	X052609.D	Liquid	Y	NA
10	VSTD150	ICAL9	05-26-2021 03:43 pm	1.00	50 mL	50 mL	X052610.D	Liquid	Y	NA
11	VSTD200	ICAL	05-26-2021 04:04 pm	1.00	50 mL	50 mL	X052611.D	Liquid	Y	NA
12	BLANK	SAMP	05-26-2021 04:25 pm	1.00	50 mL	50 mL	X052612.D	Liquid	Y	NA
13	BLANK	SAMP	05-26-2021 04:46 pm	1.00	50 mL	50 mL	X052613.D	Liquid	Y	NA
14	CCV	CCV	05-26-2021 05:07 pm	1.00	50 mL	50 mL	X052614.D	Liquid	Y	NA
15	BLANK	SAMP	05-26-2021 05:28 pm	1.00	50 mL	50 mL	X052615.D	Liquid	Y	NA
16	VLCSW-210526	LCS	05-26-2021 05:49 pm	1.00	50 mL	50 mL	X052616.D	Liquid	Y	NA
17	BLANK	SAMP	05-26-2021 06:10 pm	1.00	50 mL	50 mL	X052617.D	Liquid	Y	NA
18	VBLKW-210526	MBLK	05-26-2021 06:31 pm	1.00	50 mL	50 mL	X052618.D	Liquid	Y	NA
19	HS21051001-12	SAMP	05-26-2021 06:52 pm	1.00	50 mL	50 mL	X052619.D	Liquid	Y	NA
20	HS21051001-13	SAMP	05-26-2021 07:13 pm	1.00	50 mL	50 mL	X052620.D	Liquid	Y	NA
21	HS21051002-10	SAMP	05-26-2021 07:34 pm	1.00	50 mL	50 mL	X052621.D	Liquid	Y	NA
22	HS21051002-10MS	MS	05-26-2021 07:55 pm	1.00	50 mL	50 mL	X052622.D	Liquid	Y	NA
23	HS21051002-10MSD	MSD	05-26-2021 08:16 pm	1.00	50 mL	50 mL	X052623.D	Liquid	Y	NA
24	HS21051001-03	SAMP	05-26-2021 08:37 pm	10.00	5 mL	50 mL	X052624.D	Liquid	Y	NA
25	HS21051002-11	SAMP	05-26-2021 08:58 pm	1.00	50 mL	50 mL	X052625.D	Liquid	Y	NA
26	HS21051002-12	SAMP	05-26-2021 09:19 pm	1.00	50 mL	50 mL	X052626.D	Liquid	Y	NA
27	HS21051001-07	SAMP	05-26-2021 09:40 pm	5.00	10 mL	50 mL	X052627.D	Liquid	Y	NA
28	HS21051001-07	SAMP	05-26-2021 10:01 pm	25.00	2 mL	50 mL	X052628.D	Liquid	Y	NA
29	HS21051001-14	SAMP	05-26-2021 10:22 pm	50.00	1 mL	50 mL	X052629.D	Liquid	Y	NA
30	HS21051001-14	SAMP	05-26-2021 10:43 pm	1000.0	50 µL	50 mL	X052630.D	Liquid	Y	NA
31	CCV-END	CCV	05-26-2021 11:04 pm	1.00	50 mL	50 mL	X052631.D	Liquid	Y	NA
32	BLANK	SAMP	05-26-2021 11:25 pm	1.00	50 mL	50 mL	X052632.D	Liquid	Y	NA

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052601.D

Date : 26-MAY-2021 12:13

Client ID: BFB

Instrument: voa6.i

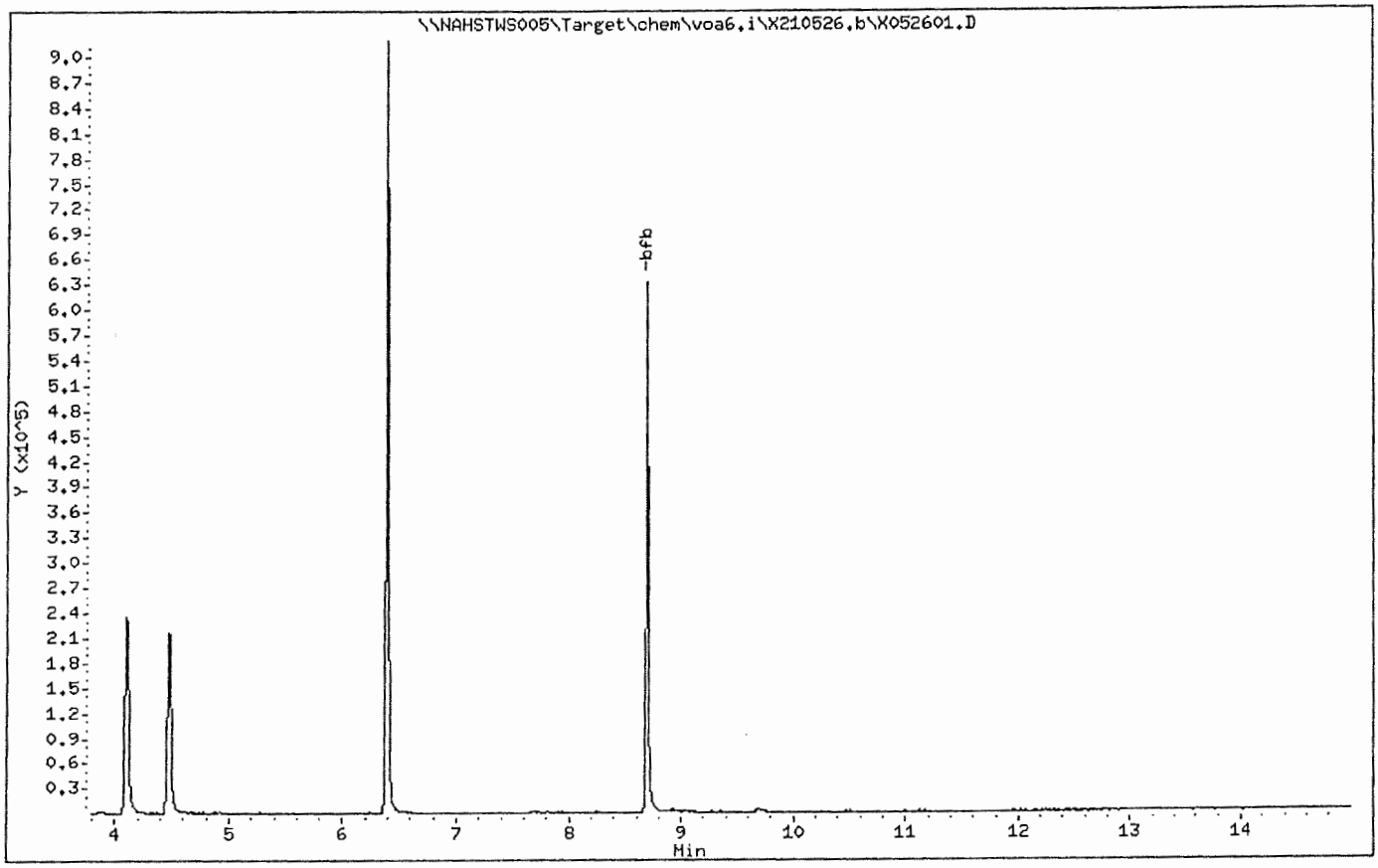
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052601.D

Date : 26-MAY-2021 12:13

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

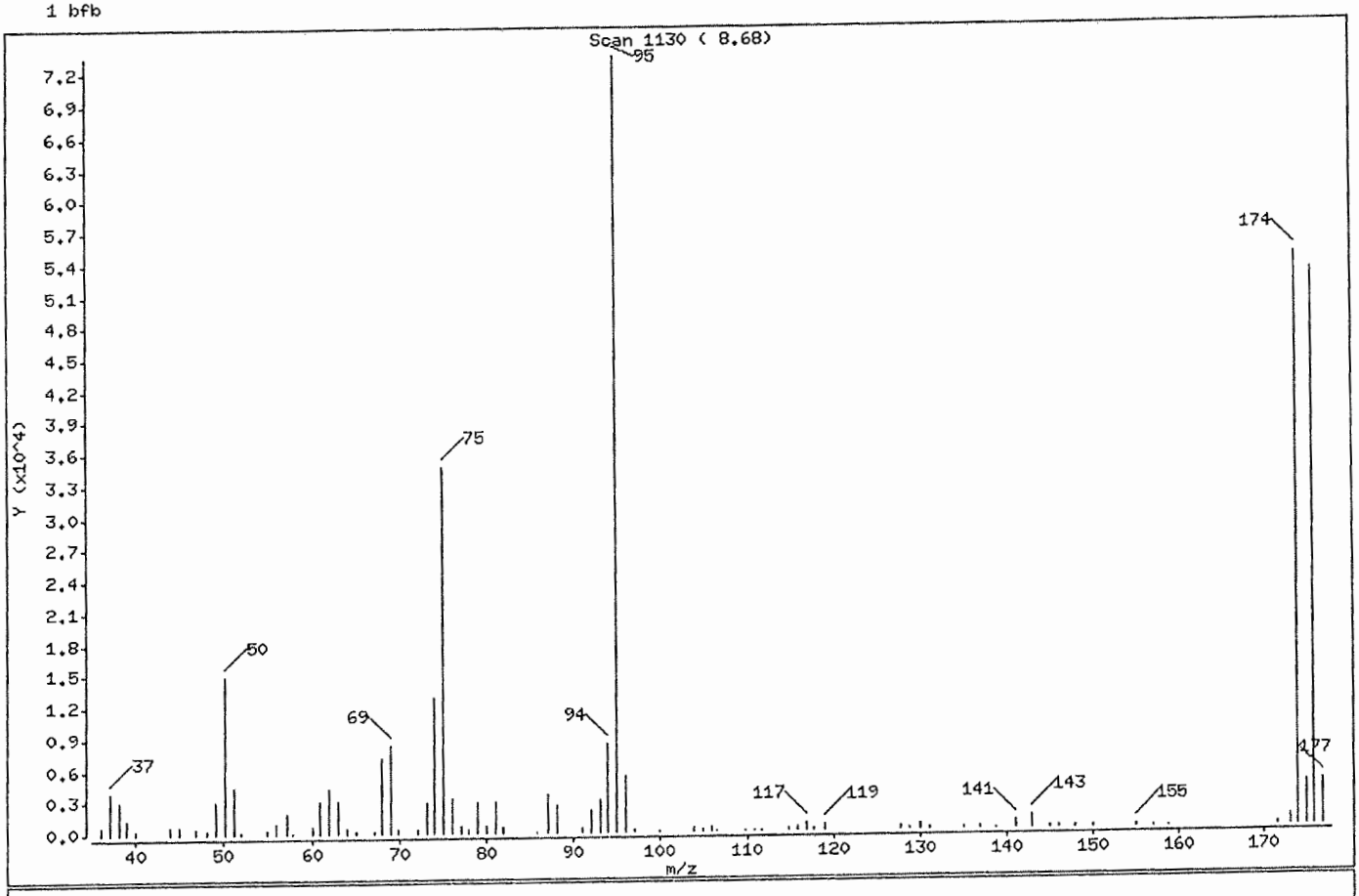
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.27
75	30.00 - 60.00% of mass 95	47.11
96	5.00 - 9.00% of mass 95	7.09
173	Less than 2.00% of mass 174	1.21 (1.65)
174	Greater than 50.00% of mass 95	73.71
175	5.00 - 9.00% of mass 174	5.53 (7.50)
176	95.00 - 101.00% of mass 174	71.72 (97.30)
177	5.00 - 9.00% of mass 176	5.80 (8.08)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052601.D

Date : 26-MAY-2021 12:13

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: X052601.D
Spectrum: Scan 1130 (8.68)
Location of Maximum: 95.00
Number of points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	701	64.00	450	92.00	1948	129.90	446
37.10	3860	65.10	94	93.00	3086	131.00	138
38.10	2991	67.10	200	94.00	8371	134.90	242
39.00	1380	68.00	7129	95.00	73600	136.80	249
40.00	299	69.00	8375	96.00	5216	138.80	68
44.00	654	69.90	378	97.00	210	141.00	700
45.00	741	72.10	268	99.90	64	142.90	1171
46.90	575	73.10	2836	103.90	279	144.90	108
48.00	378	74.00	12821	104.90	92	145.90	193
49.00	3035	75.00	34672	106.00	316	147.90	184
50.10	14921	76.00	3178	106.60	79	149.80	96
51.10	4354	77.00	694	109.80	50	154.80	188
52.00	245	78.00	394	111.00	55	157.00	80
54.90	255	78.90	2868	111.80	65	158.80	78
56.00	937	80.00	698	114.90	144	171.70	159
57.10	1853	81.00	2937	115.90	277	173.10	893
57.90	83	81.90	478	117.00	604	173.90	54248
60.00	725	85.90	55	117.80	207	175.00	4070
61.00	3025	87.00	3593	119.00	429	175.90	52784
62.00	4311	88.00	2599	127.80	262	176.90	4266
63.00	3050	90.90	275	128.70	107		

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 26-MAY-2021 12:34
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 16:04 Cal File: X052611.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

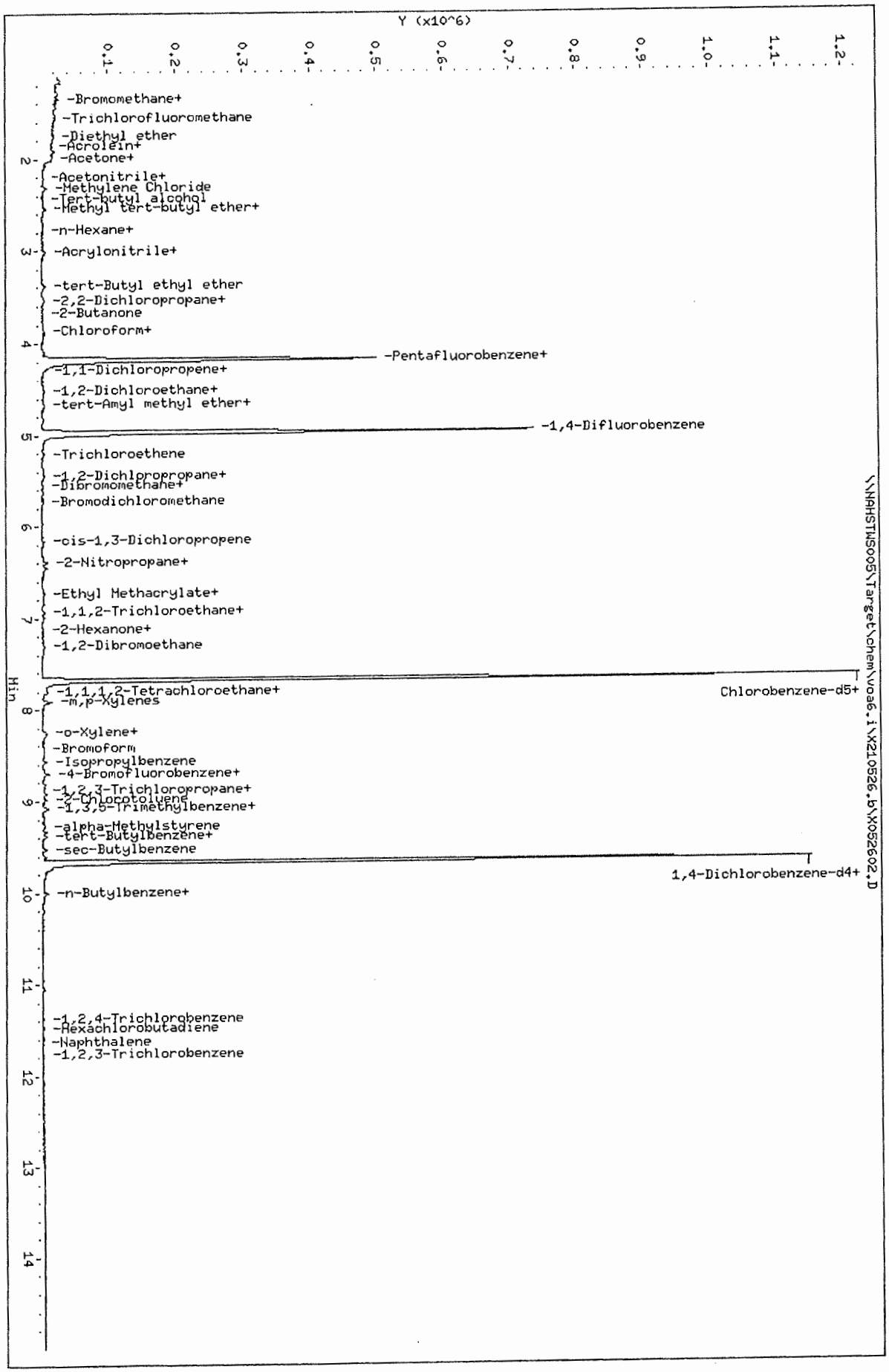
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	426285	50.0000	
* 36 1,4-Difluorobenzene	114	4.970	4.970	(1.000)	674139	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	610874	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	290894	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.483	4.483	(1.072)	1637	0.25000	(Ta)
$ 69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	3329	0.25000	1.36(a)
$ 30 Dibromofluoromethane	113	4.110	4.110	(0.983)	1296	0.25000	0.14(a)
$ 48 Toluene-d8	98	6.395	6.395	(0.834)	5966	0.25000	0.39(Ta)
31 1,1,1-Trichloroethane	97	4.089	4.089	(0.978)	1336	0.25000	0.21(a)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	753	0.25000	0.22(a)
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	2164	0.25000	0.32(Ta)
11 1,1-Dichloroethene	96	1.919	1.919	(0.459)	1029	0.25000	0.23(aM)
33 1,2-Dichloroethane	62	4.562	4.562	(0.918)	1320	0.25000	0.24(a)
37 Benzene	78	4.519	4.519	(0.909)	4046	0.25000	0.26(a)
34 Carbon Tetrachloride	117	4.268	4.268	(0.859)	1221	0.25000	0.21(aM)
59 Chlorobenzene	112	7.692	7.692	(1.003)	3251	0.25000	0.25(a)
7 Chloroethane	64	1.403	1.403	(0.336)	1049	0.25000	(aM)
28 Chloroform	83	3.910	3.910	(0.935)	1985	0.25000	0.26(a)
27 cis-1,2-Dichloroethene	96	3.545	3.545	(0.848)	1299	0.25000	0.29(aM)
61 Ethylbenzene	106	7.807	7.807	(1.018)	1393	0.25000	0.23(a)
56 Tetrachloroethene	164	6.933	6.933	(0.904)	834	0.25000	0.22(a)
50 Toluene	91	6.453	6.453	(0.841)	5337	0.25000	0.29(aM)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.535	2.535	(0.606)	1028	0.25000	0.25(a)
38 Trichloroethene	130	5.214	5.214	(1.049)	1200	0.25000	0.25(aM)
5 Vinyl Chloride	62	1.138	1.138	(0.272)	1365	0.25000	0.27(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.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052602.D
Date : 26-MAY-2021 12:34
Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;
Purge Volume: 5.0
Column phase: DB624

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

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052603.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
Inj Date : 26-MAY-2021 12:55
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 12:34 Cal File: X052602.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

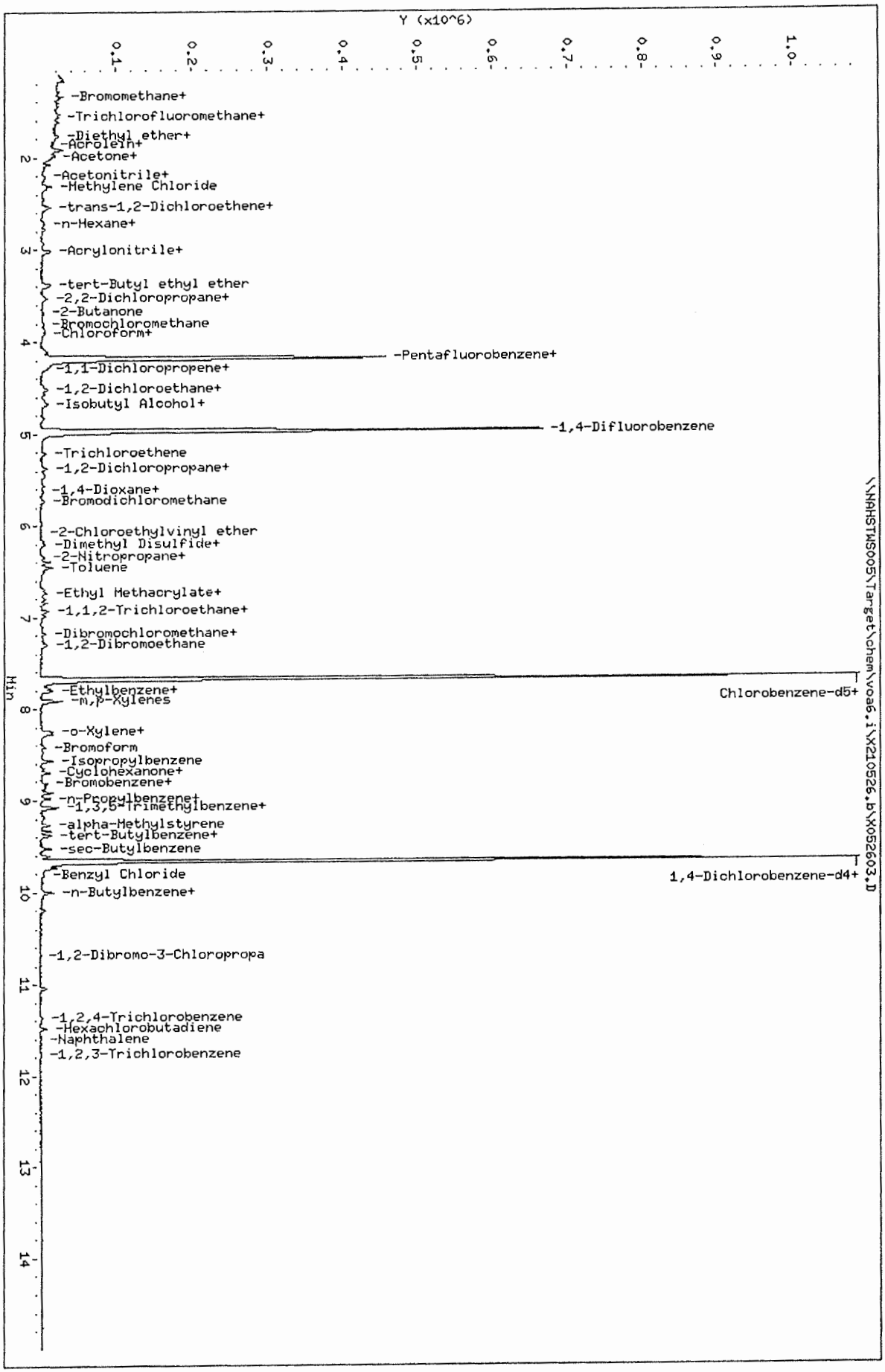
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	388108	50.0000	
* 36 1,4-Difluorobenzene	114	4.970	4.970	(1.000)	614574	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	542822	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	263849	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	2577	0.50000	0.01(Ta)
$ 69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	3467	0.50000	1.46(aM)
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	2388	0.50000	0.46(a)
$ 48 Toluene-d8	98	6.395	6.395	(0.834)	8531	0.50000	0.63(a)
31 1,1,1-Trichloroethane	97	4.089	4.089	(0.978)	3372	0.50000	0.58(a)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	1564	0.50000	0.53(a)
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	3660	0.50000	0.59(TaM)
11 1,1-Dichloroethene	96	1.919	1.919	(0.459)	2187	0.50000	0.54(aM)
33 1,2-Dichloroethane	62	4.562	4.562	(0.918)	2812	0.50000	0.57(a)
37 Benzene	78	4.519	4.519	(0.909)	8273	0.50000	0.58(aM)
34 Carbon Tetrachloride	117	4.261	4.261	(0.857)	2781	0.50000	0.54(aH)
59 Chlorobenzene	112	7.699	7.699	(1.004)	7385	0.50000	0.65(a)
7 Chloroethane	64	1.410	1.410	(0.337)	1981	0.50000	(aM)
28 Chloroform	83	3.910	3.910	(0.935)	4079	0.50000	0.59(a)
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	1686	0.50000	0.41(aM)
61 Ethylbenzene	106	7.807	7.807	(1.018)	2880	0.50000	0.55(a)
56 Tetrachloroethene	164	6.933	6.933	(0.904)	1845	0.50000	0.55(aM)
50 Toluene	91	6.453	6.453	(0.841)	9870	0.50000	0.62(aM)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.535	2.535	(0.606)	2156	0.50000	0.59(a)
38 Trichloroethene	130	5.206	5.206	(1.048)	2475	0.50000	0.58(a)
5 Vinyl Chloride	62	1.138	1.138	(0.272)	1895	0.50000	0.41(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.

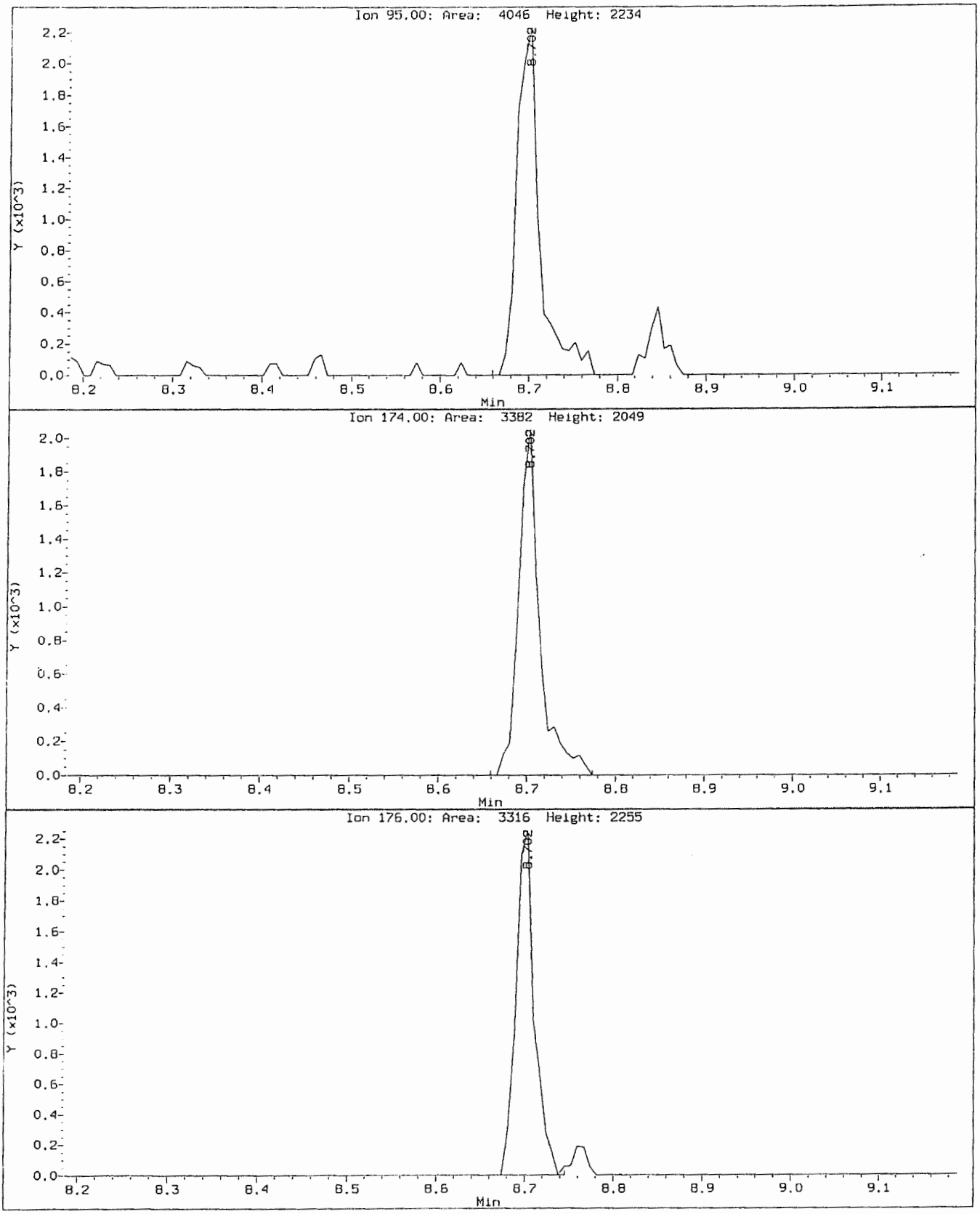


Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052603.D
Date : 26-MAY-2021 12:55
Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

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

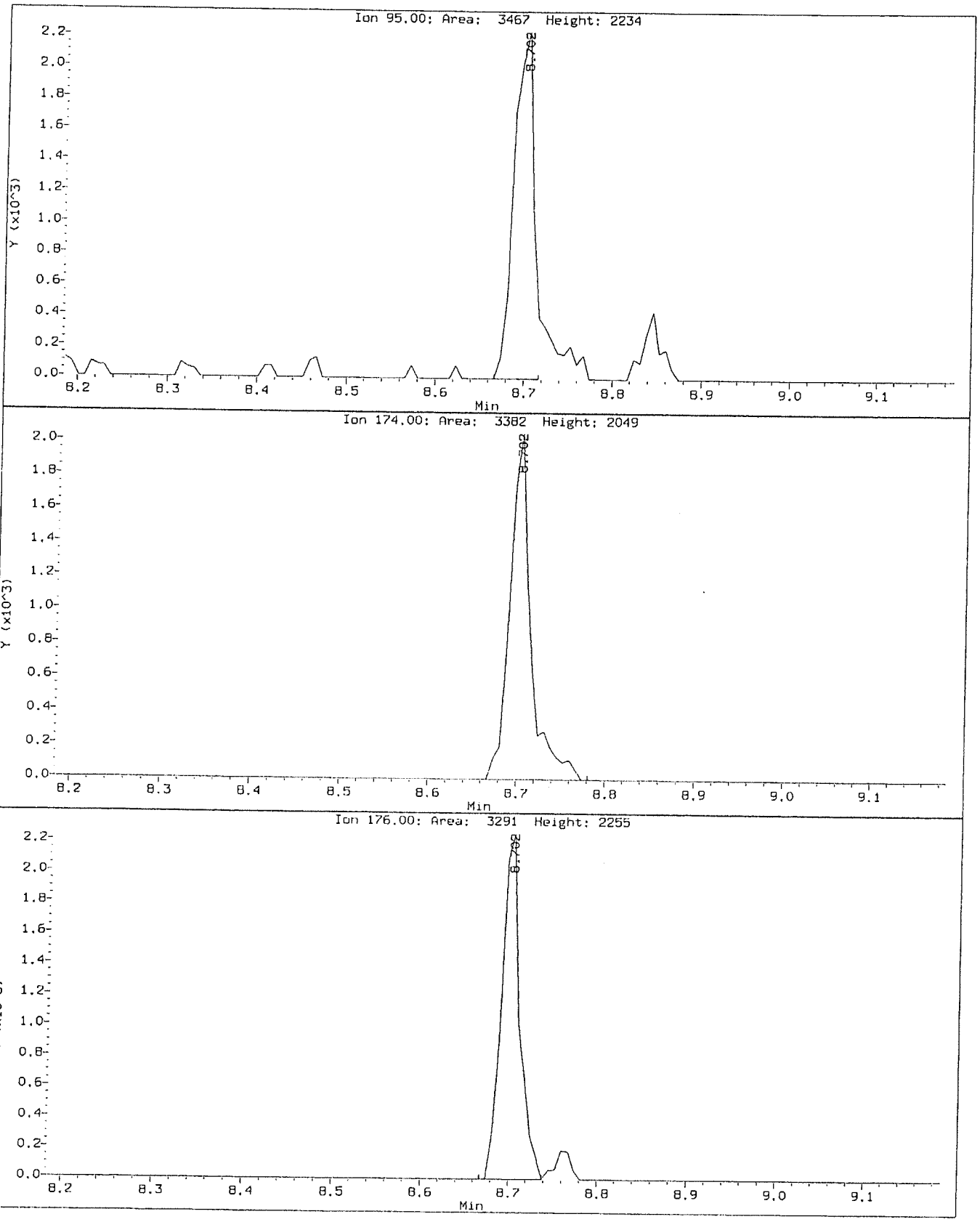
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052603.D
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: 4-Bromofluorobenzene
CAS Number: 460-00-4



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052603.D
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: 4-Bromofluorobenzene
CAS Number: 460-00-4



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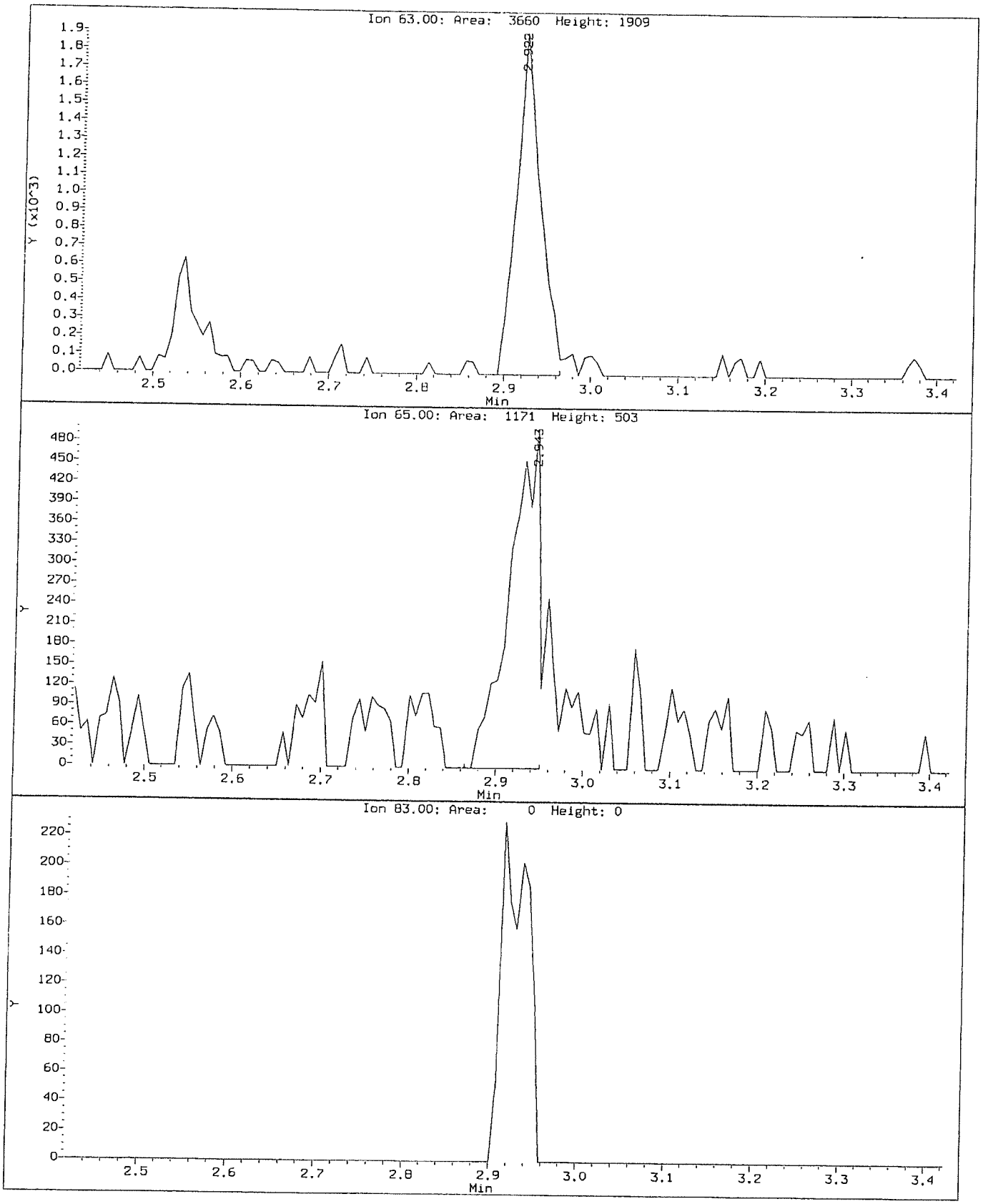
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: 1,1-Dichloroethane
CAS Number: 75-34-3



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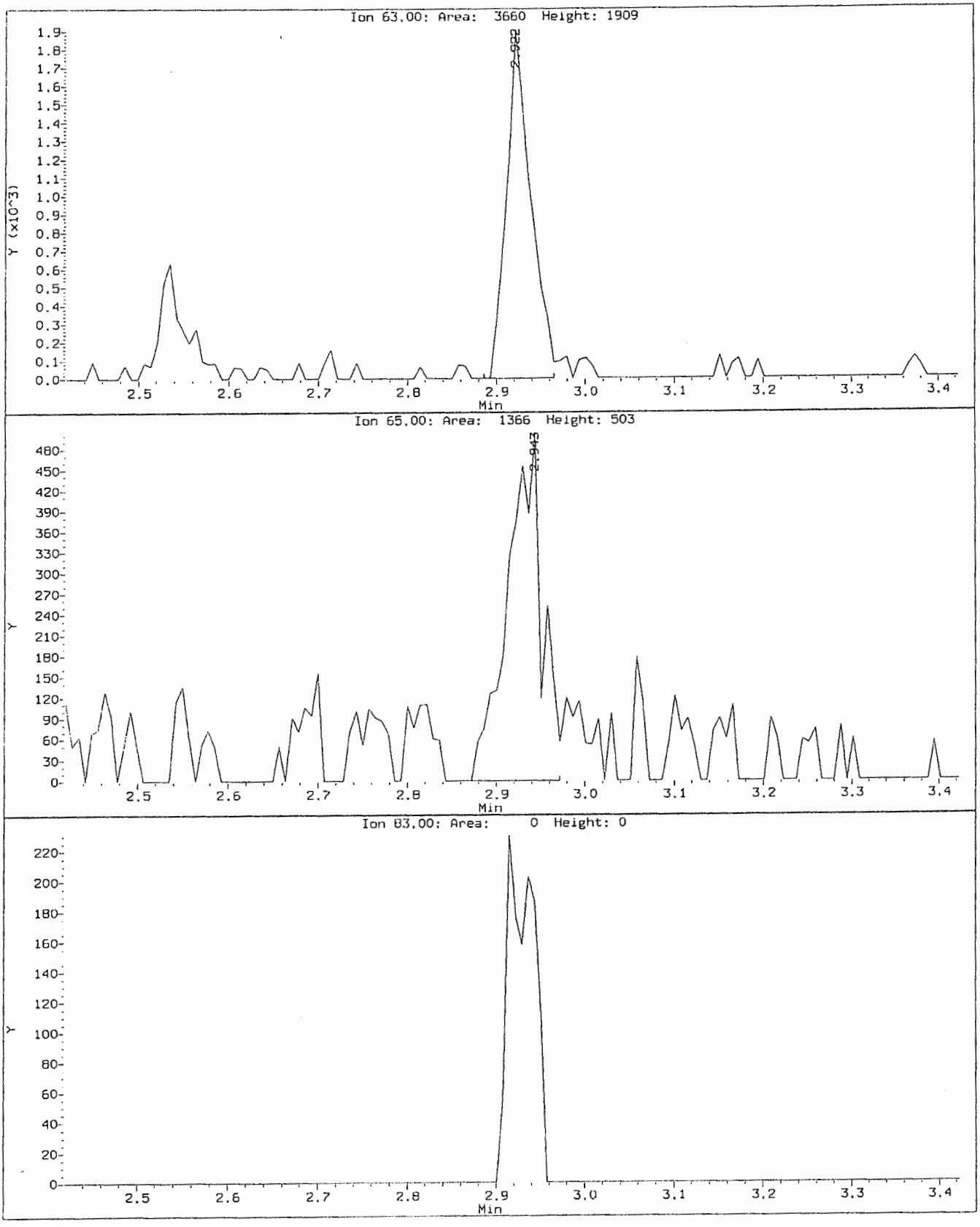
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: 1,1-Dichloroethane
CAS Number: 75-34-3



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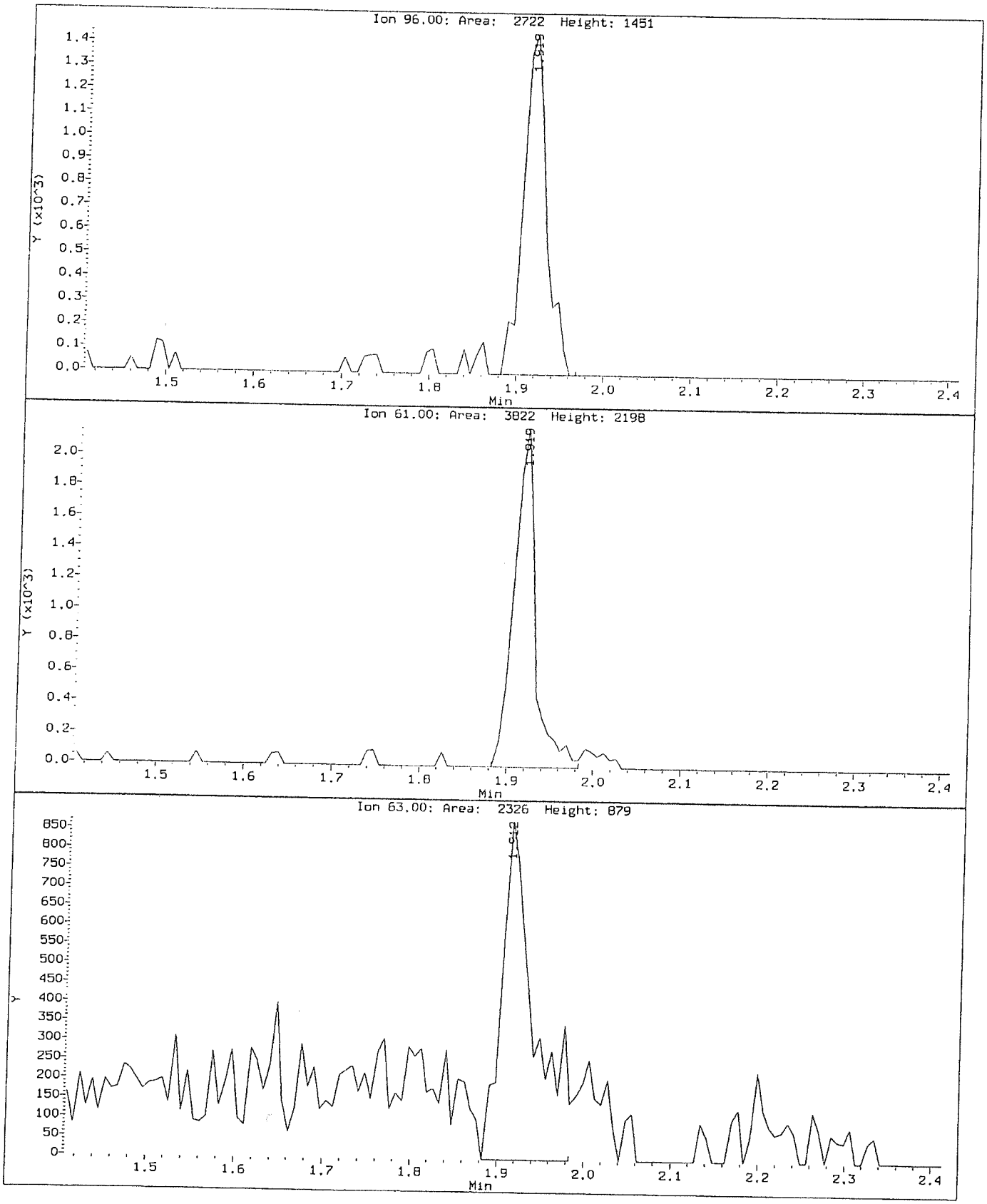
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: 1,1-Dichloroethene
CAS Number: 75-35-4



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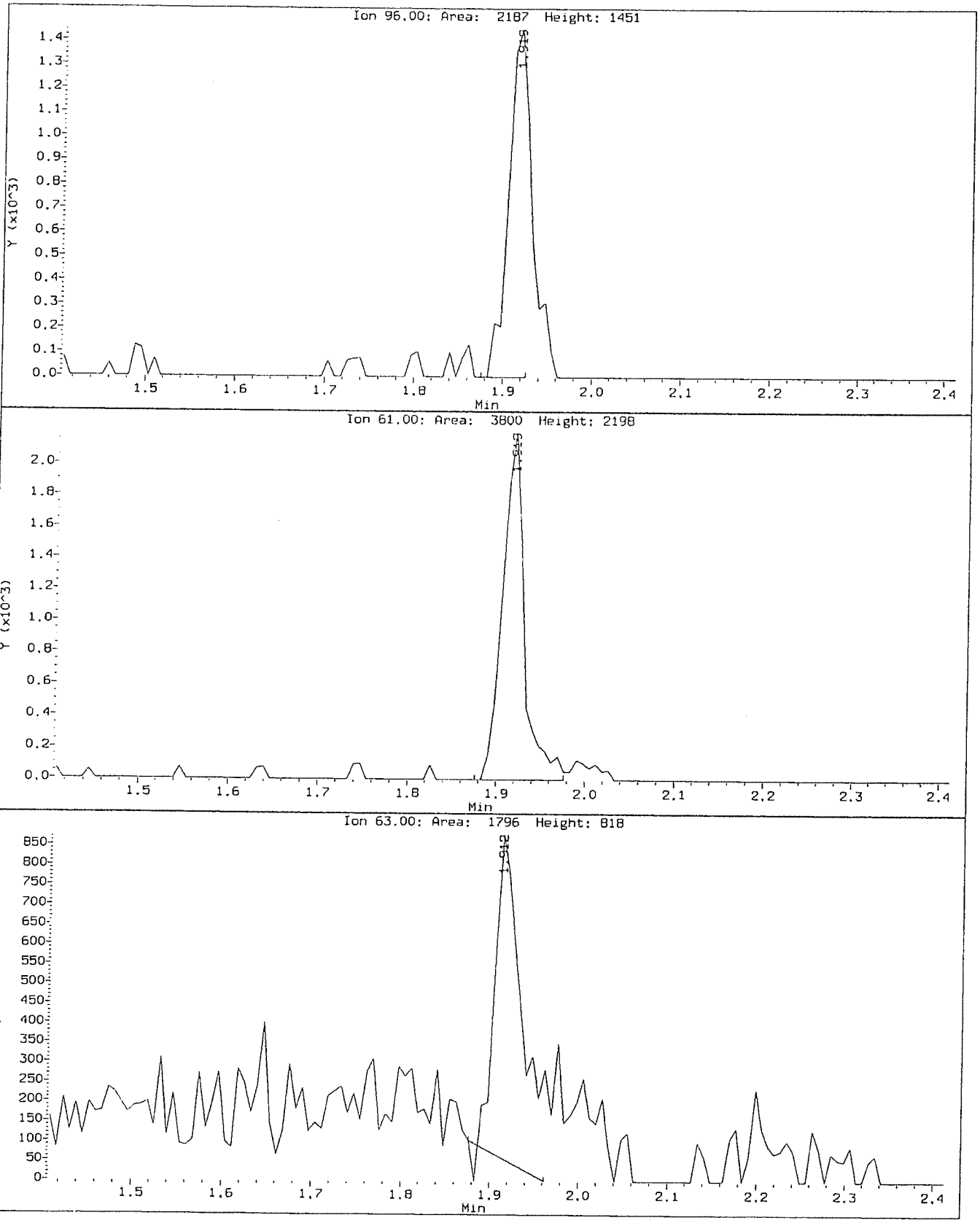
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: 1,1-Dichloroethene
CAS Number: 75-35-4



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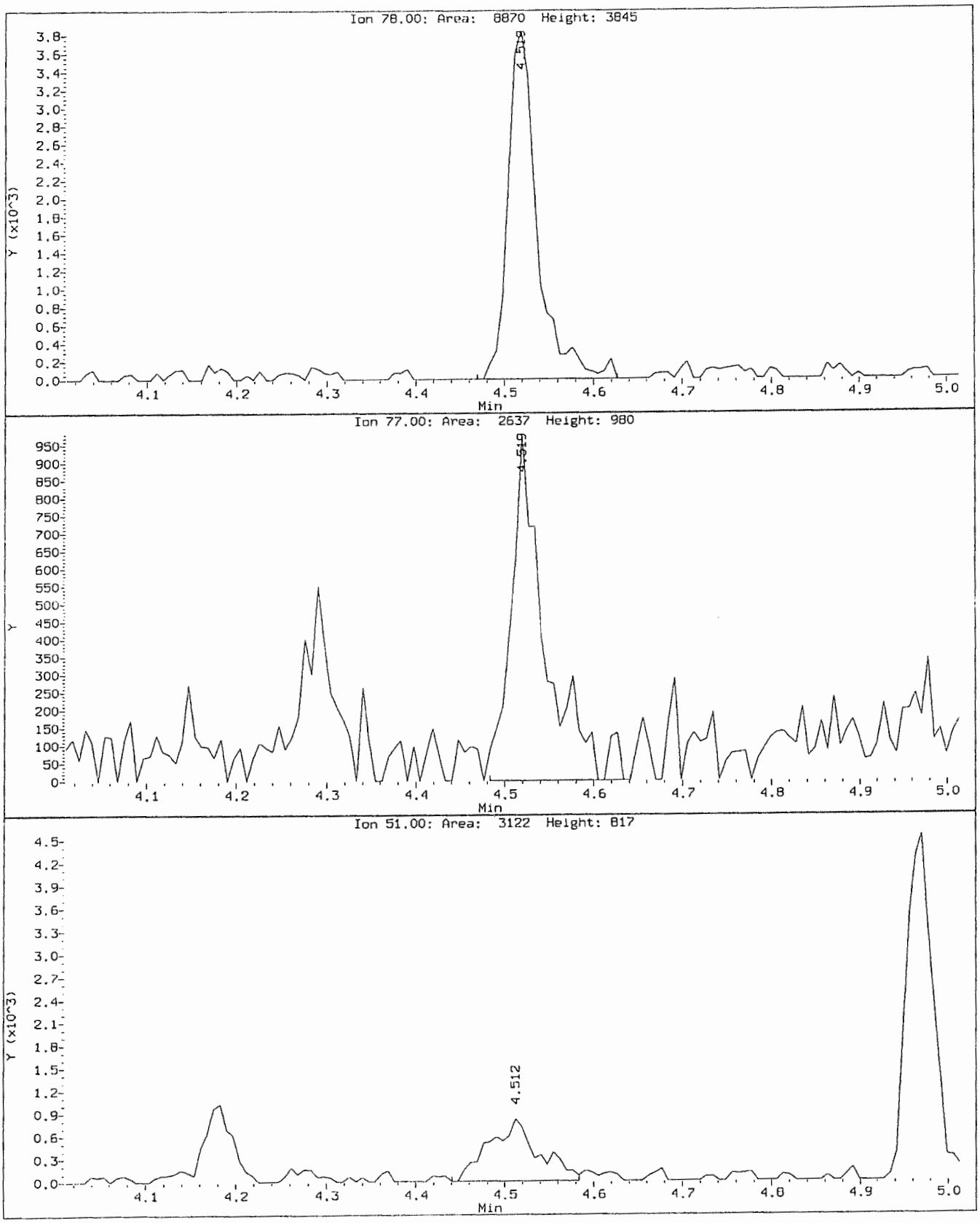
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Benzene
CAS Number: 71-43-2



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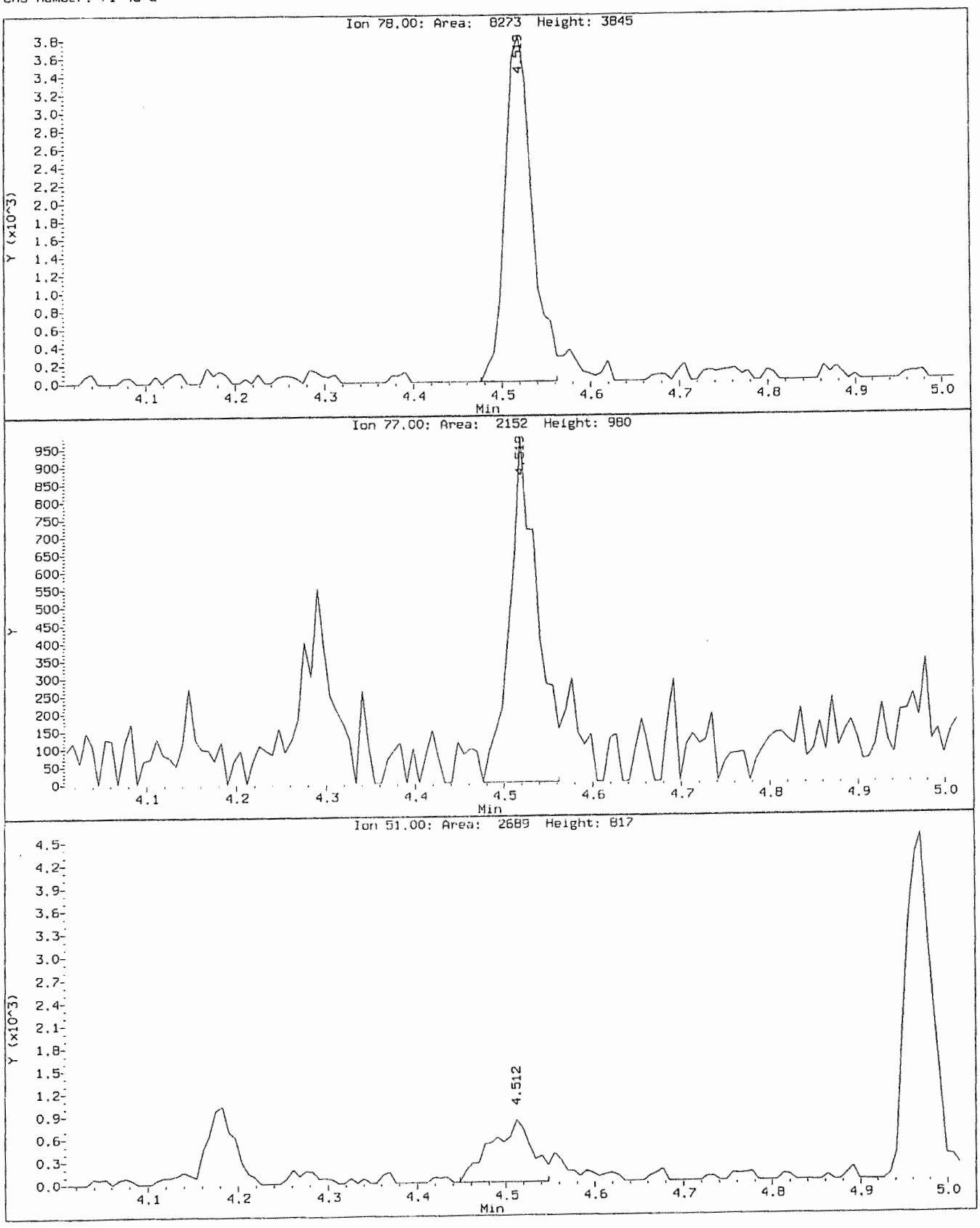
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Benzene
CAS Number: 71-43-2



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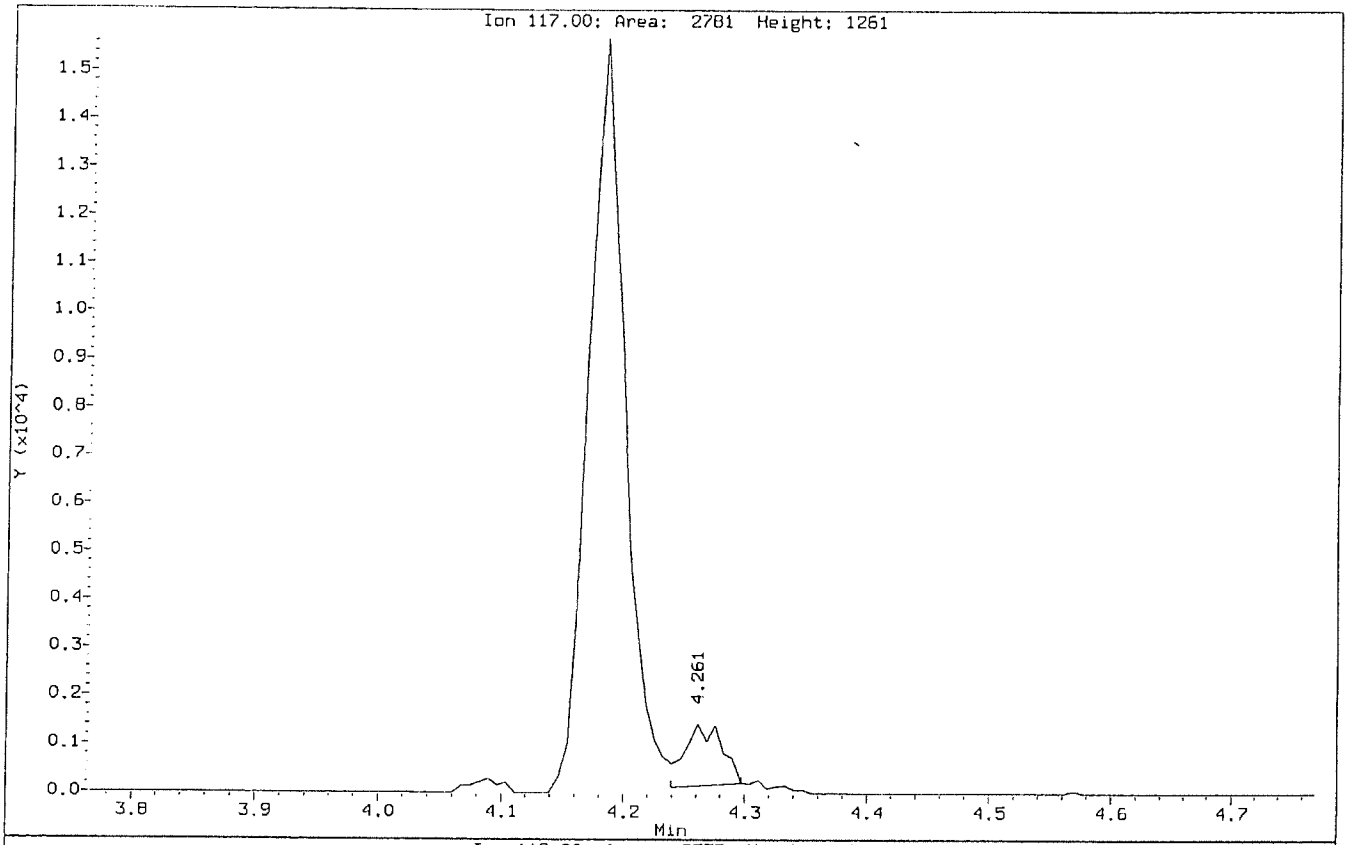
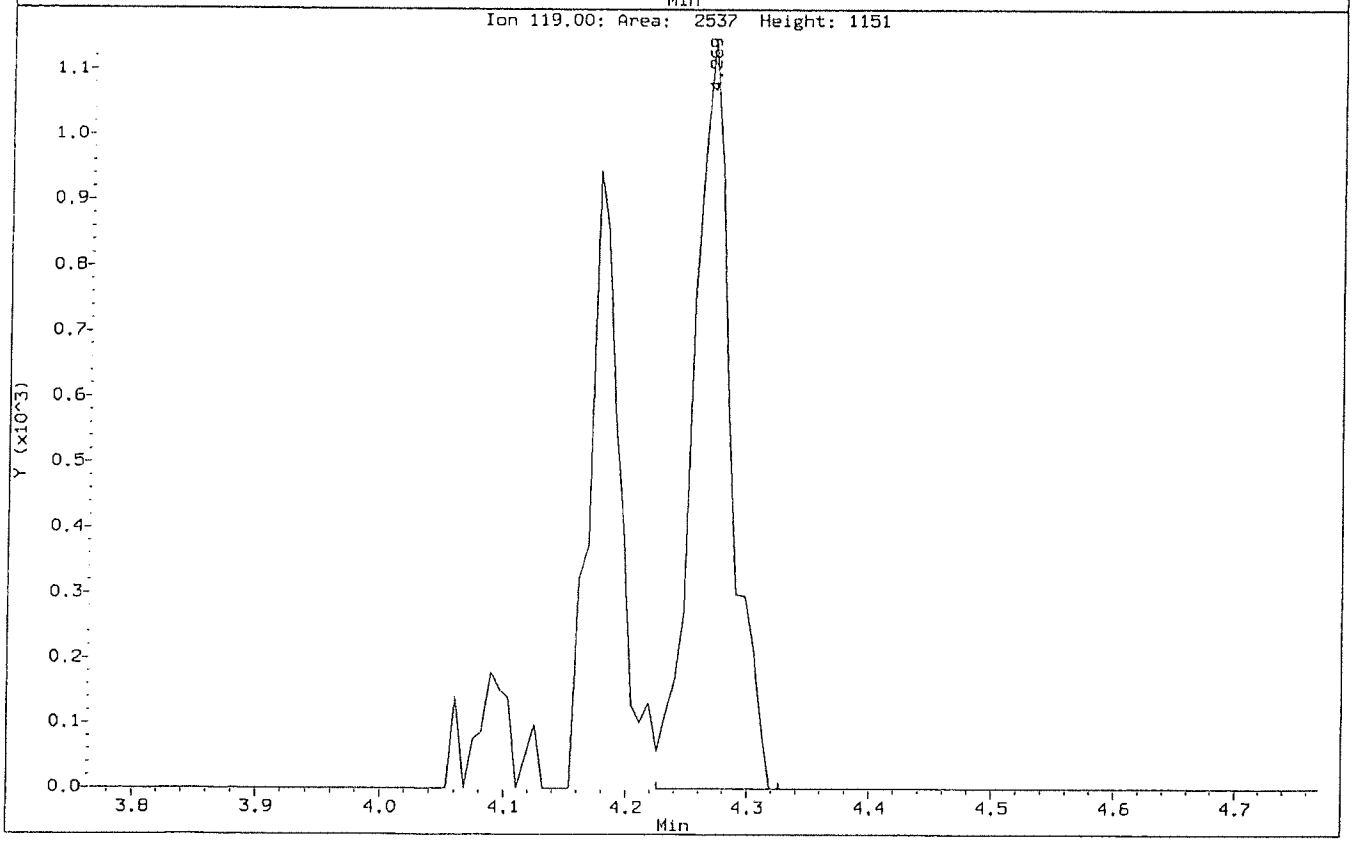
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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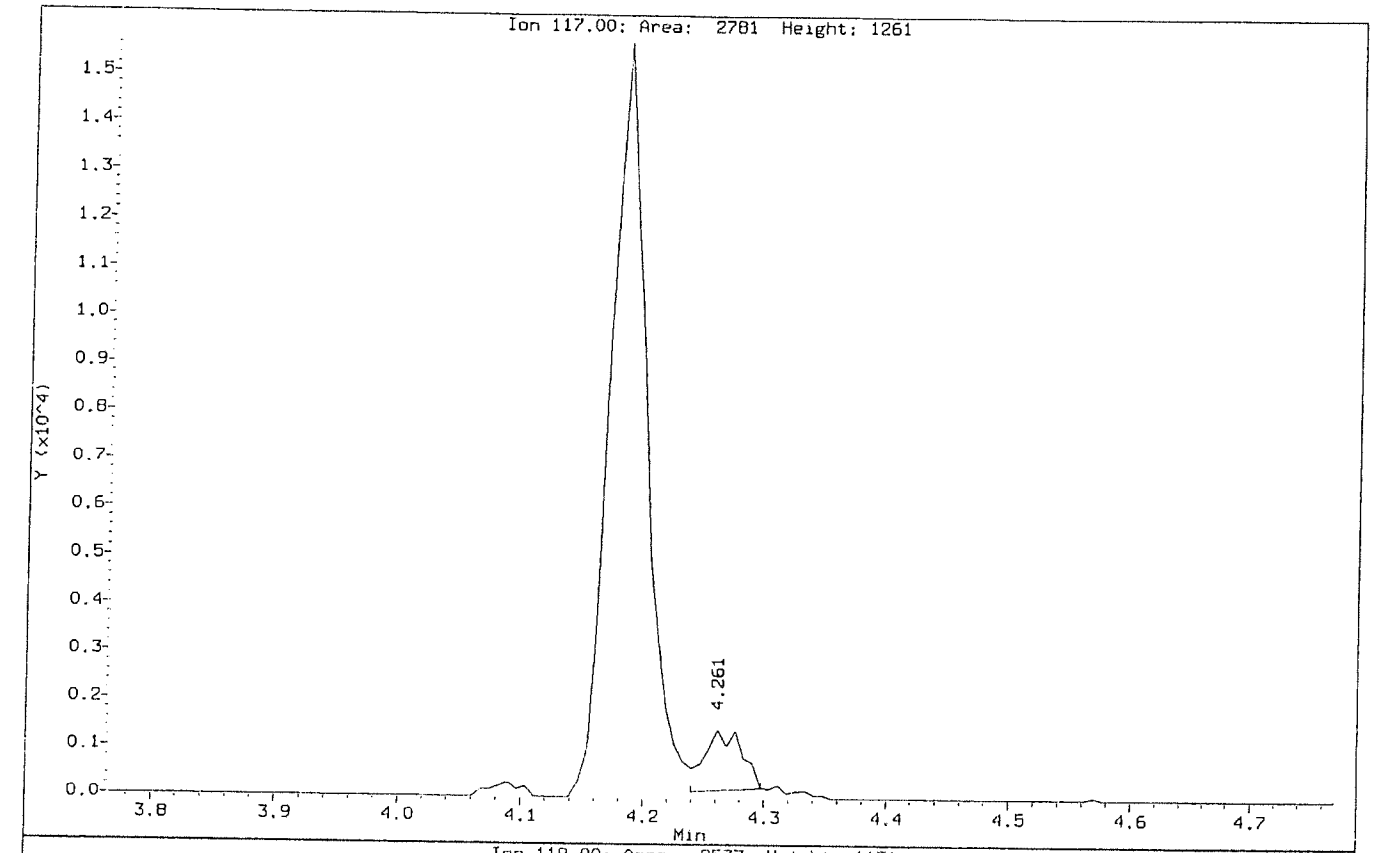
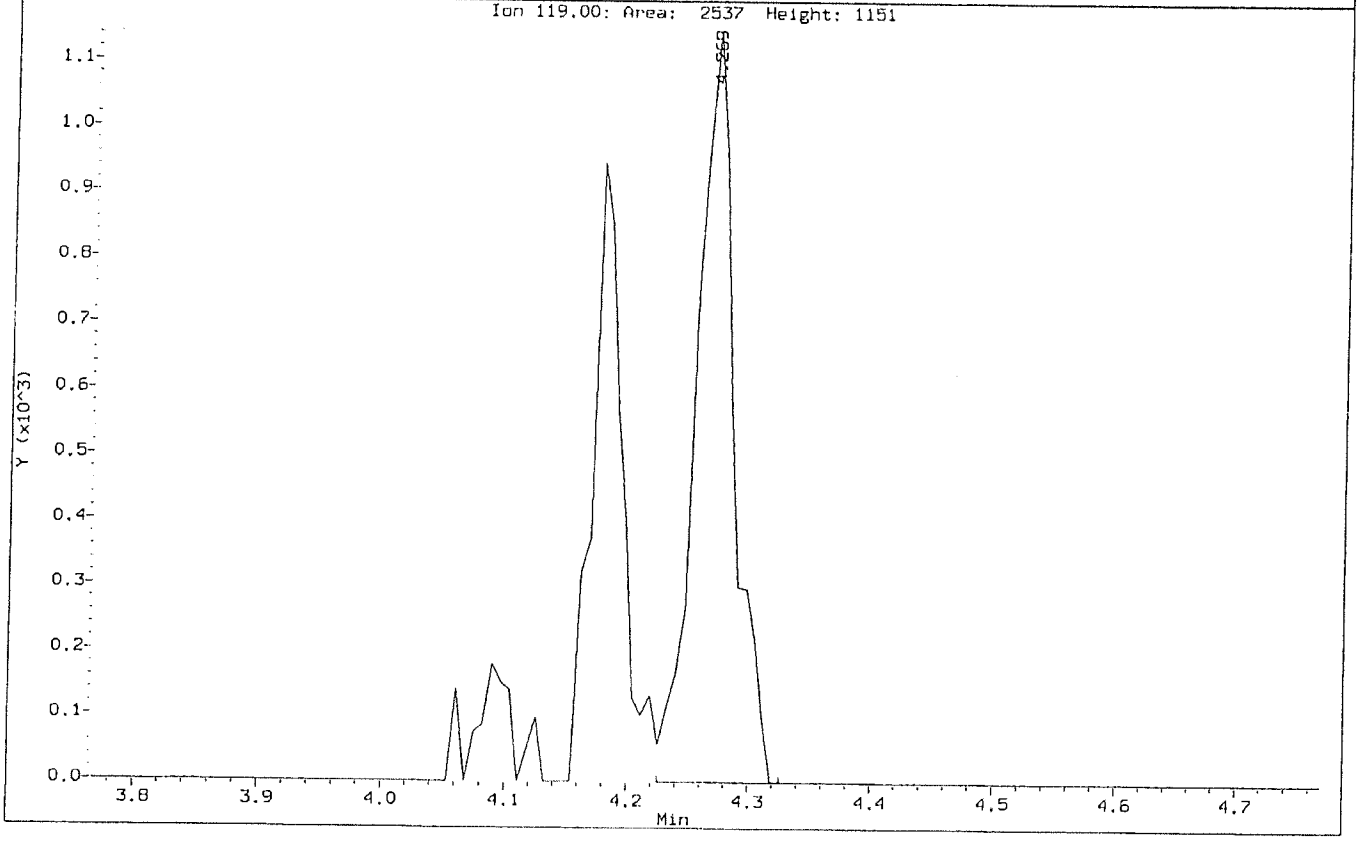
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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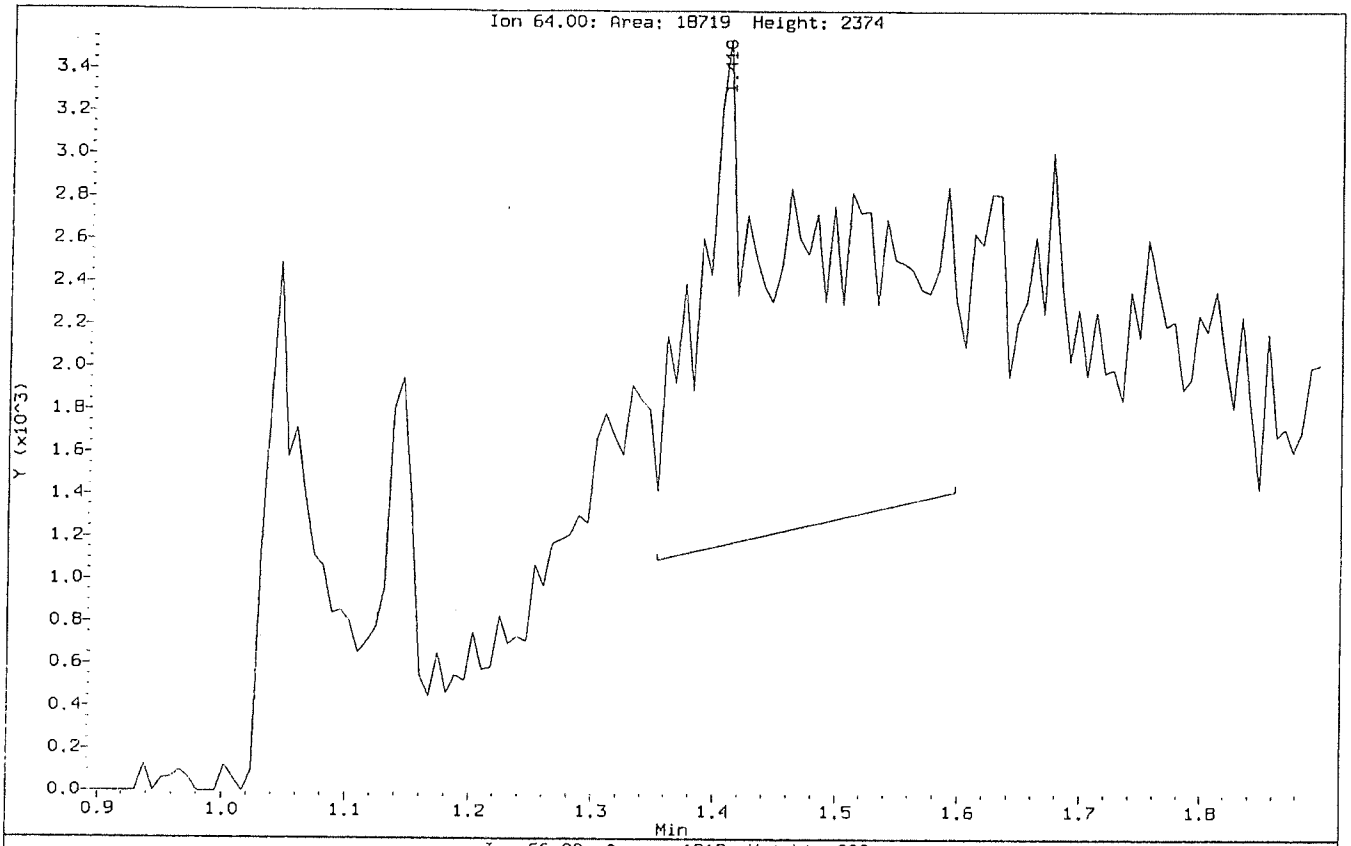
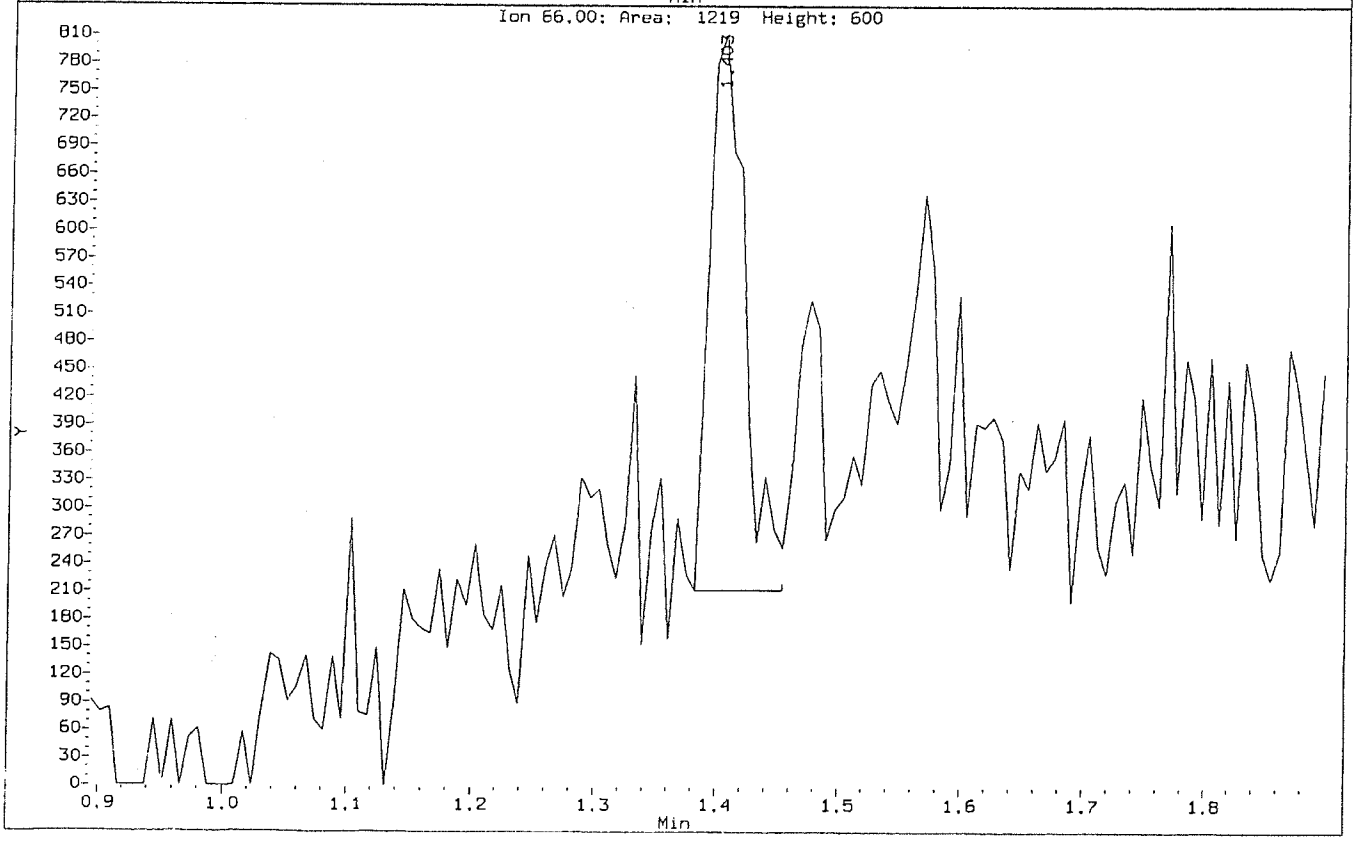
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

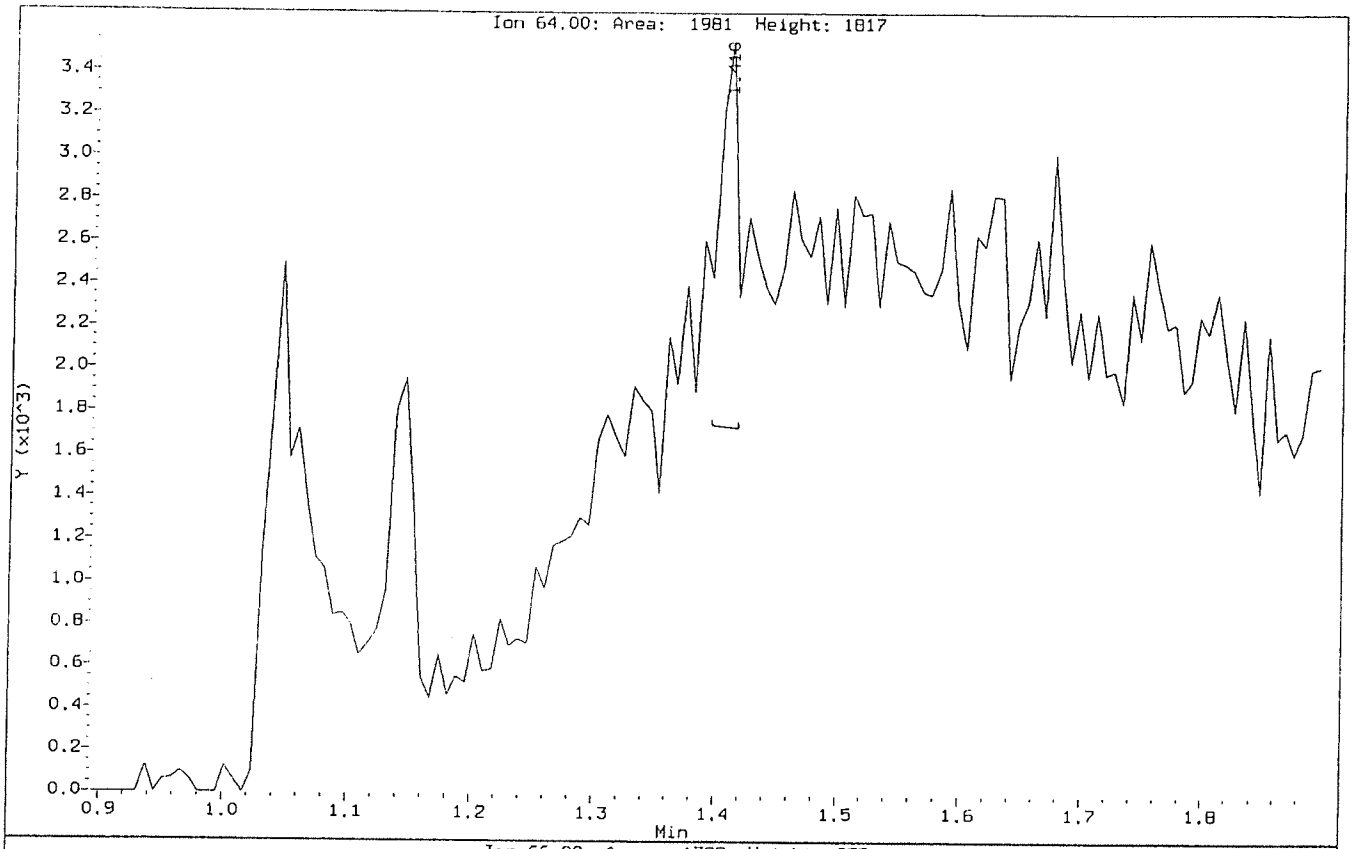
Compound: Chloroethane
CAS Number: 75-00-3

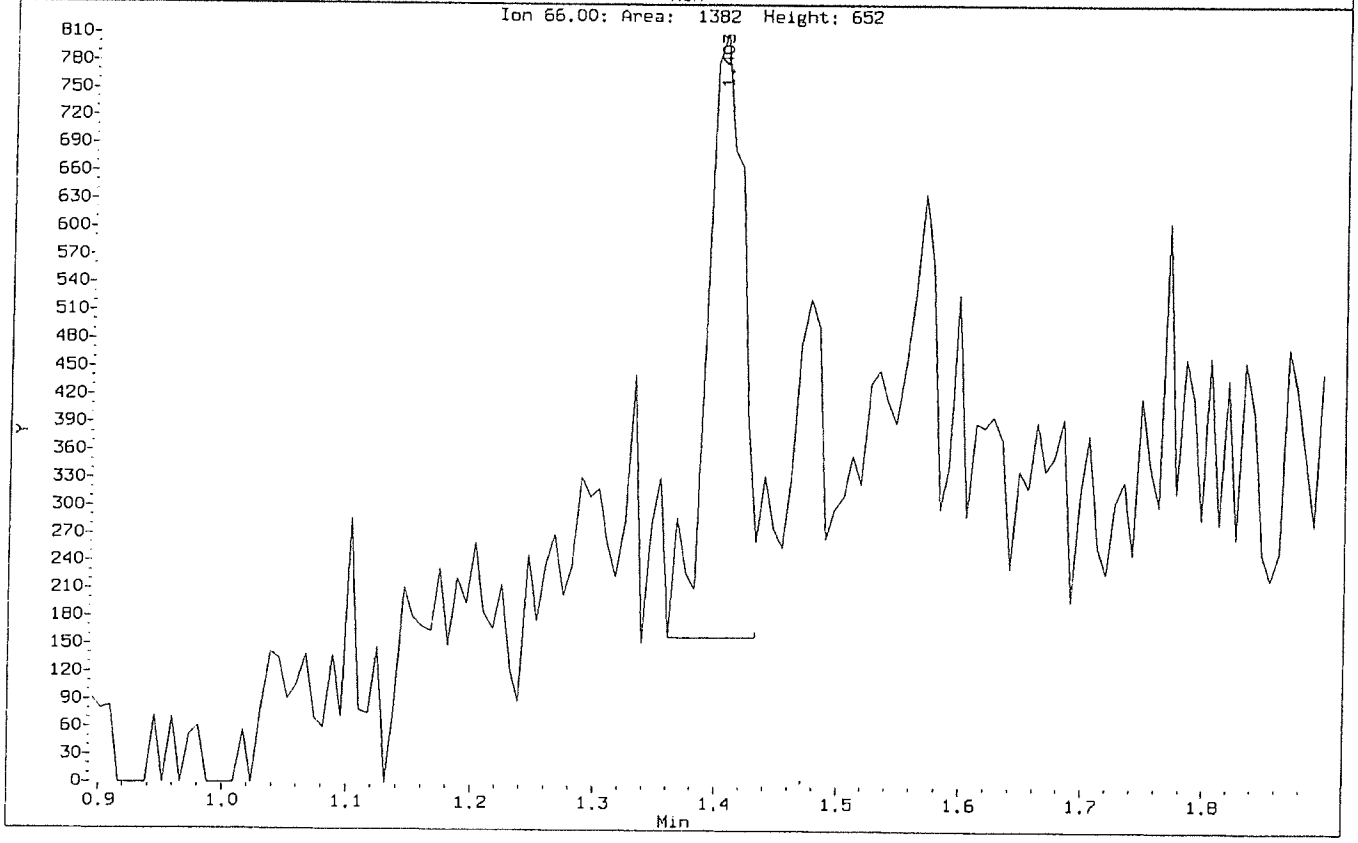




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052603.D
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Chloroethane
CAS Number: 75-00-3





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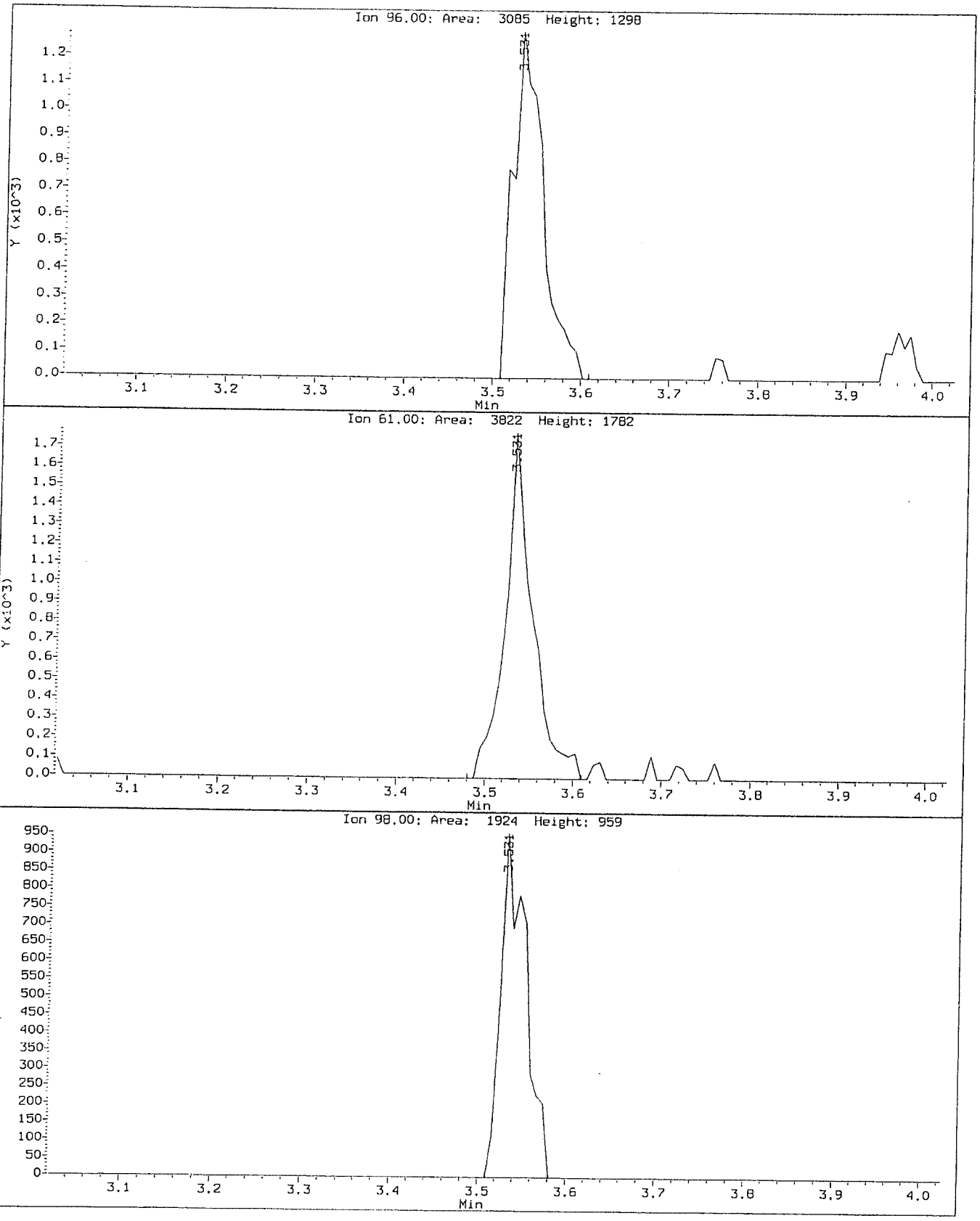
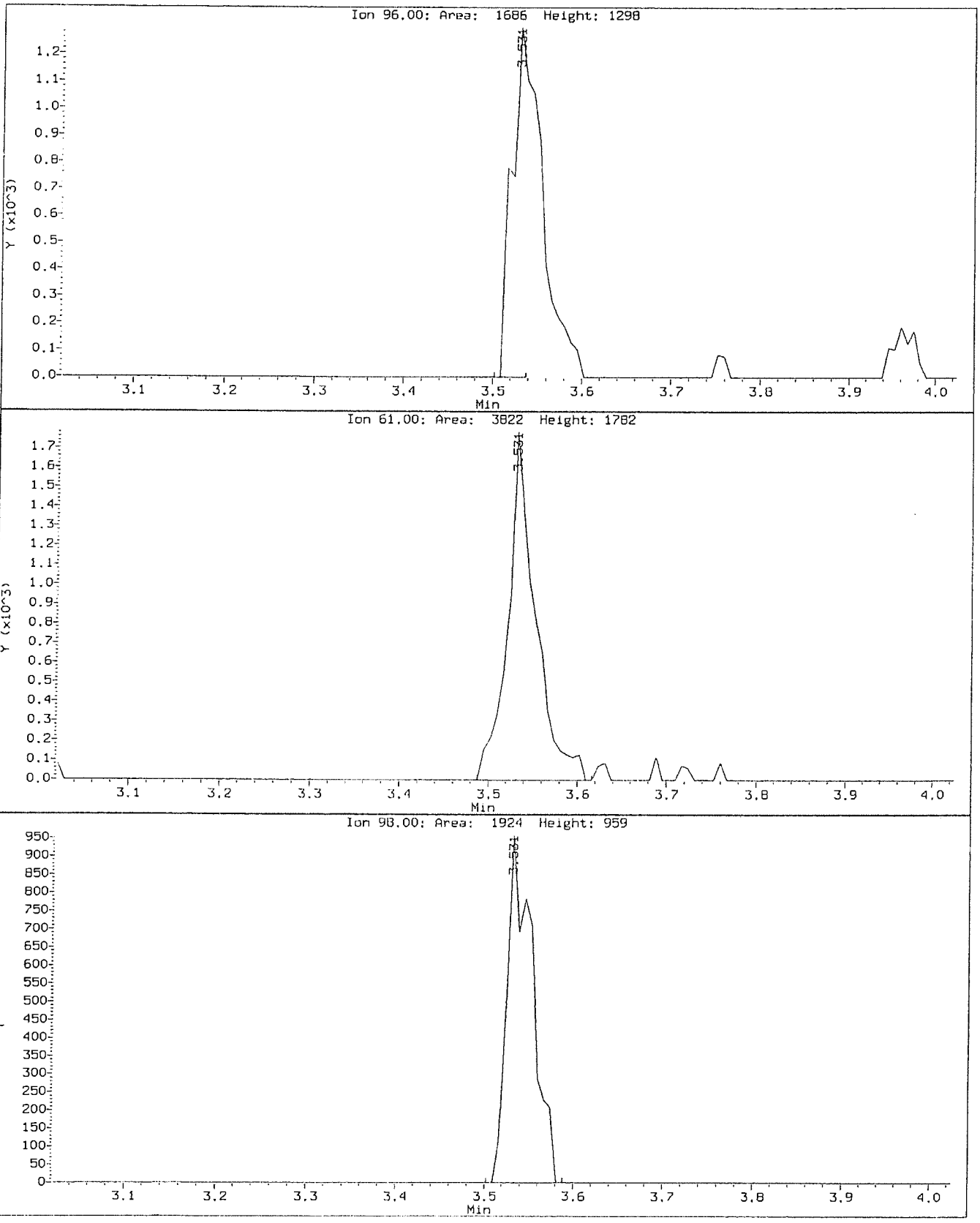
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052603.D
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



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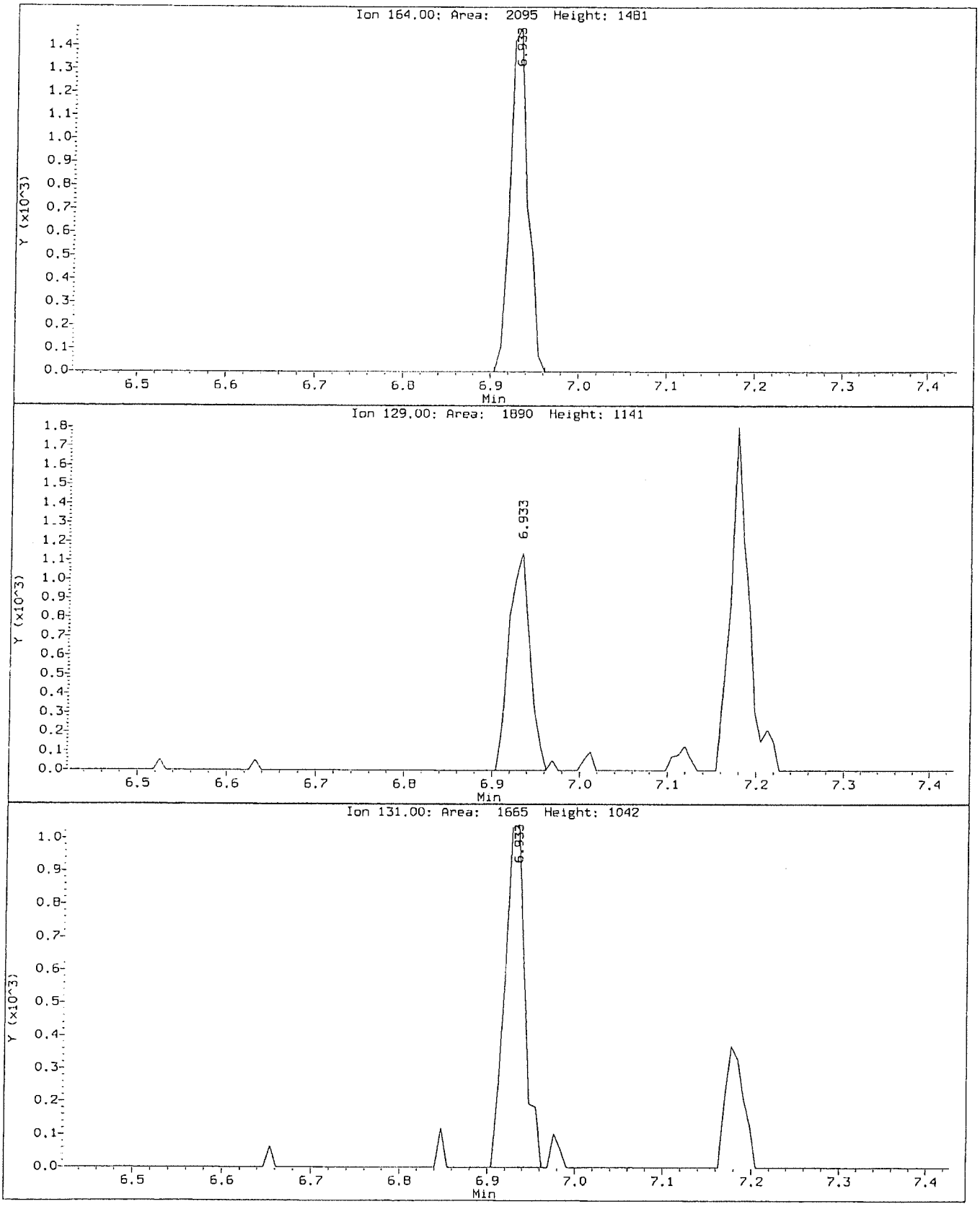
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Tetrachloroethene
CAS Number: 127-18-4



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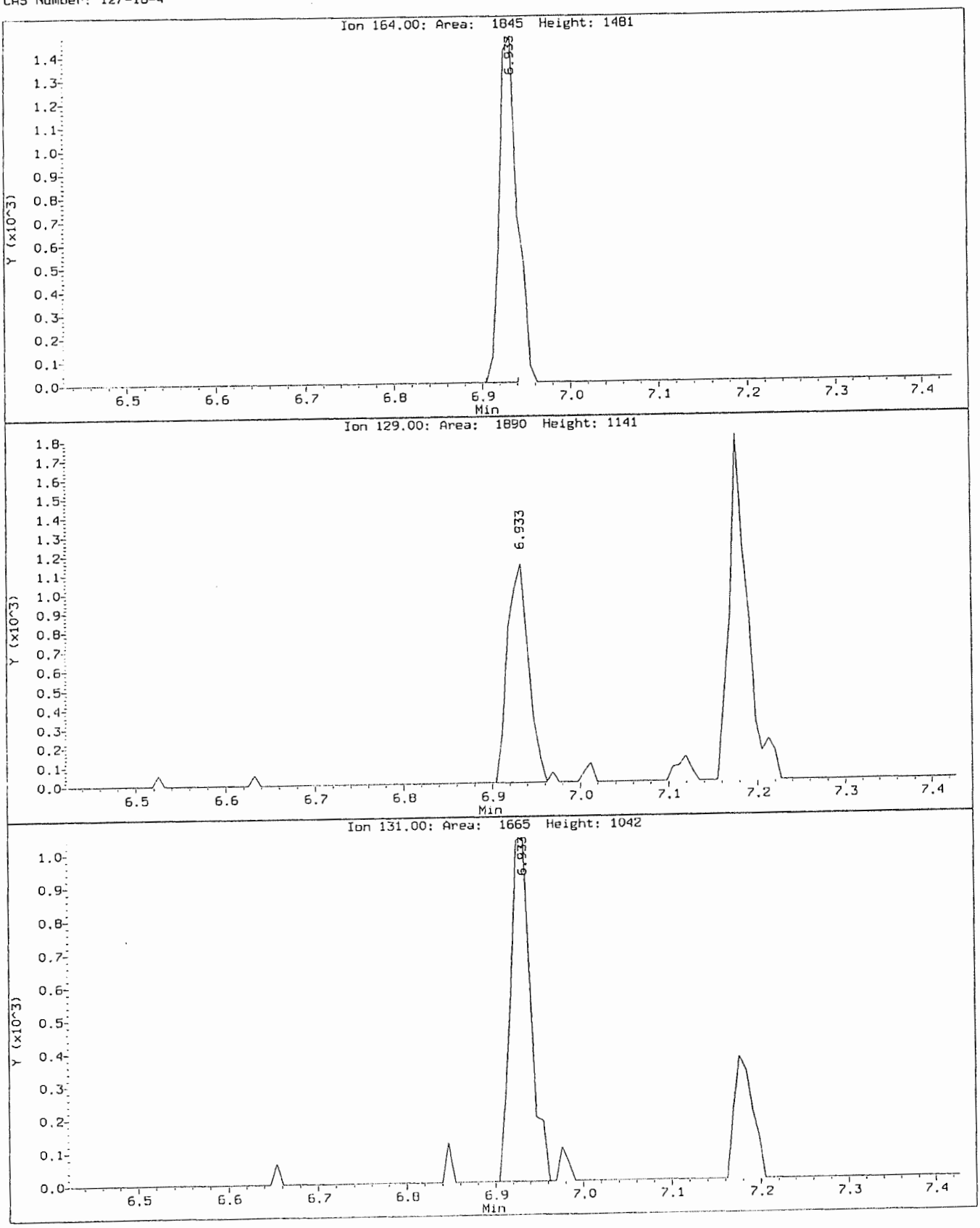
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Tetrachloroethene
CAS Number: 127-18-4



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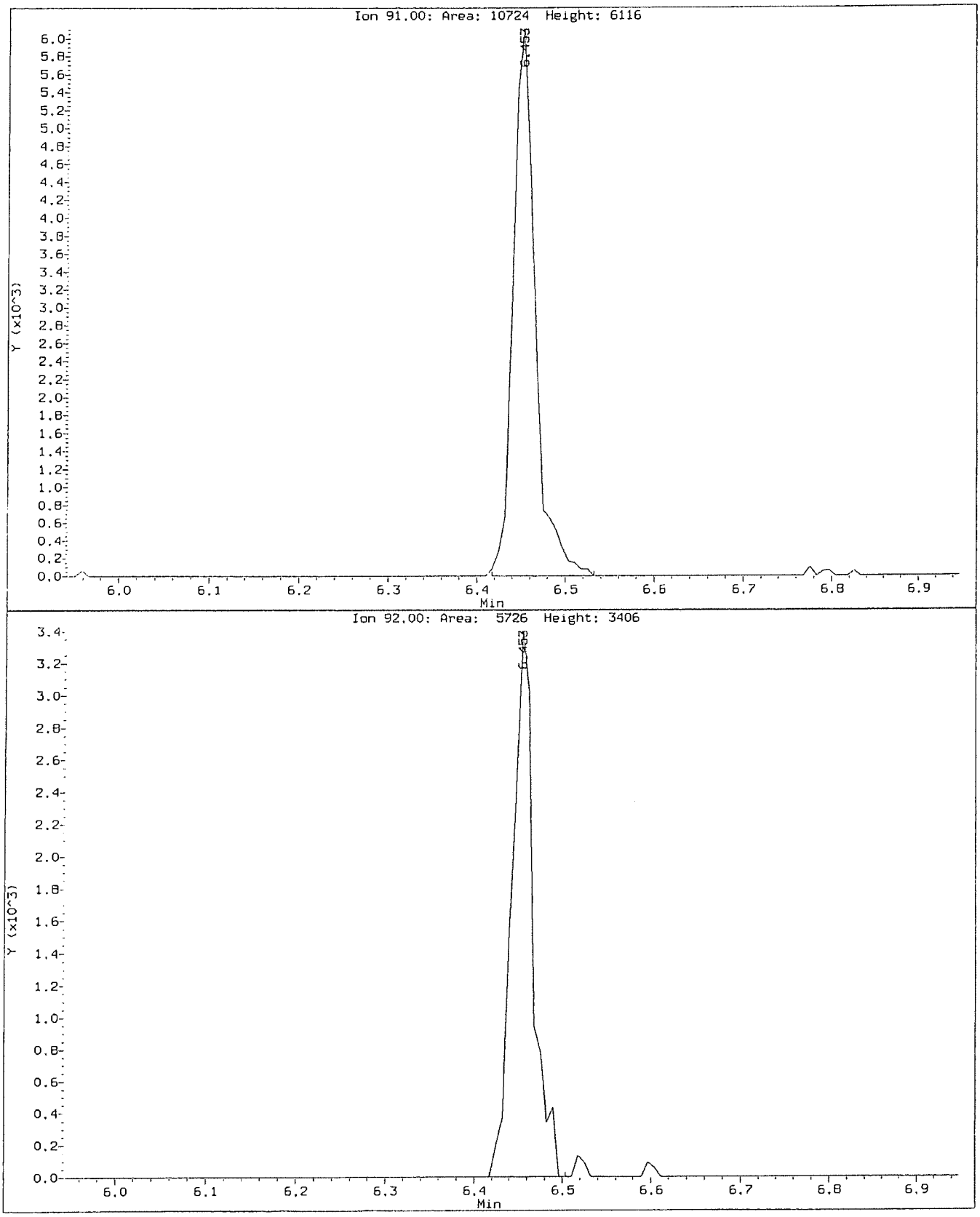
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Toluene
CAS Number: 108-88-3



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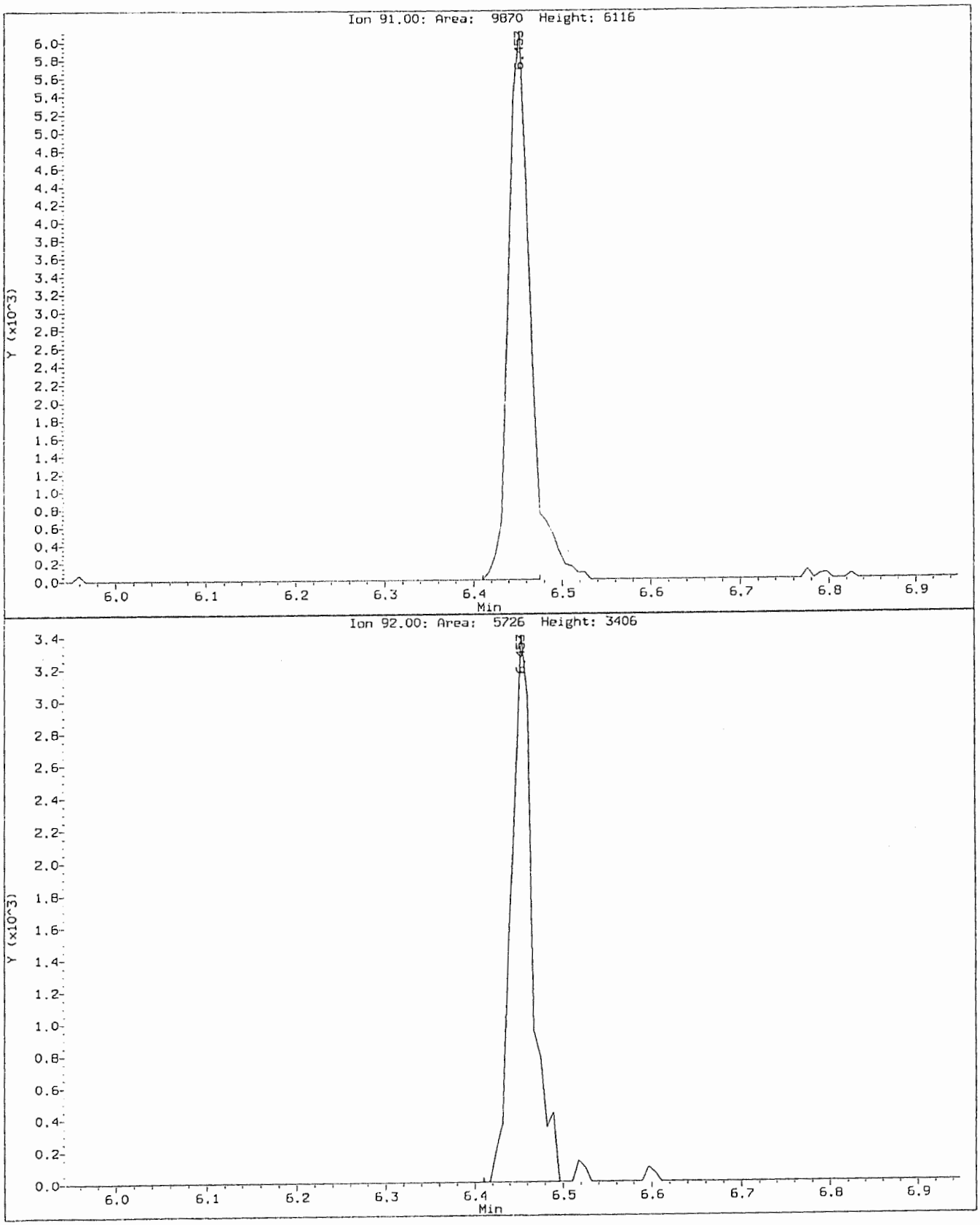
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Toluene
CAS Number: 108-88-3



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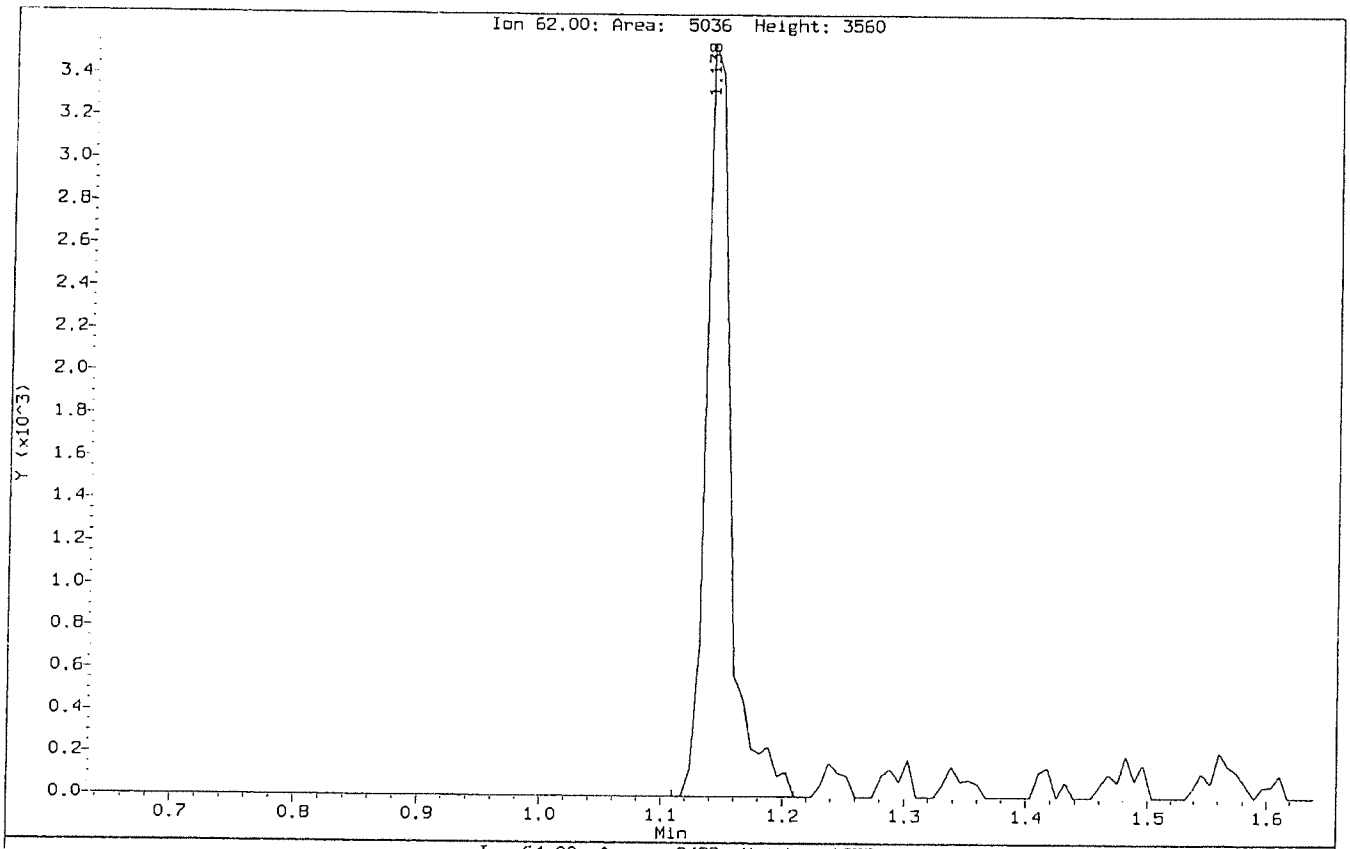
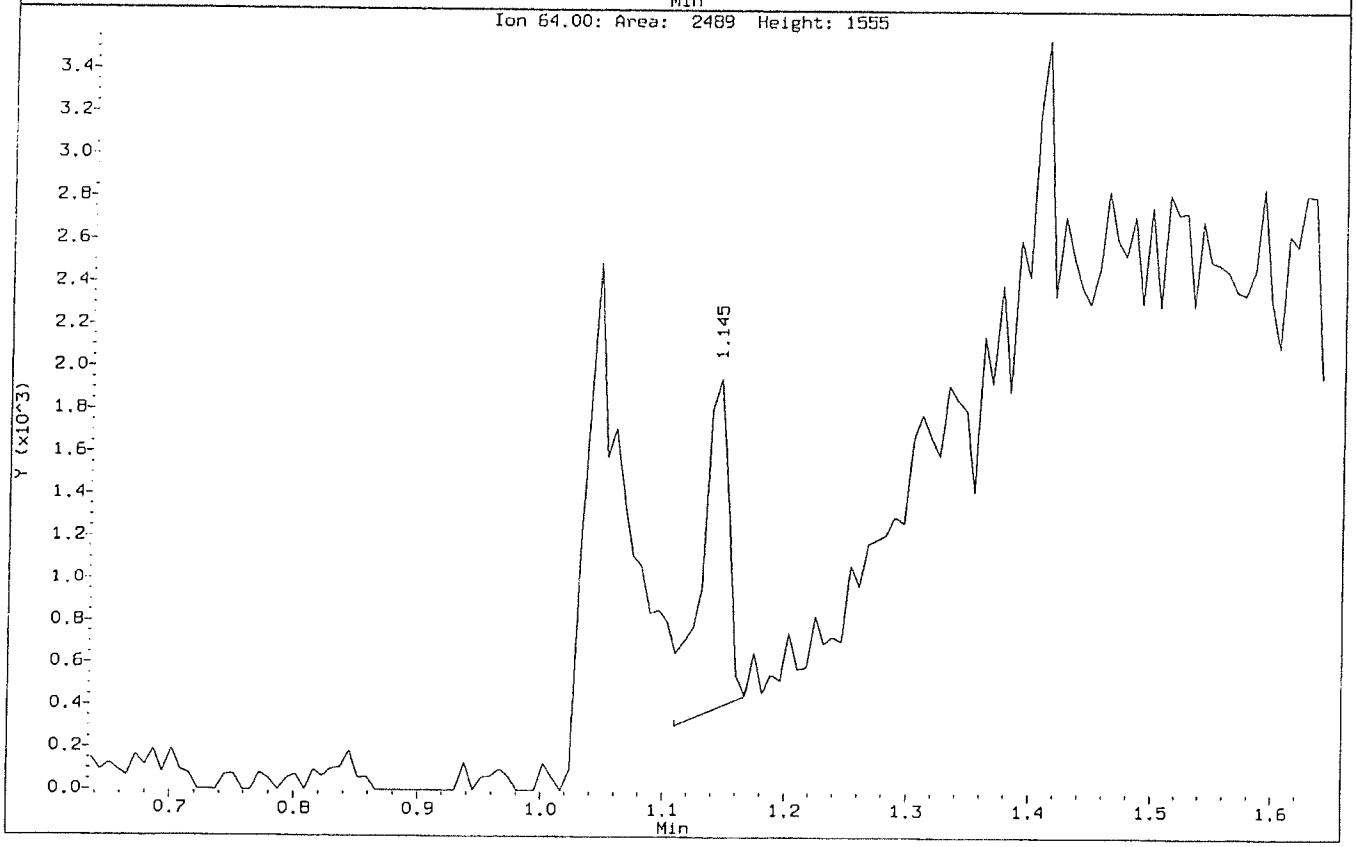
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

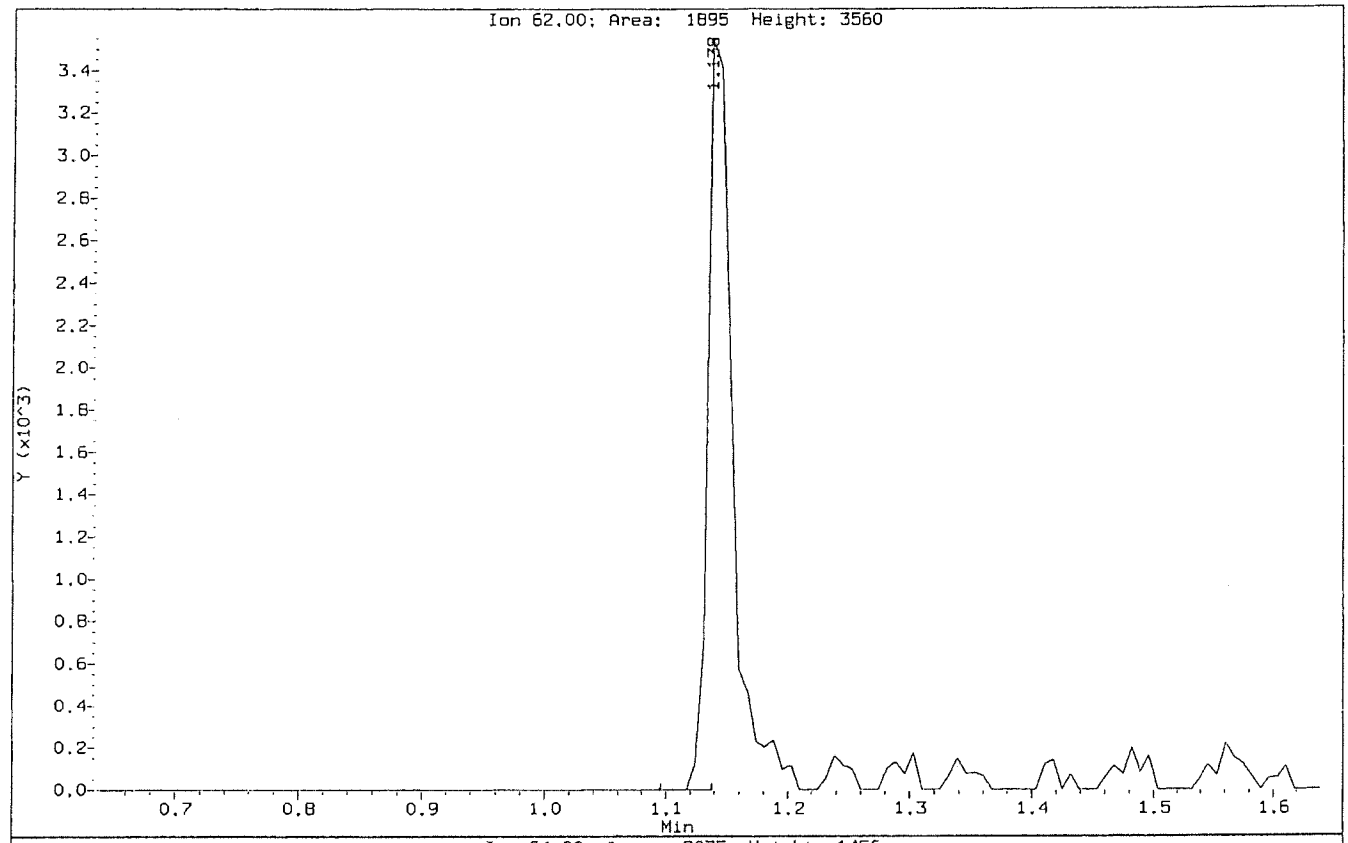
Compound: Vinyl Chloride
CAS Number: 75-01-4

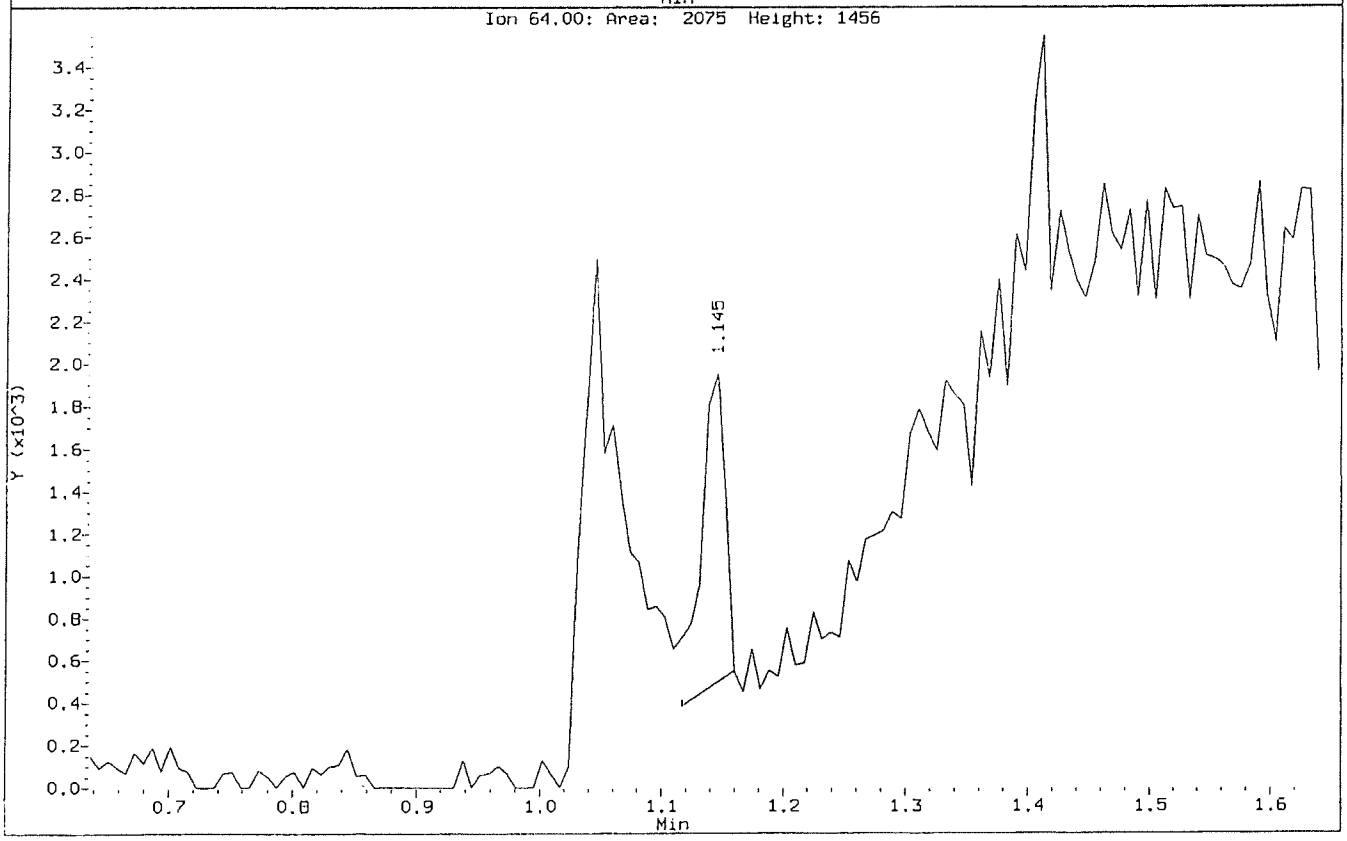




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052603.D
Injection Date: 26-MAY-2021 12:55
Instrument: voa6.i
Client Sample ID: VSTD000.5

Compound: Vinyl Chloride
CAS Number: 75-01-4





ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052604.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 26-MAY-2021 13:37
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 13:16 Cal File: X052689.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

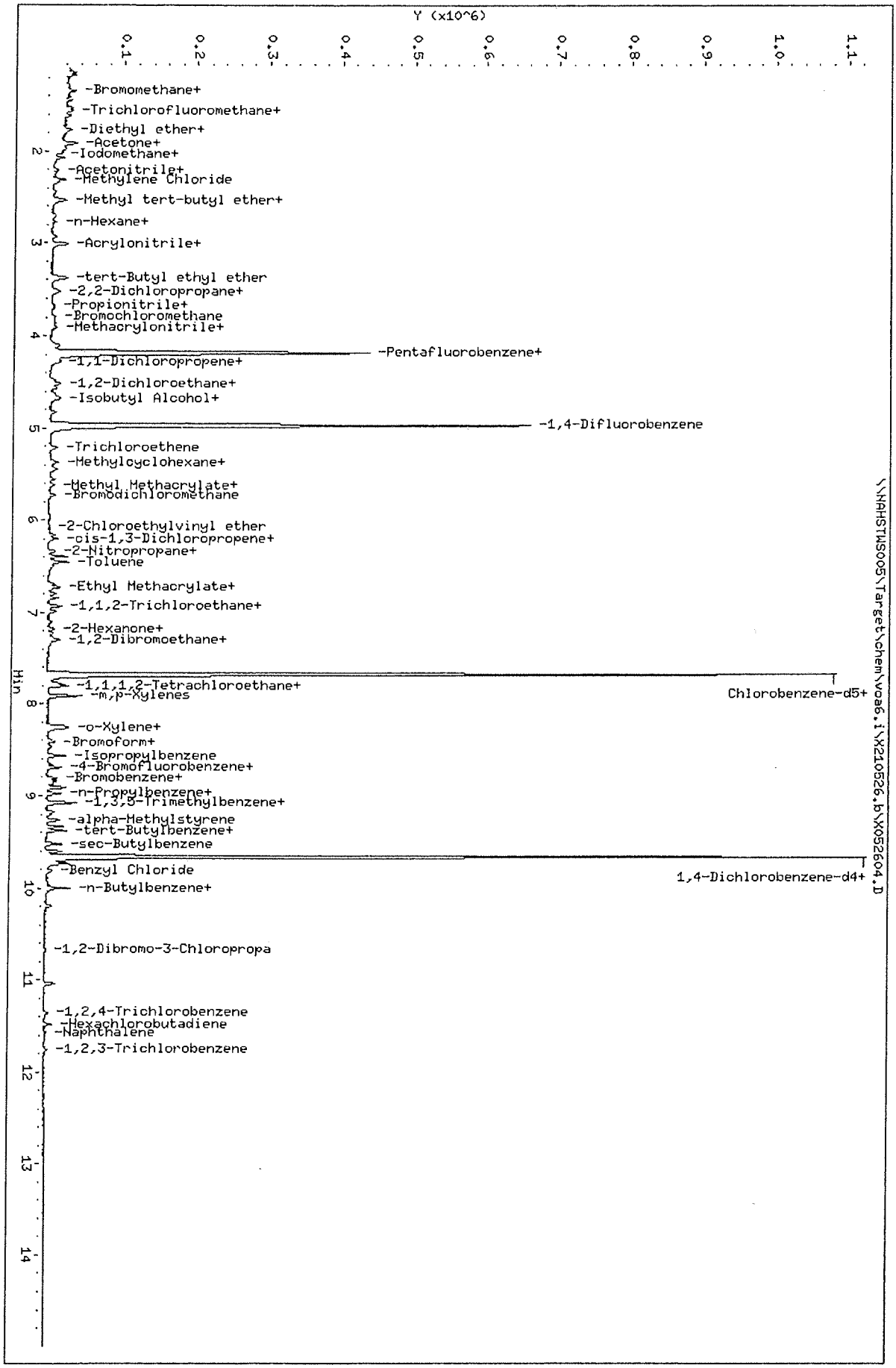
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	374662	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	596470	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	539050	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	263816	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.483	4.483	(1.072)	4768	1.00000	0.65(a)
$ 69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	6016	1.00000	2.00(a)
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	4774	1.00000	1.13(a)
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	16130	1.00000	1.20(a)
31 1,1,1-Trichloroethane	97	4.089	4.089	(0.978)	5755	1.00000	1.03(a)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	2883	1.00000	0.98(a)
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	5856	1.00000	0.98(a)
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	3995	1.00000	1.03(a)
33 1,2-Dichloroethane	62	4.562	4.562	(0.919)	4589	1.00000	0.96(a)
37 Benzene	78	4.512	4.512	(0.909)	13768	1.00000	1.00
34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	5081	1.00000	1.02(aH)
59 Chlorobenzene	112	7.692	7.692	(1.003)	11243	1.00000	1.00(a)
7 Chloroethane	64	1.403	1.403	(0.336)	3557	1.00000	(aM)
28 Chloroform	83	3.910	3.910	(0.935)	6401	1.00000	0.97(a)
27 cis-1,2-Dichloroethene	96	3.538	3.538	(0.846)	4276	1.00000	1.08(a)
61 Ethylbenzene	106	7.800	7.800	(1.017)	4880	1.00000	0.94(a)
56 Tetrachloroethene	164	6.933	6.933	(0.904)	3075	1.00000	0.92(a)
50 Toluene	91	6.453	6.453	(0.841)	16276	1.00000	1.03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.535	2.535	(0.606)	3617	1.00000	1.03(a)
38 Trichloroethene	130	5.214	5.214	(1.051)	3767	1.00000	0.92(a)
5 Vinyl Chloride	62	1.138	1.138	(0.272)	5435	1.00000	1.22(aM)

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.

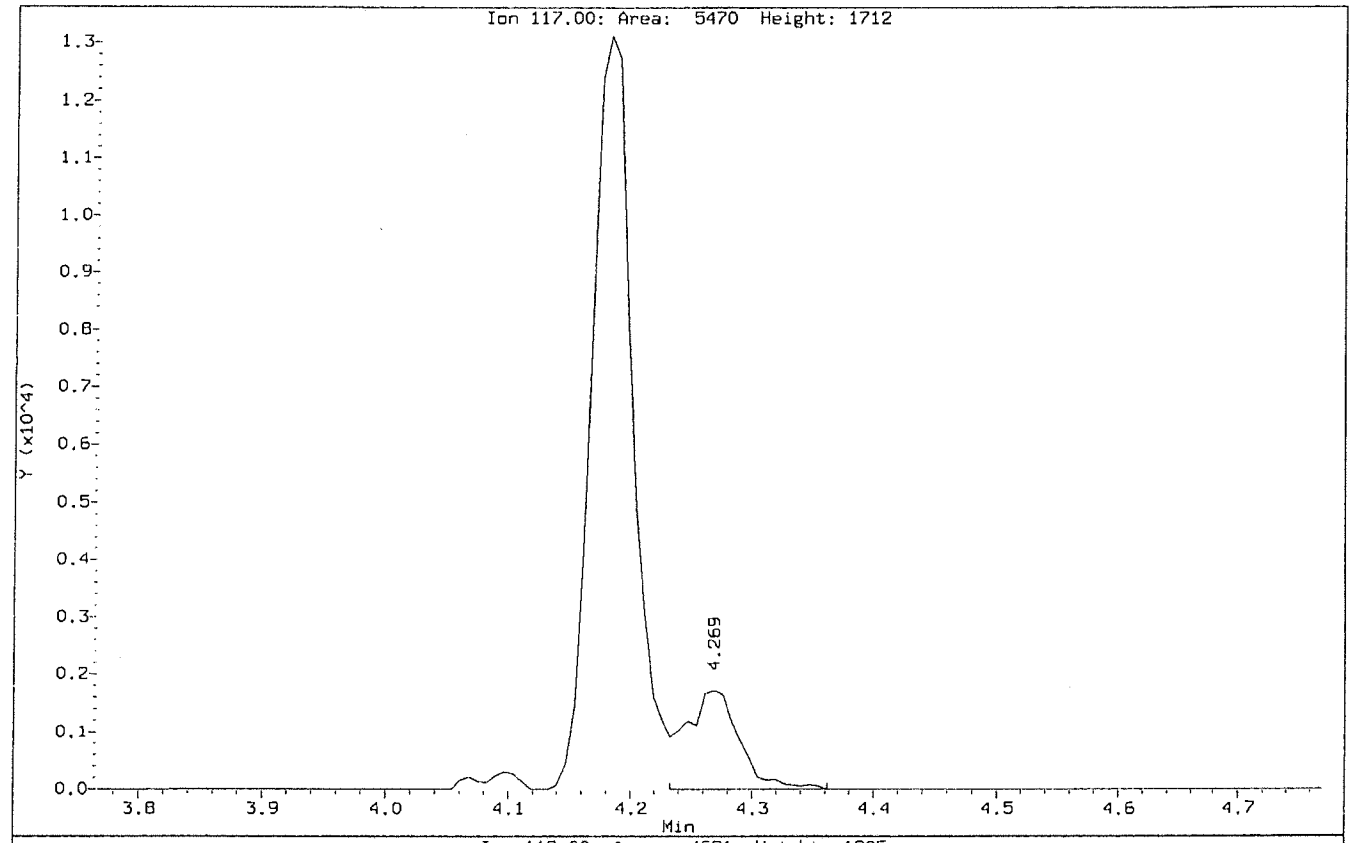


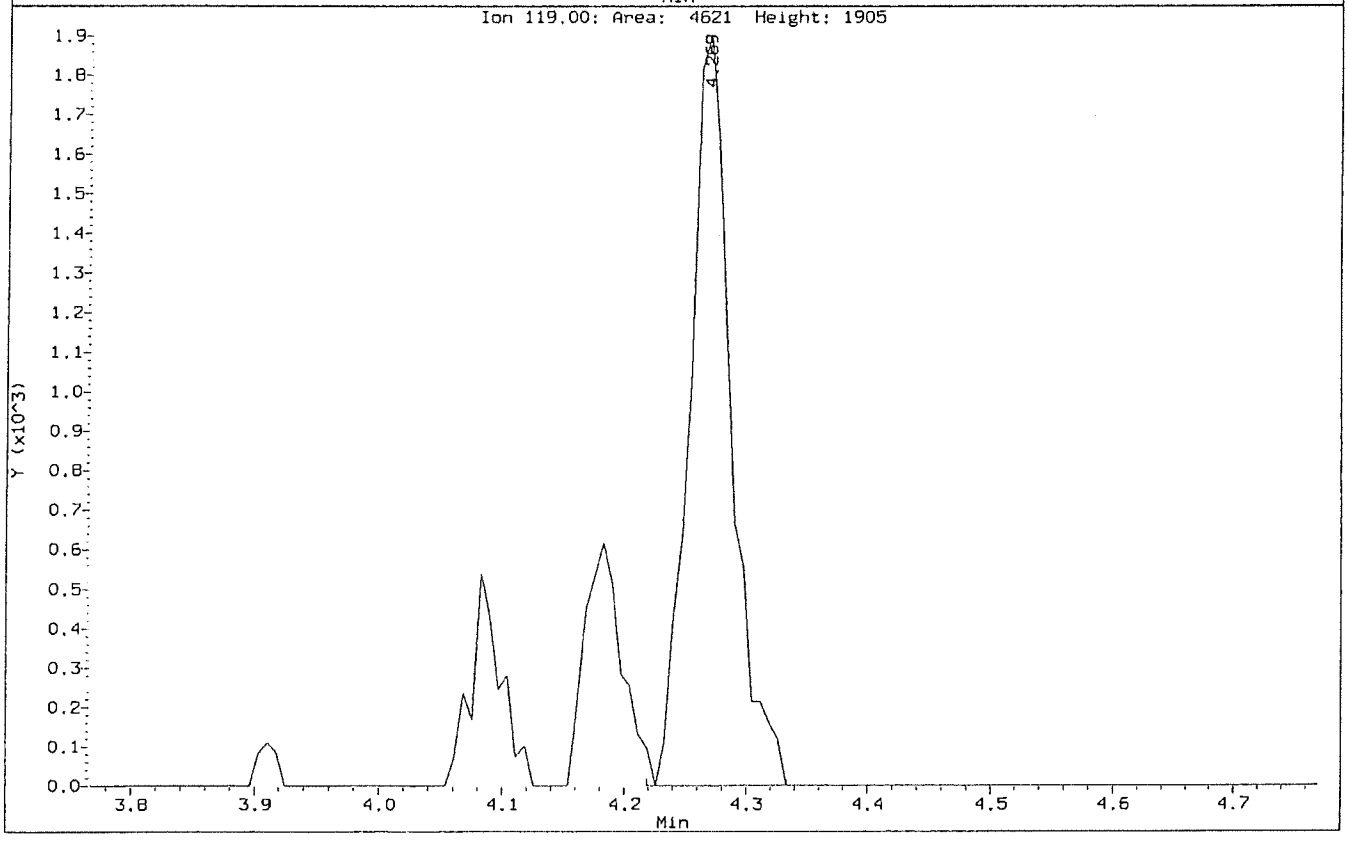
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052604.D
Date : 26-MAY-2021 13:37
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052604.D
Injection Date: 26-MAY-2021 13:37
Instrument: voa6.i
Client Sample ID: VSTD001

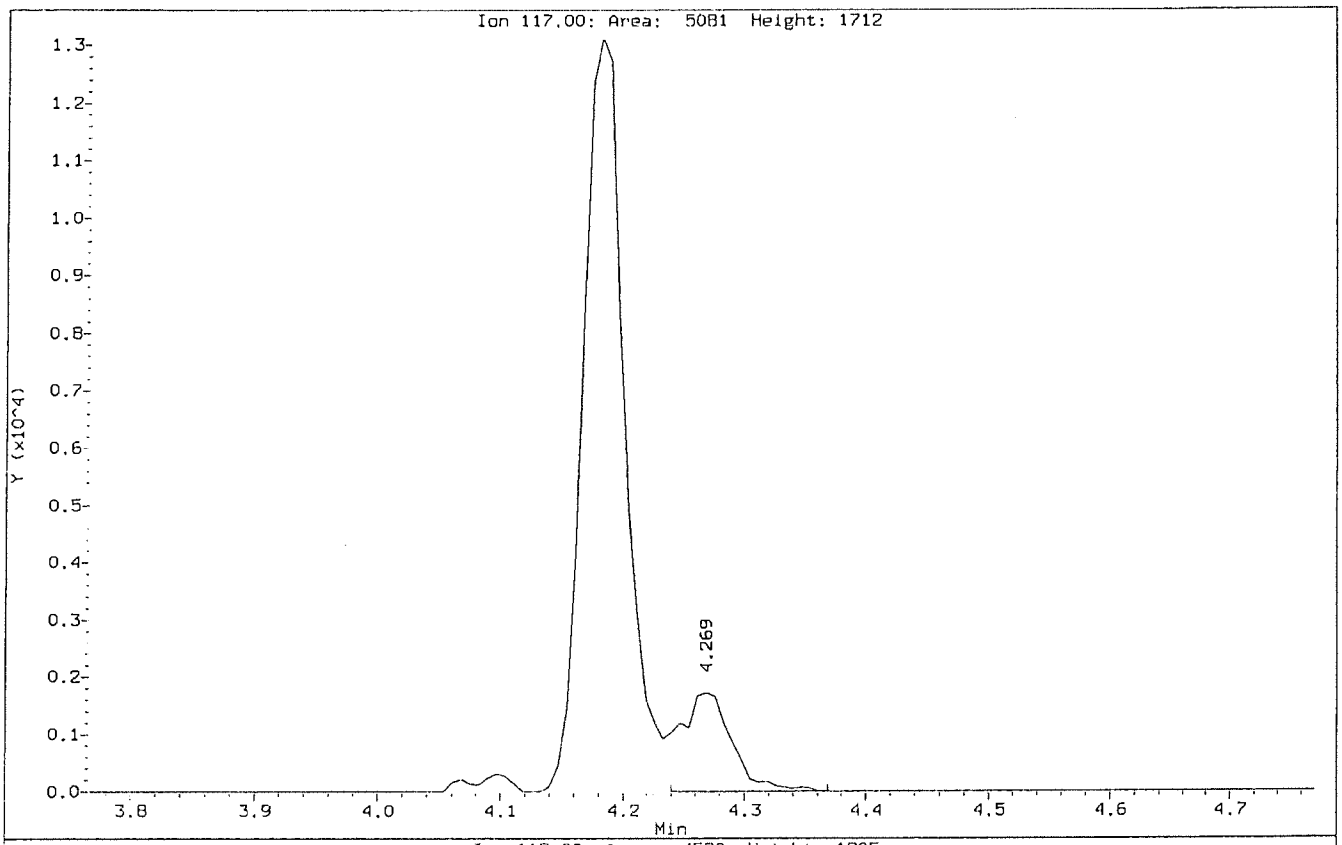
Compound: Carbon Tetrachloride
CAS Number: 56-23-5

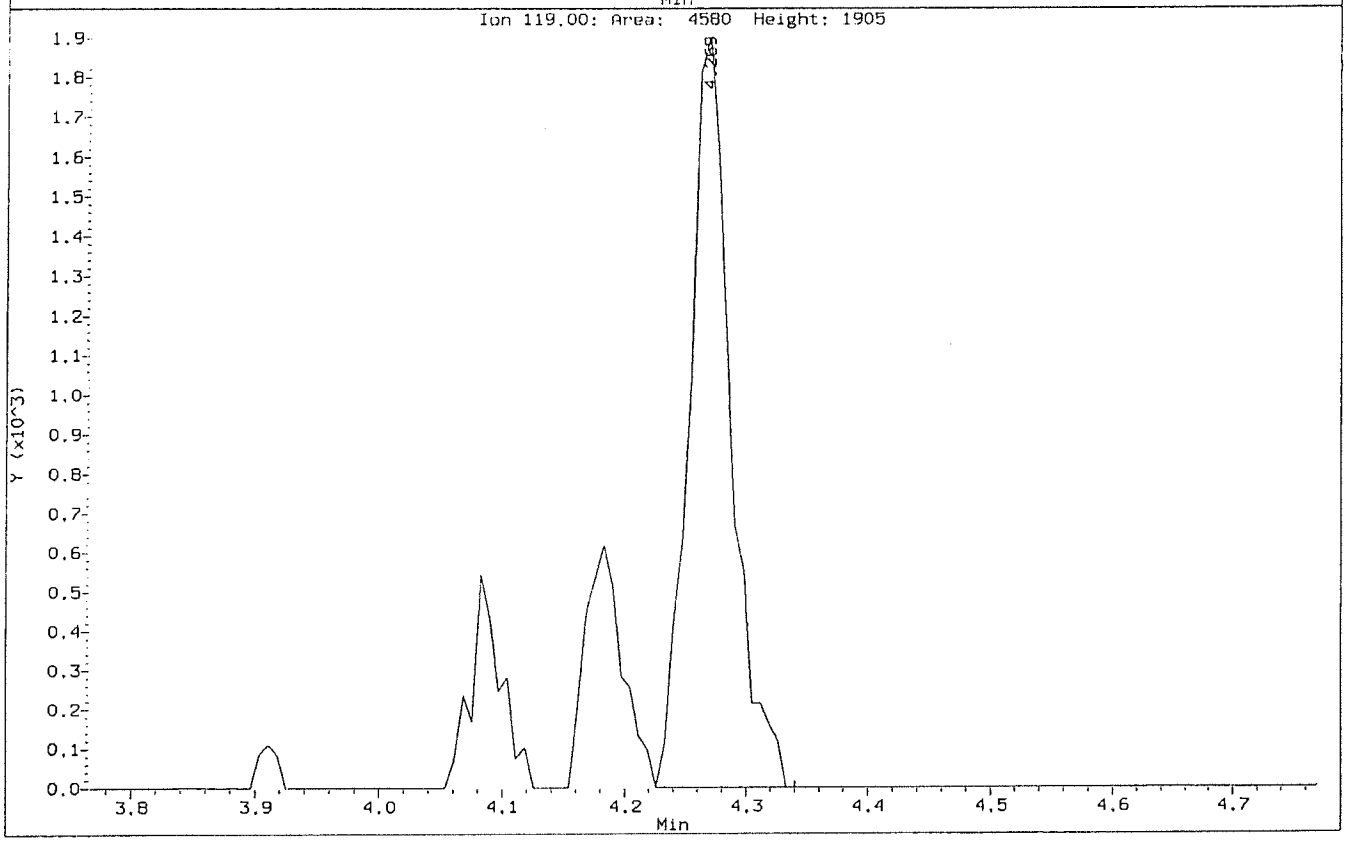




Data File: \\NAHSTW5005\Target\chem\voa6.i\X210526.b\X052604.D
Injection Date: 26-MAY-2021 13:37
Instrument: voa6.i
Client Sample ID: VSTD001

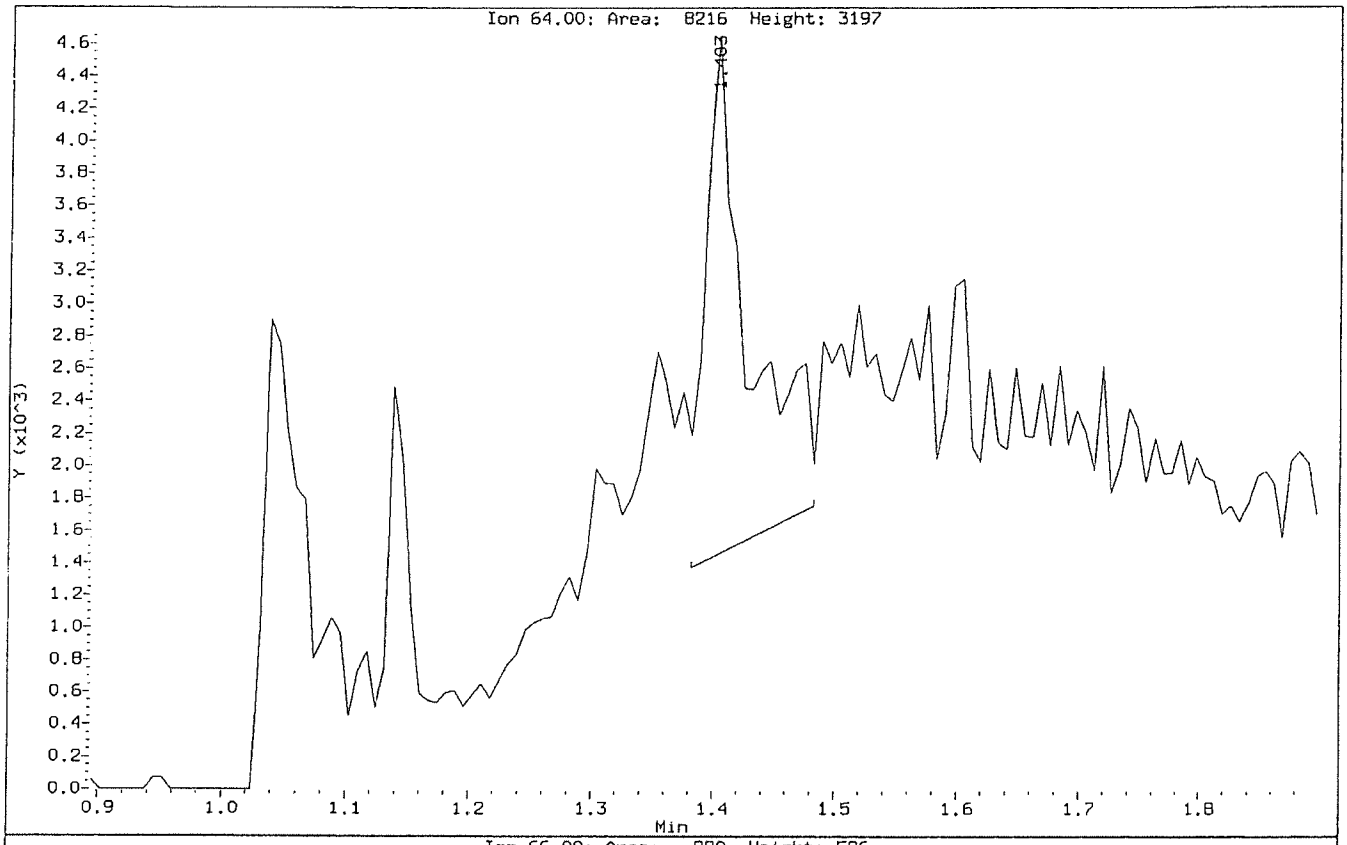
Compound: Carbon Tetrachloride
CAS Number: 56-23-5

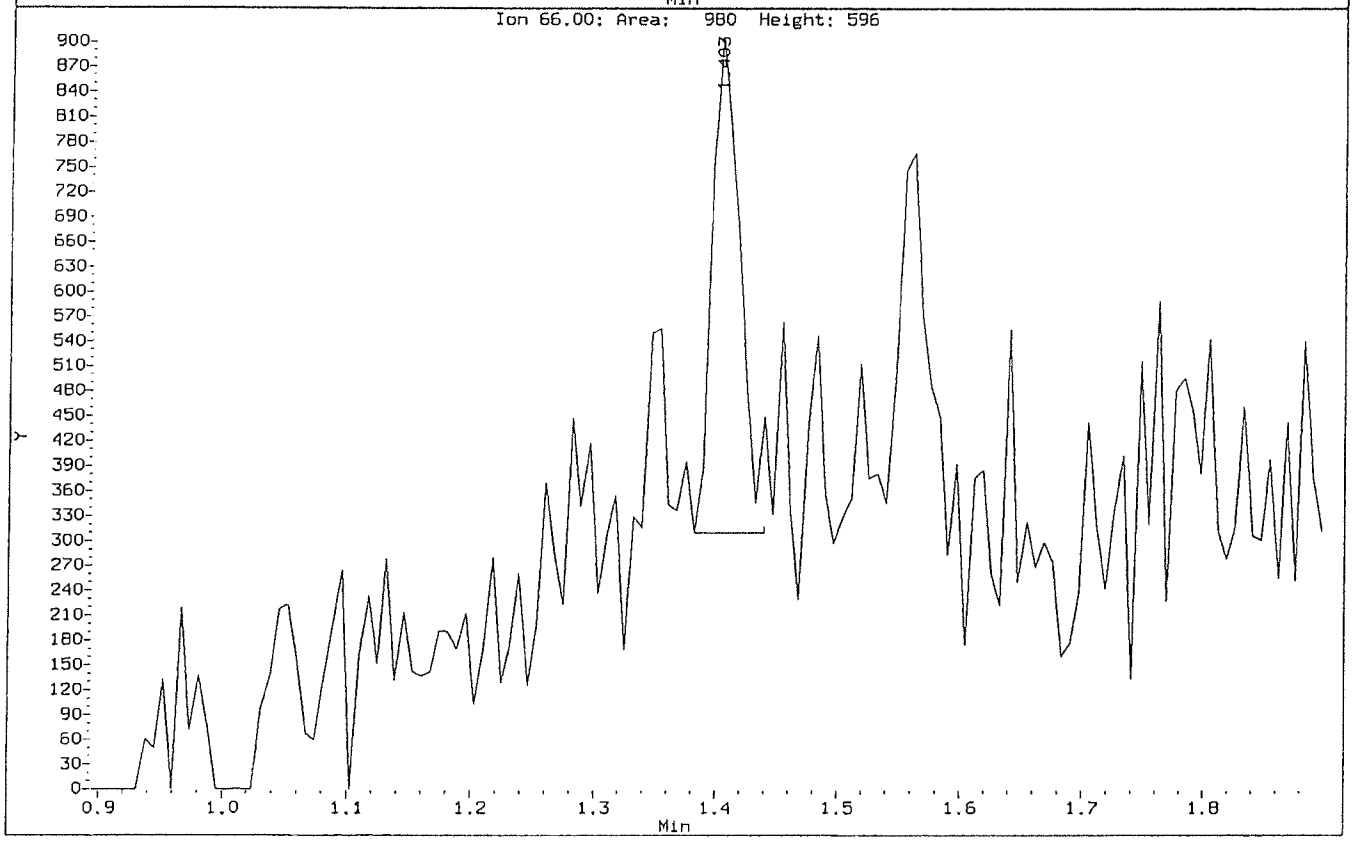




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052604.D
Injection Date: 26-MAY-2021 13:37
Instrument: voa6.i
Client Sample ID: VSTD001

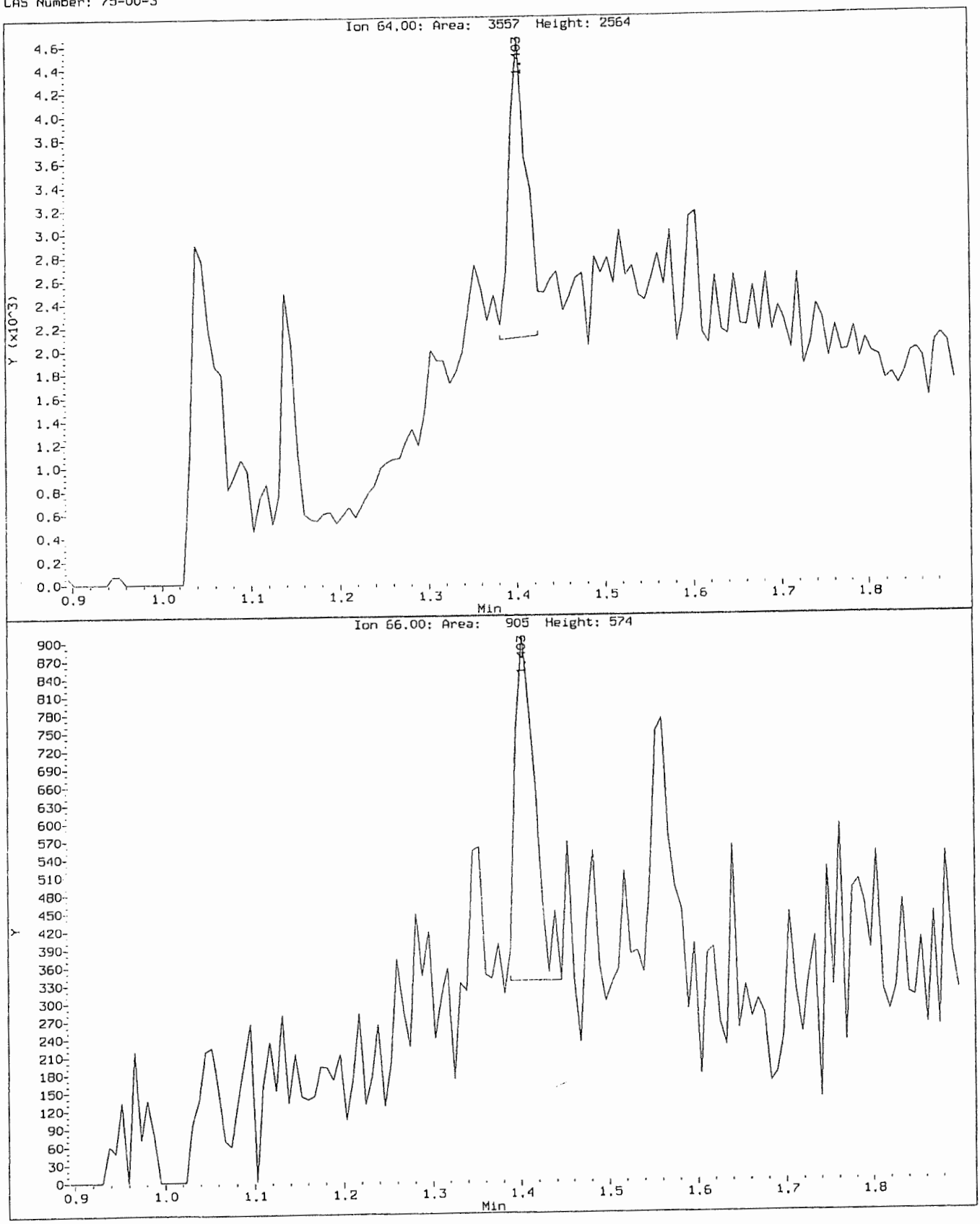
Compound: Chloroethane
CAS Number: 75-00-3





Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052604.D
Injection Date: 26-MAY-2021 13:37
Instrument: voa6.i
Client Sample ID: VSTD001

Compound: Chloroethane
CAS Number: 75-00-3



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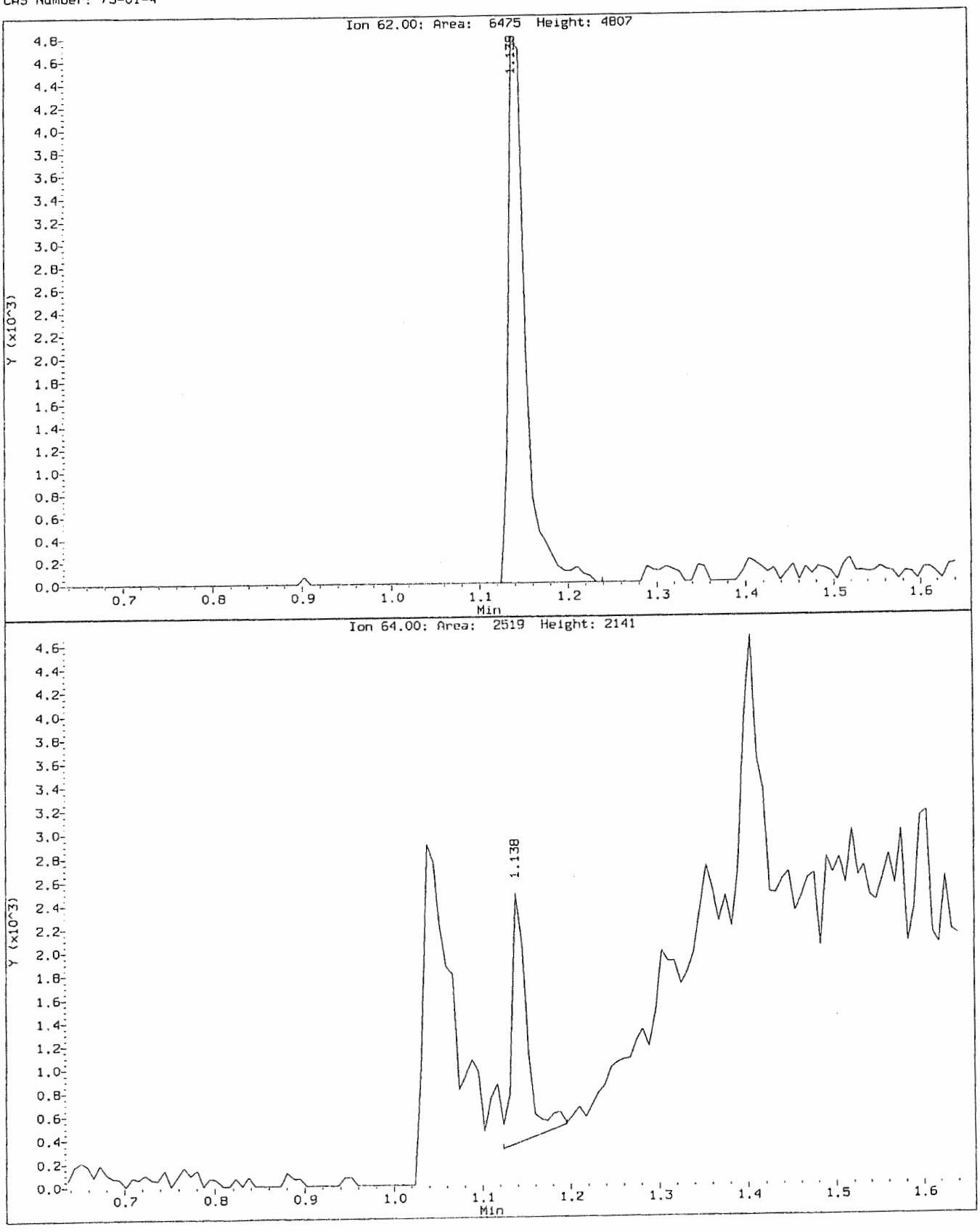
Injection Date: 26-MAY-2021 13:37
Instrument: voa6.i
Client Sample ID: VSTD001

Compound: Vinyl Chloride
CAS Number: 75-01-4



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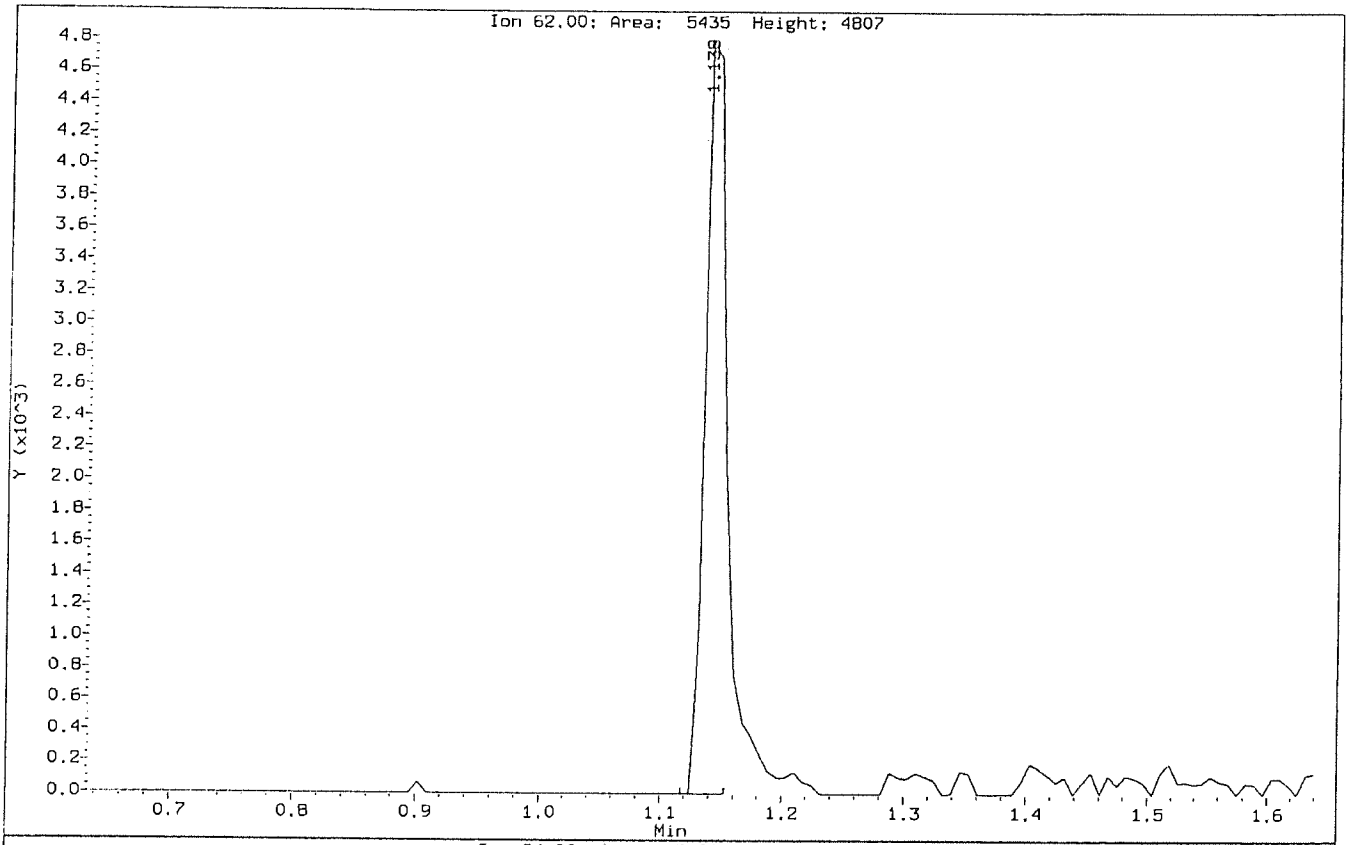
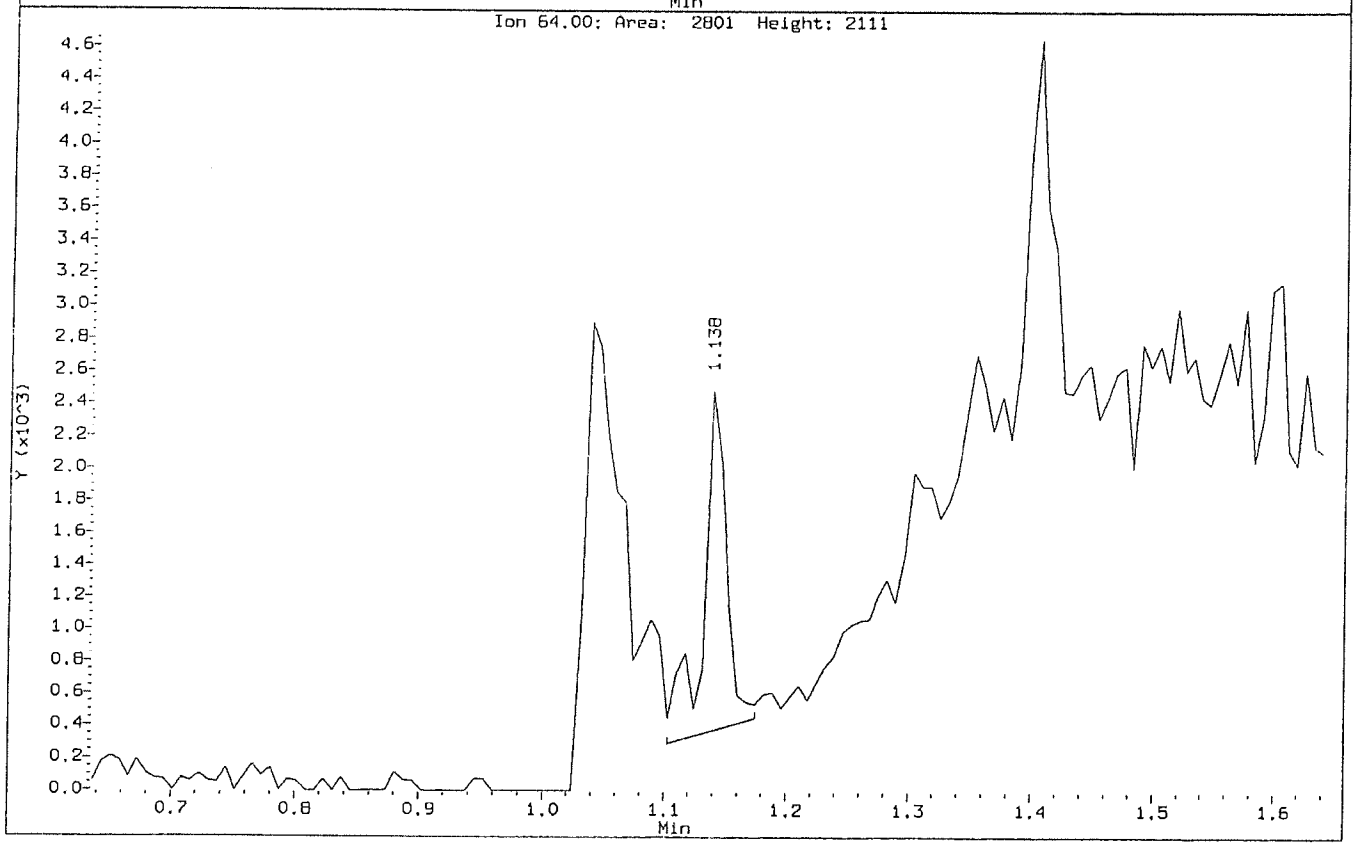
Injection Date: 26-MAY-2021 13:37
Instrument: voa6.i
Client Sample ID: VSTD001

Compound: Vinyl Chloride
CAS Number: 75-01-4





Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052605.D Page 1
Report Date: 10-Jun-2021 12:32

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052605.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 26-MAY-2021 13:58
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 13:37 Cal File: X052604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

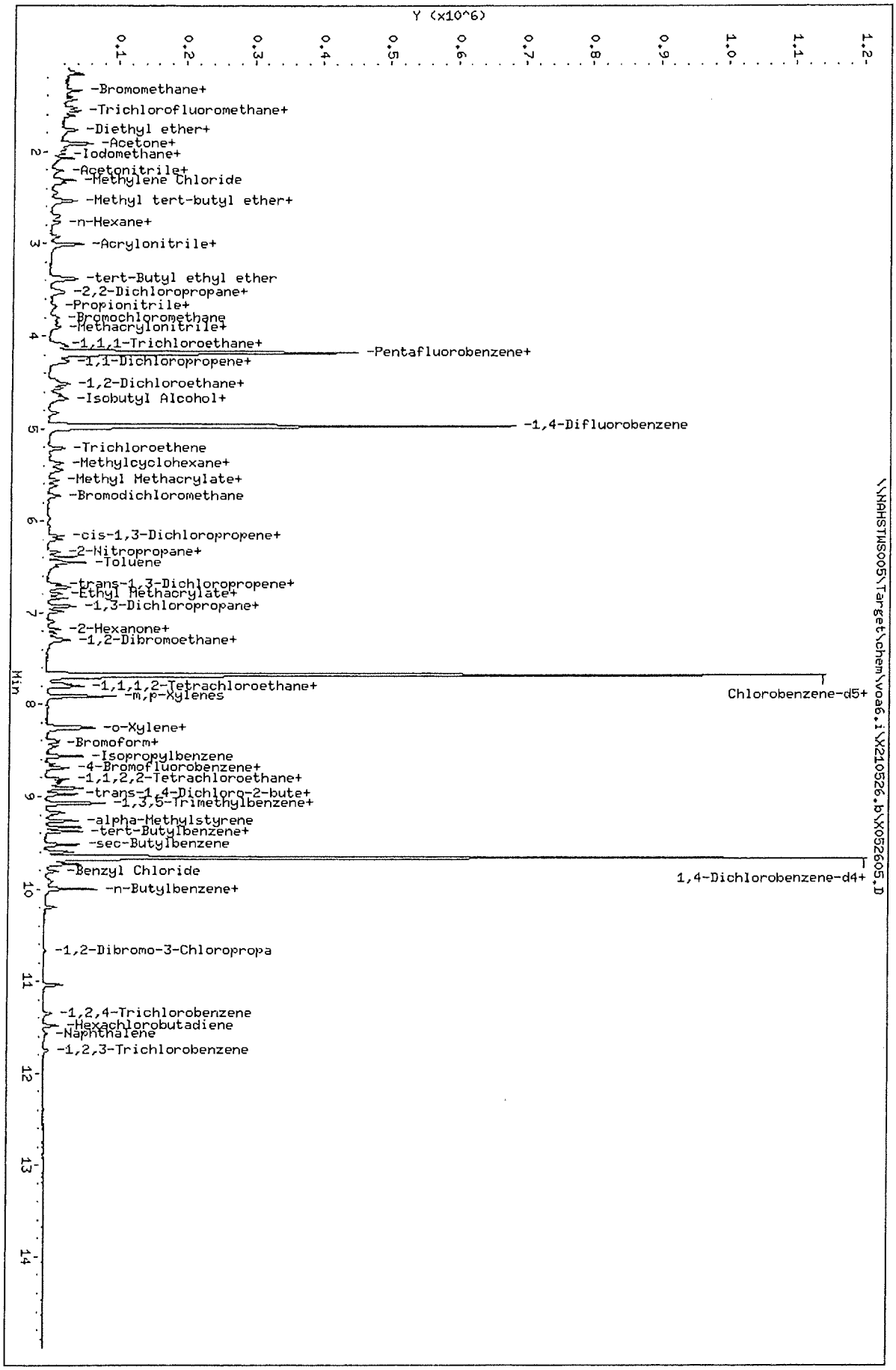
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	387304	50.0000	
* 36 1,4-Difluorobenzene	114	4.970	4.970	(1.000)	629894	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	565577	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	269984	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	8542	2.00000	1.64(a)
$ 69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	10368	2.00000	2.80(a)
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	8033	2.00000	1.94(a)
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	26638	2.00000	1.89(a)
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	11748	2.00000	2.05(a)
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	6242	2.00000	2.03(a)
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	12991	2.00000	2.12(a)
11 1,1-Dichloroethene	96	1.919	1.919	(0.459)	8783	2.00000	2.20(a)
33 1,2-Dichloroethane	62	4.562	4.562	(0.918)	9733	2.00000	1.93(a)
37 Benzene	78	4.512	4.512	(0.908)	30110	2.00000	2.08
34 Carbon Tetrachloride	117	4.268	4.268	(0.859)	11201	2.00000	2.14(aH)
59 Chlorobenzene	112	7.692	7.692	(1.003)	22805	2.00000	1.93(a)
7 Chloroethane	64	1.403	1.403	(0.336)	6715	2.00000	1.12(aM)
28 Chloroform	83	3.910	3.910	(0.935)	13954	2.00000	2.04(a)
27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	8971	2.00000	2.20(a)
61 Ethylbenzene	106	7.799	7.799	(1.017)	10776	2.00000	1.98
56 Tetrachloroethene	164	6.925	6.925	(0.903)	7019	2.00000	2.01(a)
50 Toluene	91	6.446	6.446	(0.840)	33990	2.00000	2.05

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.535	2.535	(0.606)	7304	2.00000	2.01(a)
38 Trichloroethene	130	5.206	5.206	(1.048)	8523	2.00000	1.97(a)
5 Vinyl Chloride	62	1.145	1.145	(0.274)	10726	2.00000	2.33(aM)

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.

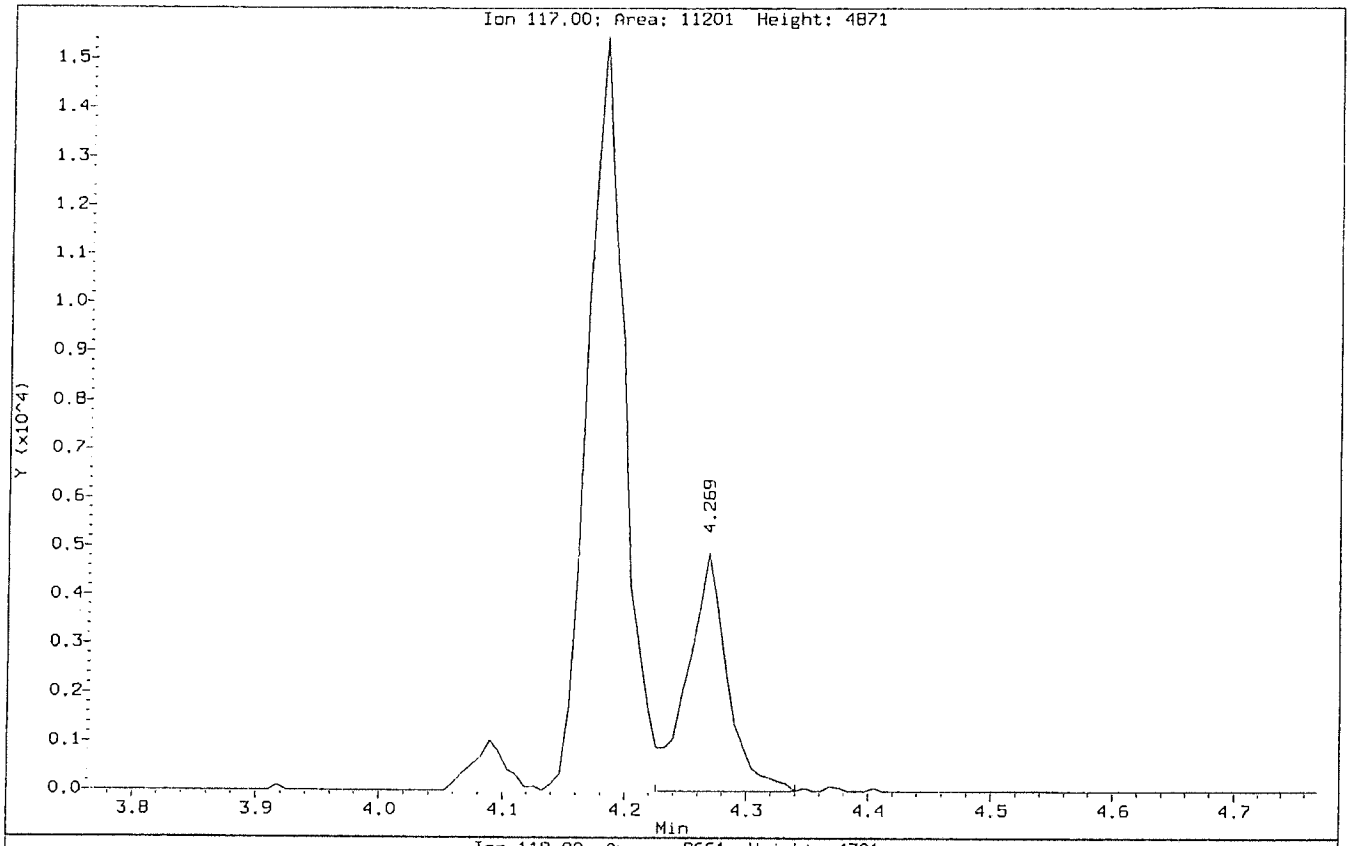


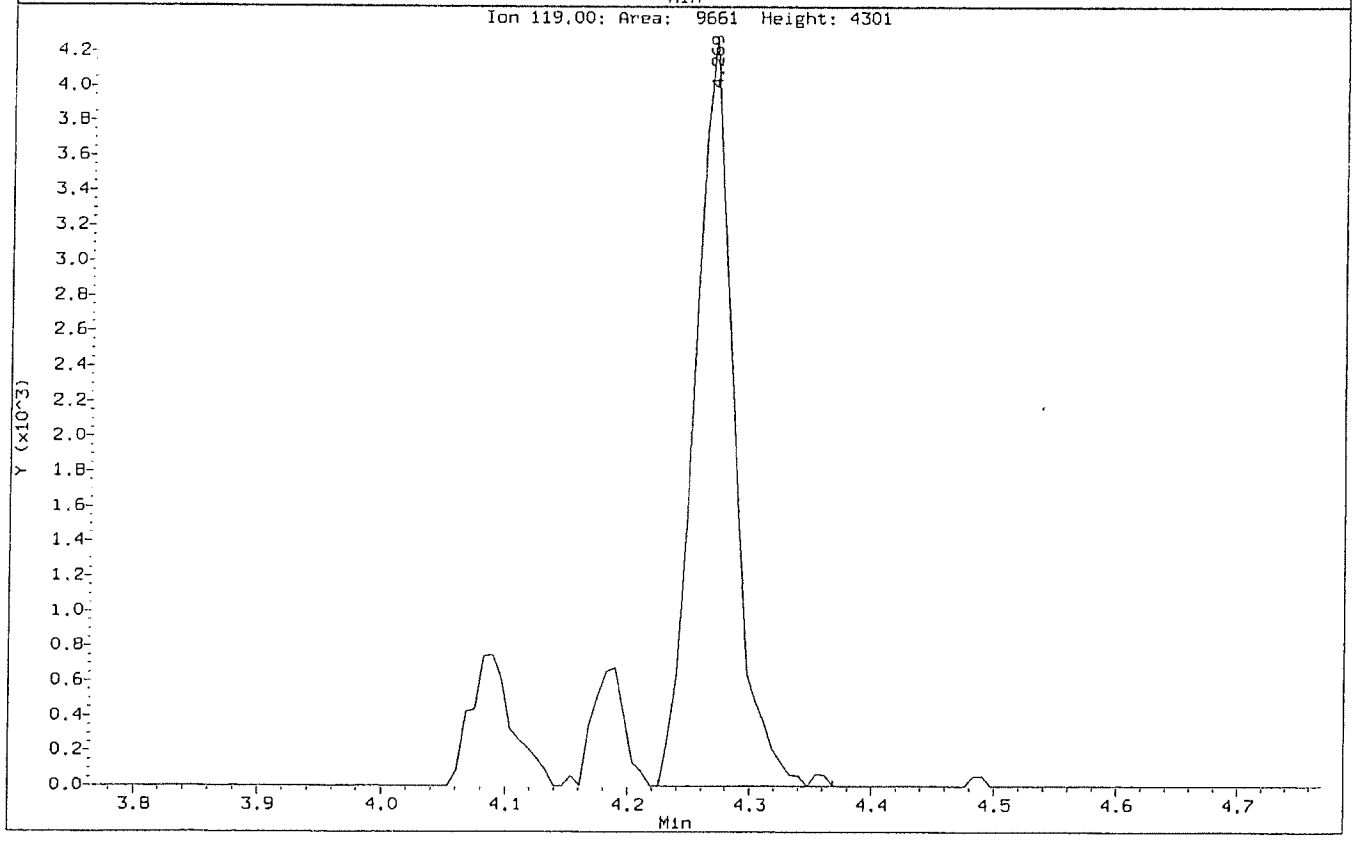
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052605.D
Date : 26-MAY-2021 13:58
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052605.D
Injection Date: 26-MAY-2021 13:58
Instrument: voa6.i
Client Sample ID: VSTD002

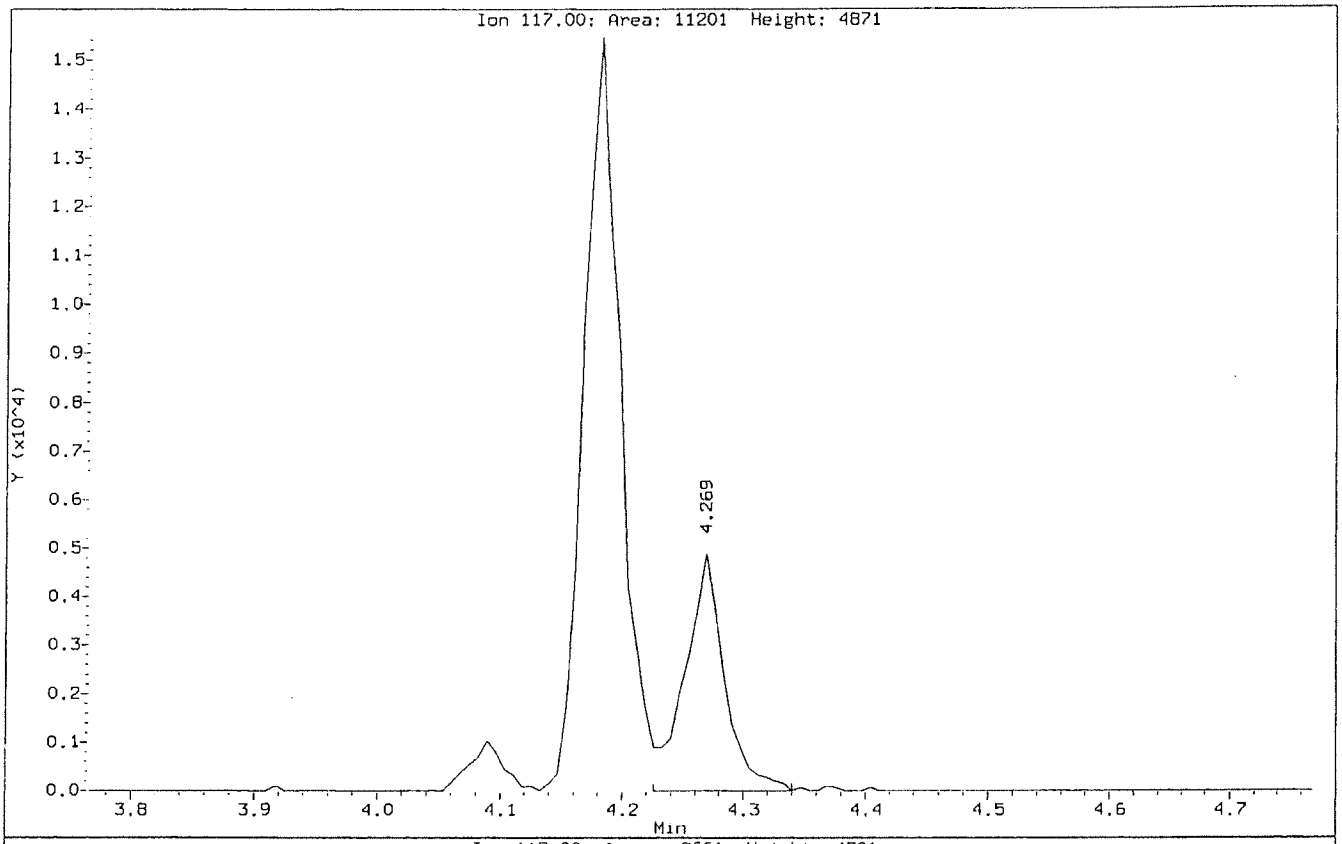
Compound: Carbon Tetrachloride
CAS Number: 56-23-5

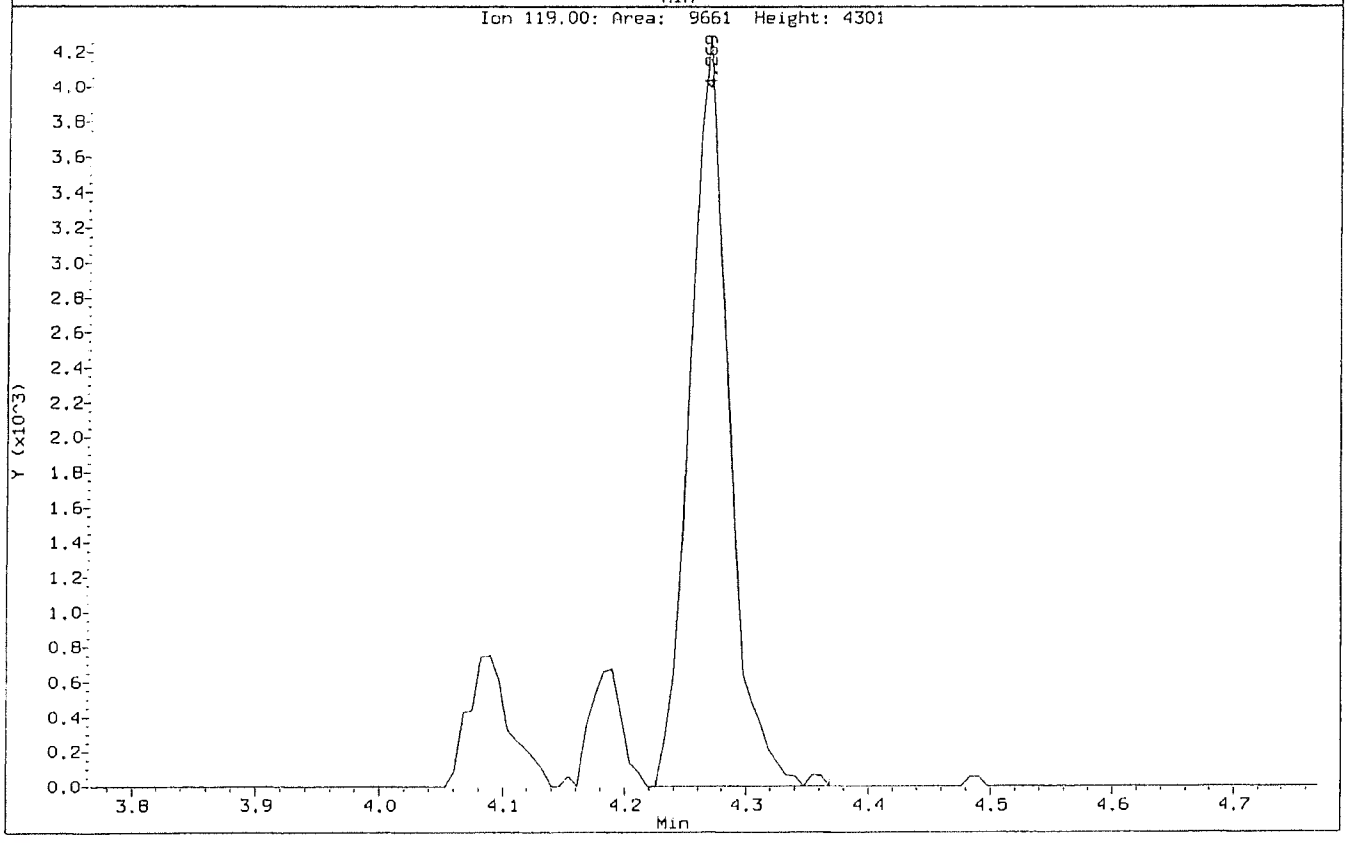




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052605.D
Injection Date: 26-MAY-2021 13:58
Instrument: voa6.i
Client Sample ID: VSTD002

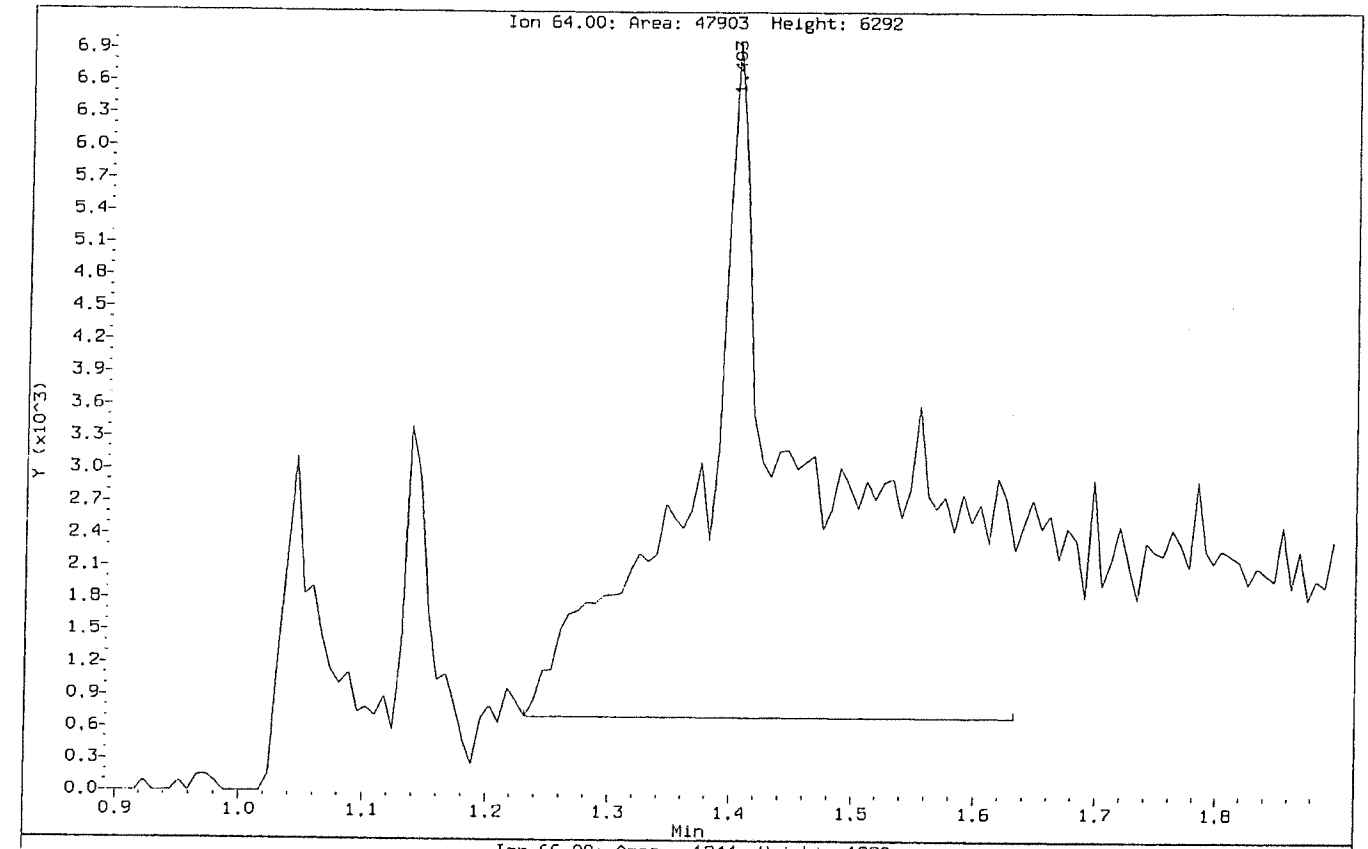
Compound: Carbon Tetrachloride
CAS Number: 56-23-5

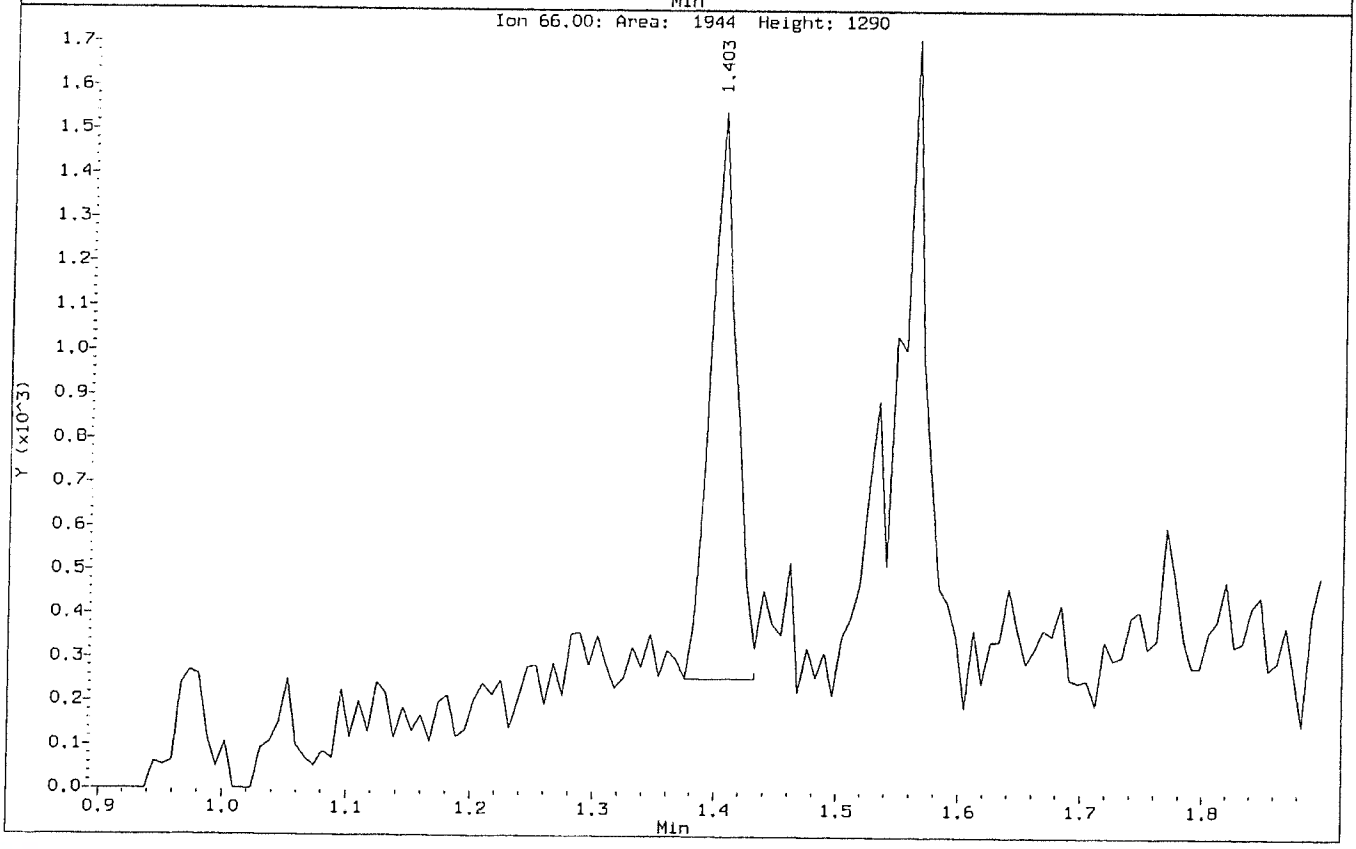




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052605.D
Injection Date: 26-MAY-2021 13:58
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: Chloroethane
CAS Number: 75-00-3





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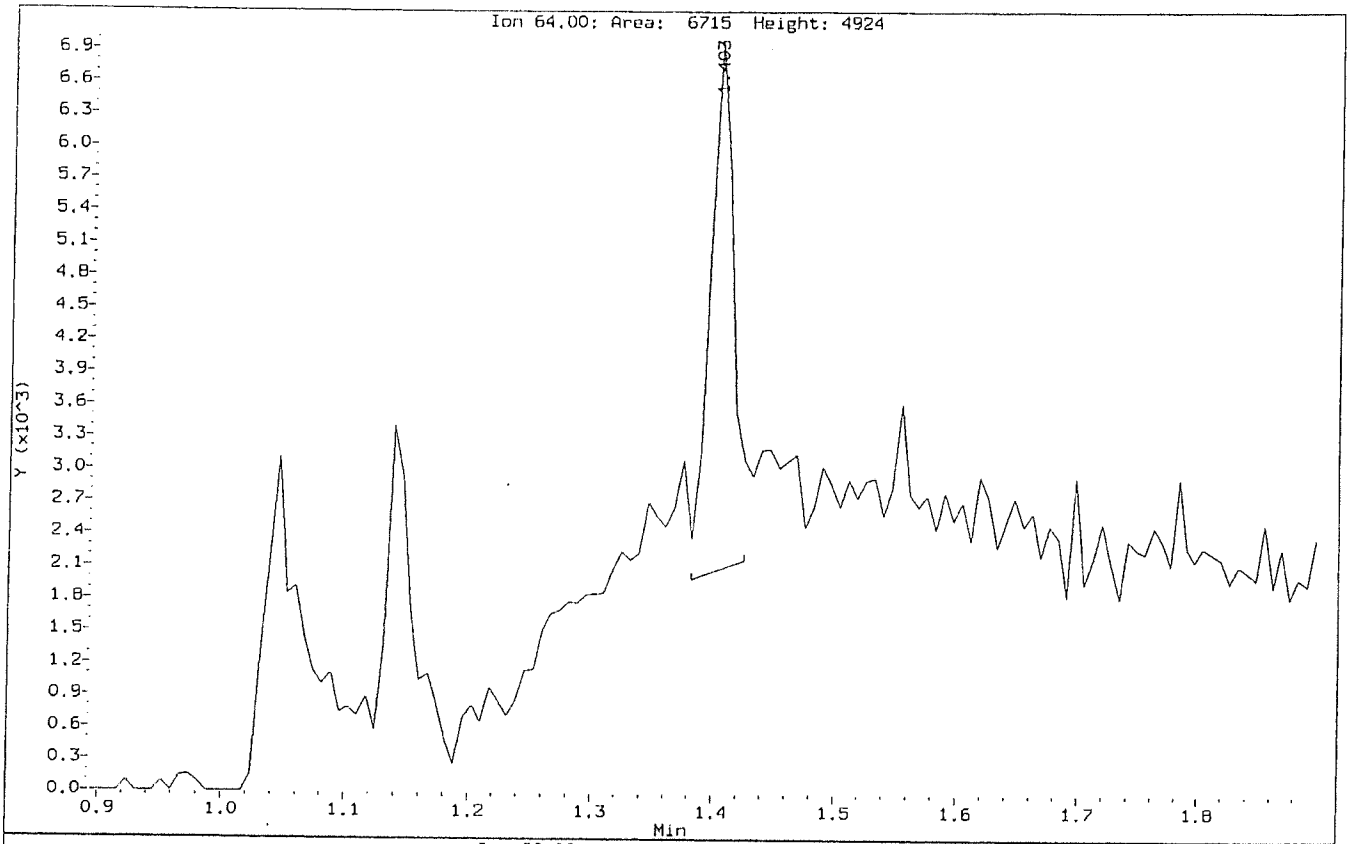
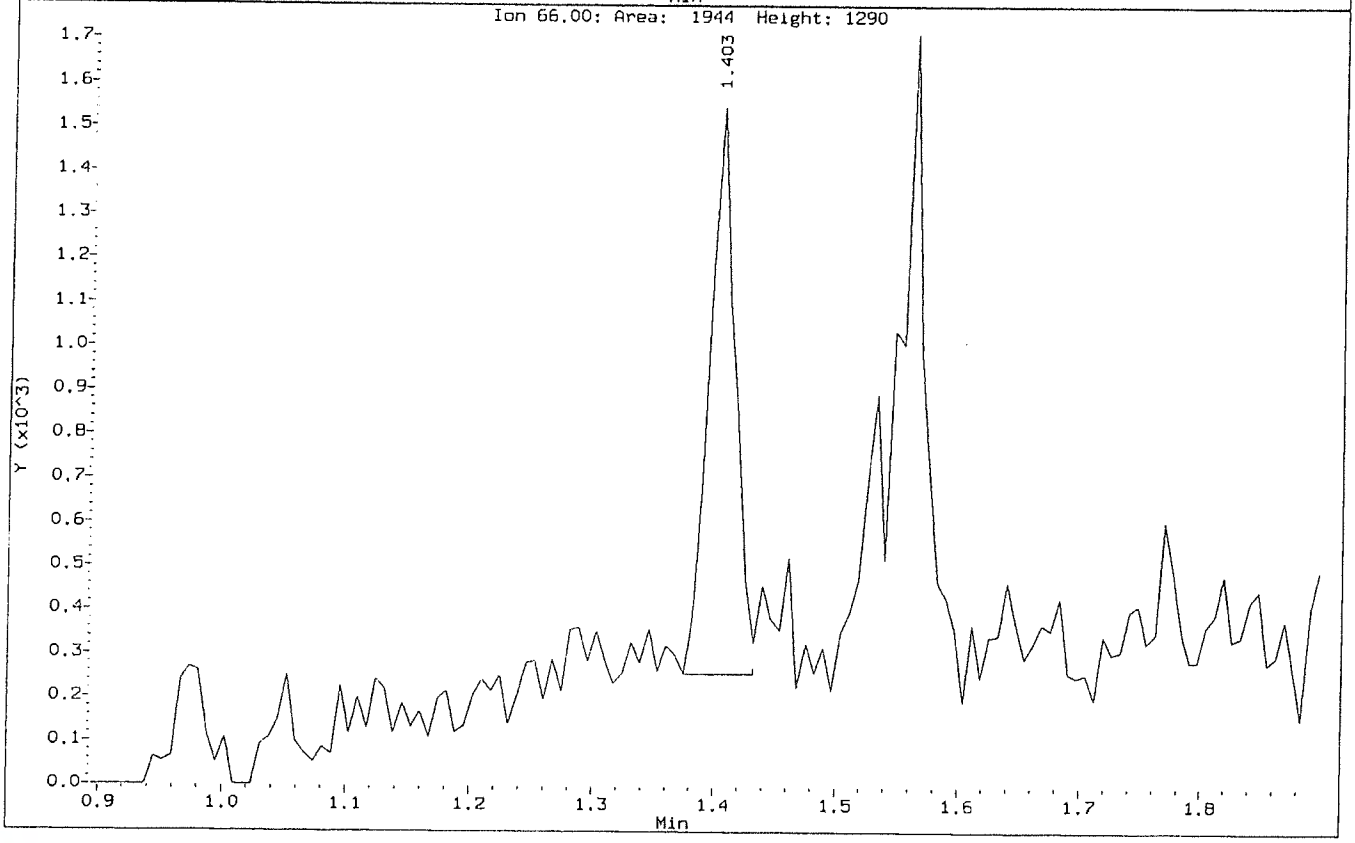
Injection Date: 26-MAY-2021 13:58
Instrument: voa6.i
Client Sample ID: VSTD002

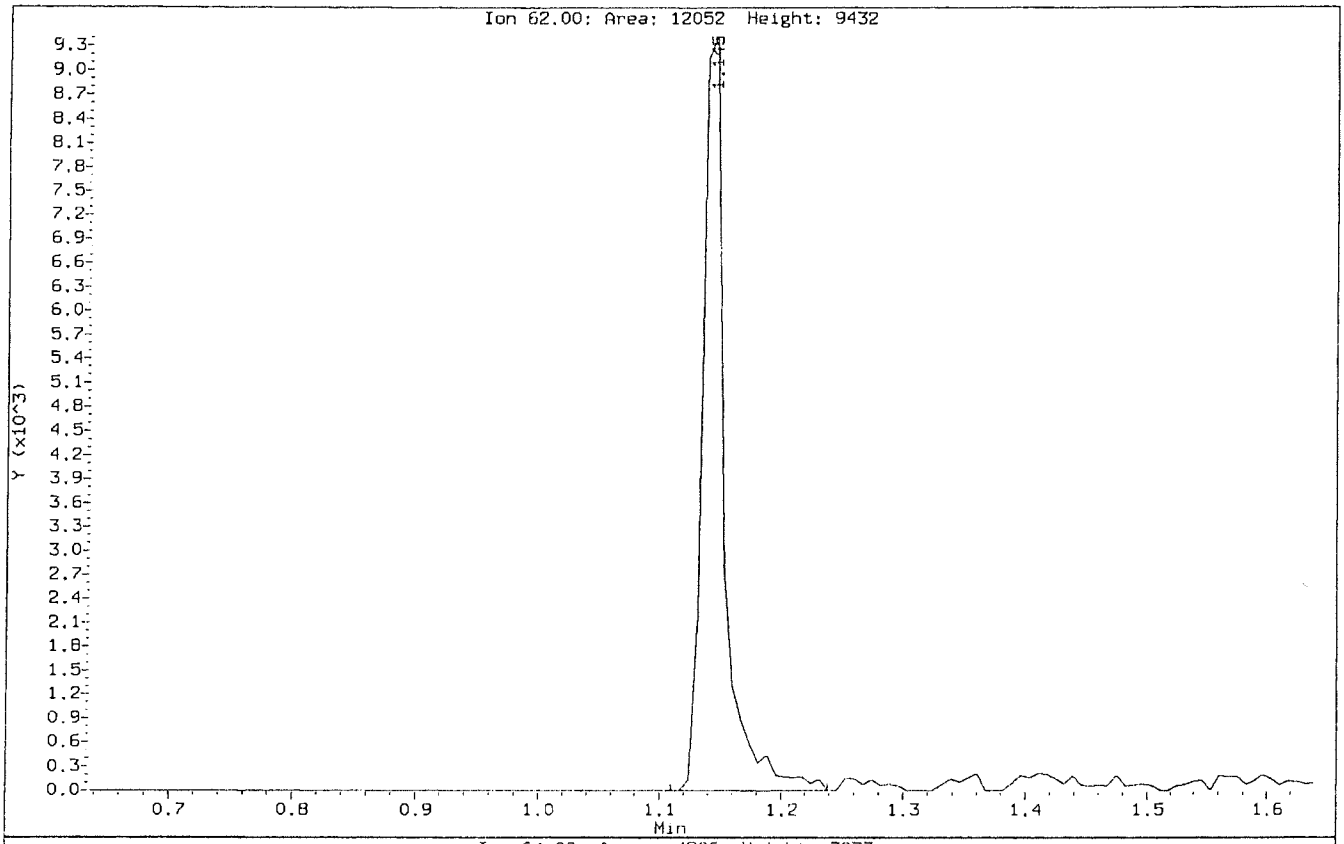
Compound: Chloroethane
CAS Number: 75-00-3

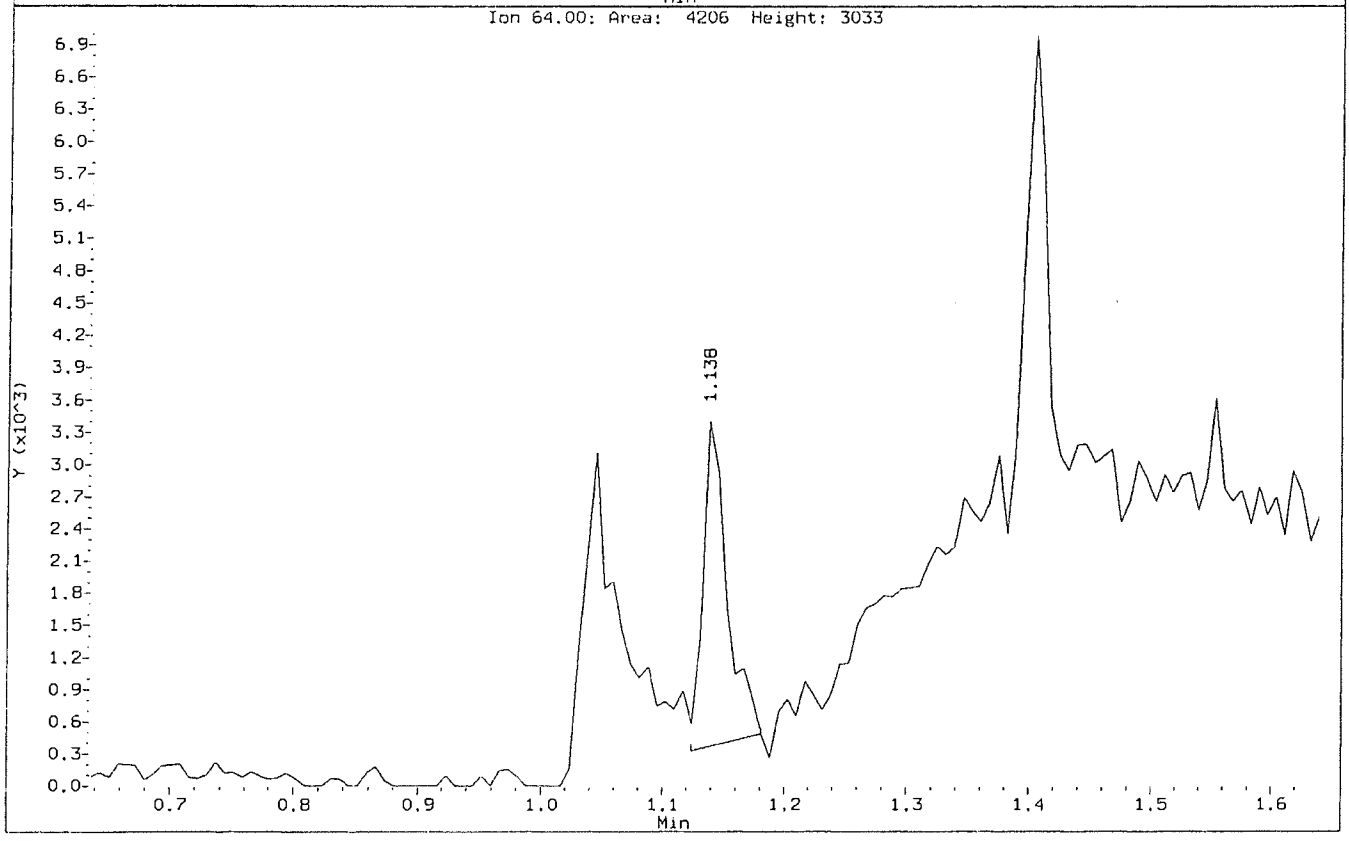




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052605.D
Injection Date: 26-MAY-2021 13:58
Instrument: voa6.i
Client Sample ID: VSTD002

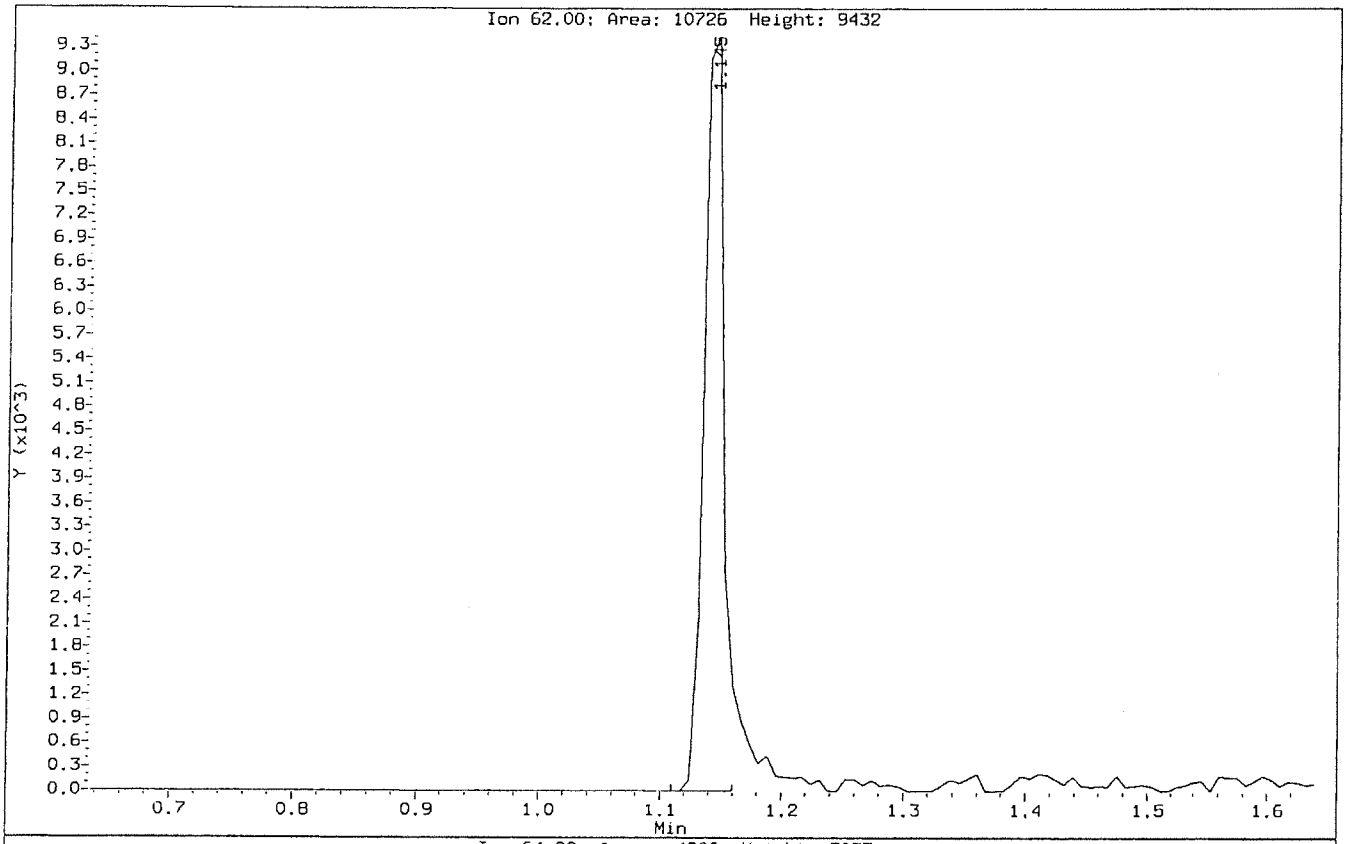
Compound: Vinyl Chloride
CAS Number: 75-01-4

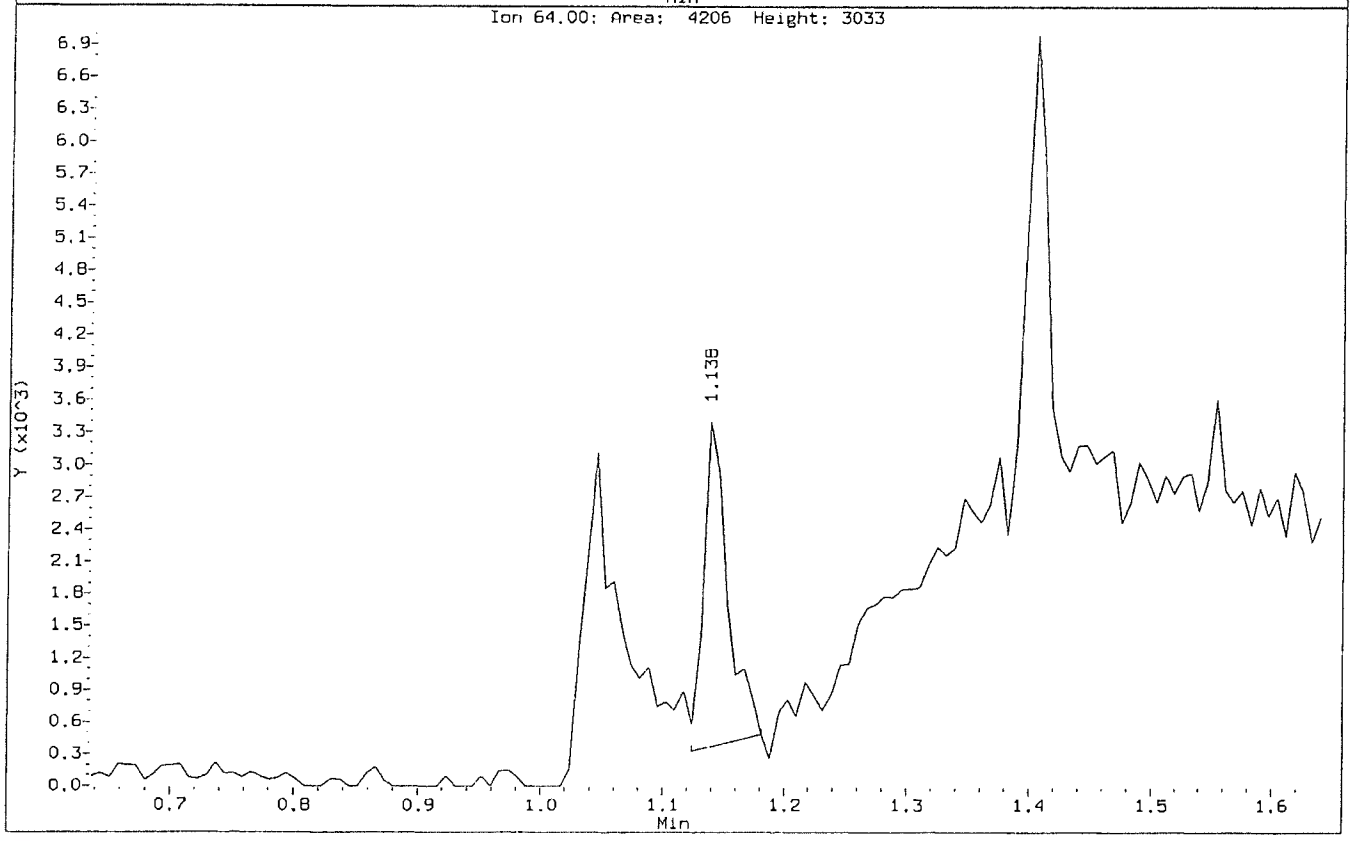




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052605.D
Injection Date: 26-MAY-2021 13:58
Instrument: voa6.i
Client Sample ID: VSTD002

Compound: Vinyl Chloride
CAS Number: 75-01-4





Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052606.D Page 1
Report Date: 10-Jun-2021 12:32

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052606.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 26-MAY-2021 14:19
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 13:58 Cal File: X052605.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

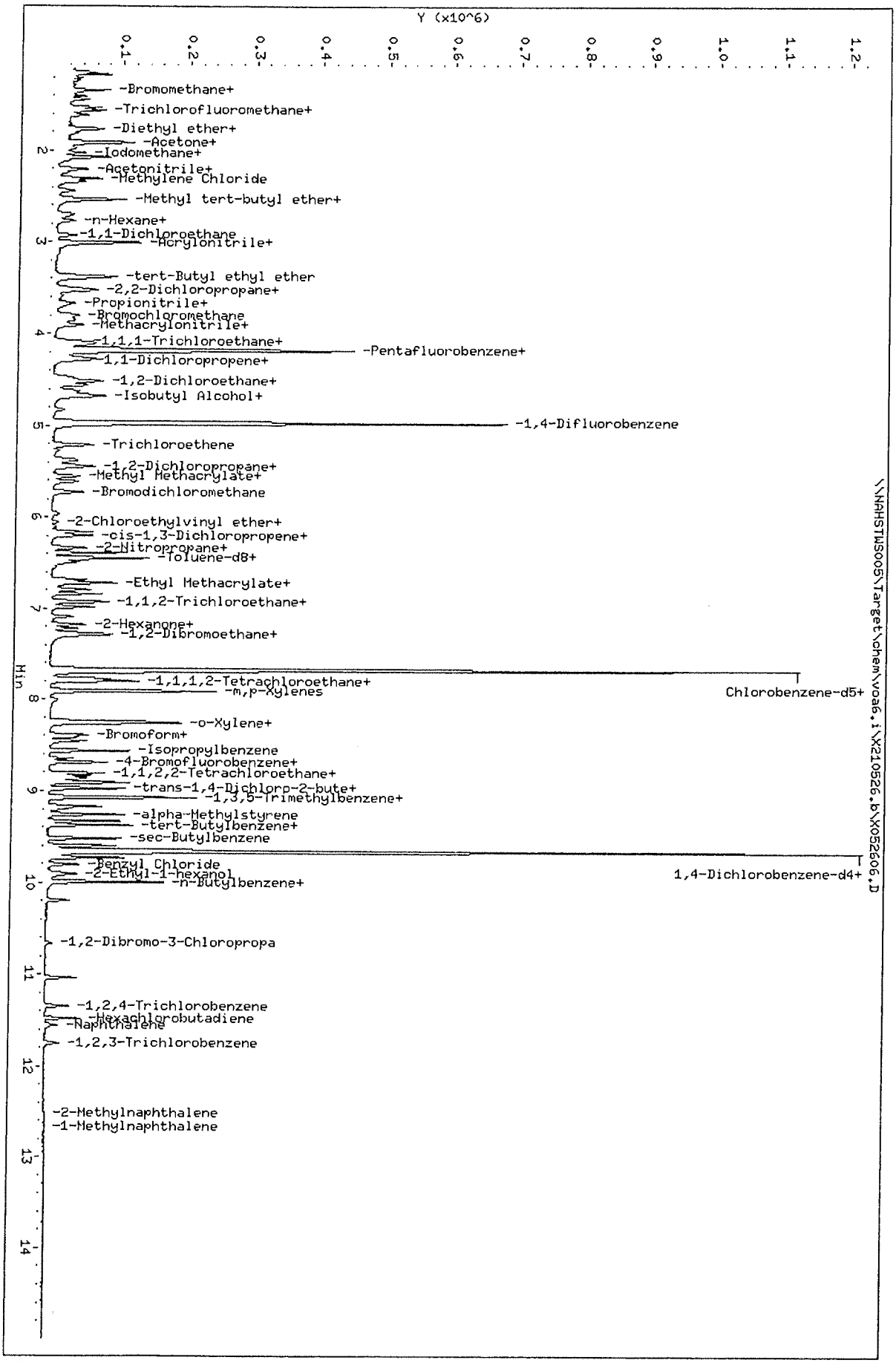
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	375848	50.0000	
* 36 1,4-Difluorobenzene	114	4.970	4.970	(1.000)	599369	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	554828	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	272673	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	21575	5.00000	5.39
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	25524	5.00000	5.91
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	21089	5.00000	5.55
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	68712	5.00000	4.97(a)
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	28395	5.00000	5.11
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	17061	5.00000	5.67
22 1,1-Dichloroethane	63	2.929	2.929	(0.700)	32111	5.00000	5.40
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	19736	5.00000	5.09
33 1,2-Dichloroethane	62	4.562	4.562	(0.918)	25252	5.00000	5.28
37 Benzene	78	4.512	4.512	(0.908)	71697	5.00000	5.20
34 Carbon Tetrachloride	117	4.268	4.268	(0.859)	24074	5.00000	4.84(aH)
59 Chlorobenzene	112	7.692	7.692	(1.003)	57208	5.00000	4.95(a)
7 Chloroethane	64	1.403	1.403	(0.336)	15071	5.00000	4.46(aM)
28 Chloroform	83	3.910	3.910	(0.935)	36863	5.00000	5.57
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	21562	5.00000	5.47
61 Ethylbenzene	106	7.799	7.799	(1.017)	26847	5.00000	5.03
56 Tetrachloroethene	164	6.933	6.933	(0.904)	16008	5.00000	4.68(a)
50 Toluene	91	6.446	6.446	(0.840)	80843	5.00000	4.99

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.535	2.535	(0.606)	18528	5.00000	5.27
38 Trichloroethene	130	5.206	5.206	(1.048)	20721	5.00000	5.03
5 Vinyl Chloride	62	1.145	1.145	(0.274)	23945	5.00000	5.38(M)

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.

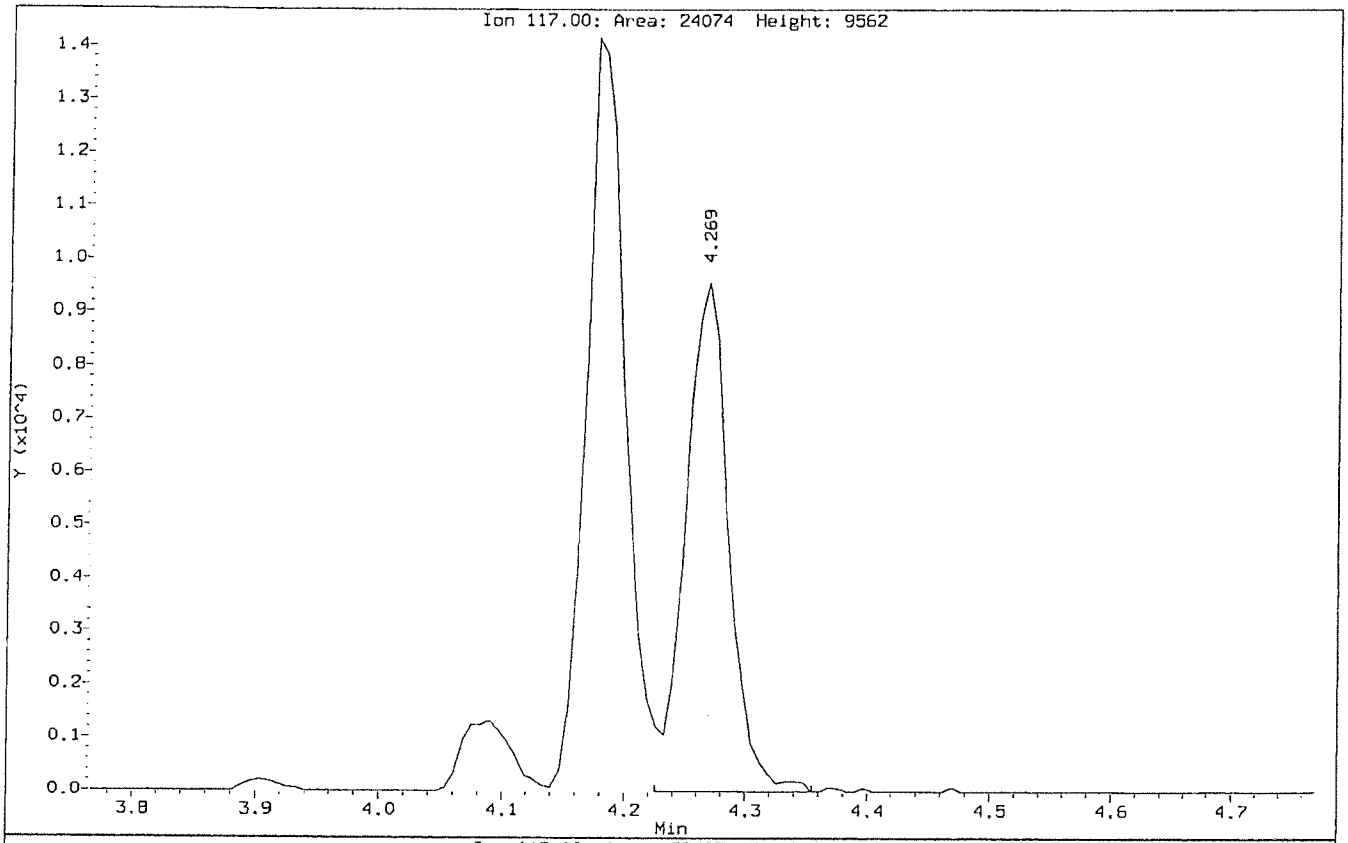


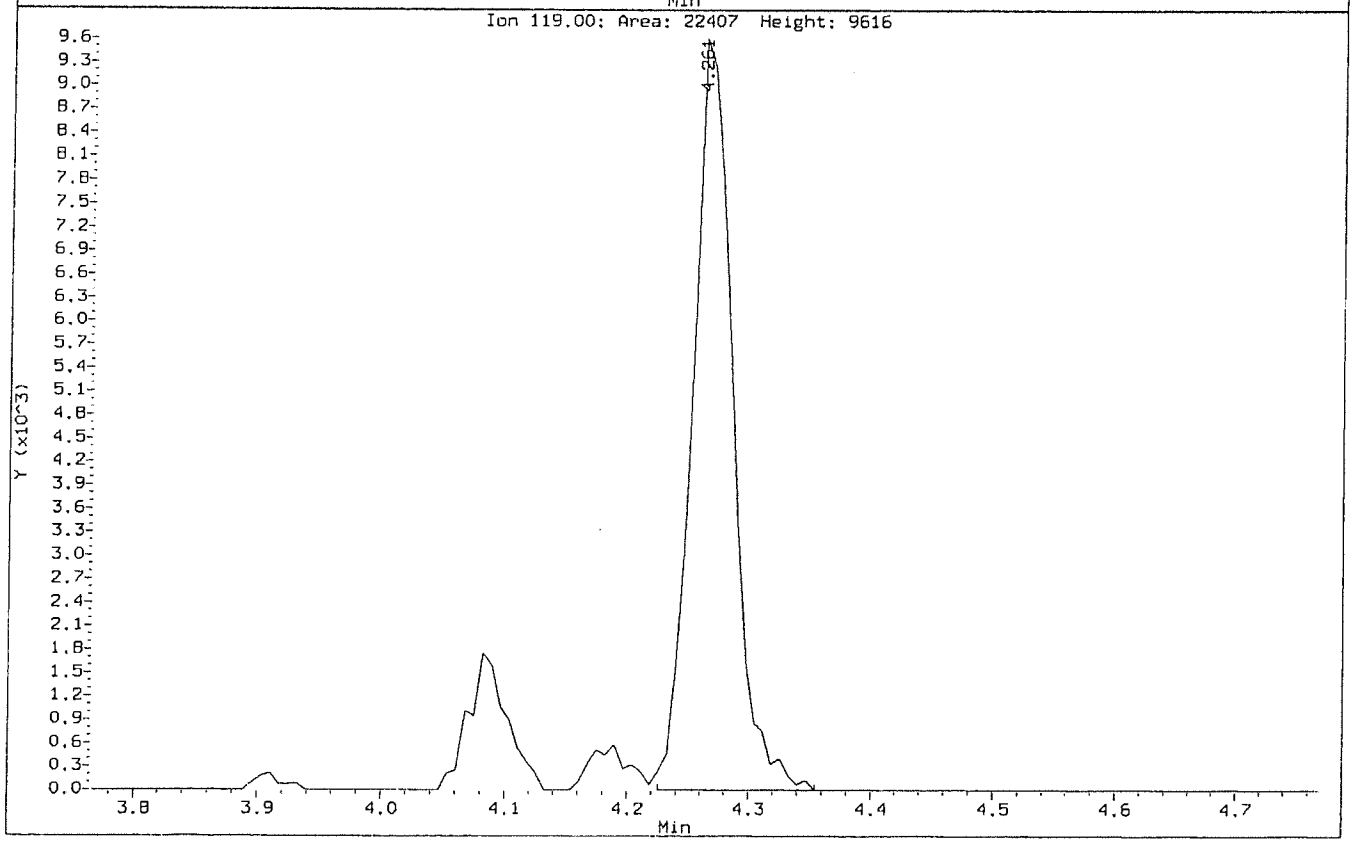
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052606.D
Date : 26-MAY-2021 14:19
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052606.D
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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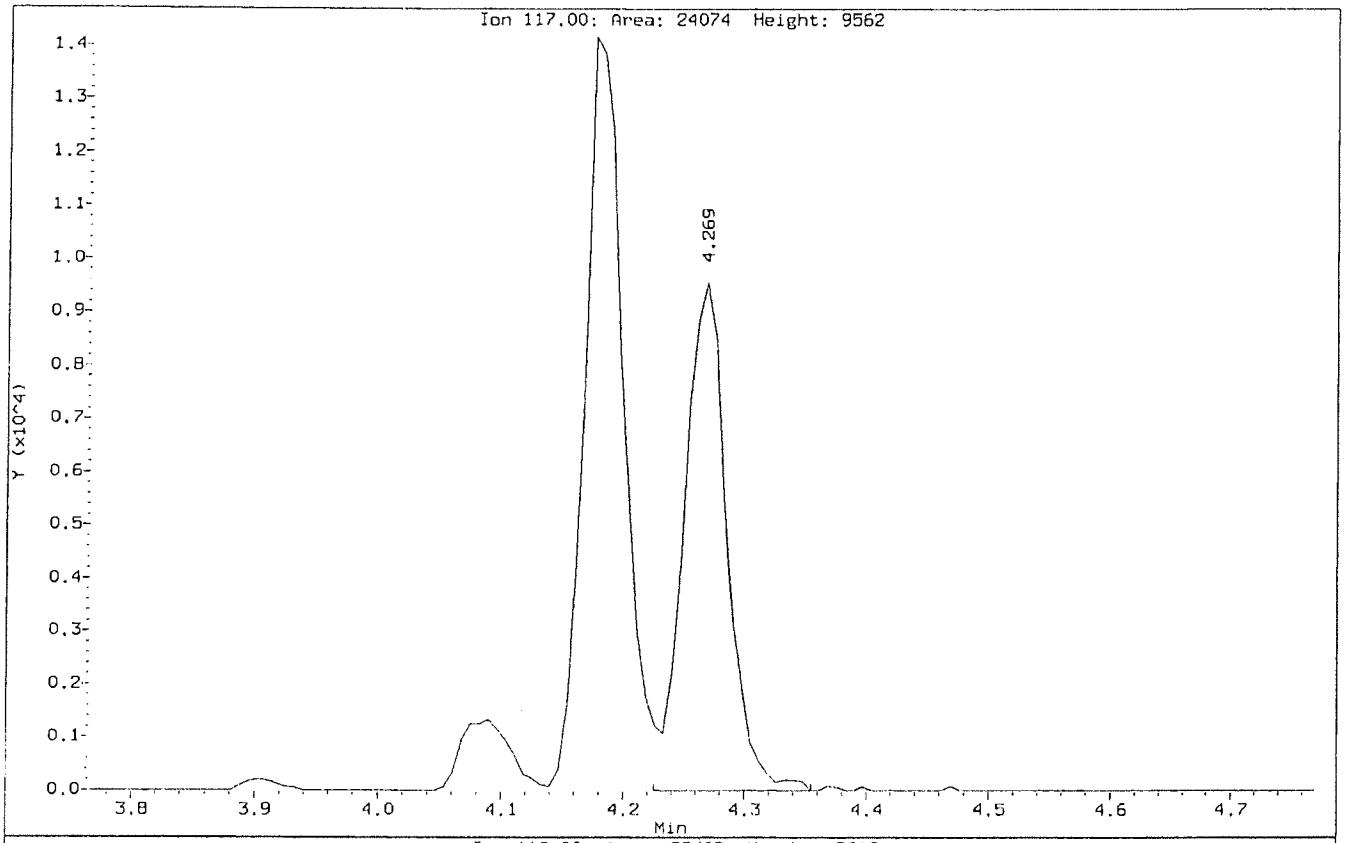
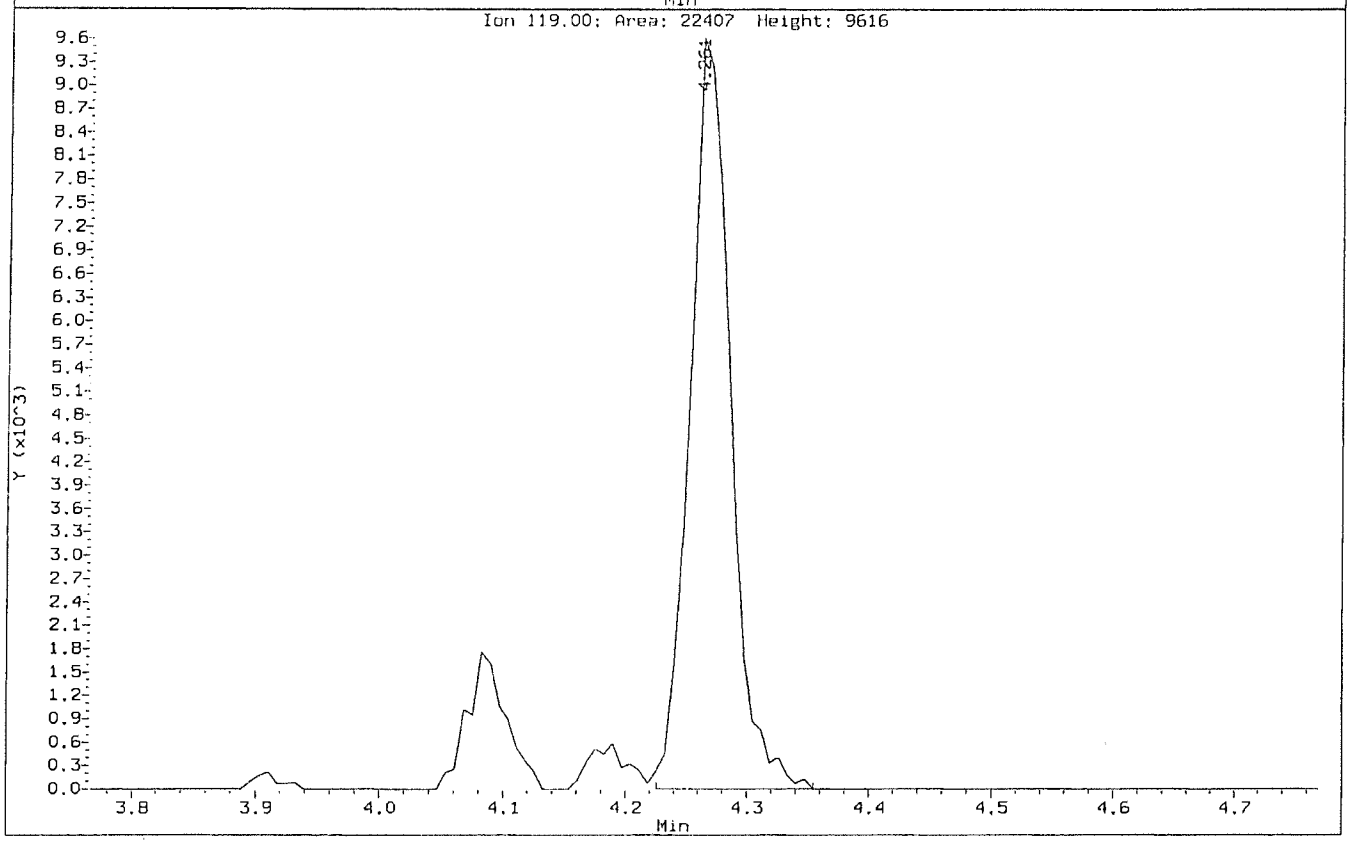
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

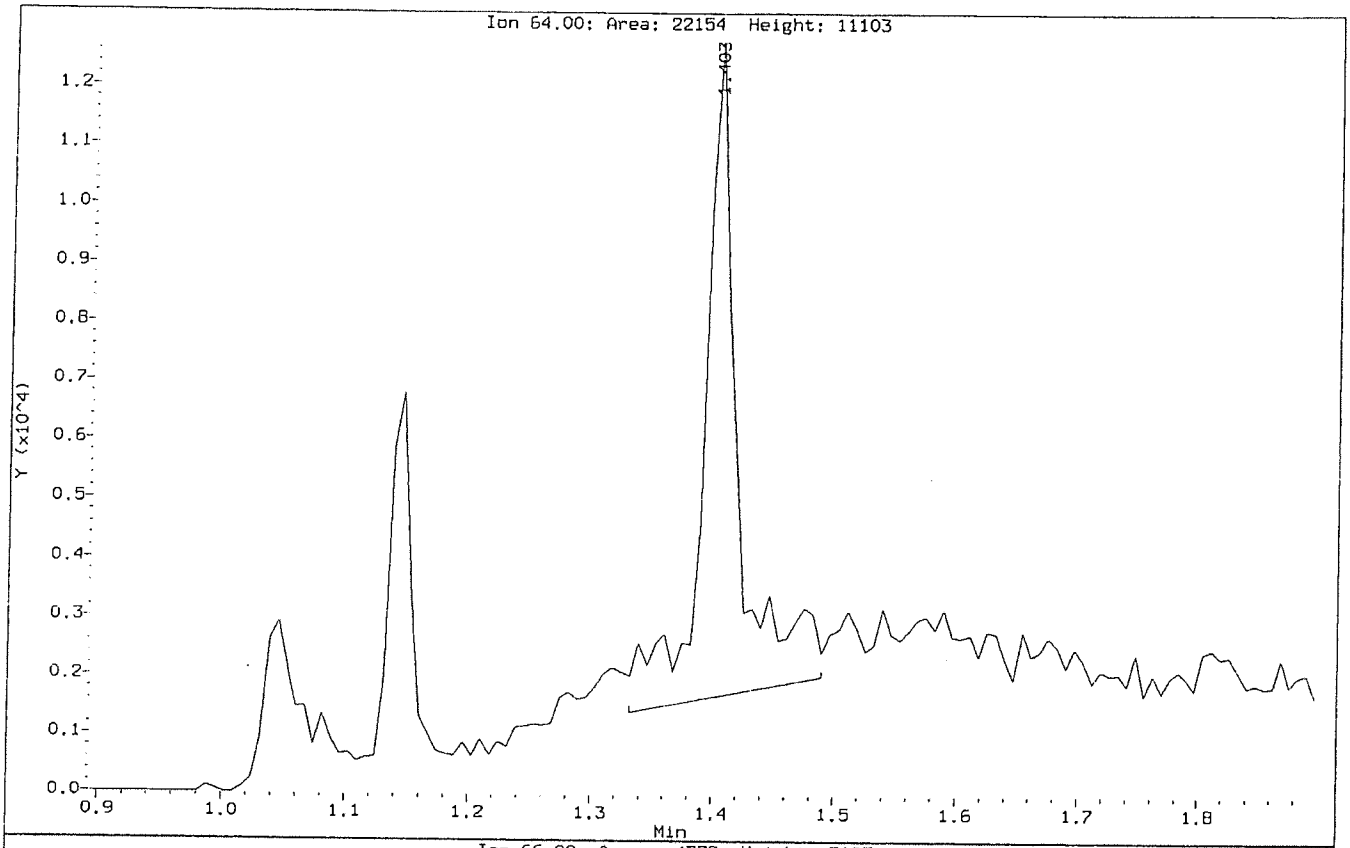
Compound: Carbon Tetrachloride
CAS Number: 56-23-5

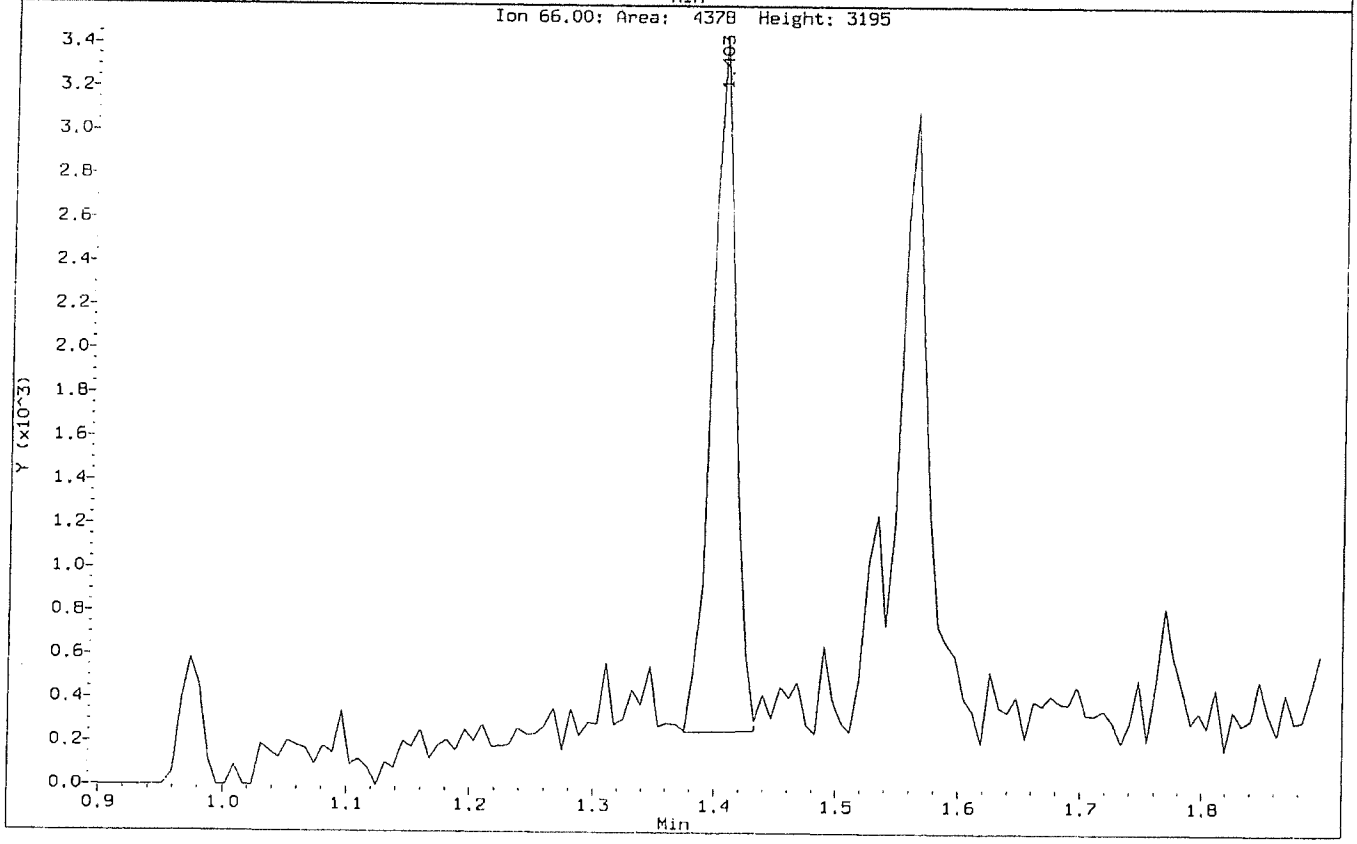




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052606.D
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

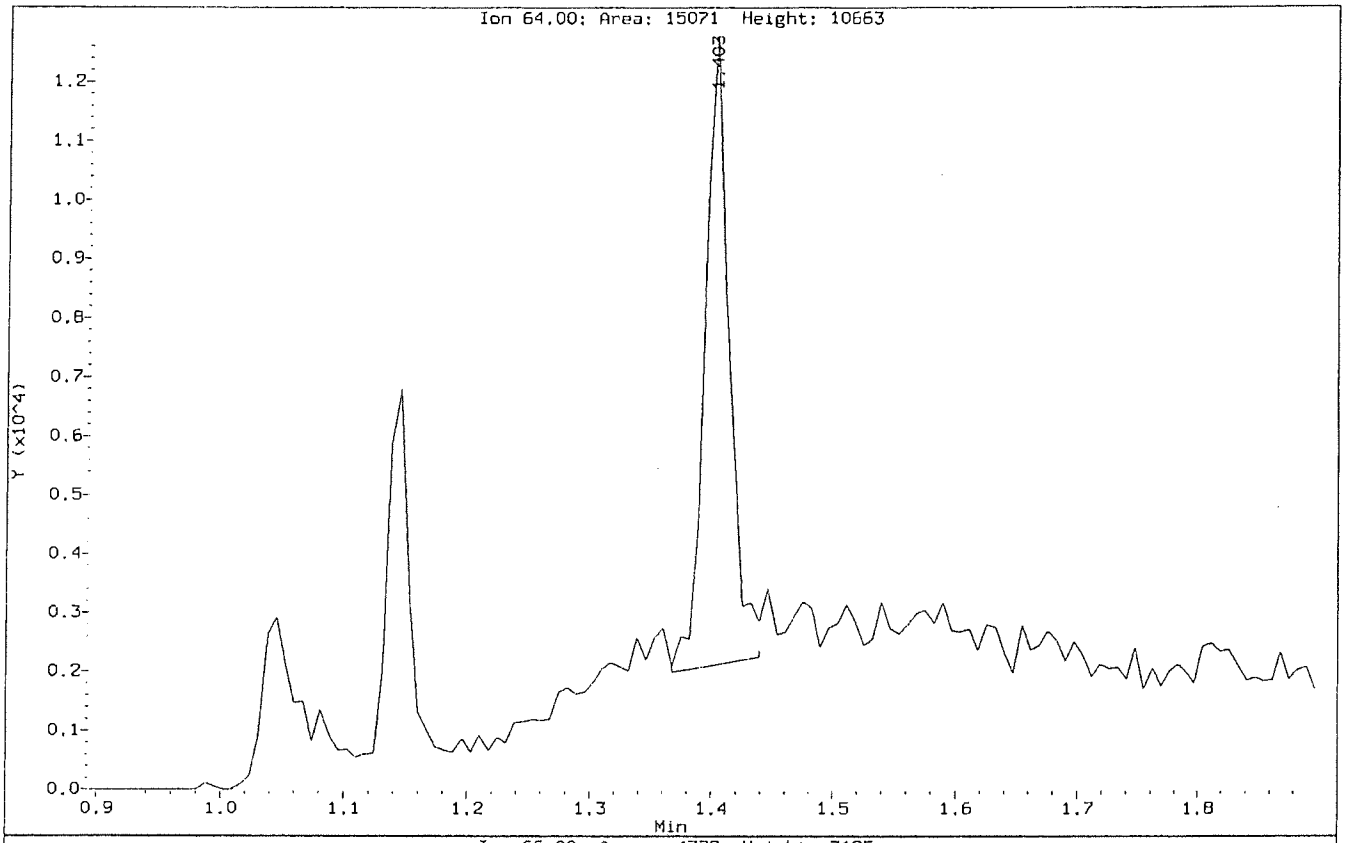
Compound: Chloroethane
CAS Number: 75-00-3

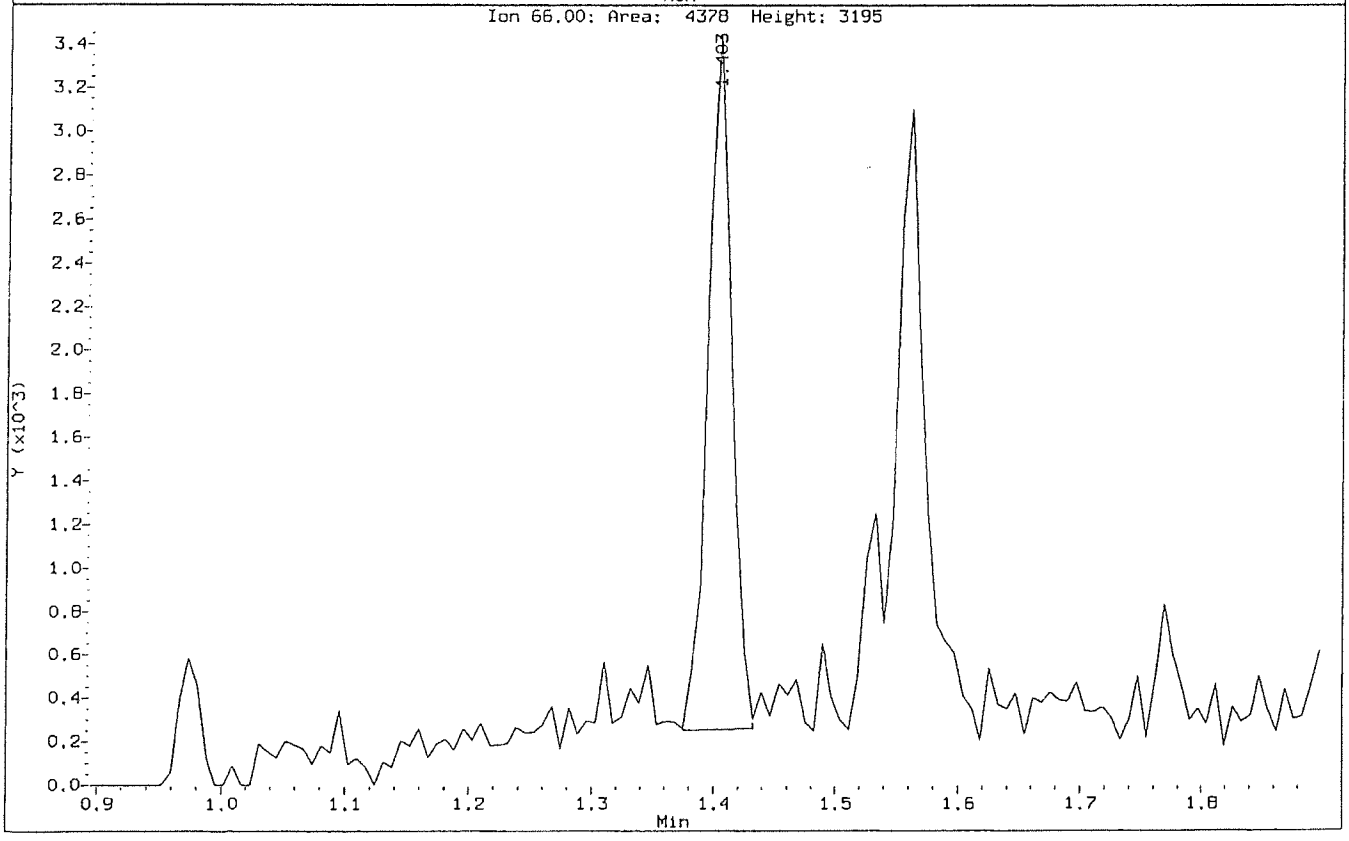




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052606.D
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

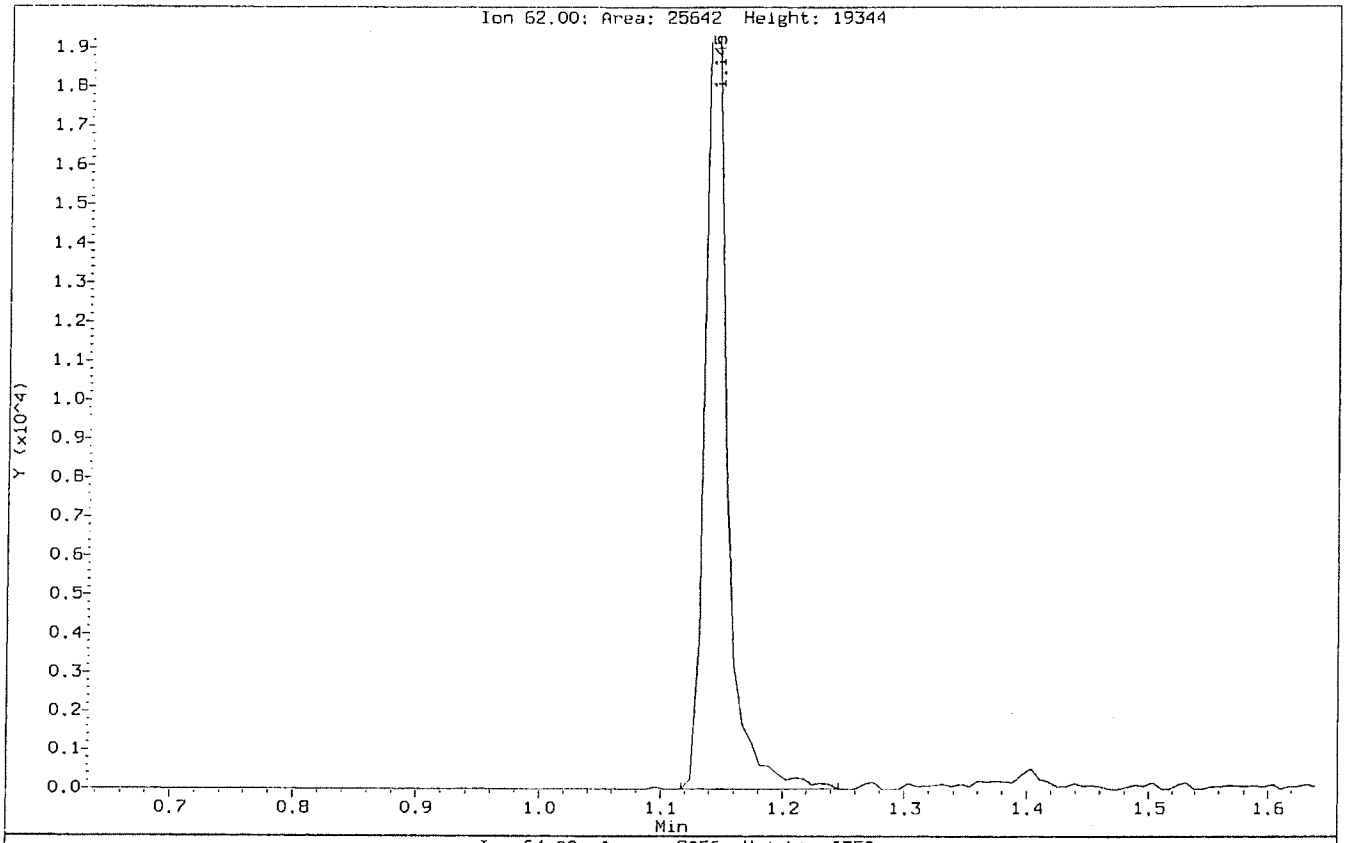
Compound: Chloroethane
CAS Number: 75-00-3

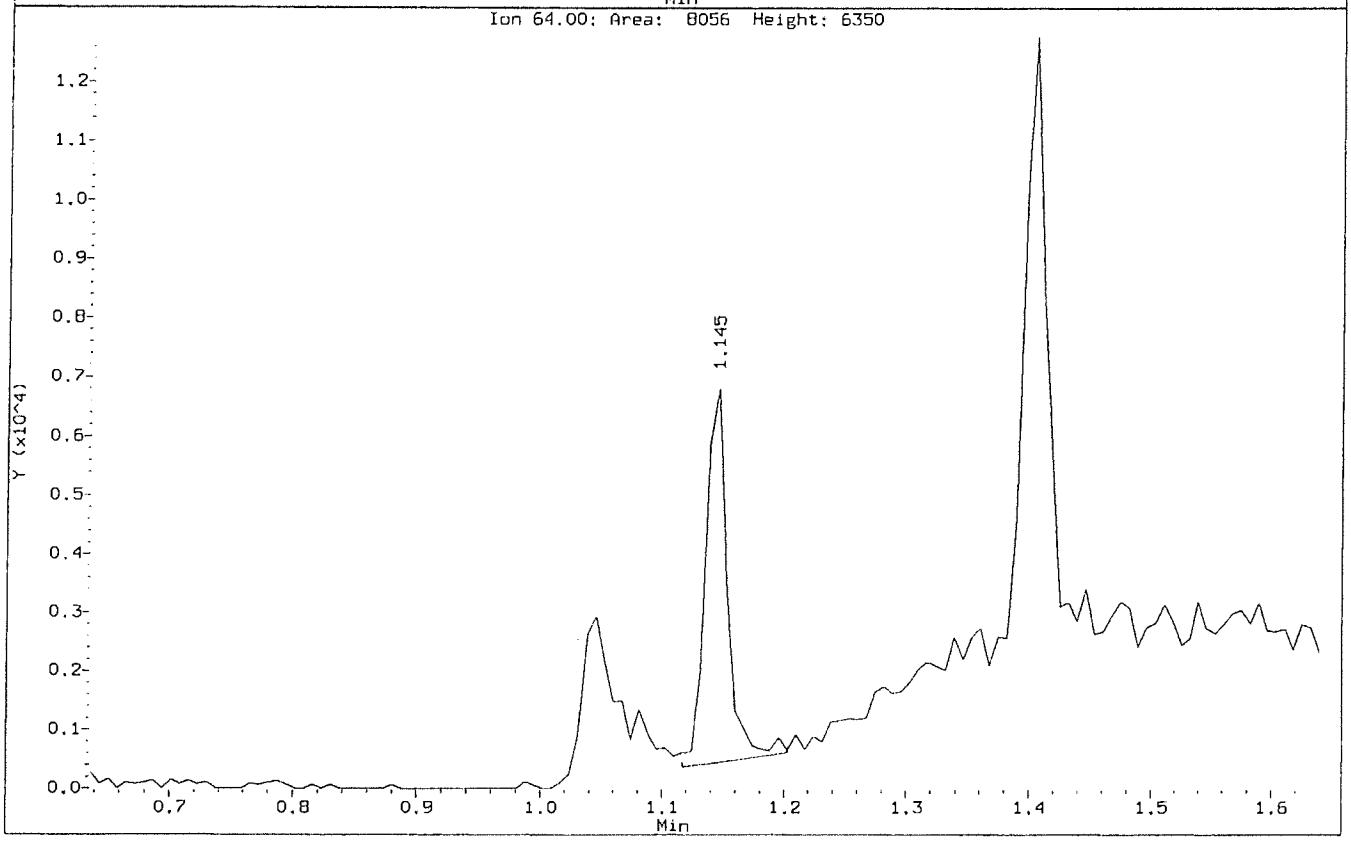




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052606.D
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

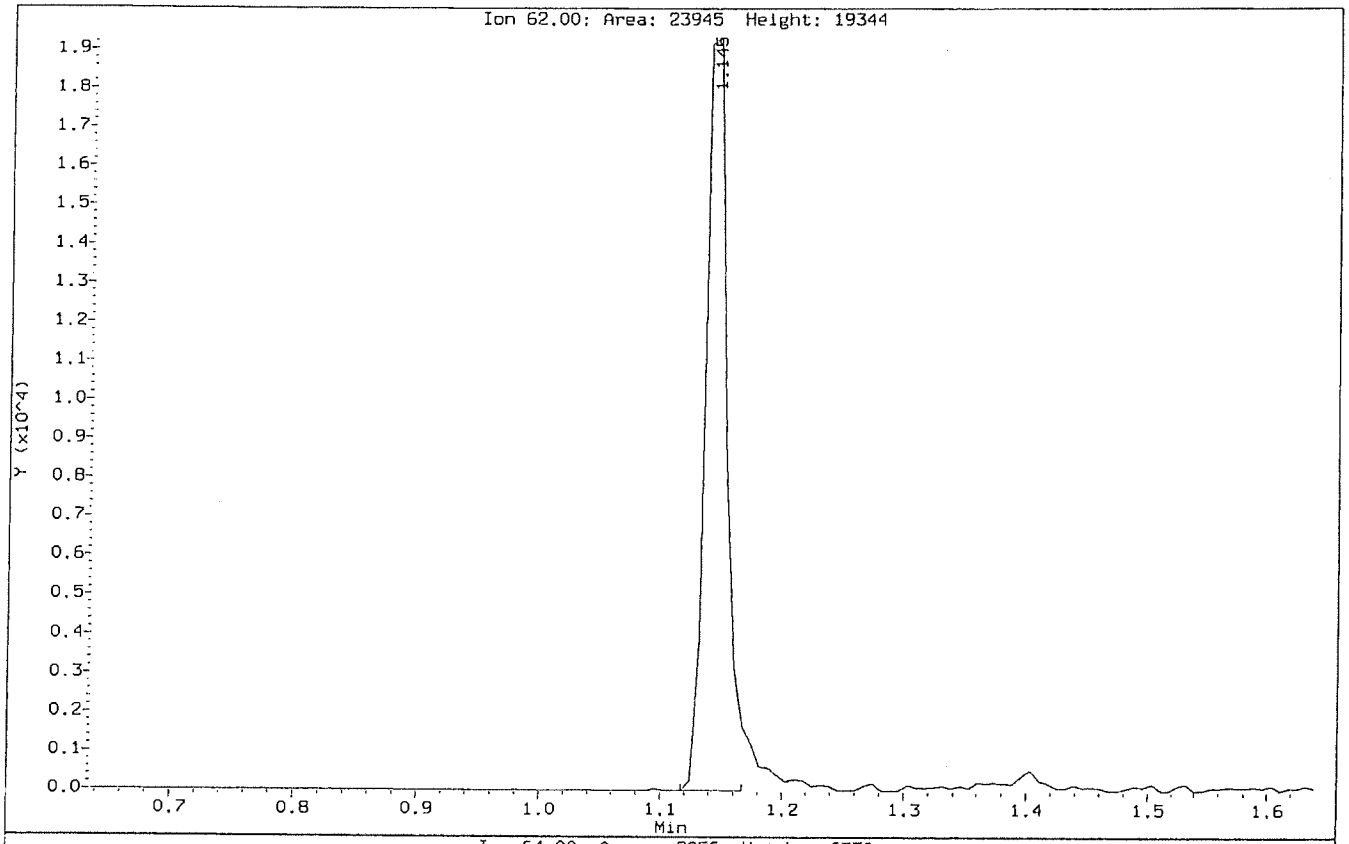
Compound: Vinyl Chloride
CAS Number: 75-01-4

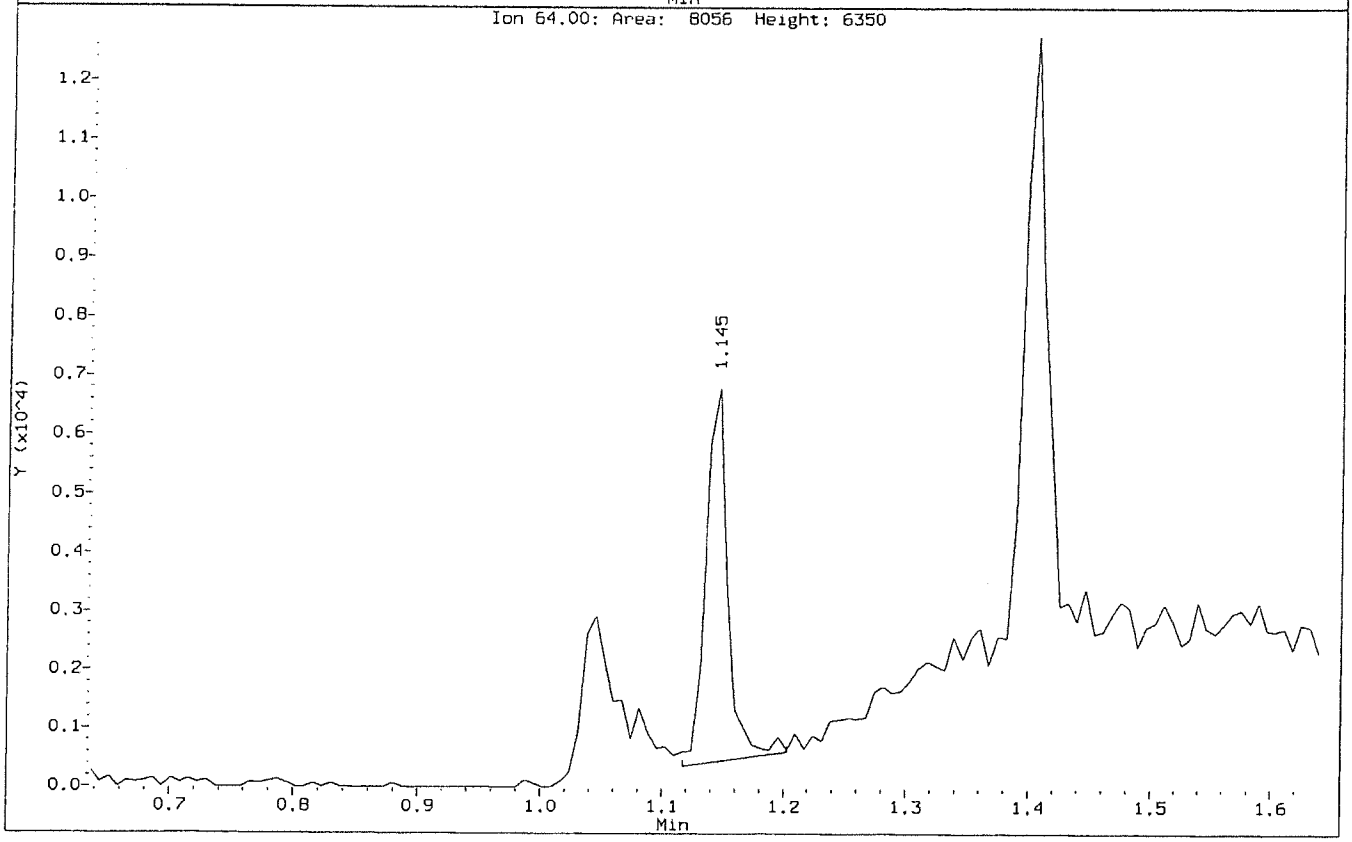




Data File: \\NAHSTW5005\Target\chem\voa6.i\X210526.b\X052606.D
Injection Date: 26-MAY-2021 14:19
Instrument: voa6.i
Client Sample ID: VSTD005

Compound: Vinyl Chloride
CAS Number: 75-01-4





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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052607.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 26-MAY-2021 14:40
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 14:19 Cal File: X052606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

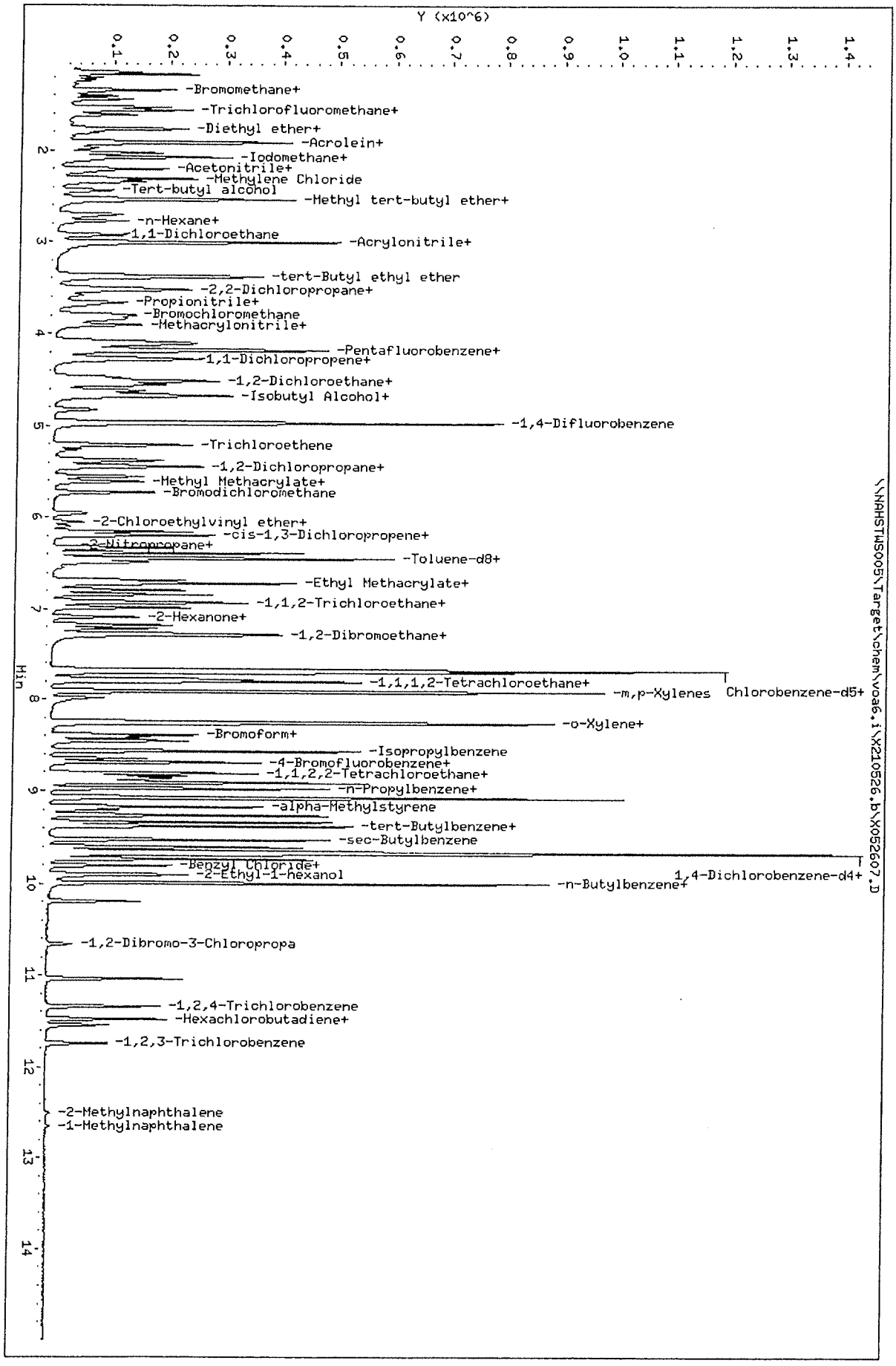
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	399349	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	620725	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	575687	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	297335	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	79438	20.0000	20.41
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	97463	20.0000	19.73
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	83421	20.0000	21.12
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	267583	20.0000	18.65
31 1,1,1-Trichloroethane	97	4.089	4.089	(0.978)	111104	20.0000	18.82
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	60385	20.0000	19.36
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	125905	20.0000	19.94
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	78545	20.0000	19.09
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	97430	20.0000	19.69
37 Benzene	78	4.512	4.512	(0.909)	277041	20.0000	19.42
34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	95975	20.0000	18.65(H)
59 Chlorobenzene	112	7.692	7.692	(1.003)	222059	20.0000	18.52
7 Chloroethane	64	1.403	1.403	(0.336)	58283	20.0000	19.98
28 Chloroform	83	3.910	3.910	(0.935)	135997	20.0000	19.36
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	85550	20.0000	20.43
61 Ethylbenzene	106	7.799	7.799	(1.017)	107937	20.0000	19.52
56 Tetrachloroethene	164	6.926	6.926	(0.903)	64343	20.0000	18.15
50 Toluene	91	6.446	6.446	(0.840)	307300	20.0000	18.28

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	70656	20.0000	18.94
38 Trichloroethene	130	5.206	5.206	(1.049)	83800	20.0000	19.67
5 Vinyl Chloride	62	1.138	1.138	(0.272)	91766	20.0000	19.41

QC Flag Legend

H - Operator selected an alternate compound hit.

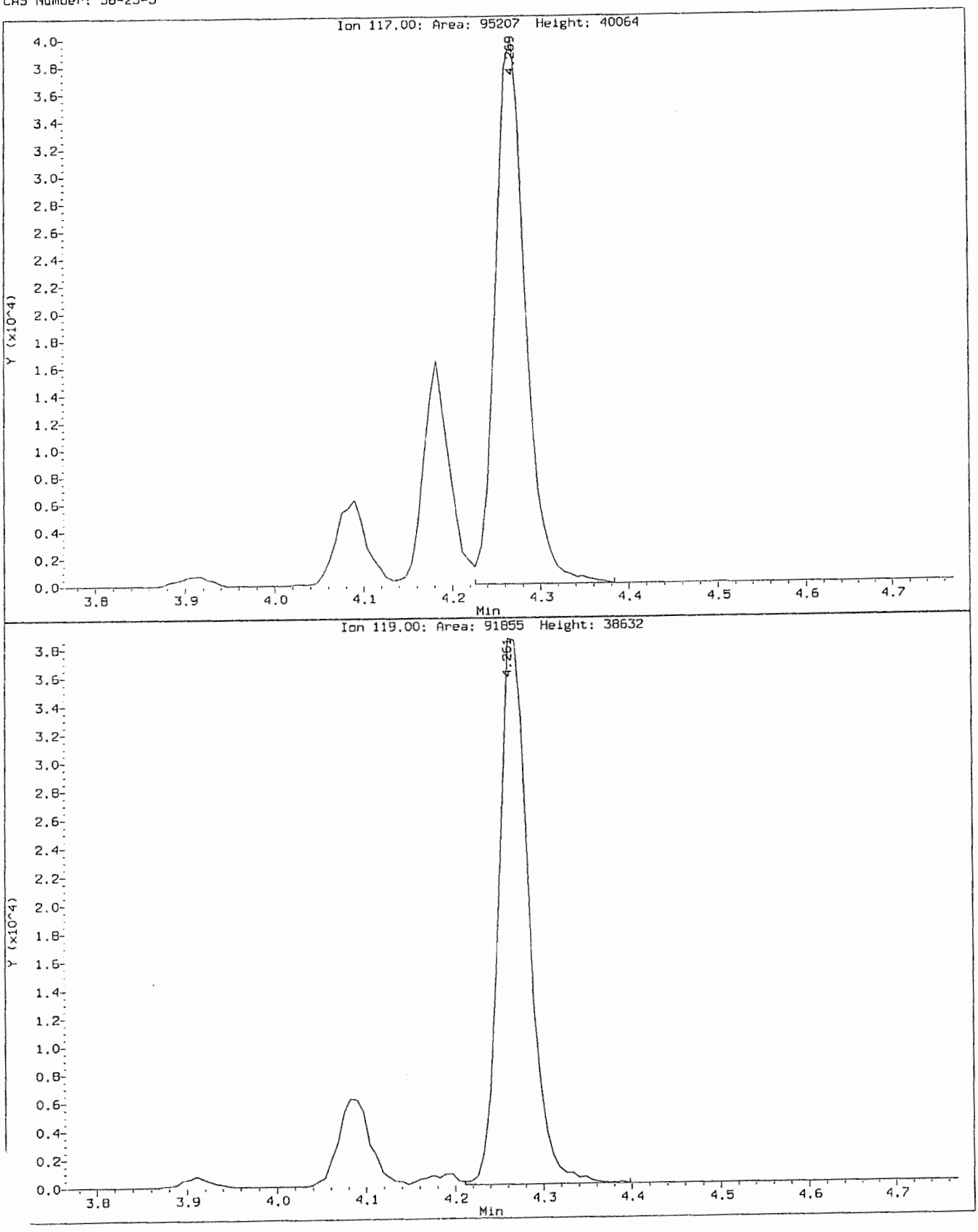


Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052607.D
Date : 26-MAY-2021 14:40
Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624

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

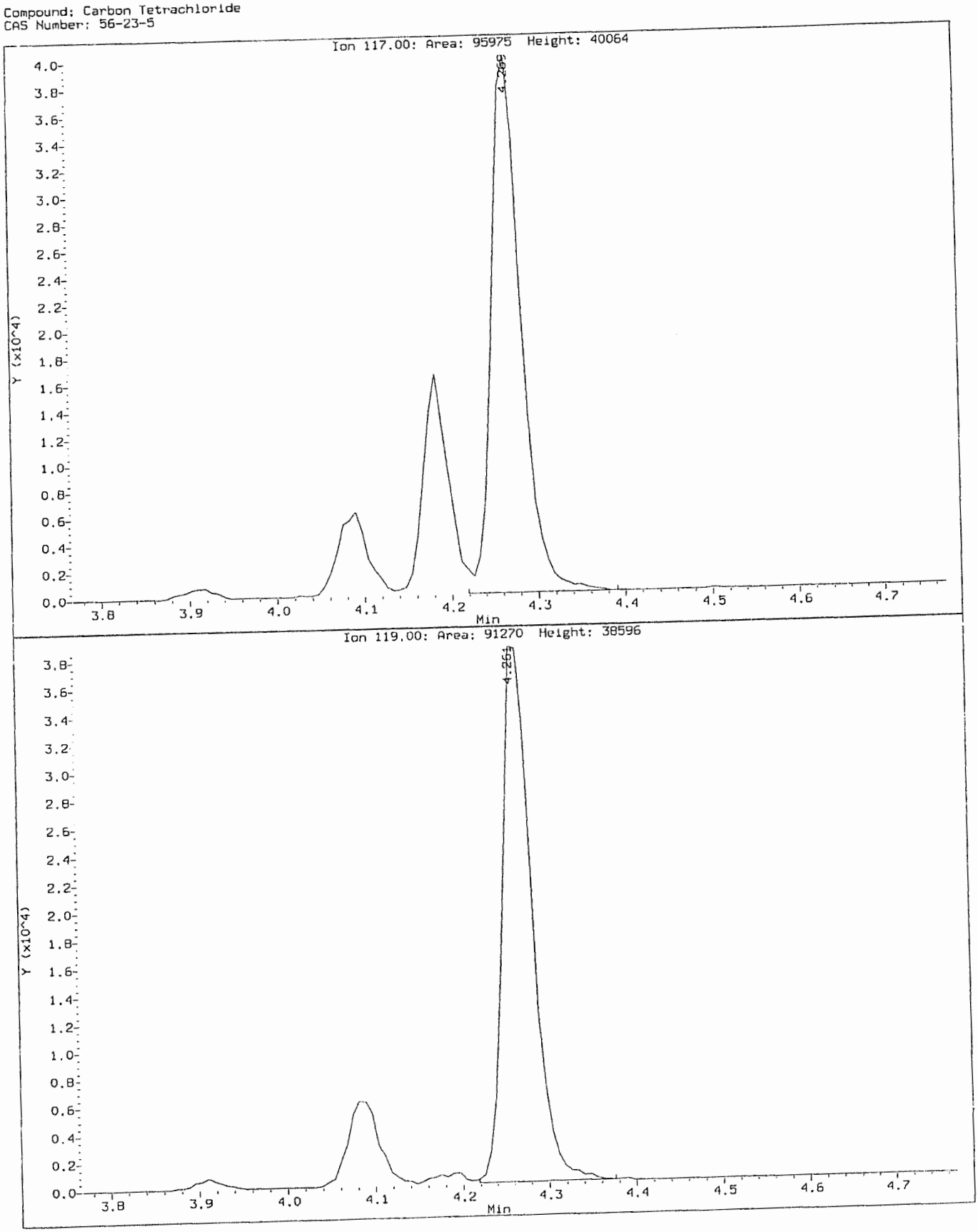
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052607.D
Injection Date: 26-MAY-2021 14:40
Instrument: voa6.i
Client Sample ID: VSTD020

Compound: Carbon Tetrachloride
CAS Number: 56-23-5



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052607.D
Injection Date: 26-MAY-2021 14:40
Instrument: voa6.i
Client Sample ID: VSTD020

Compound: Carbon Tetrachloride
CAS Number: 56-23-5



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052608.D Page 1
Report Date: 10-Jun-2021 12:32

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052608.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 26-MAY-2021 15:01
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 14:40 Cal File: X052607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

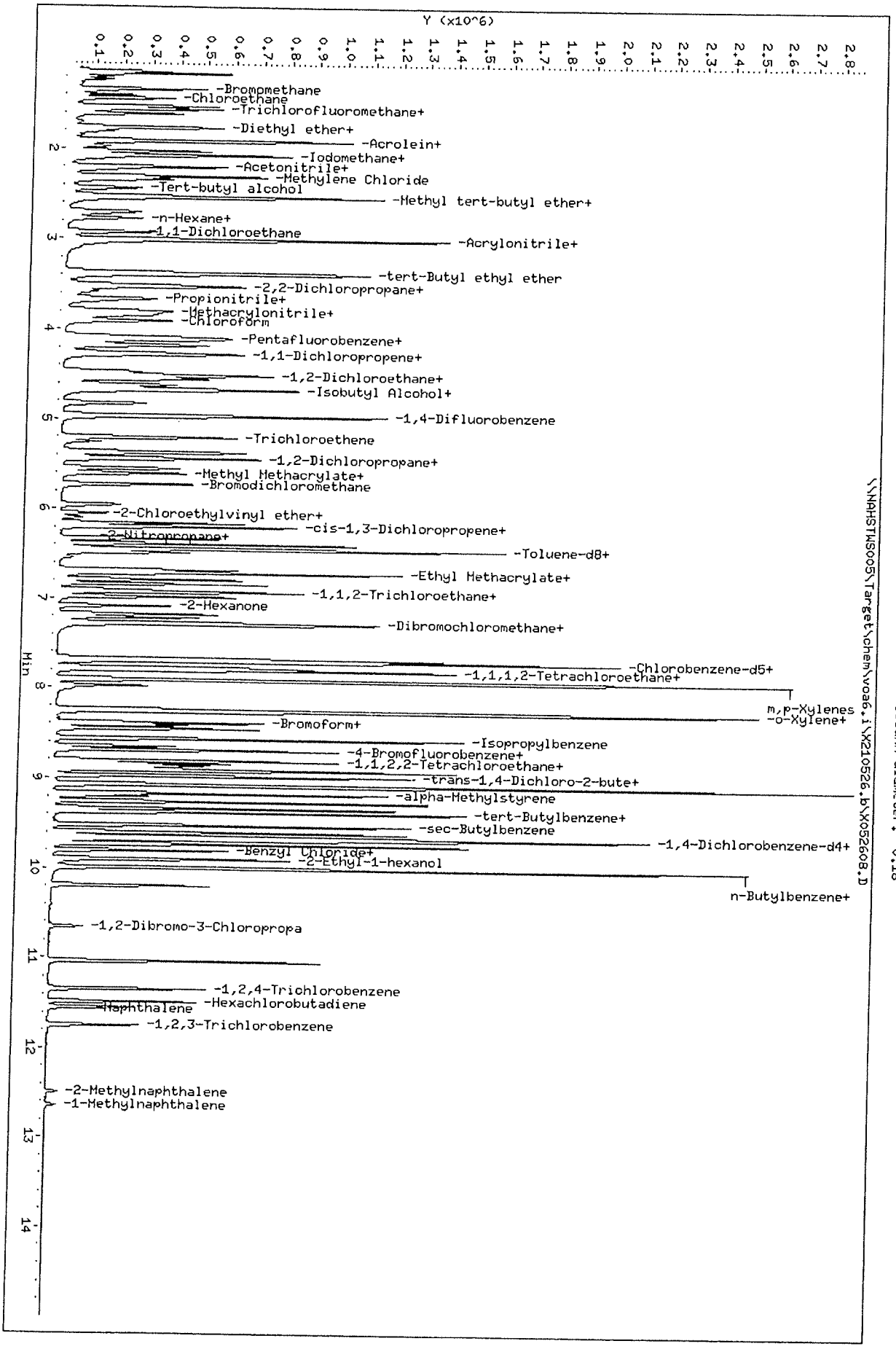
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	424959	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	666769	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	619576	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	345661	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	202707	50.0000	49.93
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	243279	50.0000	44.79
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	198305	50.0000	47.39
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	641202	50.0000	41.54
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	286118	50.0000	45.55
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	159364	50.0000	47.48
22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	316911	50.0000	47.17
11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	198252	50.0000	45.29
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	255497	50.0000	48.09
37 Benzene	78	4.512	4.512	(0.909)	726648	50.0000	47.43
34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	244057	50.0000	44.15(H)
59 Chlorobenzene	112	7.692	7.692	(1.003)	575989	50.0000	44.65
7 Chloroethane	64	1.403	1.403	(0.336)	169882	50.0000	57.20
28 Chloroform	83	3.910	3.910	(0.935)	352687	50.0000	47.19
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	219469	50.0000	49.27
61 Ethylbenzene	106	7.800	7.800	(1.017)	273828	50.0000	46.01
56 Tetrachloroethene	164	6.926	6.926	(0.903)	165887	50.0000	43.49
50 Toluene	91	6.446	6.446	(0.840)	806999	50.0000	44.61

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	188221	50.0000	47.43
38 Trichloroethene	130	5.207	5.207	(1.049)	221368	50.0000	48.37
5 Vinyl Chloride	62	1.138	1.138	(0.272)	233856	50.0000	46.48

QC Flag Legend

H - Operator selected an alternate compound hit.

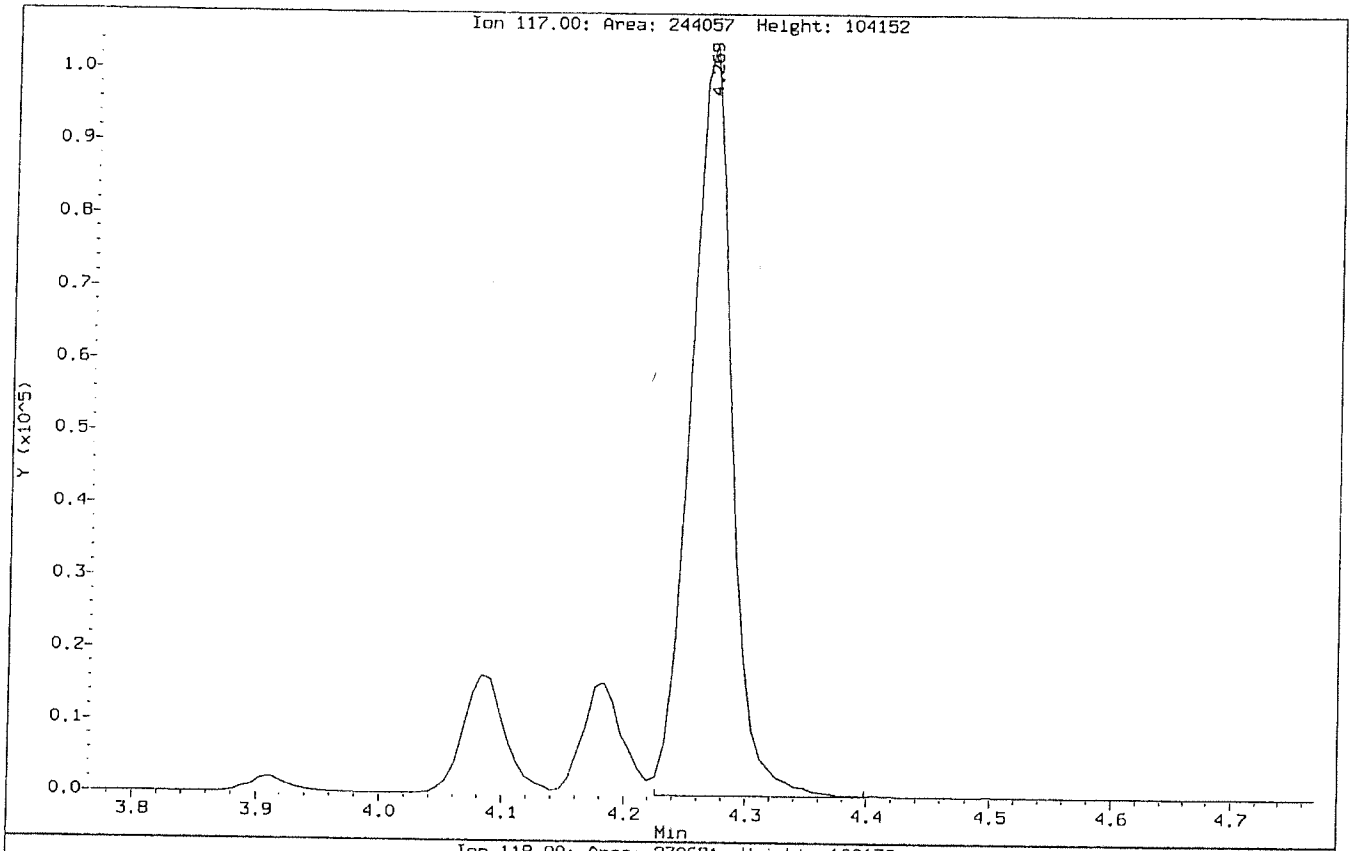


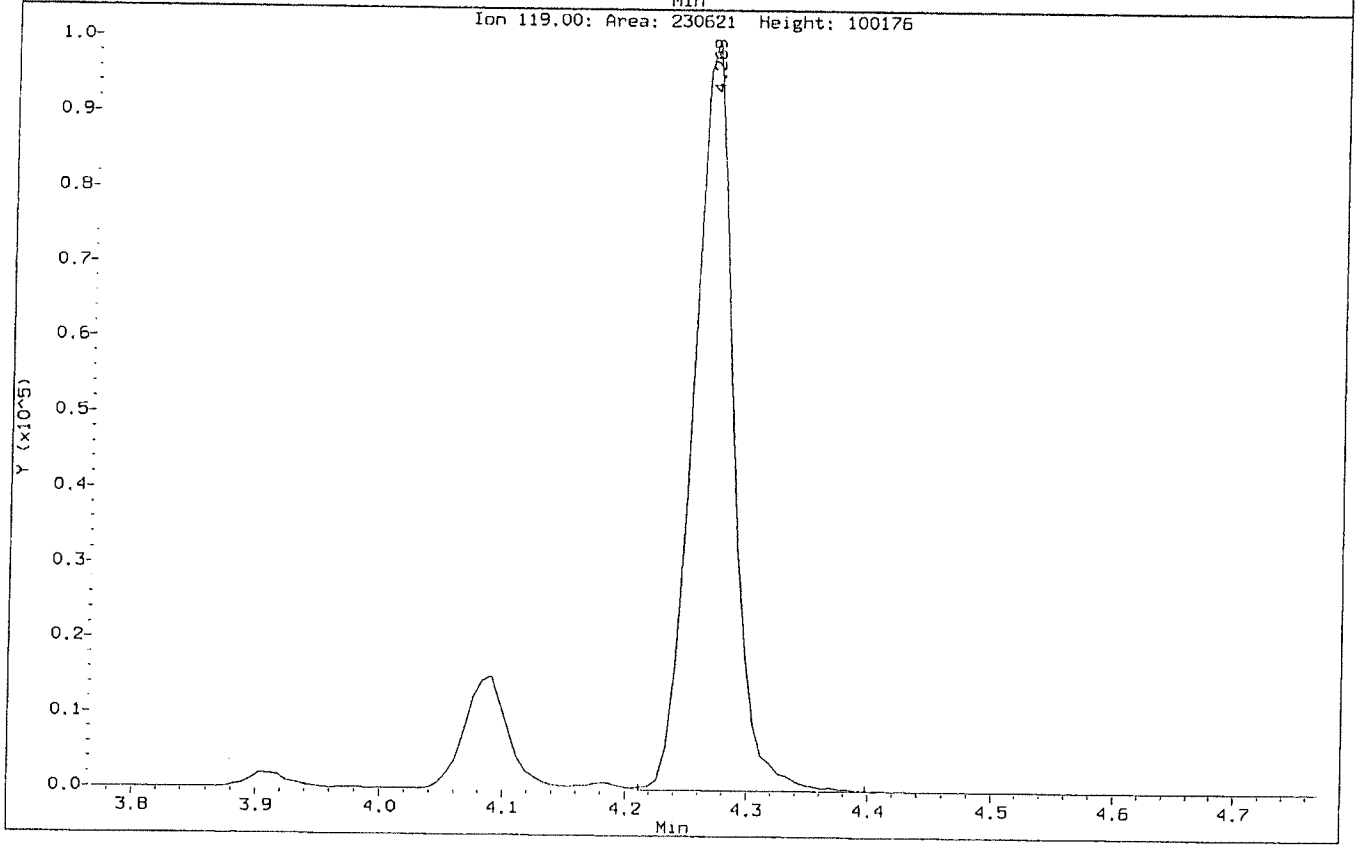
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052608.D
Date : 26-MAY-2021 15:01
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052608.D
Injection Date: 26-MAY-2021 15:01
Instrument: voa6.i
Client Sample ID: VSTD050

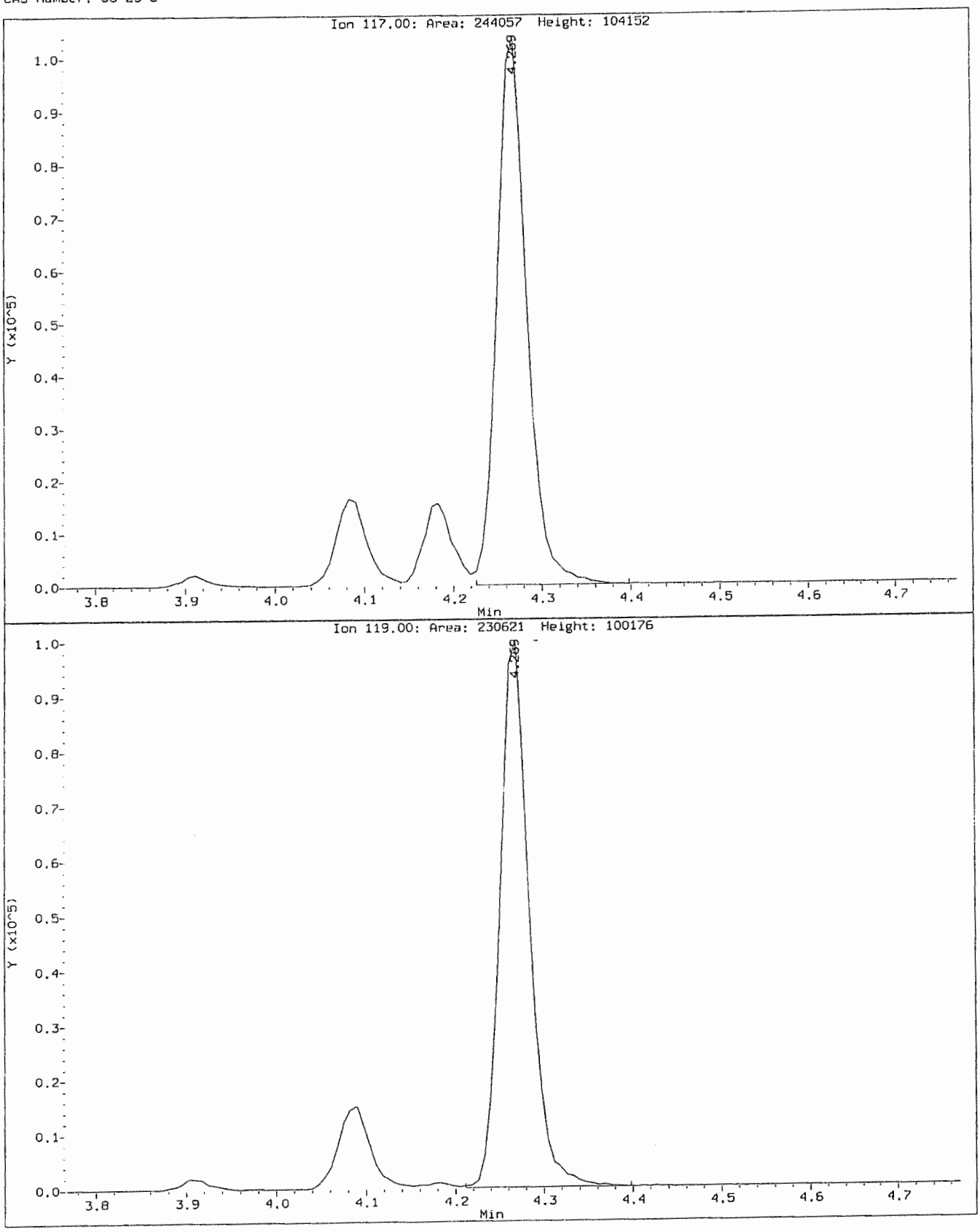
Compound: Carbon Tetrachloride
CAS Number: 56-23-5





Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052608.D
Injection Date: 26-MAY-2021 15:01
Instrument: voa6.i
Client Sample ID: VSTD050

Compound: Carbon Tetrachloride
CAS Number: 56-23-5



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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 26-MAY-2021 15:22
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

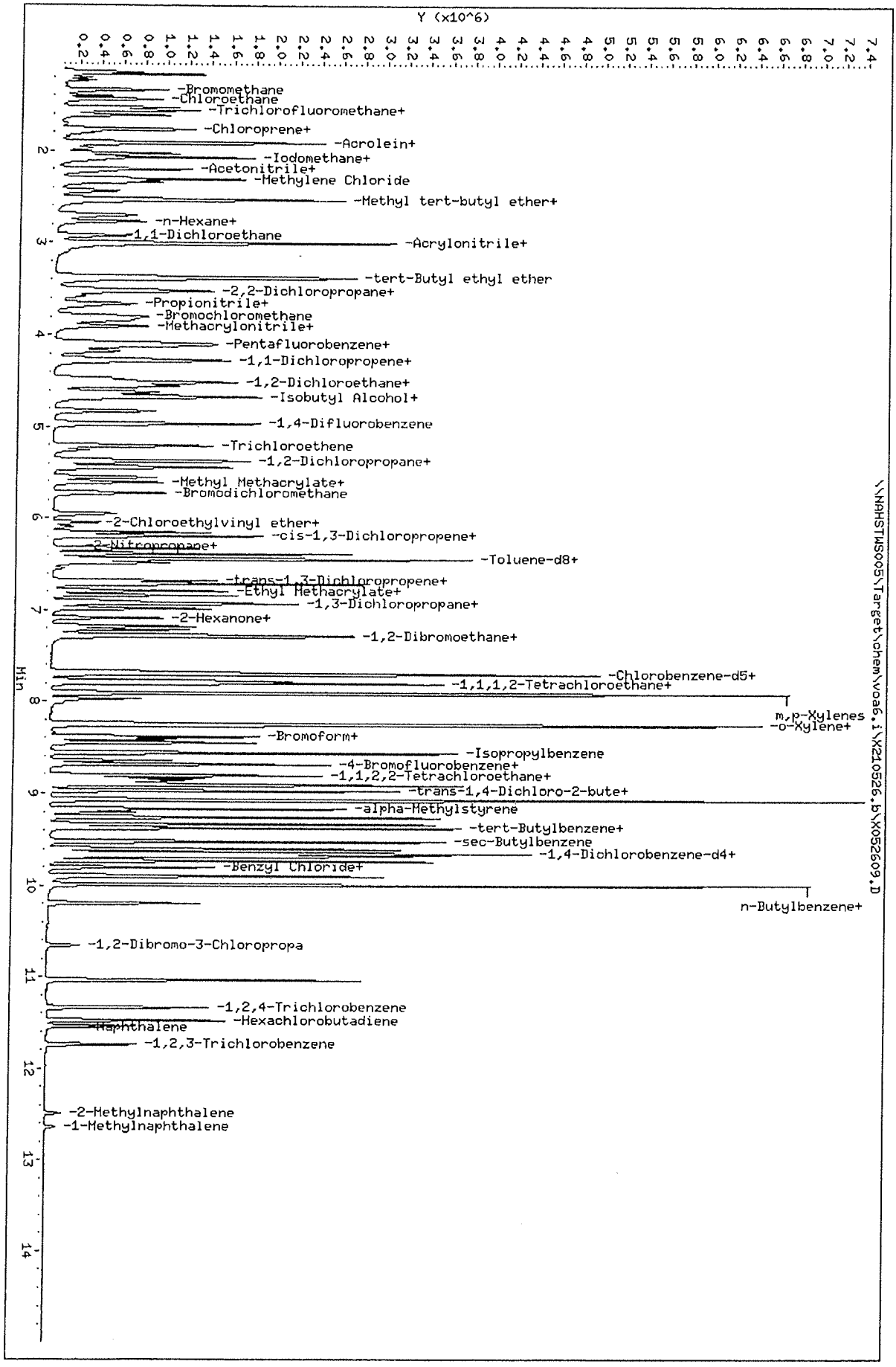
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	465829	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	710792	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	666442	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	392601	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	450261	100.000	101.89
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	606080	100.000	102.75
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	469782	100.000	102.62(A)
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	1608002	100.000	96.86
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	661548	100.000	96.09
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	346404	100.000	95.95
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	677723	100.000	92.02
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	458831	100.000	95.62
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	546071	100.000	96.42
37 Benzene	78	4.512	4.512	(0.909)	1561197	100.000	95.60
34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	602380	100.000	102.23(H)
59 Chlorobenzene	112	7.692	7.692	(1.003)	1335922	100.000	96.29
7 Chloroethane	64	1.403	1.403	(0.336)	322237	100.000	100.02
28 Chloroform	83	3.910	3.910	(0.935)	762402	100.000	93.06
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	473541	100.000	96.98
61 Ethylbenzene	106	7.799	7.799	(1.017)	658754	100.000	102.92
56 Tetrachloroethene	164	6.925	6.925	(0.903)	441656	100.000	107.65
50 Toluene	91	6.446	6.446	(0.840)	1856343	100.000	95.41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	413319	100.000	95.02
38 Trichloroethene	130	5.206	5.206	(1.049)	490520	100.000	100.54
5 Vinyl Chloride	62	1.138	1.138	(0.272)	519936	100.000	94.29

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

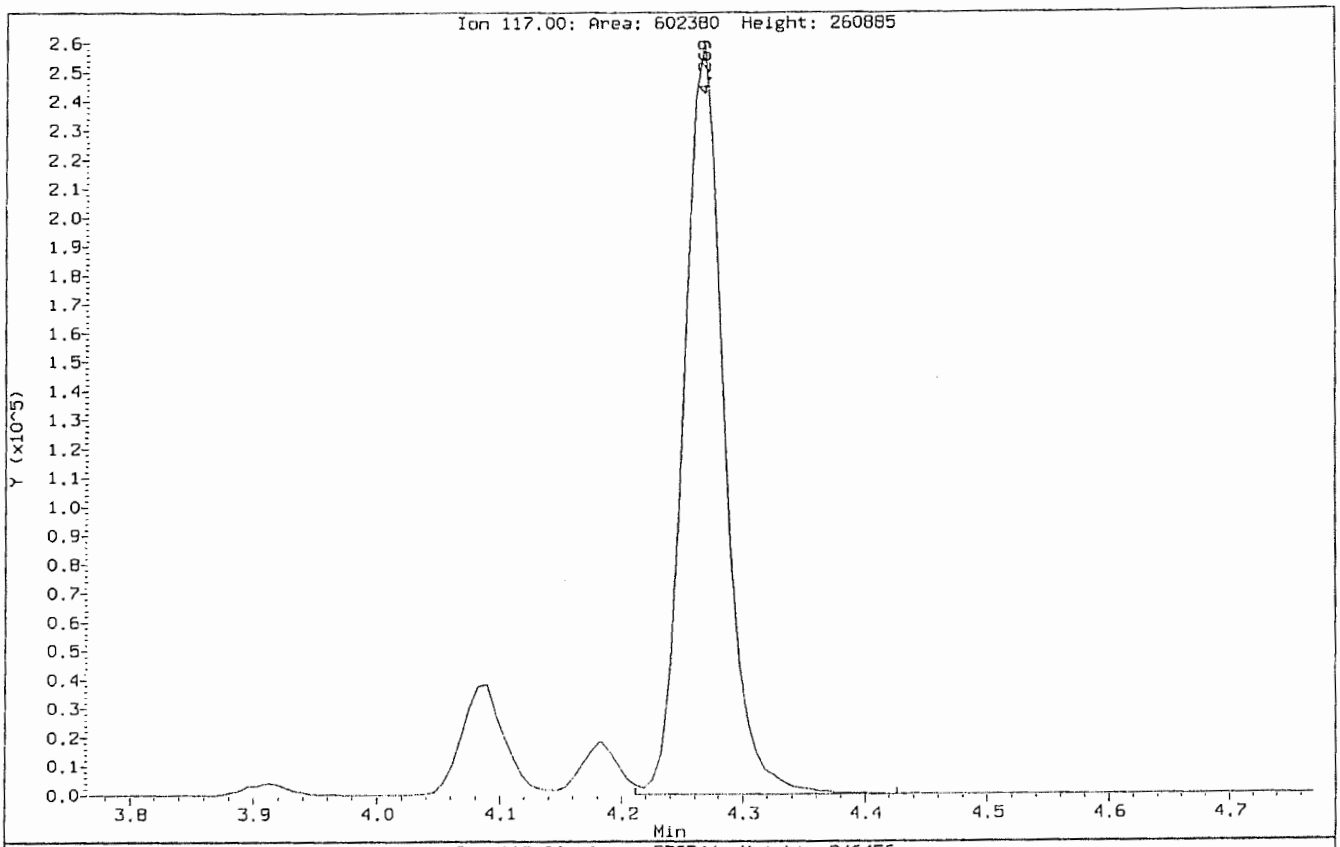


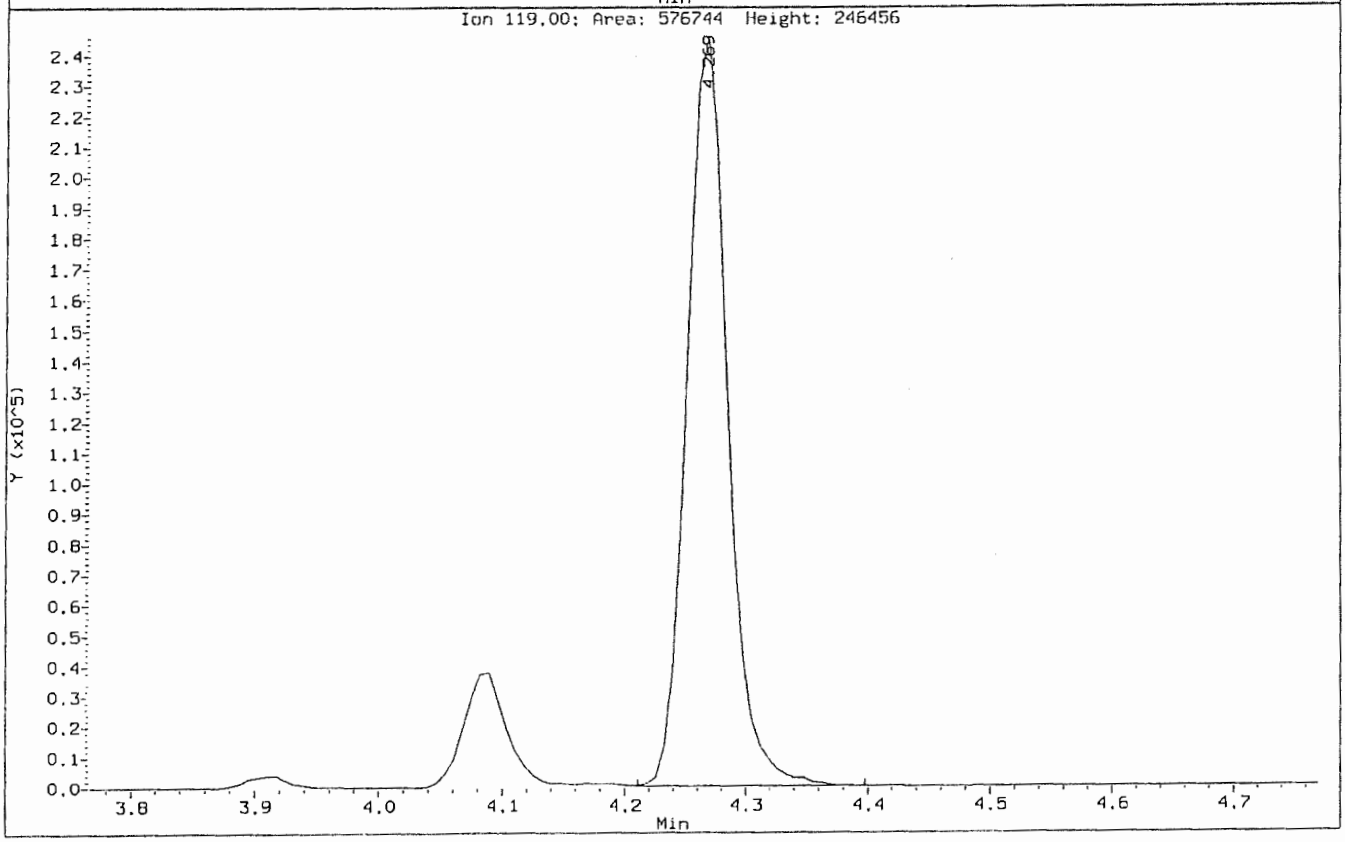
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052609.D
Date : 26-MAY-2021 15:22
Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTW5005\Target\chem\voa6.i\X210526.b\Before1\X052609.D
Injection Date: 26-MAY-2021 15:22
Instrument: voa6.i
Client Sample ID: VSTD100

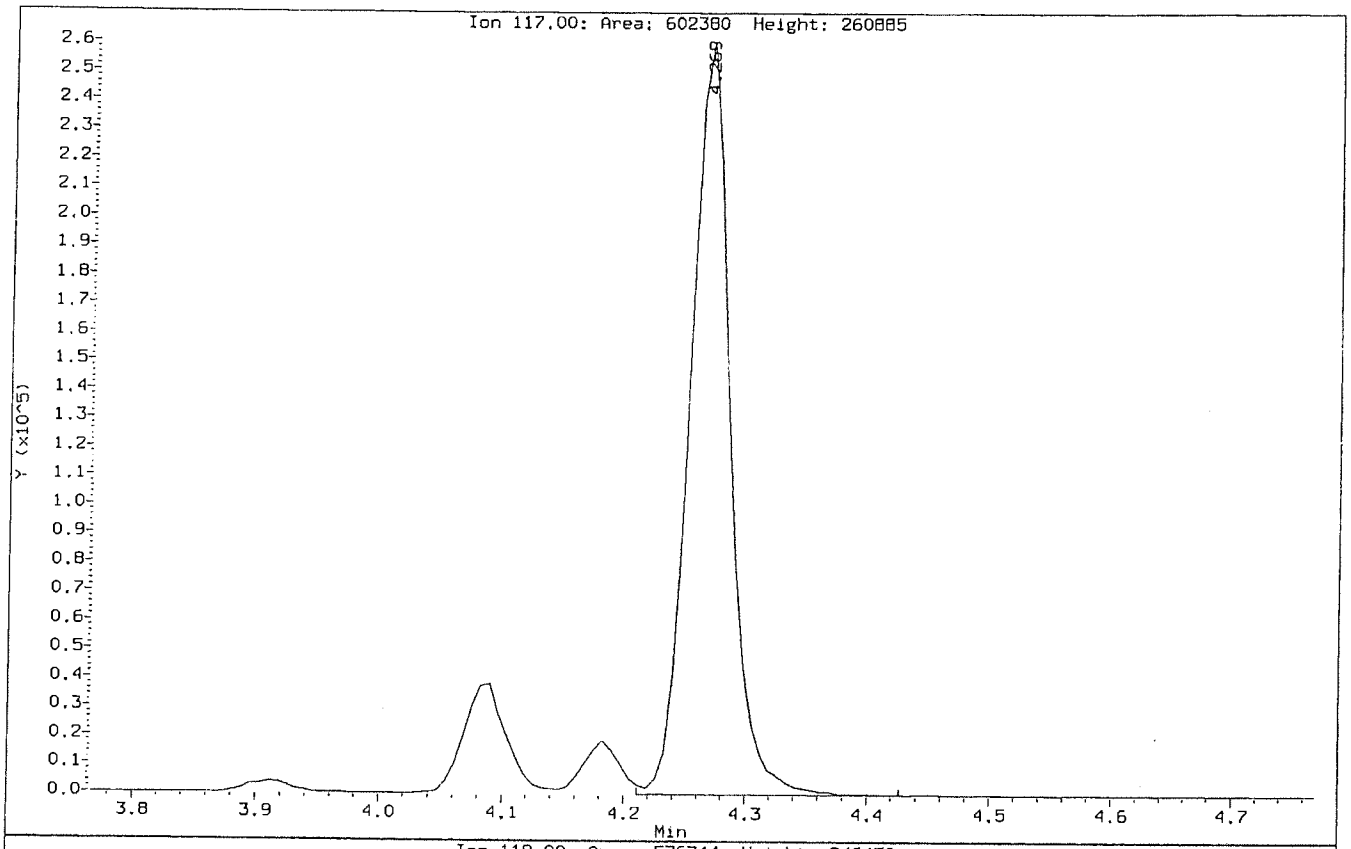
Compound: Carbon Tetrachloride
CAS Number: 56-23-5

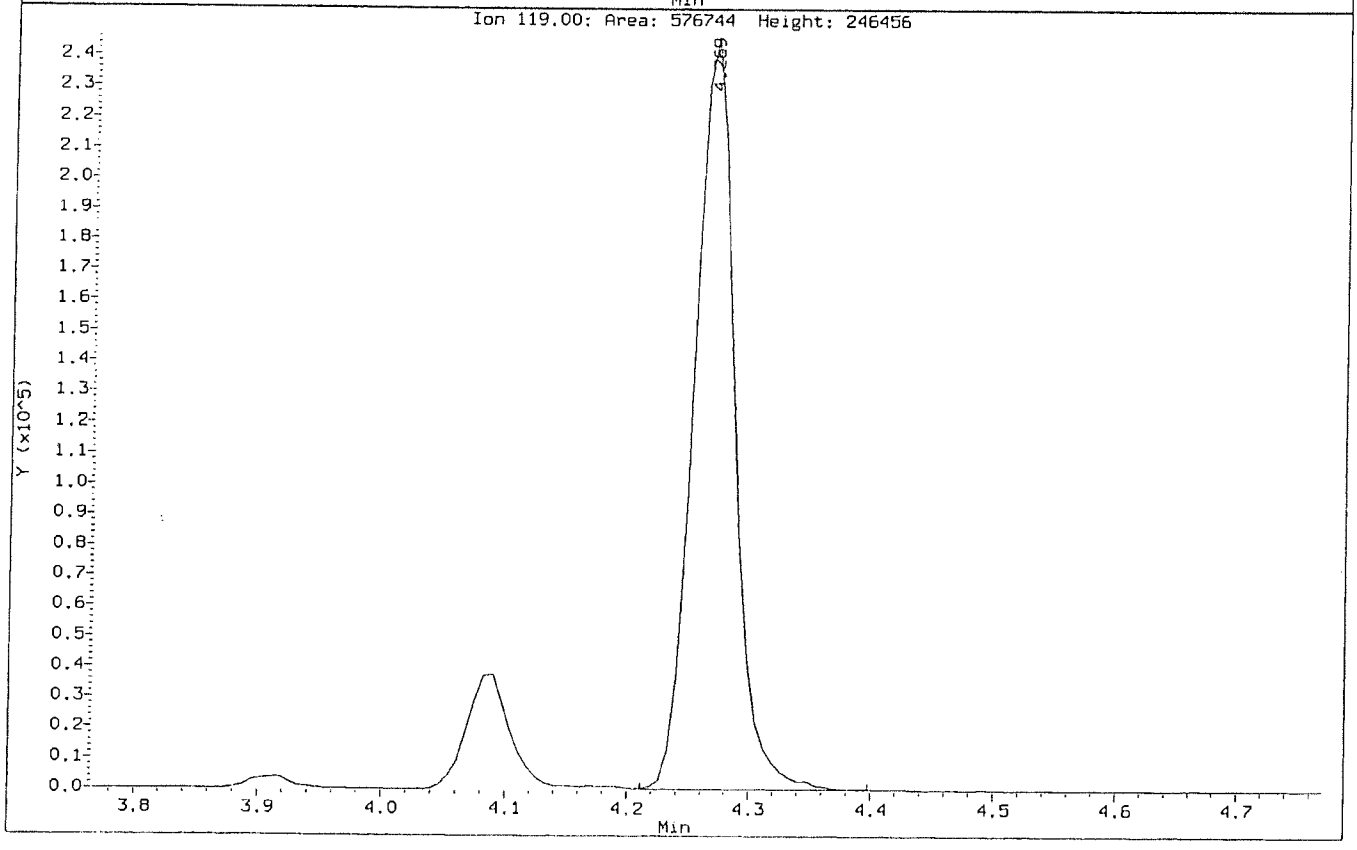




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052609.D
Injection Date: 26-MAY-2021 15:22
Instrument: voa6.i
Client Sample ID: VSTD100

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052610.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 26-MAY-2021 15:43
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:22 Cal File: X052609.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

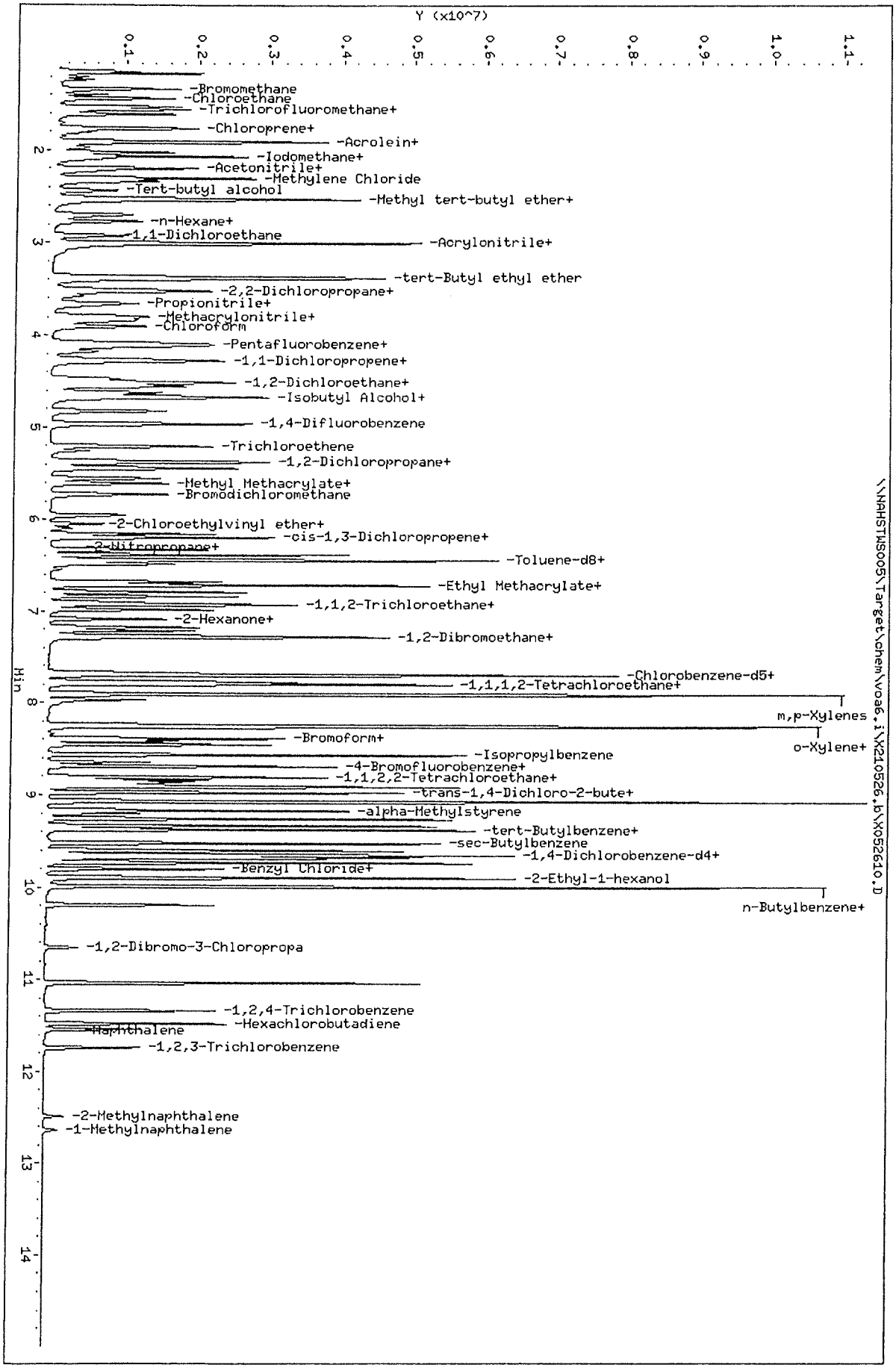
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	496717	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	755988	50.0000	
*	47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	712100	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	415744	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.468	4.468	(1.069)	696836	150.000	148.20
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	931244	150.000	147.42
$	30 Dibromofluoromethane	113	4.103	4.103	(0.981)	715769	150.000	146.71(A)
S	48 Toluene-d8	98	6.388	6.388	(0.833)	2408134	150.000	135.76(A)
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	1024526	150.000	139.57
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	547310	150.000	141.88
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	1041496	150.000	132.62
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	716685	150.000	140.07
	33 1,2-Dichloroethane	62	4.554	4.554	(0.918)	860786	150.000	142.90
	37 Benzene	78	4.511	4.511	(0.909)	2402438	150.000	138.33
	34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	917973	150.000	146.47(H)
	59 Chlorobenzene	112	7.692	7.692	(1.003)	2108986	150.000	142.26
	7 Chloroethane	64	1.396	1.396	(0.334)	494207	150.000	144.48
	28 Chloroform	83	3.910	3.910	(0.935)	1186262	150.000	135.80
	27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	727278	150.000	139.69
	61 Ethylbenzene	106	7.799	7.799	(1.017)	1007746	150.000	147.35
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	689188	150.000	157.21
	50 Toluene	91	6.445	6.445	(0.840)	2907224	150.000	139.84

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	633195	150.000	136.52
38 Trichloroethene	130	5.206	5.206	(1.049)	743912	150.000	143.37
5 Vinyl Chloride	62	1.138	1.138	(0.272)	799846	150.000	136.03

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.



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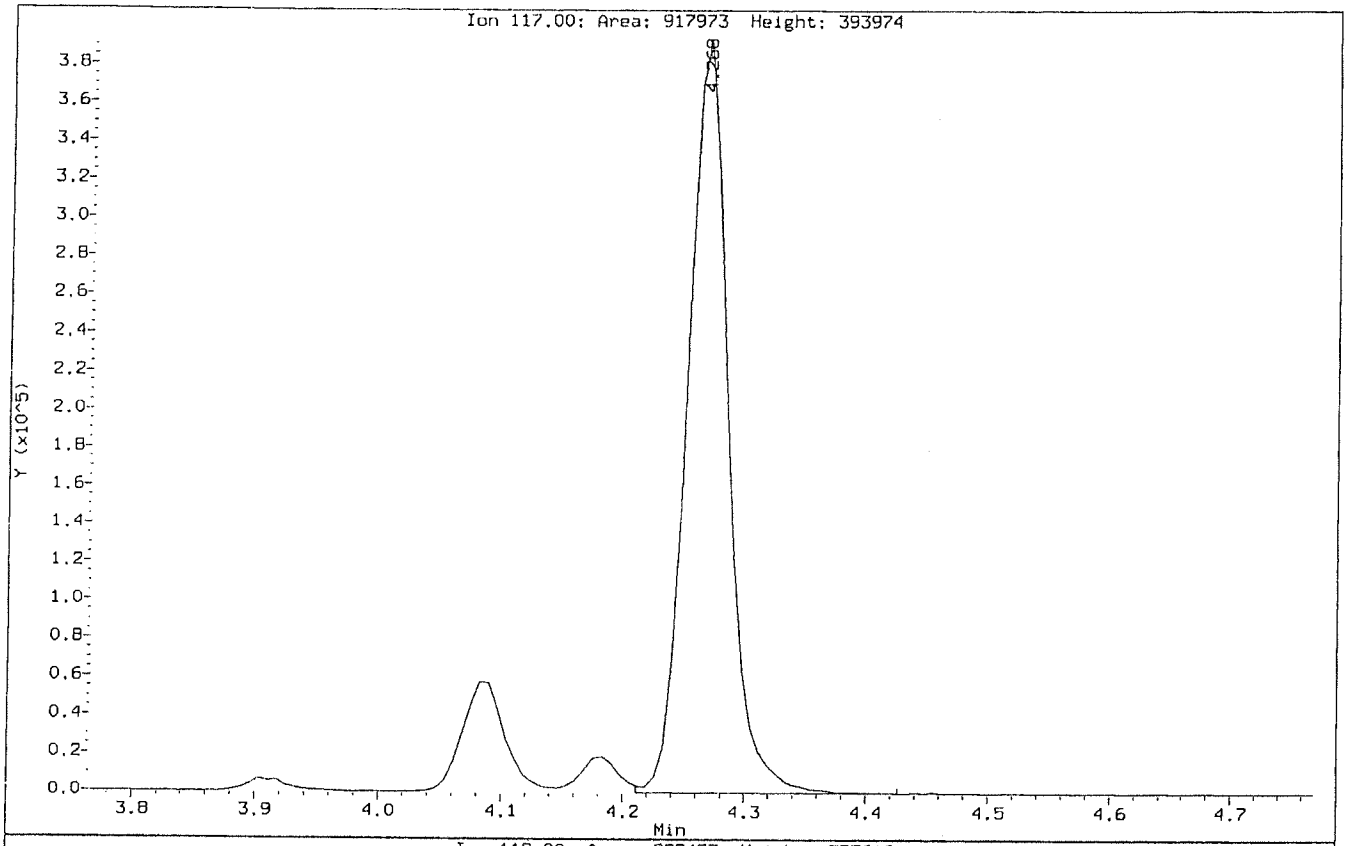
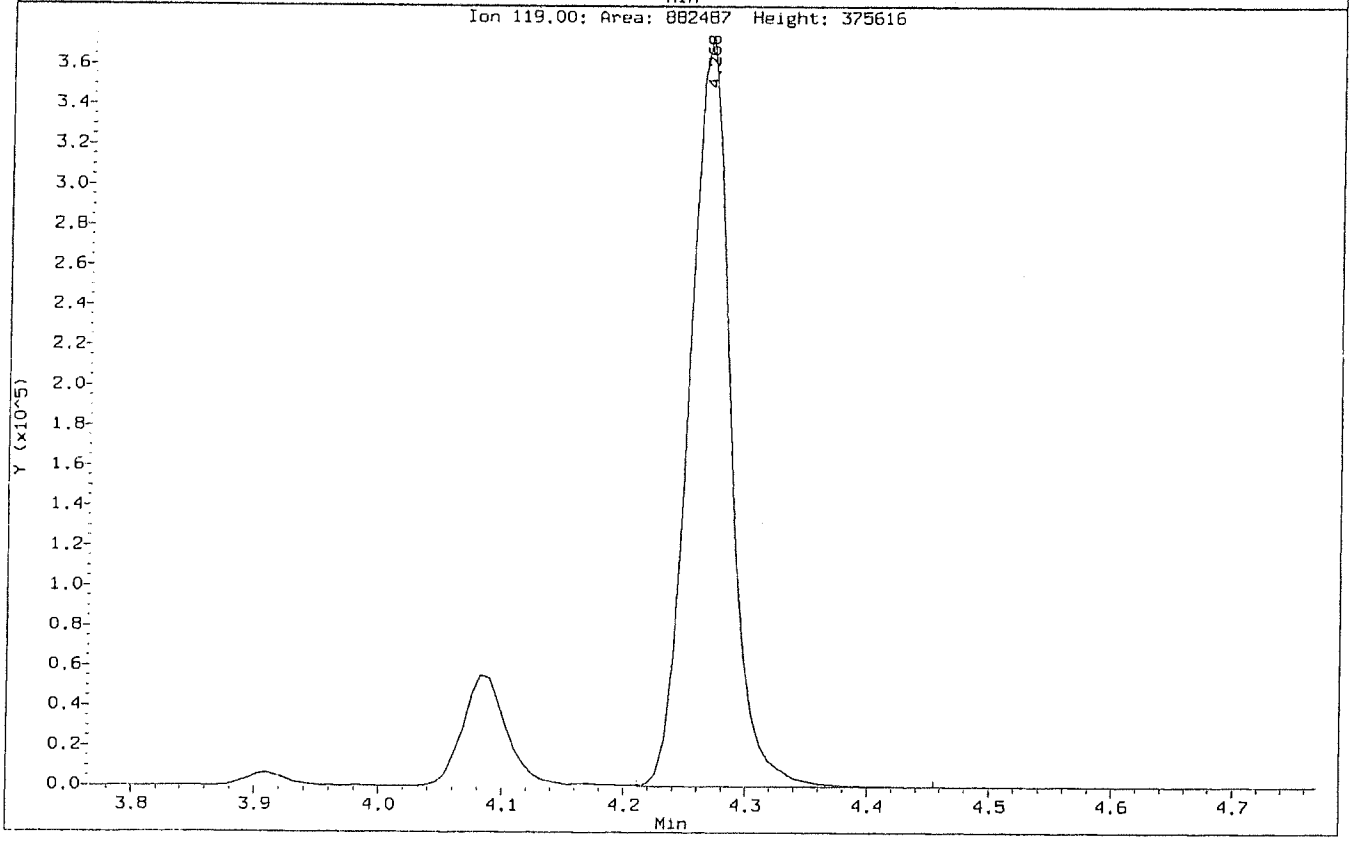
Date : 26-MAY-2021 15:43
Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052610.D
Injection Date: 26-MAY-2021 15:43
Instrument: voa6.i
Client Sample ID: VSTD150

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





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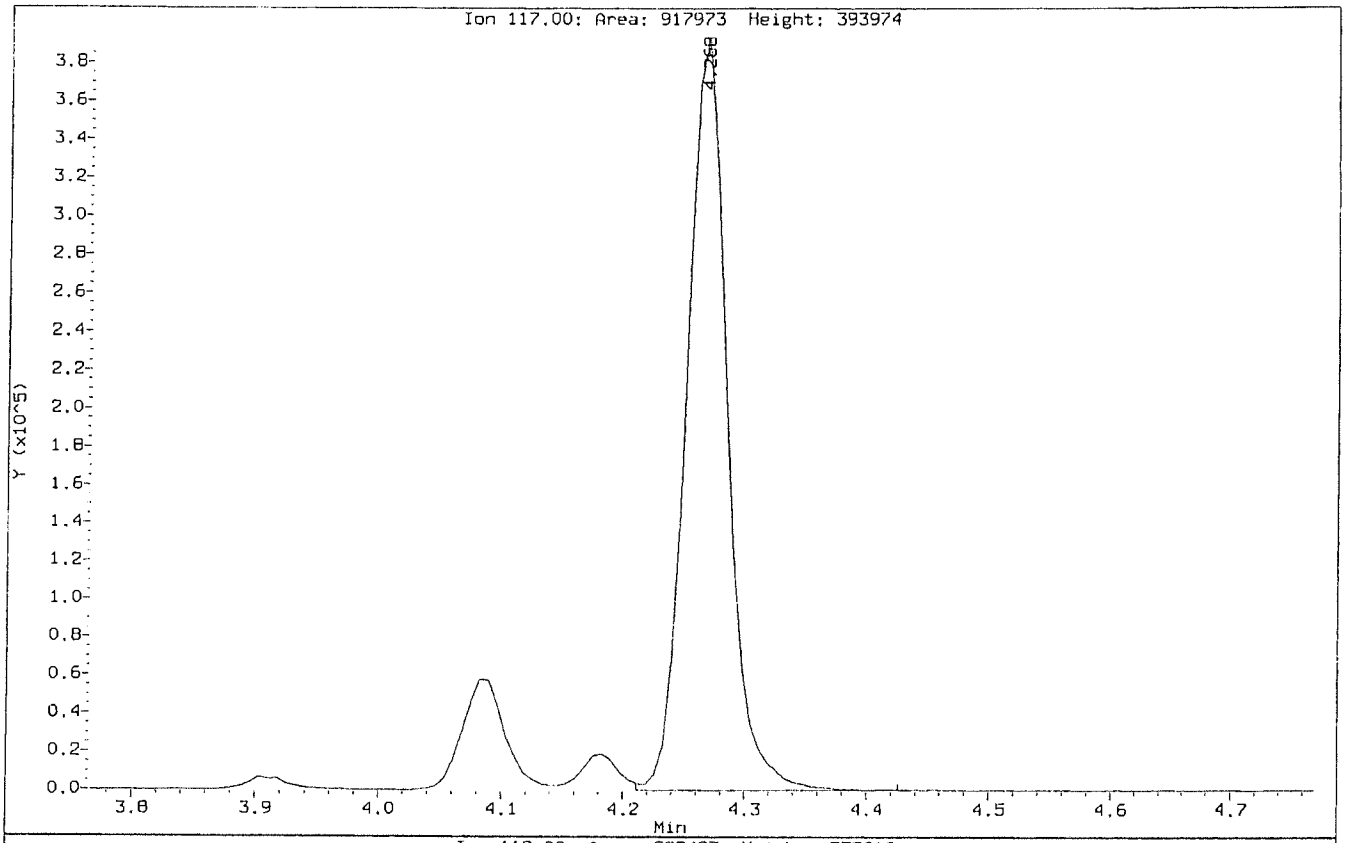
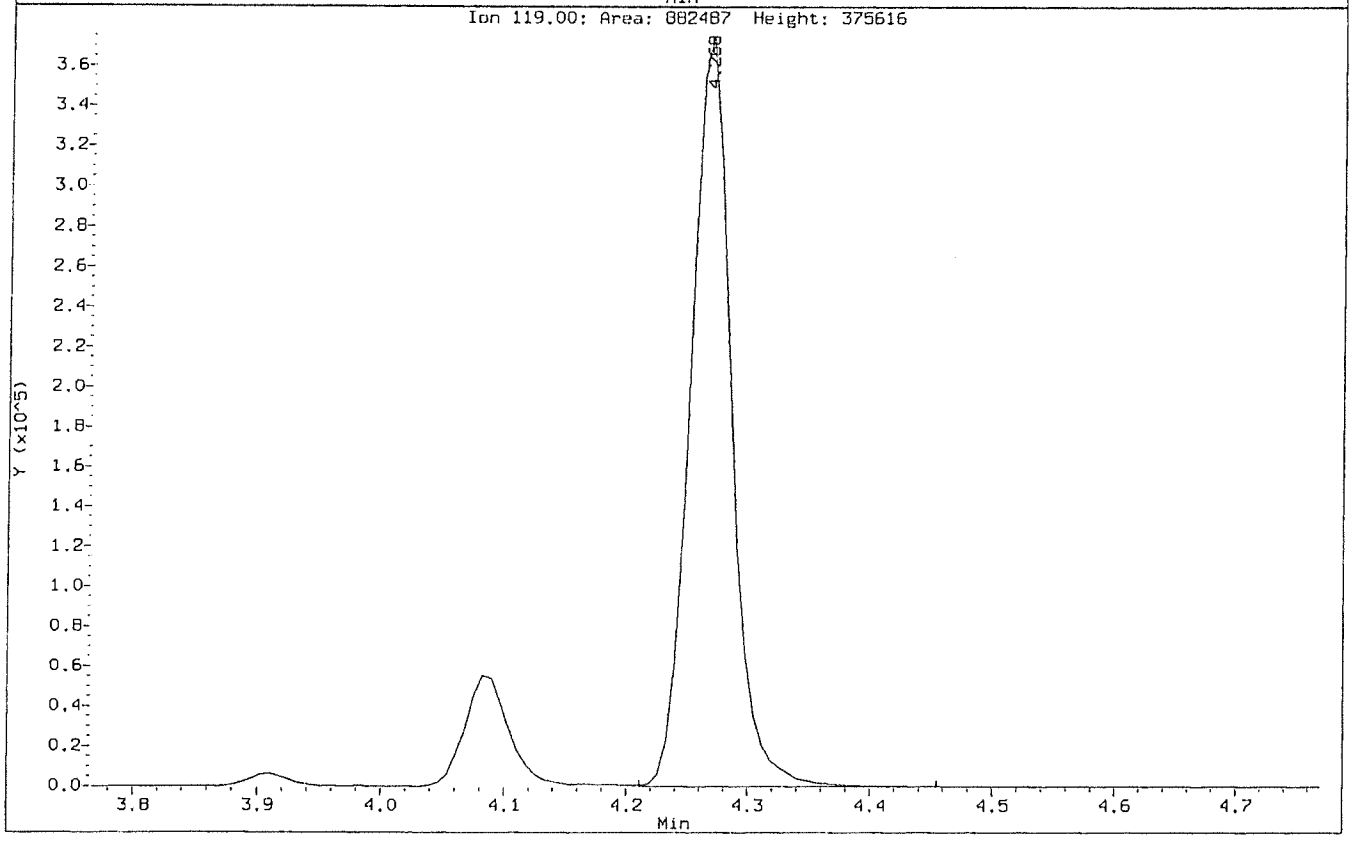
Instrument: voa6.i
Client Sample ID: VSTD150

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052611.D Page 1
Report Date: 10-Jun-2021 12:32

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052611.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 26-MAY-2021 16:04
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:43 Cal File: X052610.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

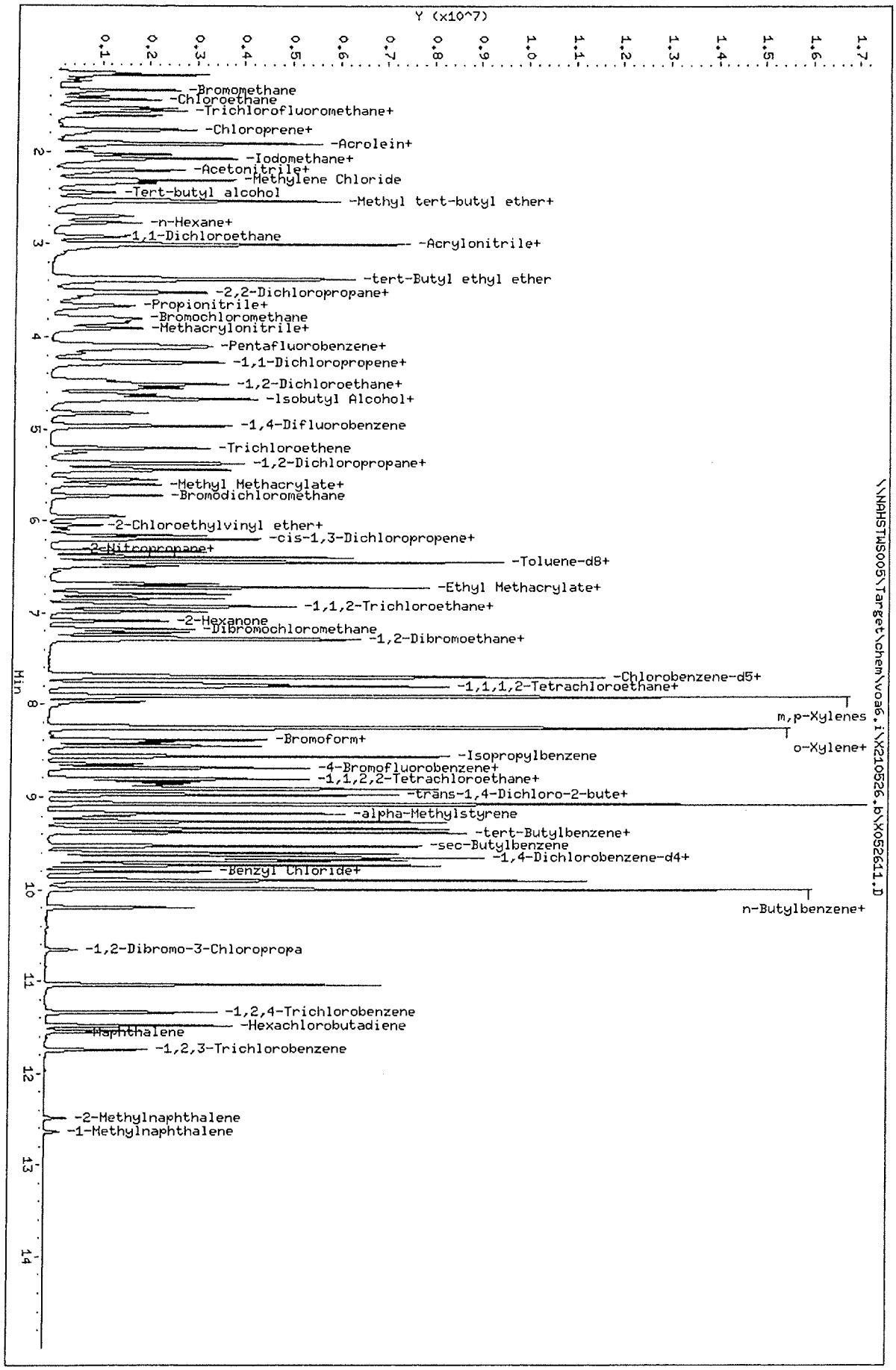
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	527290	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	811816	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	755473	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	445629	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	998694	200.000	200.33(A)
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	1352939	200.000	201.60(A)
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	1043408	200.000	201.53(A)
$	48 Toluene-d8	98	6.388	6.388	(0.833)	3611012	200.000	191.88(A)
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	1546157	200.000	198.41
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	795336	200.000	194.34
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	1553138	200.000	186.31
	11 1,1-Dichloroethene	96	1.912	1.912	(0.457)	1086071	200.000	199.96
	33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	1287189	200.000	198.99
	37 Benzene	78	4.512	4.512	(0.909)	3517442	200.000	188.60
	34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	1378935	200.000	204.90(AH)
	59 Chlorobenzene	112	7.692	7.692	(1.003)	3148357	200.000	200.18(A)
	7 Chloroethane	64	1.396	1.396	(0.334)	731139	200.000	201.91(A)
	28 Chloroform	83	3.910	3.910	(0.935)	1752890	200.000	189.03
	27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	1076621	200.000	194.80
	61 Ethylbenzene	106	7.800	7.800	(1.017)	1516023	200.000	208.94(A)
	56 Tetrachloroethene	164	6.933	6.933	(0.904)	1043185	200.000	224.30(A)
	50 Toluene	91	6.446	6.446	(0.840)	4409516	200.000	199.93

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	939280	200.000	190.77
38 Trichloroethene	130	5.207	5.207	(1.049)	1115378	200.000	200.18(A)
5 Vinyl Chloride	62	1.138	1.138	(0.272)	1189726	200.000	190.61

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.



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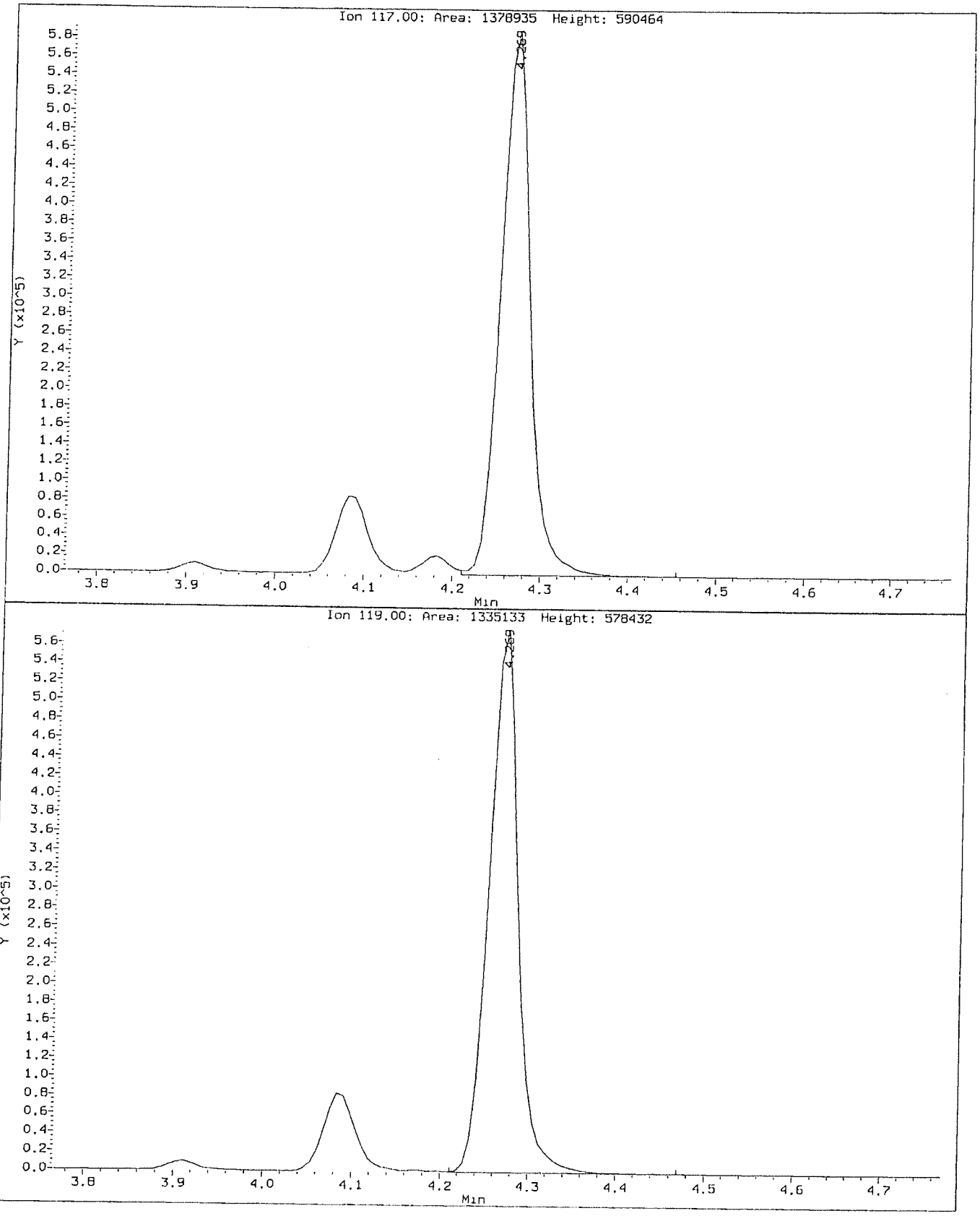
Date : 26-MAY-2021 16:04
Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\Before1\X052611.D
Injection Date: 26-MAY-2021 16:04
Instrument: voa6.i
Client Sample ID: VSTD200

Compound: Carbon Tetrachloride
CAS Number: 56-23-5



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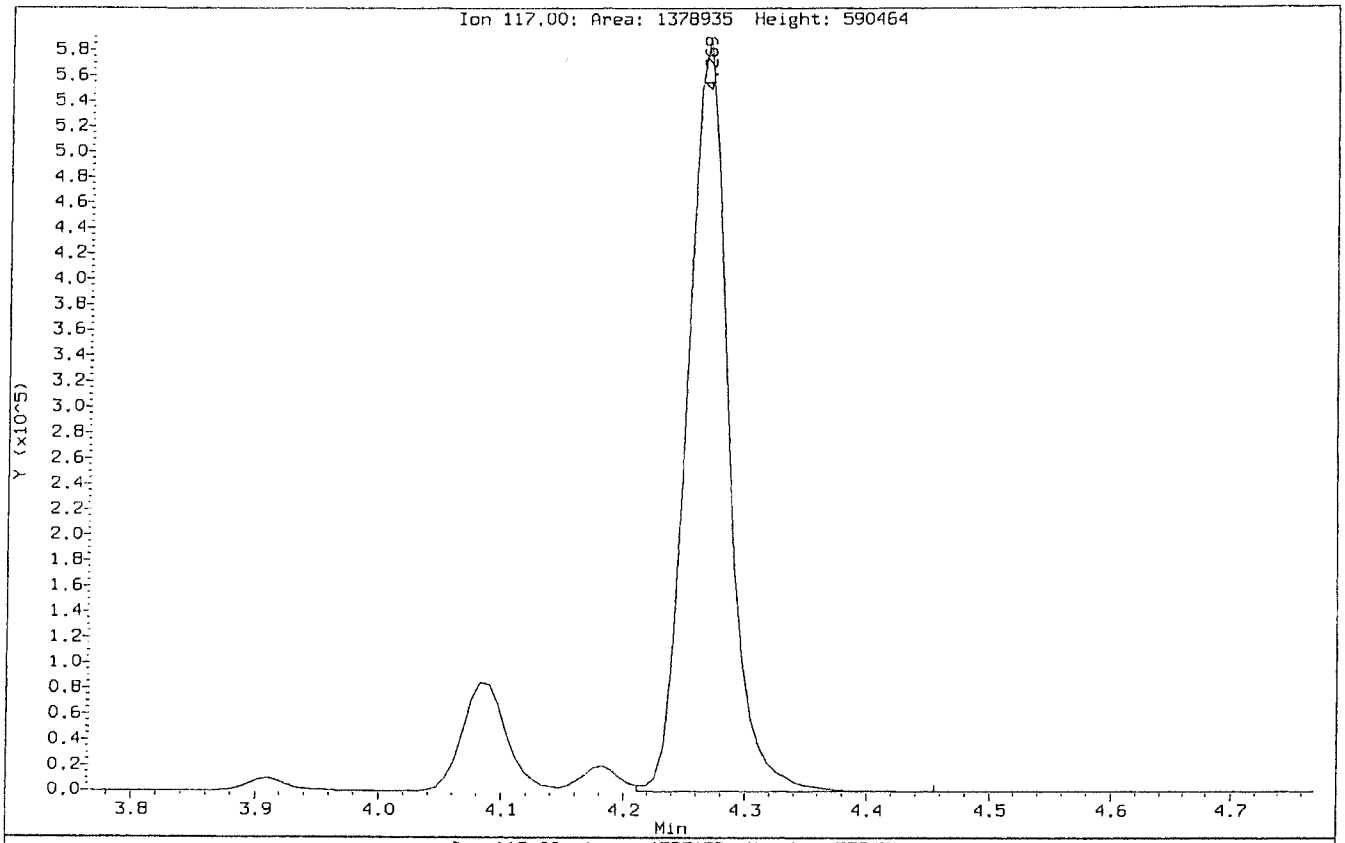
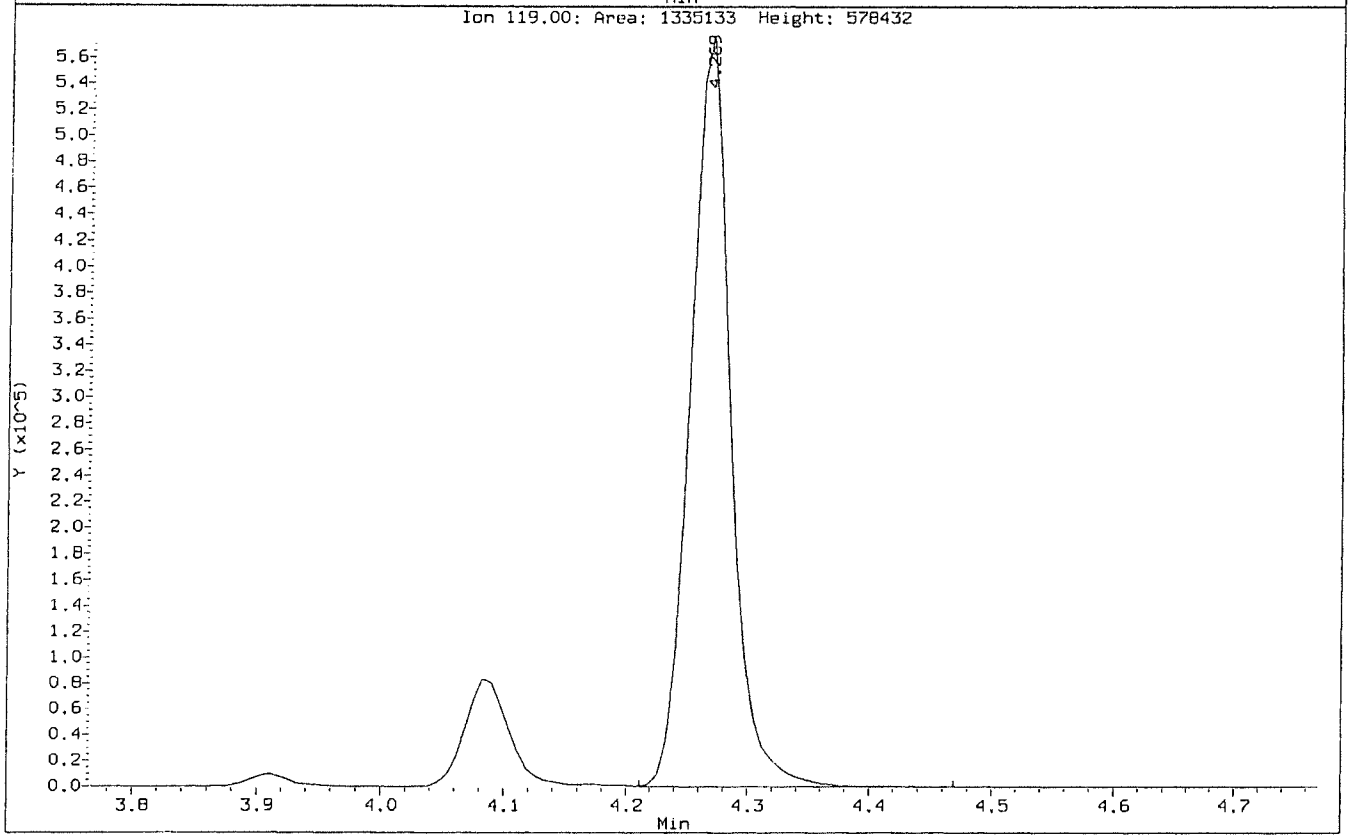
Injection Date: 26-MAY-2021 16:04
Instrument: voa6.i
Client Sample ID: VSTD200

Compound: Carbon Tetrachloride
CAS Number: 56-23-5





ALS Laboratory Group

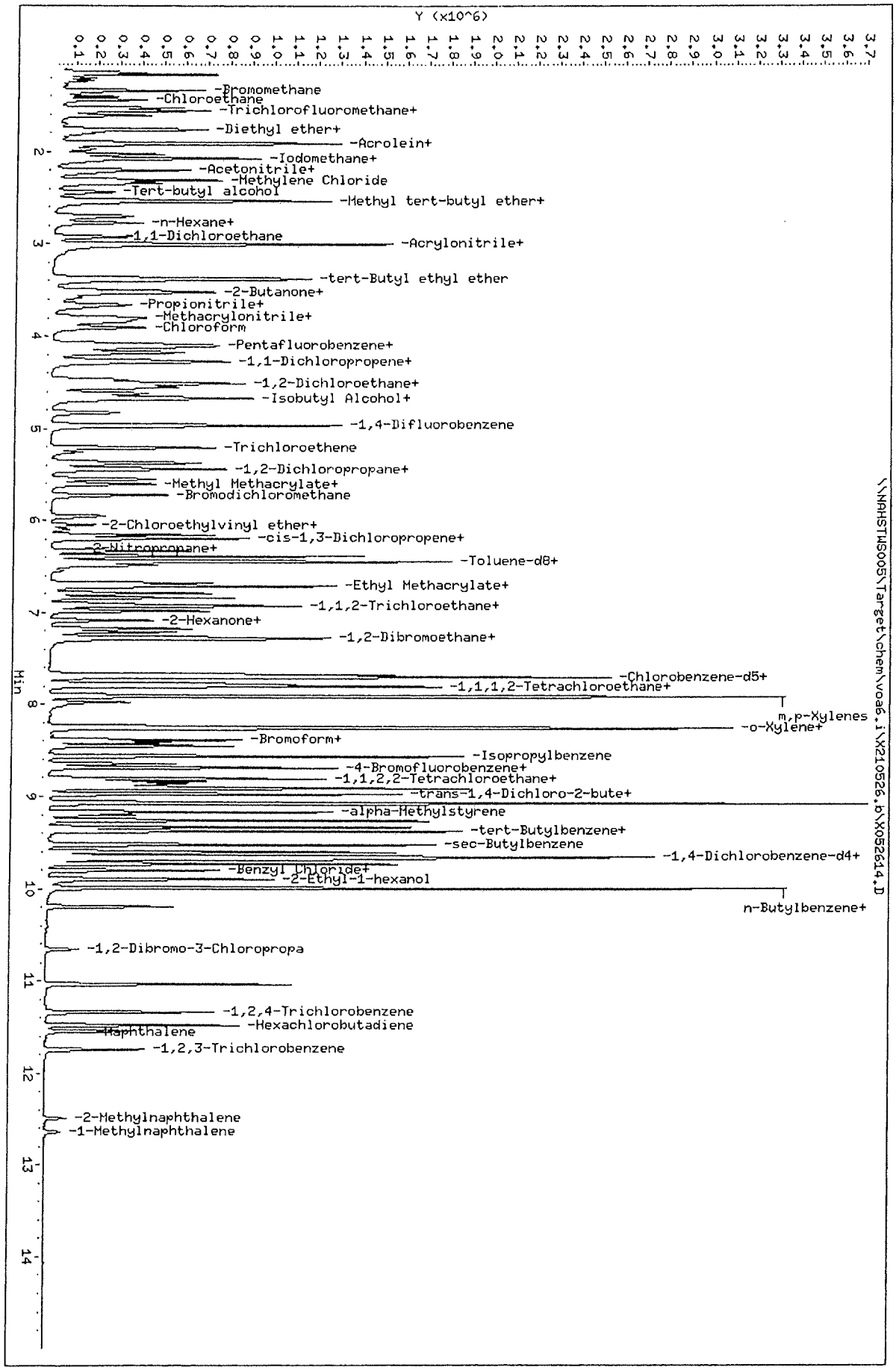
Data file : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052614.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 26-MAY-2021 17:07
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210526.b\8260W.m
Meth Date : 10-Jun-2021 12:32 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 16:04 Cal File: X052611.D
Als bottle: 15 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AECOM-short4.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	506914	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	749401	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	706349	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	404605	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	239842	49.5243	49.52
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	315807	50.8964	50.89
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	247247	49.5505	49.55
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	833853	47.3924	47.39
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	339781	45.3571	45.35
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	179104	46.8083	46.80
22 1,1-Dichloroethane	63	2.921	2.922	(0.699)	347110	43.3136	43.31
11 1,1-Dichloroethene	96	1.911	1.912	(0.457)	245712	47.0575	47.05
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	289734	48.5232	48.52
37 Benzene	78	4.512	4.512	(0.909)	815678	47.3793	47.37
34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	303364	48.8328	48.83
59 Chlorobenzene	112	7.692	7.692	(1.003)	679625	46.2195	46.21
7 Chloroethane	64	1.403	1.396	(0.336)	180947	50.9274	50.92
28 Chloroform	83	3.910	3.910	(0.935)	393929	44.1902	44.19
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	247214	46.5287	46.52
61 Ethylbenzene	106	7.800	7.800	(1.017)	342336	50.4646	50.46
56 Tetrachloroethene	164	6.926	6.933	(0.903)	224904	51.7220	51.72
50 Toluene	91	6.446	6.446	(0.840)	948186	45.9813	45.98

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	2.528	(0.604)	214846	45.3913	45.39
38 Trichloroethene	130	5.206	5.207	(1.049)	255360	49.6477	49.64
5 Vinyl Chloride	62	1.138	1.138	(0.272)	282225	47.0343	47.03



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210526.b\X052614.D
Date : 26-MAY-2021 17:07
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

MSVOA06 -Logbook

Batch: 45638
Date: 06-19-2021
Method: 8260
Comments:

Analyst: Presenta Cabascango
Reviewer:
Laboratory: Houston

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	06-19-2021 11:14 am	1.00	50 mL	50 mL	X061901.D	Liquid	Y	NA
2	CCV	CCV	06-19-2021 11:35 am	1.00	50 mL	50 mL	X061902.D	Liquid	Y	NA
3	BLANK	SAMP	06-19-2021 11:56 am	1.00	50 mL	50 mL	X061903.D	Liquid	Y	NA
4	CCB	SAMP	06-19-2021 12:17 pm	1.00	50 mL	50 mL	X061904.D	Liquid	Y	NA
5	CCB	SAMP	06-19-2021 12:38 pm	1.00	50 mL	50 mL	X061905.D	Liquid	Y	NA
6	VLCSW-210619	LCS	06-19-2021 12:59 pm	1.00	50 mL	50 mL	X061906.D	Liquid	Y	NA
7	BLANK	SAMP	06-19-2021 01:20 pm	1.00	50 mL	50 mL	X061907.D	Liquid	Y	NA
8	VBLKW-210619	MBLK	06-19-2021 01:41 pm	1.00	50 mL	50 mL	X061908.D	Liquid	Y	NA
9	HS21060970-08	SAMP	06-19-2021 02:02 pm	1.00	50 mL	50 mL	X061909.D	Liquid	Y	NA
10	HS21060937-11	SAMP	06-19-2021 02:23 pm	1.00	50 mL	50 mL	X061910.D	Liquid	Y	NA
11	HS21060937-04	SAMP	06-19-2021 02:44 pm	1.00	50 mL	50 mL	X061911.D	Liquid	Y	NA
12	HS21060937-06	SAMP	06-19-2021 03:05 pm	1.00	50 mL	50 mL	X061912.D	Liquid	Y	NA
13	HS21060937-04MS	MS	06-19-2021 03:26 pm	1.00	50 mL	50 mL	X061913.D	Liquid	Y	NA
14	HS21060937-04MSD	MSD	06-19-2021 03:47 pm	1.00	50 mL	50 mL	X061914.D	Liquid	Y	NA
15	BLANK	SAMP	06-19-2021 04:08 pm	1.00	50 mL	50 mL	X061915.D	Liquid	Y	NA
16	HS21060937-06	SAMP	06-19-2021 04:29 pm	25.00	2 mL	50 mL	X061916.D	Liquid	Y	NA
17	HS21060908-09	SAMP	06-19-2021 04:50 pm	1.00	50 mL	50 mL	X061917.D	Liquid	Y	NA
18	HS21060937-01	SAMP	06-19-2021 05:11 pm	1.00	50 mL	50 mL	X061918.D	Liquid	Y	NA
19	HS21060937-02	SAMP	06-19-2021 05:32 pm	1.00	50 mL	50 mL	X061919.D	Liquid	Y	NA
20	HS21060937-10	SAMP	06-19-2021 05:53 pm	1.00	50 mL	50 mL	X061920.D	Liquid	Y	NA
21	HS21060937-05	SAMP	06-19-2021 06:14 pm	1.00	50 mL	50 mL	X061921.D	Liquid	Y	NA
22	HS21060908-02	SAMP	06-19-2021 06:35 pm	1.00	50 mL	50 mL	X061922.D	Liquid	Y	NA
23	HS21060908-04	SAMP	06-19-2021 06:56 pm	1.00	50 mL	50 mL	X061923.D	Liquid	Y	NA
24	HS21060937-07	SAMP	06-19-2021 07:18 pm	5.00	10 mL	50 mL	X061924.D	Liquid	Y	NA
25	HS21060937-08	SAMP	06-19-2021 07:39 pm	5.00	10 mL	50 mL	X061925.D	Liquid	Y	NA
26	HS21060937-03	SAMP	06-19-2021 08:00 pm	5.00	10 mL	50 mL	X061926.D	Liquid	Y	NA
27	HS21060937-03	SAMP	06-19-2021 08:21 pm	25.00	2 mL	50 mL	X061927.D	Liquid	Y	NA
28	HS21060908-06	SAMP	06-19-2021 08:42 pm	5.00	10 mL	50 mL	X061928.D	Liquid	Y	NA
29	HS21060908-06	SAMP	06-19-2021 09:03 pm	50.00	1 mL	50 mL	X061929.D	Liquid	Y	NA
30	HS21060908-01n/r	SAMP	06-19-2021 09:24 pm	10.00	5 mL	50 mL	X061930.D	Liquid	Y	NA
31	HS21060908-01	SAMP	06-19-2021 09:45 pm	100.0(	500 µL	50 mL	X061931.D	Liquid	Y	NA
32	CCV-END	CCV	06-19-2021 10:06 pm	1.00	50 mL	50 mL	X061932.D	Liquid	Y	NA
33	BLANK	SAMP	06-19-2021 10:27 pm	1.00	50 mL	50 mL	X061933.D	Liquid	Y	NA

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 #	SMC3 (TOL) #	OTHER #	TOT OUT
01	VLCSW-210619	102	95	95	99	0
02	VBLKW-210619	95	89	102	99	0
03	HS21060937-04	91	89	100	99	0
04	HS21060937-04	90	89	99	99	0
05	HS21060908-09	91	89	102	97	0
06	HS21060908-02	92	88	104	98	0
07	HS21060908-04	92	88	102	97	0
08	HS21060908-06	91	88	104	96	0
09	HS21060908-06	92	89	102	98	0
10	HS21060908-01	92	89	102	98	0
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		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(0-130)
SMC2	= Dibromofluoromethane	(0-130)
SMC3 (TOL)	= Toluene-d8	(0-130)
OTHER	= 4-Bromofluorobenzene	(0-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKW-210619

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID: X061908 Lab Sample ID: VBLKW-210619

Date Analyzed: 06/19/21 Time Analyzed: 1341

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCSW-210619	VLCSW-210619	X061906	1259
02	HS21060937-0	HS21060937-04M	X061913	1526
03	HS21060937-0	HS21060937-04M	X061914	1547
04	HS21060908-0	HS21060908-09	X061917	1650
05	HS21060908-0	HS21060908-02	X061922	1835
06	HS21060908-0	HS21060908-04	X061923	1856
07	HS21060908-0	HS21060908-06	X061928	2042
08	HS21060908-0	HS21060908-06	X061929	2103
09	HS21060908-0	HS21060908-01	X061931	2145
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COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID: X061901 BFB Injection Date: 06/19/21

Instrument ID: VOA6 BFB Injection Time: 1114

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.0
75	30.0 - 60.0% of mass 95	46.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	Greater than 50.0% of mass 95	84.8
175	5.0 - 9.0% of mass 174	6.9 (8.2)1
176	95.0 - 101.0% of mass 174	83.7 (98.7)1
177	5.0 - 9.0% of mass 176	6.3 (7.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV	CCV	X061902	06/19/21	1135
02	VLCSW-210619	VLCSW-210619	X061906	06/19/21	1259
03	VBLKW-210619	VBLKW-210619	X061908	06/19/21	1341
04	HS21060937-0	HS21060937-04M	X061913	06/19/21	1526
05	HS21060937-0	HS21060937-04M	X061914	06/19/21	1547
06	HS21060908-0	HS21060908-09	X061917	06/19/21	1650
07	HS21060908-0	HS21060908-02	X061922	06/19/21	1835
08	HS21060908-0	HS21060908-04	X061923	06/19/21	1856
09	HS21060908-0	HS21060908-06	X061928	06/19/21	2042
10	HS21060908-0	HS21060908-06	X061929	06/19/21	2103
11	HS21060908-0	HS21060908-01	X061931	06/19/21	2145
12	CCV-END	CCV-END	X061932	06/19/21	2206
13					
14					
15					
16					
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18					
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FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: VOA6 Calibration Date: 06/19/21 Time: 1135

Lab File ID: X061902 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
cis-1,3-Dichloropropene	0.5060000	0.5387963	0.5387963	0.2	-6.48	20.00	AVRG	
trans-1,3-Dichloropropene	0.4370000	0.4691945	0.4691945	0.1	-7.37	20.00	AVRG	
1,3-Dichlorobenzene	1.4100000	1.3882561	1.3882561	0.6	1.54	20.00	AVRG	
2,2-Dichloropropane	0.6840000	0.6247263	0.6247263	0.1	8.66	20.00	AVRG	
1,1-Dichloropropene	0.3830000	0.3803290	0.3803290	0.1	0.70	20.00	AVRG	
Dibromomethane	0.2210000	0.2270561	0.2270561	0.1	-2.74	20.00	AVRG	
1,2-Dibromoethane	0.3680000	0.3738843	0.3738843	0.1	-1.60	20.00	AVRG	
trans-1,2-Dichloroethene	0.4670000	0.4071698	0.4071698	0.1	12.81	20.00	AVRG	
1,1,1,2-Tetrachloroethane	0.3700000	0.3844655	0.3844655	0.1	-3.91	20.00	AVRG	
1,1,1-Trichloroethane	0.7390000	0.6491404	0.6491404	0.1	12.16	20.00	AVRG	
1,1,2,2-Tetrachloroethane	55.849515	50.000000	0.7696725	0.3	-11.70	20.00	LINR	
1,1,2-Trichloroethane	0.2710000	0.2723224	0.2723224	0.1	-0.49	20.00	AVRG	
1,1-Dichloroethane	0.7900000	0.6849099	0.6849099	0.2	13.30	20.00	AVRG	
1,1-Dichloroethene	0.5150000	0.4390638	0.4390638	0.1	14.74	20.00	AVRG	
Trichloroethene	0.3430000	0.3581507	0.3581507	0.2	-4.42	20.00	AVRG	
1,2,3-Trichlorobenzene	0.3030000	0.3760448	0.3760448	0.01	-24.11	20.00	AVRG	<-
Trichlorofluoromethane	0.9020000	0.7732067	0.7732067	0.1	14.28	20.00	AVRG	
1,2,4-Trichlorobenzene	0.4940000	0.6074269	0.6074269	0.1	-22.96	20.00	AVRG	<-
1,2,4-Trimethylbenzene	2.2800000	2.1567446	2.1567446	0.1	5.40	20.00	AVRG	
Tetrachloroethene	0.3080000	0.3136622	0.3136622	0.2	-1.84	20.00	AVRG	
1,2-Dichlorobenzene	1.3560000	1.3427604	1.3427604	0.4	0.98	20.00	AVRG	
1,2-Dichloroethane	0.3980000	0.4124258	0.4124258	0.1	-3.62	20.00	AVRG	
1,2-Dichloropropane	0.2940000	0.2929808	0.2929808	0.1	0.35	20.00	AVRG	
1,3,5-Trimethylbenzene	2.2700000	2.1170705	2.1170705	0.1	6.74	20.00	AVRG	
1,3-Dichloropropane	0.5390000	0.5355869	0.5355869	0.1	0.63	20.00	AVRG	
1,4-Dichlorobenzene	1.4720000	1.4244569	1.4244569	0.4	3.23	20.00	AVRG	
Toluene	1.4600000	1.3460142	1.3460142	0.4	7.81	20.00	AVRG	
2-Butanone	0.1520000	0.1494709	0.1494709	0.1	1.66	20.00	AVRG	
2-Chlorotoluene	1.8720000	1.7547642	1.7547642	0.1	6.26	20.00	AVRG	
2-Hexanone	0.1860000	0.1995719	0.1995719	0.1	-7.30	20.00	AVRG	
4-Chlorotoluene	2.2280000	2.0607528	2.0607528	0.1	7.51	20.00	AVRG	
tert-Butylbenzene	1.9460000	1.8565157	1.8565157	0.1	4.60	20.00	AVRG	
4-Methyl-2-Pentanone	0.2880000	0.2878973	0.2878973	0.1	0.04	20.00	AVRG	
Acetone	98.664219	100.00000	0.1261032	0.1	1.34	20.00	LINR	
Benzene	1.1480000	1.1372621	1.1372621	0.5	0.94	20.00	AVRG	
Bromobenzene	0.8300000	0.8428645	0.8428645	0.1	-1.55	20.00	AVRG	
Bromochloromethane	0.3020000	0.2827784	0.2827784	0.1	6.36	20.00	AVRG	
Bromodichloromethane	0.4300000	0.4364796	0.4364796	0.2	-1.51	20.00	AVRG	
Bromoform	0.2790000	0.3110963	0.3110963	0.1	-11.50	20.00	AVRG	
Bromomethane	41.715412	50.000000	0.4306129	0.1	16.57	20.00	LINR	
Carbon Disulfide	1.2210000	1.0609329	1.0609329	0.1	13.11	20.00	AVRG	
Carbon Tetrachloride	0.4140000	0.4115234	0.4115234	0.1	0.60	20.00	AVRG	

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date: 06/19/21 Time: 1135

Lab File ID: X061902 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chlorobenzene	1.0410000	0.9910442	0.9910442	0.5	4.80	20.00	AVRG	
Chloroethane	44.113519	50.000000	0.3104910	0.1	11.77	20.00	LINR	
Chloroform	0.8790000	0.7748280	0.7748280	0.2	11.85	20.00	AVRG	
Chloromethane	43.635259	50.000000	0.3972849	0.1	12.73	20.00	LINR	
cis-1,2-Dichloroethene	0.5240000	0.4750939	0.4750939	0.1	9.33	20.00	AVRG	
Dibromochloromethane	0.4120000	0.4318918	0.4318918	0.1	-4.83	20.00	AVRG	
Dichlorodifluoromethane	46.926507	50.000000	0.4311856	0.1	6.15	20.00	LINR	
Ethylbenzene	0.4800000	0.4877295	0.4877295	0.1	-1.61	20.00	AVRG	
Hexachlorobutadiene	65.992028	50.000000	0.4149905	0.1	-31.98	20.00	2RDR	<-
Isopropylbenzene	1.4670000	1.4237456	1.4237456	0.1	2.95	20.00	AVRG	
m,p-Xylenes	0.6260000	0.6064366	0.6064366	0.1	3.12	20.00	AVRG	
Methylene Chloride	46.033685	50.000000	0.4183875	0.1	7.93	20.00	LINR	
n-Butylbenzene	1.9450000	1.9319266	1.9319266	0.5	0.67	20.00	AVRG	
n-Propylbenzene	3.1190000	2.8941255	2.8941255	0.1	7.21	20.00	AVRG	
Naphthalene	0.7140000	0.8347761	0.8347761	0.2	-16.92	20.00	AVRG	
o-Xylene	0.6100000	0.5953316	0.5953316	0.3	2.40	20.00	AVRG	
sec-Butylbenzene	2.6250000	2.4999691	2.4999691	0.1	4.76	20.00	AVRG	
Styrene	1.0200000	1.0466328	1.0466328	0.3	-2.61	20.00	AVRG	
Vinyl Chloride	0.5920000	0.5232030	0.5232030	0.1	11.62	20.00	AVRG	
1,2,3-Trichloropropane	0.6230000	0.6543035	0.6543035	0.1	-5.02	20.00	AVRG	
p-Isopropyltoluene	2.3120000	2.2130511	2.2130511	0.1	4.28	20.00	AVRG	
1,2-Dibromo-3-Chloropropane	58.580487	50.000000	9.31e-002	0.05	-17.16	20.00	LINR	
1,2-Dichloroethane-d4	48.304157	50.000000	0.4616456	0.1	3.39	20.00	LINR	
Dibromofluoromethane	46.770858	50.000000	0.4604786	0.1	6.46	20.00	LINR	
Toluene-d8	1.2450000	1.1495199	1.1495199	0.1	7.67	20.00	AVRG	
4-Bromofluorobenzene	50.988701	50.000000	0.4479210	0.1	-1.98	20.00	LINR	

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: VOA6 Calibration Date: 06/19/21 Time: 2206

Lab File ID: X061932 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
cis-1,3-Dichloropropene	0.5060000	0.4720208	0.4720208	0.2	6.72	50.00	AVRG
trans-1,3-Dichloropropene	0.4370000	0.4168065	0.4168065	0.1	4.62	50.00	AVRG
1,3-Dichlorobenzene	1.4100000	1.2692908	1.2692908	0.6	9.98	50.00	AVRG
2,2-Dichloropropane	0.6840000	0.4702111	0.4702111	0.1	31.26	50.00	AVRG
1,1-Dichloropropene	0.3830000	0.3497376	0.3497376	0.1	8.68	50.00	AVRG
Dibromomethane	0.2210000	0.2136412	0.2136412	0.1	3.33	50.00	AVRG
1,2-Dibromoethane	0.3680000	0.3474156	0.3474156	0.1	5.59	50.00	AVRG
trans-1,2-Dichloroethene	0.4670000	0.3961911	0.3961911	0.1	15.16	50.00	AVRG
1,1,1,2-Tetrachloroethane	0.3700000	0.3517512	0.3517512	0.1	4.93	50.00	AVRG
1,1,1-Trichloroethane	0.7390000	0.6488019	0.6488019	0.1	12.20	50.00	AVRG
1,1,2,2-Tetrachloroethane	52.790962	50.000000	0.7284062	0.3	-5.58	50.00	LINR
1,1,2-Trichloroethane	0.2710000	0.2511983	0.2511983	0.1	7.31	50.00	AVRG
1,1-Dichloroethane	0.7900000	0.6659665	0.6659665	0.2	15.70	50.00	AVRG
1,1-Dichloroethene	0.5150000	0.4346074	0.4346074	0.1	15.61	50.00	AVRG
Trichloroethene	0.3430000	0.3380585	0.3380585	0.2	1.44	50.00	AVRG
1,2,3-Trichlorobenzene	0.3030000	0.3403927	0.3403927	0.01	-12.34	50.00	AVRG
Trichlorofluoromethane	0.9020000	0.7673640	0.7673640	0.1	14.93	50.00	AVRG
1,2,4-Trichlorobenzene	0.4940000	0.5215192	0.5215192	0.1	-5.57	50.00	AVRG
1,2,4-Trimethylbenzene	2.2800000	1.9636342	1.9636342	0.1	13.88	50.00	AVRG
Tetrachloroethene	0.3080000	0.2837950	0.2837950	0.2	7.86	50.00	AVRG
1,2-Dichlorobenzene	1.3560000	1.2312568	1.2312568	0.4	9.20	50.00	AVRG
1,2-Dichloroethane	0.3980000	0.3877788	0.3877788	0.1	2.57	50.00	AVRG
1,2-Dichloropropane	0.2940000	0.2701392	0.2701392	0.1	8.12	50.00	AVRG
1,3,5-Trimethylbenzene	2.2700000	1.9144427	1.9144427	0.1	15.66	50.00	AVRG
1,3-Dichloropropane	0.5390000	0.5022602	0.5022602	0.1	6.82	50.00	AVRG
1,4-Dichlorobenzene	1.4720000	1.2881779	1.2881779	0.4	12.49	50.00	AVRG
Toluene	1.4600000	1.2513648	1.2513648	0.4	14.29	50.00	AVRG
2-Butanone	0.1520000	0.1485112	0.1485112	0.1	2.30	50.00	AVRG
2-Chlorotoluene	1.8720000	1.6225535	1.6225535	0.1	13.32	50.00	AVRG
2-Hexanone	0.1860000	0.1906153	0.1906153	0.1	-2.48	50.00	AVRG
4-Chlorotoluene	2.2280000	1.8875160	1.8875160	0.1	15.28	50.00	AVRG
tert-Butylbenzene	1.9460000	1.6617390	1.6617390	0.1	14.61	50.00	AVRG
4-Methyl-2-Pentanone	0.2880000	0.2741417	0.2741417	0.1	4.81	50.00	AVRG
Acetone	101.21471	100.00000	0.1291772	0.1	-1.21	50.00	LINR
Benzene	1.1480000	1.0593956	1.0593956	0.5	7.72	50.00	AVRG
Bromobenzene	0.8300000	0.7761391	0.7761391	0.1	6.49	50.00	AVRG
Bromochloromethane	0.3020000	0.2700863	0.2700863	0.1	10.57	50.00	AVRG
Bromodichloromethane	0.4300000	0.4040644	0.4040644	0.2	6.03	50.00	AVRG
Bromoform	0.2790000	0.2896070	0.2896070	0.1	-3.80	50.00	AVRG
Bromomethane	42.848685	50.000000	0.4423542	0.1	14.30	50.00	LINR
Carbon Disulfide	1.2210000	0.9099487	0.9099487	0.1	25.48	50.00	AVRG
Carbon Tetrachloride	0.4140000	0.3891801	0.3891801	0.1	6.00	50.00	AVRG

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date: 06/19/21 Time: 2206

Lab File ID: X061932 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Chlorobenzene	1.0410000	0.9115487	0.9115487	0.5	12.44	50.00	AVRG
Chloroethane	49.426351	50.000000	0.3467218	0.1	1.15	50.00	LINR
Chloroform	0.8790000	0.7614209	0.7614209	0.2	13.38	50.00	AVRG
Chloromethane	44.163679	50.000000	0.4018114	0.1	11.67	50.00	LINR
cis-1,2-Dichloroethene	0.5240000	0.4875680	0.4875680	0.1	6.95	50.00	AVRG
Dibromochloromethane	0.4120000	0.4032003	0.4032003	0.1	2.14	50.00	AVRG
Dichlorodifluoromethane	45.245131	50.000000	0.4158051	0.1	9.51	50.00	LINR
Ethylbenzene	0.4800000	0.4459829	0.4459829	0.1	7.09	50.00	AVRG
Hexachlorobutadiene	48.207286	50.000000	0.2967933	0.1	3.58	50.00	2RDR
Isopropylbenzene	1.4670000	1.3149687	1.3149687	0.1	10.36	50.00	AVRG
m,p-Xylenes	0.6260000	0.5542951	0.5542951	0.1	11.45	50.00	AVRG
Methylene Chloride	45.583906	50.000000	0.4144143	0.1	8.83	50.00	LINR
n-Butylbenzene	1.9450000	1.5967251	1.5967251	0.5	17.91	50.00	AVRG
n-Propylbenzene	3.1190000	2.6086414	2.6086414	0.1	16.36	50.00	AVRG
Naphthalene	0.7140000	0.7658468	0.7658468	0.2	-7.26	50.00	AVRG
o-Xylene	0.6100000	0.5462678	0.5462678	0.3	10.45	50.00	AVRG
sec-Butylbenzene	2.6250000	2.2114752	2.2114752	0.1	15.75	50.00	AVRG
Styrene	1.0200000	0.9414175	0.9414175	0.3	7.70	50.00	AVRG
Vinyl Chloride	0.5920000	0.5097666	0.5097666	0.1	13.89	50.00	AVRG
1,2,3-Trichloropropane	0.6230000	0.6012631	0.6012631	0.1	3.49	50.00	AVRG
p-Isopropyltoluene	2.3120000	1.9528605	1.9528605	0.1	15.53	50.00	AVRG
1,2-Dibromo-3-Chloropropane	56.374808	50.000000	8.95e-002	0.05	-12.75	50.00	LINR
1,2-Dichloroethane-d4	51.902390	50.000000	0.4955475	0.1	-3.80	50.00	LINR
Dibromofluoromethane	50.336653	50.000000	0.4954620	0.1	-0.67	50.00	LINR
Toluene-d8	1.2450000	1.1750751	1.1750751	0.1	5.62	50.00	AVRG
4-Bromofluorobenzene	51.157742	50.000000	0.4494281	0.1	-2.32	50.00	LINR

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID (Standard): X061902 Date Analyzed: 06/19/21

Instrument ID: VOA6 Time Analyzed: 1135

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(DCB) AREA #	RT #
	12 HOUR STD	626298	7.67	650500	4.96	355572	9.66
	UPPER LIMIT	1252596	8.17	1301000	5.46	711144	10.16
	LOWER LIMIT	313149	7.17	325250	4.46	177786	9.16
	CLIENT SAMPLE NO.						
01	VLCSW-210619	597347	7.67	631885	4.96	330500	9.66
02	VBLKW-210619	643803	7.67	722008	4.96	339694	9.66
03	HS21060937-04	669261	7.67	725367	4.96	370111	9.66
04	HS21060937-04	682423	7.67	754115	4.96	358825	9.66
05	HS21060908-09	648005	7.67	730129	4.96	328164	9.66
06	HS21060908-02	620039	7.67	717289	4.96	313621	9.66
07	HS21060908-04	632452	7.67	715010	4.97	323742	9.66
08	HS21060908-06	603907	7.67	700805	4.97	291030	9.66
09	HS21060908-06	635635	7.67	714522	4.96	329529	9.66
10	HS21060908-01	620479	7.67	699824	4.96	326246	9.66
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID (Standard): X061902 Date Analyzed: 06/19/21

Instrument ID: VOA6 Time Analyzed: 1135

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	464445	4.18				
	UPPER LIMIT	928890	4.68				
	LOWER LIMIT	232223	3.68				
	CLIENT SAMPLE NO.						
01	VLCSW-210619	442478	4.18				
02	VBLKW-210619	529045	4.18				
03	HS21060937-04	536997	4.18				
04	HS21060937-04	553011	4.18				
05	HS21060908-09	536695	4.18				
06	HS21060908-02	531669	4.18				
07	HS21060908-04	527537	4.18				
08	HS21060908-06	517068	4.18				
09	HS21060908-06	519396	4.18				
10	HS21060908-01	512884	4.18				
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 = Pentafluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061901.D

Date : 19-JUN-2021 11:14

Client ID: BFB

Instrument: voa6.i

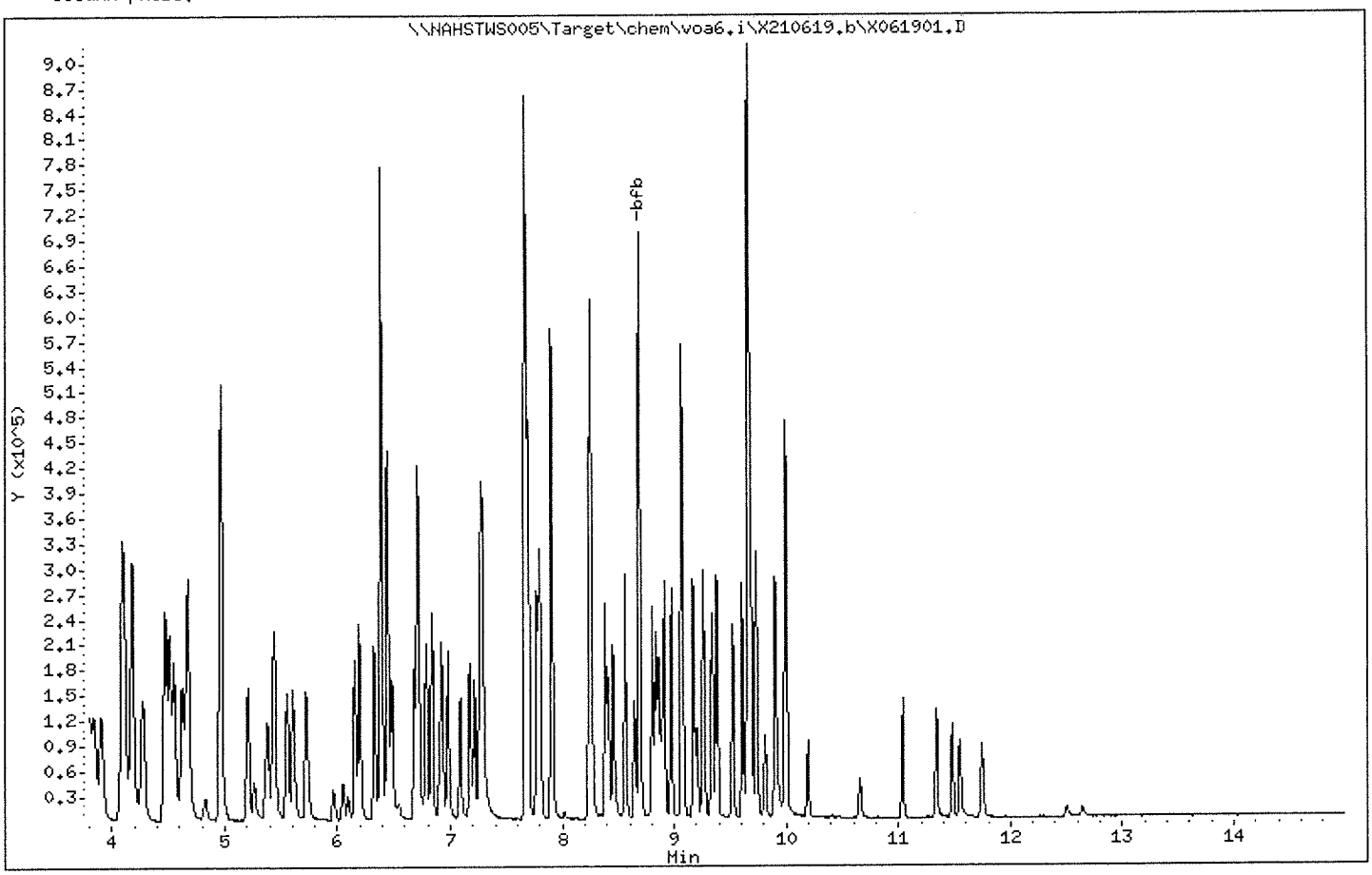
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061901.D

Date : 19-JUN-2021 11:14

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

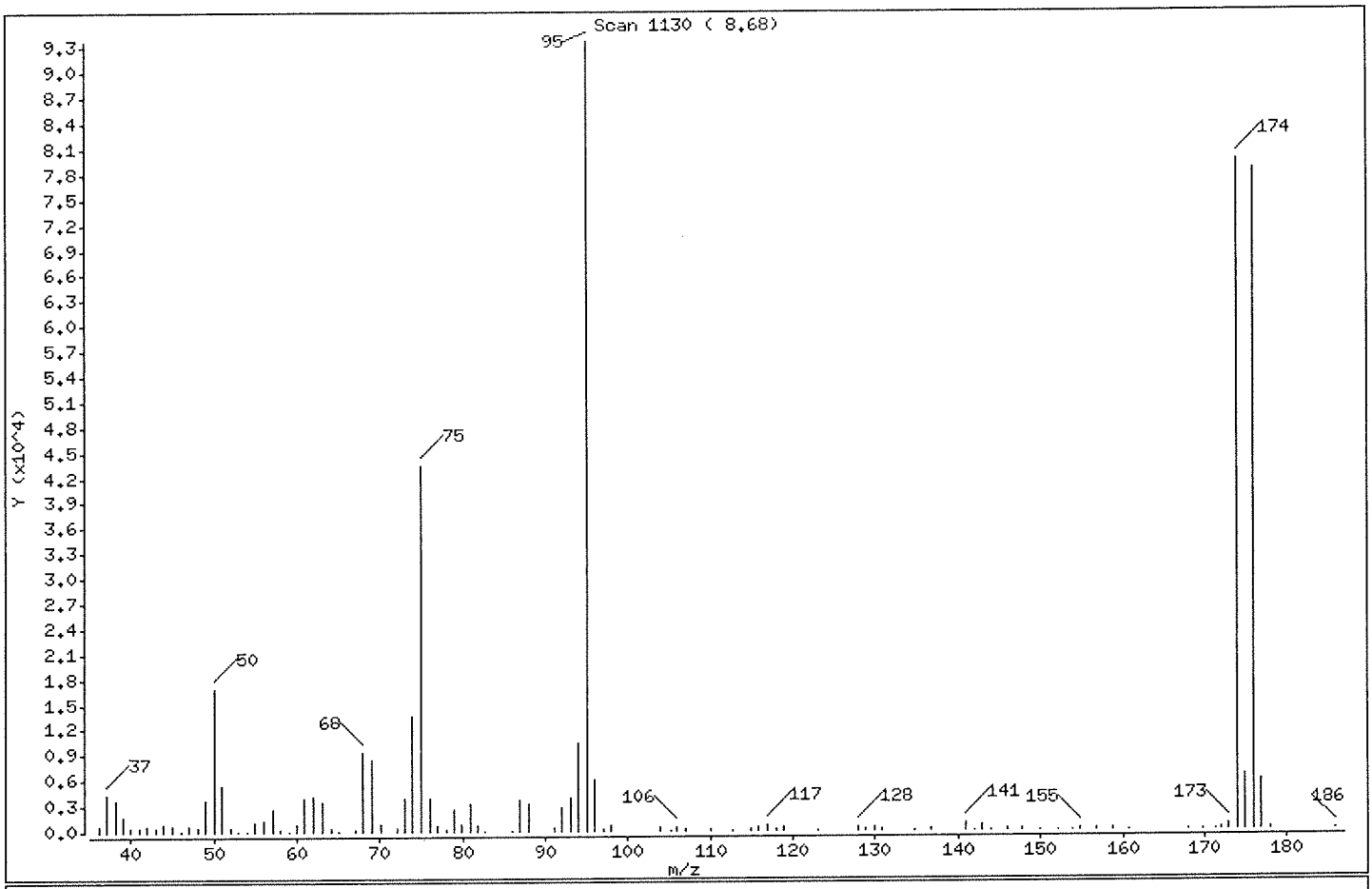
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.04
75	30.00 - 60.00% of mass 95	46.26
96	5.00 - 9.00% of mass 95	6.46
173	Less than 2.00% of mass 174	0.66 (0.78)
174	Greater than 50.00% of mass 95	84.82
175	5.00 - 9.00% of mass 174	6.95 (8.19)
176	95.00 - 101.00% of mass 174	83.69 (98.66)
177	5.00 - 9.00% of mass 176	6.27 (7.50)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061901.D

Date : 19-JUN-2021 11:14

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: X061901.D
Spectrum: Scan 1130 (8.68)
Location of Maximum: 95.00
Number of points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	558	61.00	3847	92.00	2728	140.90	772
37.10	4339	62.00	4065	93.00	3847	142.00	90
38.10	3714	63.00	3557	94.00	10349	142.90	667
39.10	1648	64.10	354	95.00	93728	143.90	78
40.00	466	65.10	73	96.00	6053	145.90	112
41.00	467	67.00	315	97.10	253	147.80	127
42.00	634	68.00	9187	98.00	567	149.90	98
43.00	445	69.10	8459	103.90	391	152.10	71
44.00	934	70.10	958	105.10	94	153.90	59
45.10	673	72.10	486	105.90	469	154.80	208
46.10	78	73.00	3811	106.90	231	156.80	149
47.00	680	74.00	13653	110.00	116	158.80	137
48.10	468	75.00	43360	112.80	71	160.70	98
49.00	3601	76.10	3792	114.90	149	168.10	66
50.10	16904	77.00	611	115.90	462	169.70	64
51.00	5306	78.00	323	116.90	628	171.40	64
52.00	362	78.90	2641	117.90	257	171.90	187
53.00	88	79.90	900	118.90	396	173.00	623
54.10	93	80.90	3140	123.00	71	173.90	79504
55.00	1087	81.90	721	128.00	417	174.90	6512
56.00	1352	82.80	106	128.80	162	175.90	78440
57.10	2668	86.10	98	129.80	365	176.90	5881
58.10	217	87.00	3714	130.80	133	177.90	179
59.10	64	88.00	3336	134.80	102	186.00	92
60.00	773	91.00	329	136.80	195		

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061902.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 19-JUN-2021 11:35
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:41 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

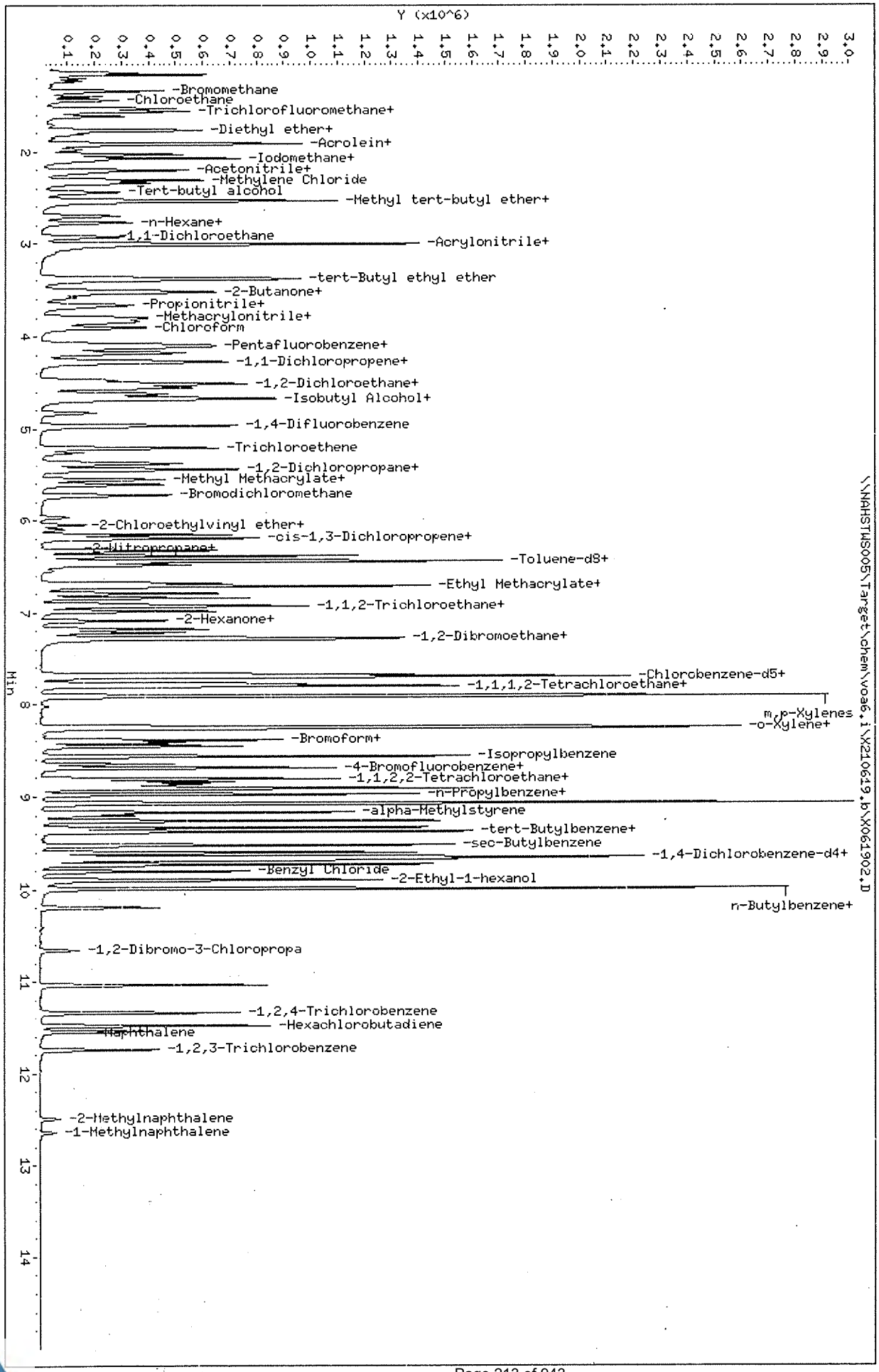
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	464445	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	650500	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	626298	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	355572	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	213867	50.0000	46.77
$ 35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	214409	50.0000	48.30
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	719942	50.0000	46.14
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	280532	50.0000	50.98
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	240790	50.0000	51.98
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	301490	50.0000	43.92
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	273674	50.0000	55.84
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.392)	170555	50.0000	50.27
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	318103	50.0000	43.32
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	203921	50.0000	42.62
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	247404	50.0000	49.65
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	133711	50.0000	62.11
71 1,2,3-Trichloropropane	75	8.859	8.859	(0.917)	232652	50.0000	52.48 (M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	215984	50.0000	61.43
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	766878	50.0000	47.28
89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	33094	50.0000	58.58
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	234163	50.0000	50.78
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	477448	50.0000	49.50

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061902.D Page 2
Report Date: 26-Aug-2021 16:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	268283	50.0000	51.76
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	190584	50.0000	49.77
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	752771	50.0000	46.64
83	1,3-Dichlorobenzene	146	9.604	9.604	(0.994)	493625	50.0000	49.21
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	335437	50.0000	49.72
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	506497	50.0000	48.39
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	290151	50.0000	45.66
24	2-Butanone	43	3.580	3.580	(0.856)	138842	100.000	98.25
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	623945	50.0000	46.88
52	2-Hexanone	43	7.083	7.083	(0.923)	249983	100.000	107.44
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	732746	50.0000	46.23
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	786899	50.0000	47.86
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	360619	100.000	99.98
10	Acetone	43	1.976	1.976	(0.473)	117136	100.000	98.66
37	Benzene	78	4.512	4.512	(0.909)	739789	50.0000	49.50
74	Bromobenzene	156	8.802	8.802	(0.911)	299699	50.0000	50.80
29	Bromochloromethane	128	3.795	3.795	(0.908)	131335	50.0000	46.76
39	Bromodichloromethane	83	5.722	5.722	(1.153)	283930	50.0000	50.77
66	Bromoform	173	8.408	8.408	(1.096)	194839	50.0000	55.78
6	Bromomethane	94	1.338	1.338	(0.320)	199996	50.0000	41.71
19	Carbon Disulfide	76	2.069	2.069	(0.495)	985490	100.000	86.86 (M)
34	Carbon Tetrachloride	117	4.261	4.261	(0.859)	267696	50.0000	49.64
59	Chlorobenzene	112	7.692	7.692	(1.003)	620689	50.0000	47.60
7	Chloroethane	64	1.403	1.403	(0.336)	144206	50.0000	44.11
28	Chloroform	83	3.910	3.910	(0.935)	359865	50.0000	44.06
3	Chloromethane	50	1.073	1.073	(0.257)	184517	50.0000	43.63
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	220655	50.0000	45.32
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	350487	50.0000	53.18
55	Dibromochloromethane	129	7.176	7.176	(0.936)	270493	50.0000	52.47
44	Dibromomethane	93	5.550	5.550	(1.118)	147700	50.0000	51.32
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	200262	50.0000	46.92
61	Ethylbenzene	106	7.799	7.799	(1.017)	305464	50.0000	50.78
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	147559	50.0000	65.99
67	Isopropylbenzene	105	8.559	8.559	(1.116)	891689	50.0000	48.51
62	m,p-Xylenes	106	7.900	7.900	(1.030)	759620	100.000	96.87
17	Methylene Chloride	84	2.305	2.305	(0.551)	194318	50.0000	46.03
87	n-Butylbenzene	91	9.991	9.991	(1.034)	686939	50.0000	49.66
73	n-Propylbenzene	91	8.910	8.910	(0.922)	1029070	50.0000	46.39
92	Naphthalene	128	11.538	11.538	(1.194)	296823	50.0000	58.41
63	o-Xylene	106	8.243	8.243	(1.075)	372855	50.0000	48.76
81	sec-Butylbenzene	105	9.518	9.518	(0.985)	888919	50.0000	47.60
64	Styrene	104	8.258	8.258	(1.077)	655504	50.0000	51.30
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	660125	50.0000	47.70
56	Tetrachloroethene	164	6.925	6.925	(0.903)	196446	50.0000	50.95
50	Toluene	91	6.446	6.446	(0.840)	843006	50.0000	46.10
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	189108	50.0000	43.60
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	305211	50.0000	53.68
38	Trichloroethene	130	5.206	5.206	(1.049)	232977	50.0000	52.18
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	359112	50.0000	42.83
5	Vinyl Chloride	62	1.138	1.138	(0.272)	242999	50.0000	44.20

QC Flag Legend

M - Compound response manually integrated.



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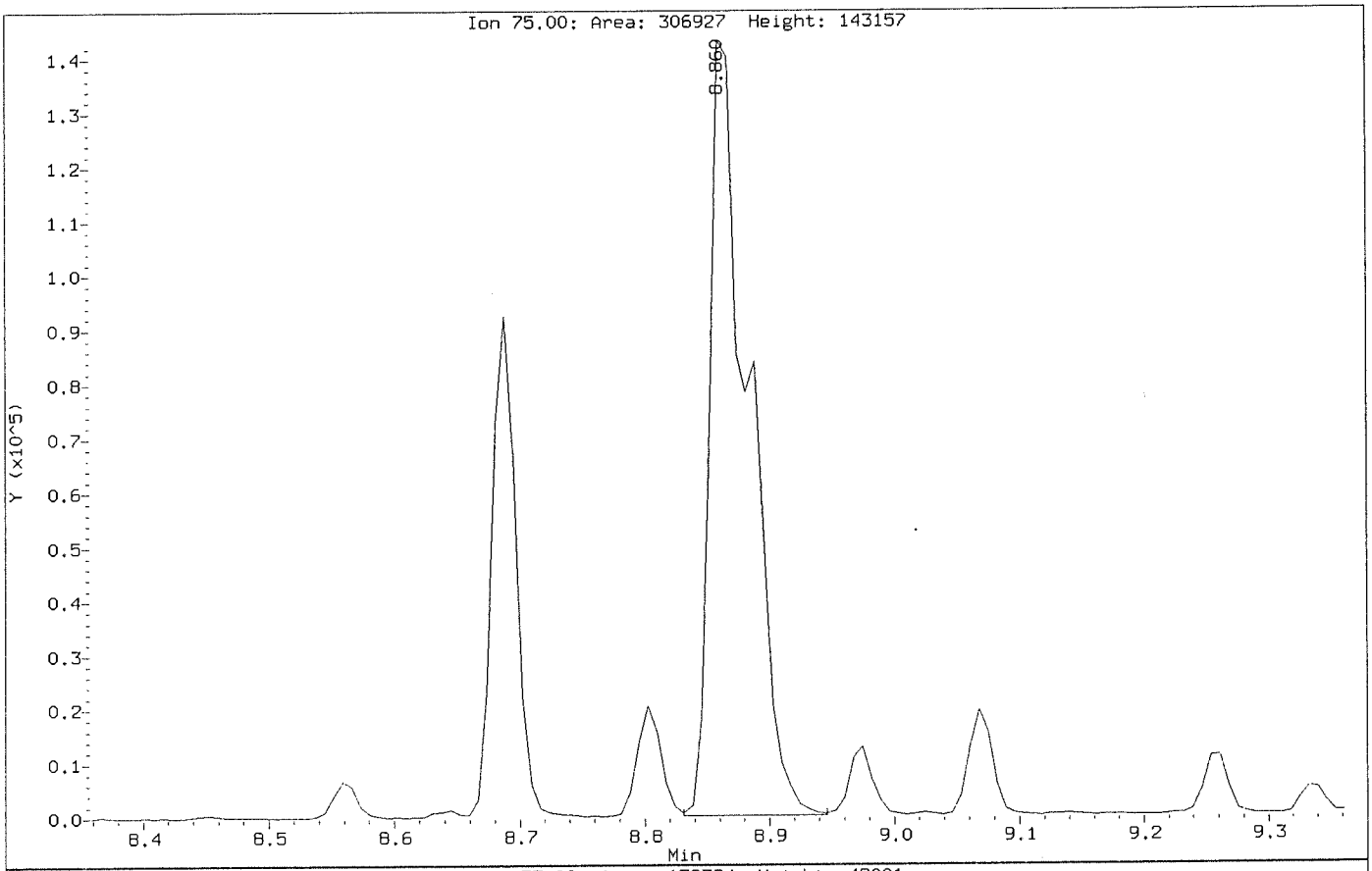
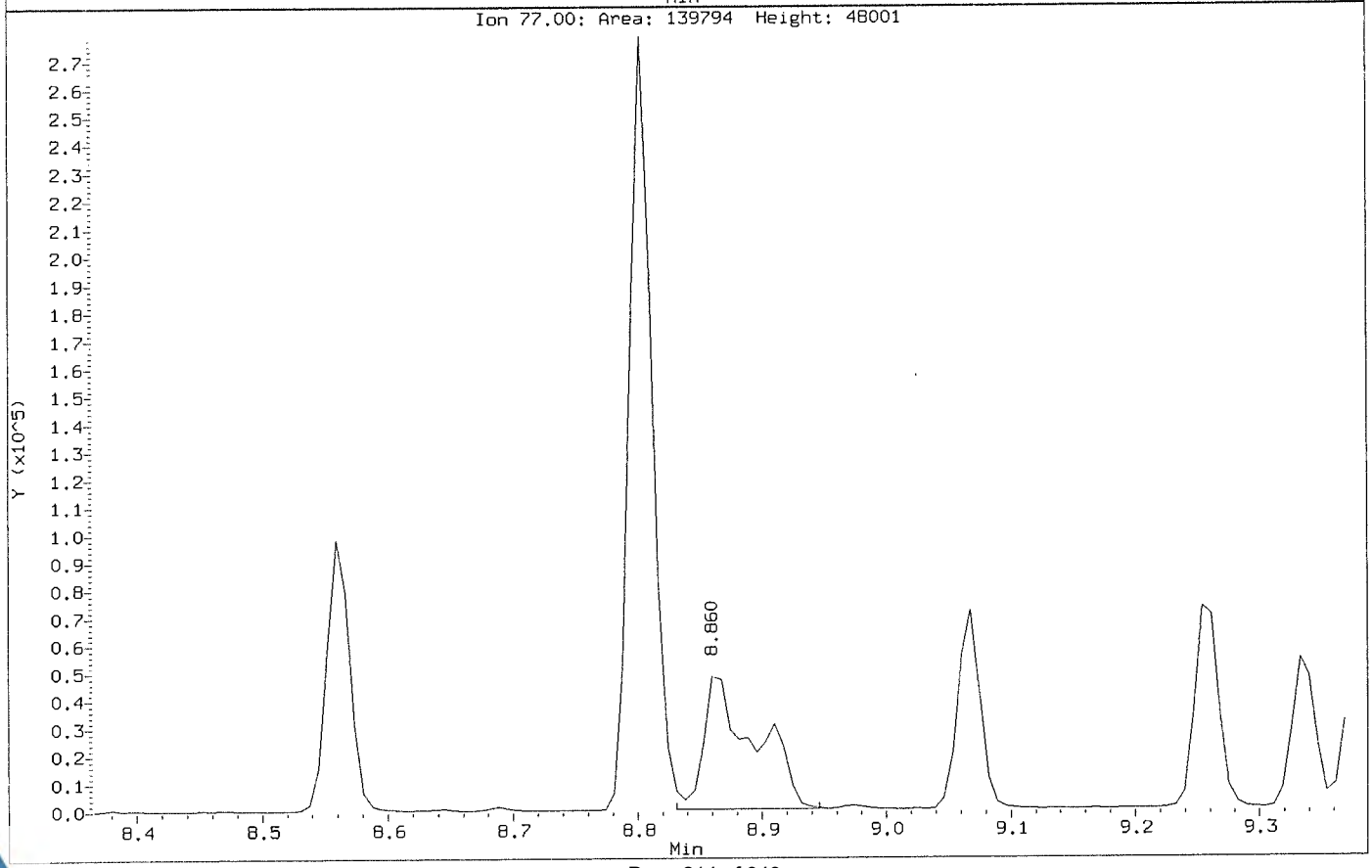
Date : 19-JUN-2021 11:35
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\Before\X061902.D
Injection Date: 19-JUN-2021 11:35
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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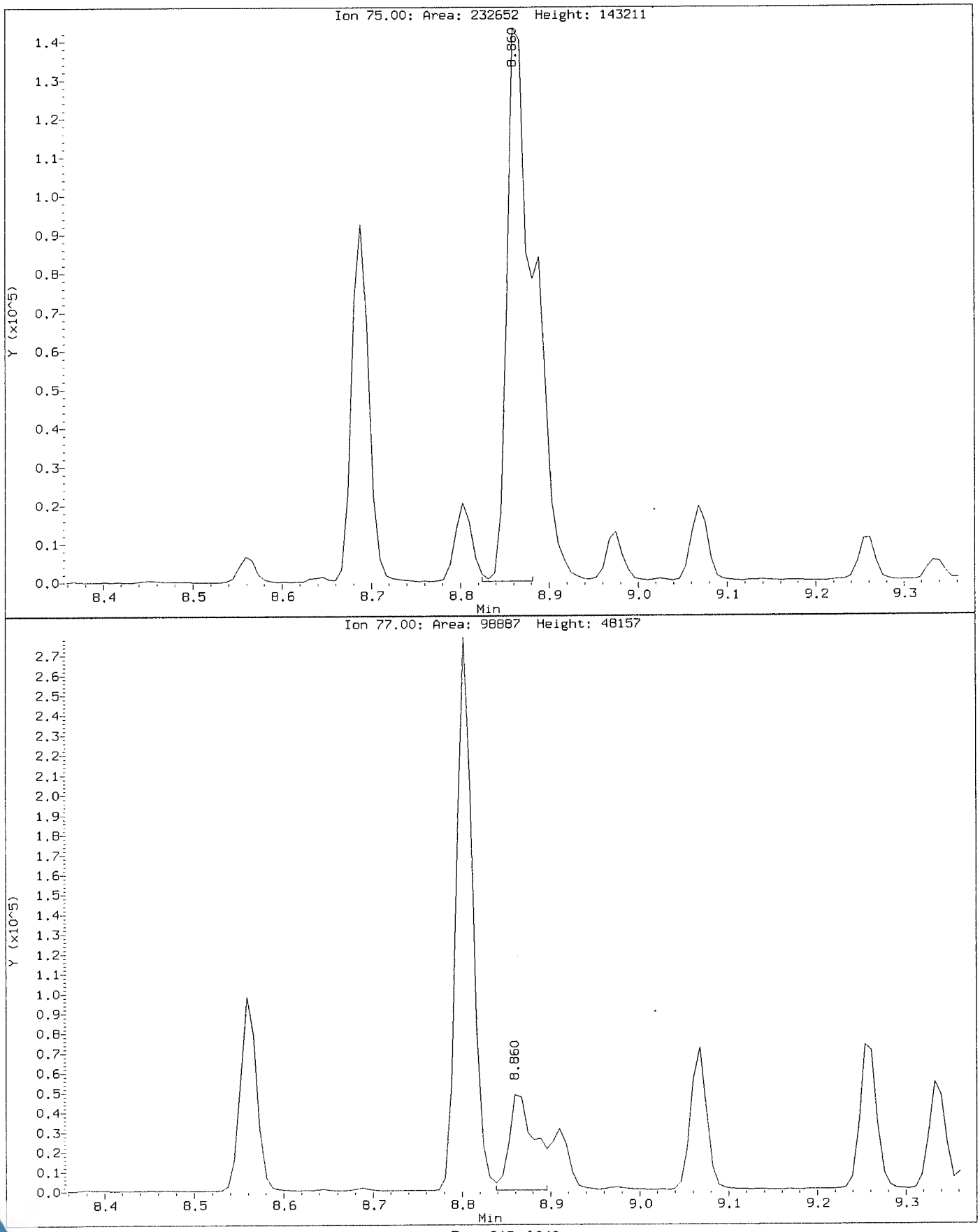
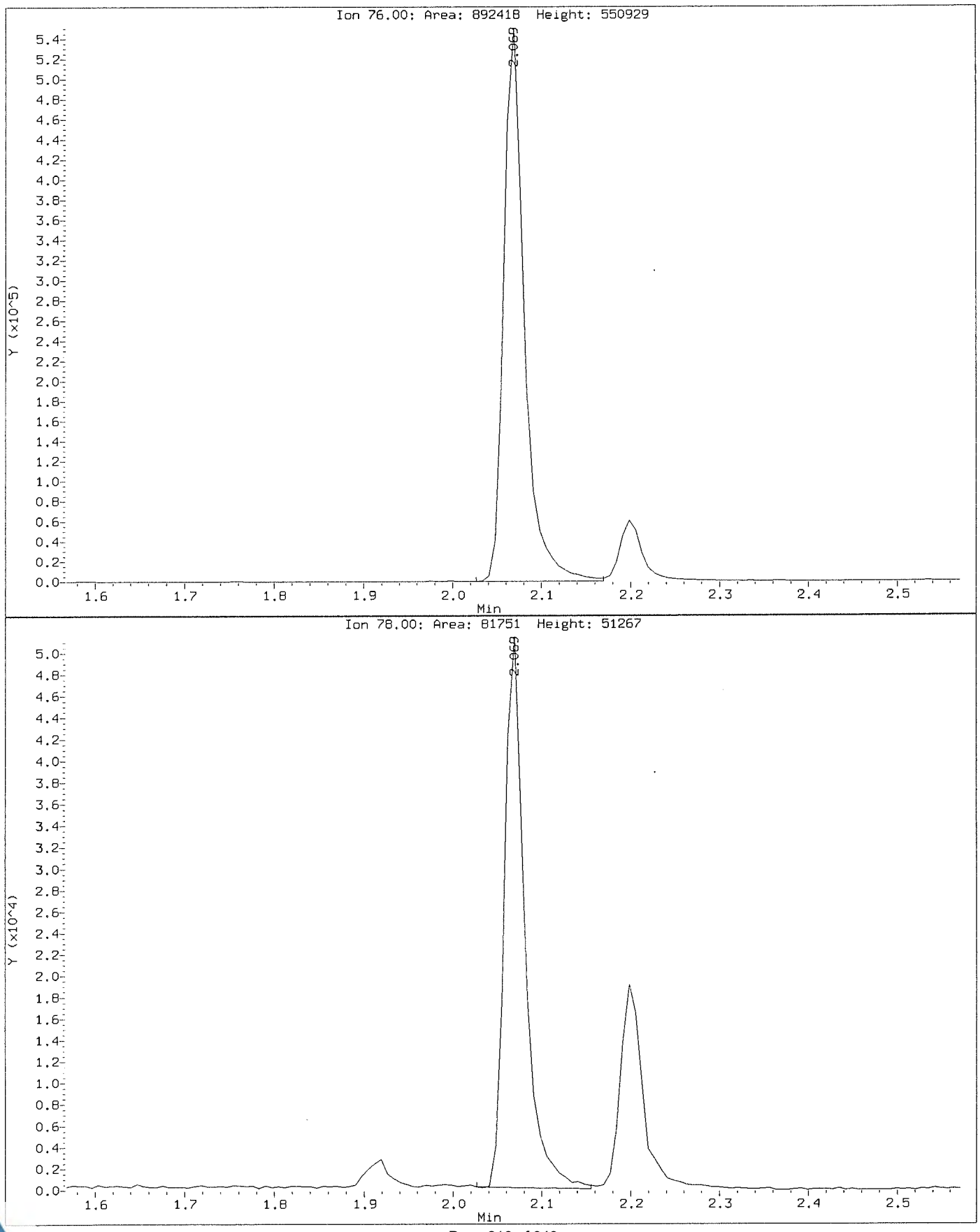
Injection Date: 19-JUN-2021 11:35
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



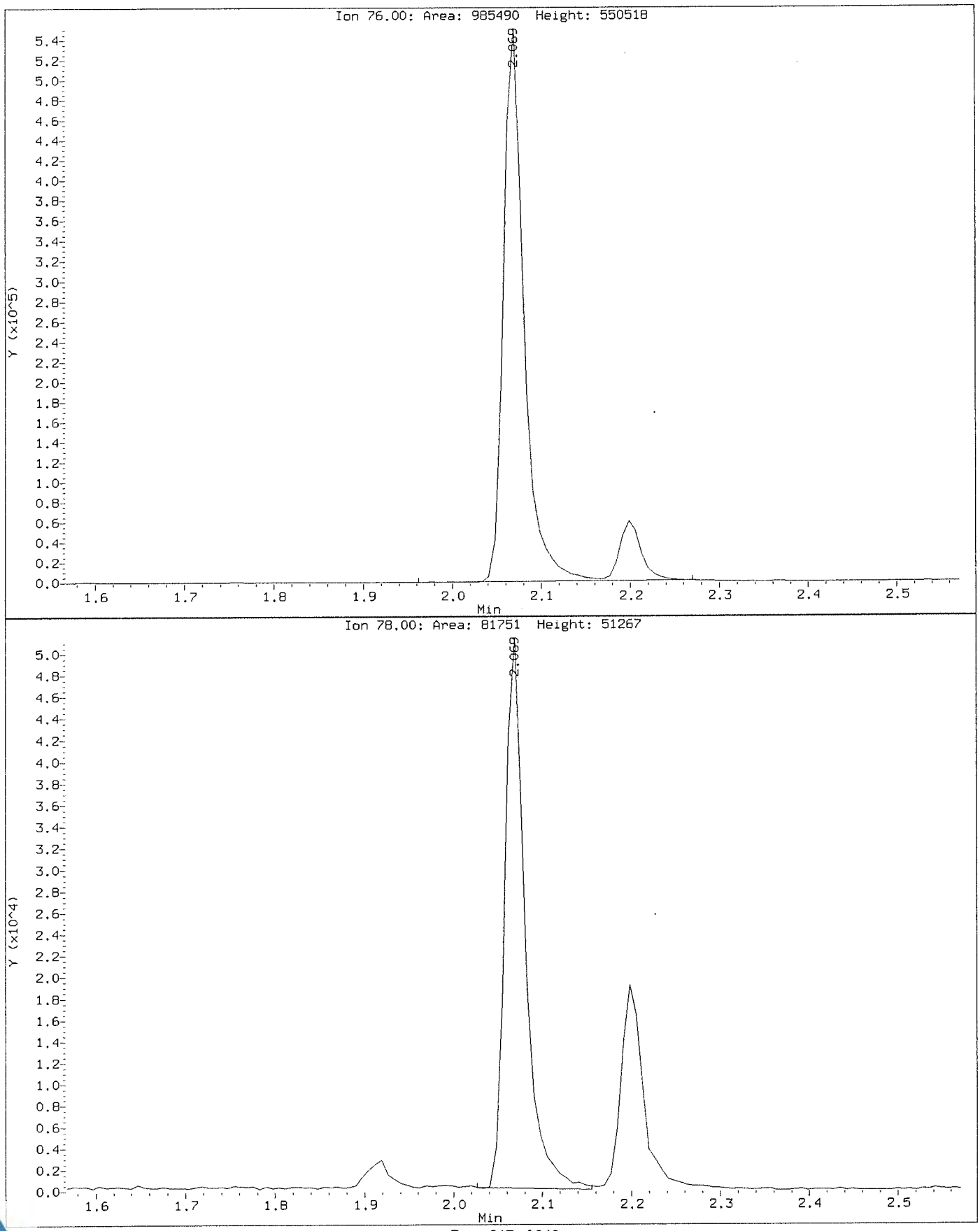
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\Before\X061902.D
Injection Date: 19-JUN-2021 11:35
Instrument: voa6.i
Client Sample ID: CCV

Compound: Carbon Disulfide
CAS Number: 75-15-0



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061902.D
Injection Date: 19-JUN-2021 11:35
Instrument: voa6.i
Client Sample ID: CCV

Compound: Carbon Disulfide
CAS Number: 75-15-0



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061906.D Page 1
Report Date: 26-Aug-2021 16:41

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061906.D
Lab Smp Id: VLCSW-210619 Client Smp ID: VLCSW-210619
Inj Date : 19-JUN-2021 12:59
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-210619;VLCSW-210619;3;;LCS
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:41 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

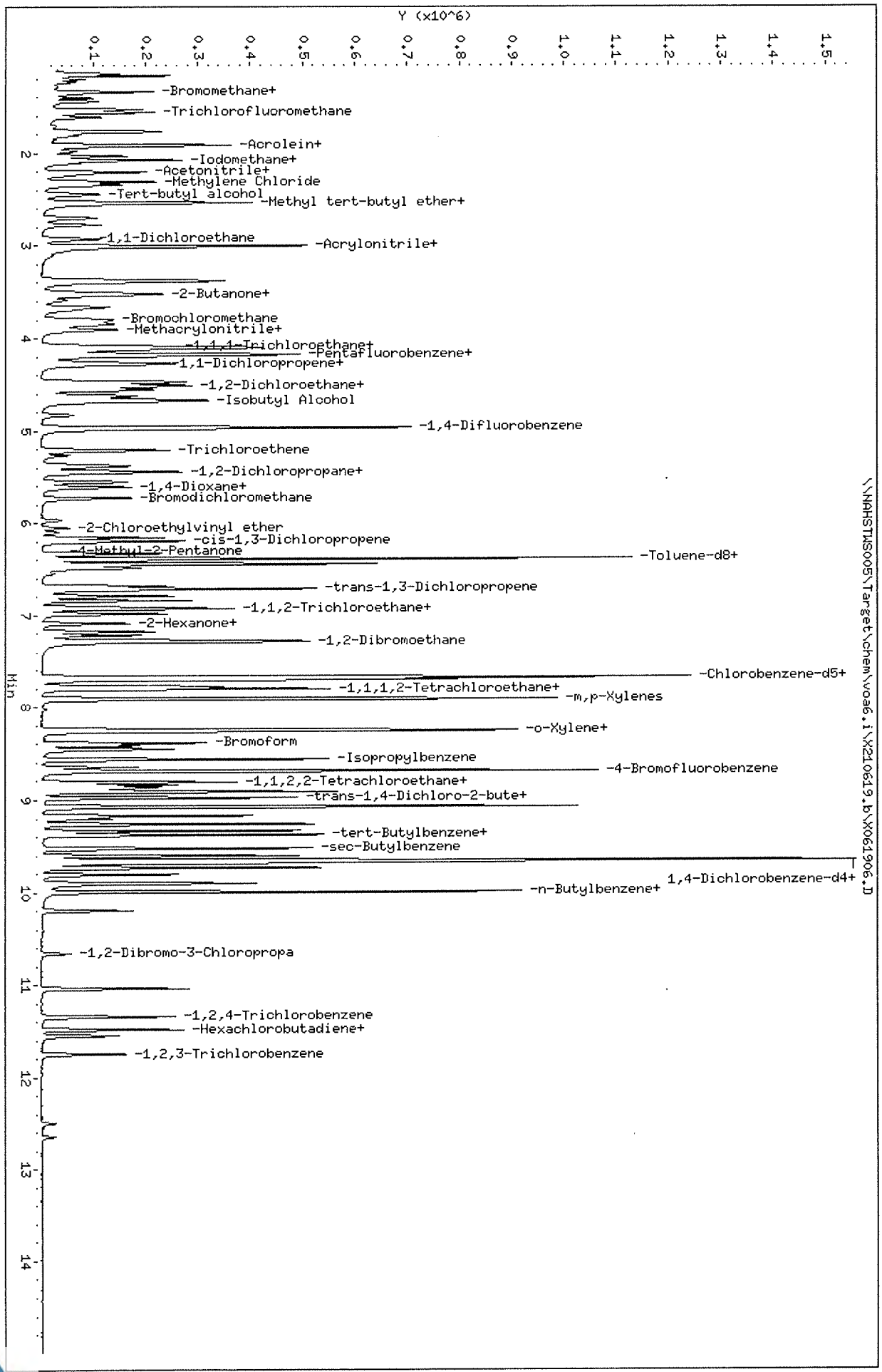
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	442478	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	631885	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	597347	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	330500	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.103	(0.979)	206348	47.3689	47.36
$ 35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	215817	51.0744	51.07
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	703927	47.3085	47.30
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	259258	49.4291	49.42
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	83478	18.8968	18.89
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	110472	16.8943	16.89
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	99689	21.1595	21.15
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	61903	19.1303	19.13
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	118302	16.9119	16.91
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	75050	16.4663	16.46
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	90764	18.7547	18.75
93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	54537	27.2579	27.25
71 1,2,3-Trichloropropane	75	8.867	8.859	(0.918)	79581	19.3133	19.31(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	82292	25.1842	25.18
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	263197	17.4600	17.46
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.657	(1.103)	12591	24.2812	24.28
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	84938	19.3132	19.31
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	165867	18.5029	18.50

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061906.D Page 2
Report Date: 26-Aug-2021 16:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	101880	20.2355	20.23
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	69309	18.6340	18.63
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	257231	17.1465	17.14
83	1,3-Dichlorobenzene	146	9.605	9.604	(0.994)	169059	18.1353	18.13
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	124115	19.2894	19.28
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	174275	17.9154	17.91
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	104426	17.2501	17.25
24	2-Butanone	43	3.580	3.580	(0.856)	49923	37.0838	37.08
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	219317	17.7291	17.72
52	2-Hexanone	43	7.090	7.083	(0.924)	93807	42.2751	42.27
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	252893	17.1665	17.16
82	p-Isopropyltoluene	119	9.648	9.647	(0.999)	267239	17.4875	17.48
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	136581	39.7054	39.70
10	Acetone	43	1.976	1.976	(0.473)	46954	38.0593	38.05
37	Benzene	78	4.512	4.512	(0.909)	269137	18.5404	18.54
74	Bromobenzene	156	8.802	8.802	(0.911)	104460	19.0501	19.05
29	Bromochloromethane	128	3.795	3.795	(0.908)	48362	18.0759	18.07
39	Bromodichloromethane	83	5.722	5.722	(1.153)	101597	18.7026	18.70
66	Bromoform	173	8.408	8.408	(1.096)	67359	20.2222	20.22
6	Bromomethane	94	1.338	1.338	(0.320)	90586	19.9127	19.91
19	Carbon Disulfide	76	2.069	2.069	(0.495)	328185	30.3635	30.36
34	Carbon Tetrachloride	117	4.268	4.261	(0.860)	98942	18.8888	18.88
59	Chlorobenzene	112	7.692	7.692	(1.003)	220362	17.7209	17.72
7	Chloroethane	64	1.403	1.403	(0.336)	51665	15.7055	15.70(M)
28	Chloroform	83	3.910	3.910	(0.935)	133543	17.1622	17.16
3	Chloromethane	50	1.073	1.073	(0.257)	69448	15.5788	15.57
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	81316	17.5334	17.53
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	126486	19.7600	19.76
55	Dibromochloromethane	129	7.176	7.176	(0.936)	97103	19.7503	19.75
44	Dibromomethane	93	5.550	5.550	(1.118)	55276	19.7753	19.77
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	74553	18.2089	18.20
61	Ethylbenzene	106	7.799	7.799	(1.017)	107201	18.6864	18.68
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	46722	23.9367	23.93
67	Isopropylbenzene	105	8.559	8.559	(1.116)	311891	17.7934	17.79
62	m,p-Xylenes	106	7.907	7.900	(1.031)	269683	36.0606	36.06
17	Methylene Chloride	84	2.305	2.305	(0.551)	73607	17.5028	17.50
87	n-Butylbenzene	91	9.991	9.991	(1.034)	221961	17.2634	17.26
73	n-Propylbenzene	91	8.910	8.910	(0.922)	349519	16.9538	16.95
92	Naphthalene	128	11.546	11.538	(1.195)	120030	25.4247	25.42
63	o-Xylene	106	8.244	8.243	(1.075)	132806	18.2116	18.21
81	sec-Butylbenzene	105	9.519	9.518	(0.985)	299322	17.2474	17.24
64	Styrene	104	8.258	8.258	(1.077)	221784	18.2004	18.20
78	tert-Butylbenzene	119	9.340	9.332	(0.967)	218751	17.0083	17.00
56	Tetrachloroethene	164	6.926	6.925	(0.903)	69803	18.9821	18.98
50	Toluene	91	6.446	6.446	(0.840)	306855	17.5960	17.59
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	68793	16.6507	16.65
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	109624	19.8521	19.85
38	Trichloroethene	130	5.206	5.206	(1.049)	86511	19.9478	19.94
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	132127	16.5426	16.54
5	Vinyl Chloride	62	1.138	1.138	(0.272)	90221	17.2254	17.22

QC Flag Legend

M - Compound response manually integrated.



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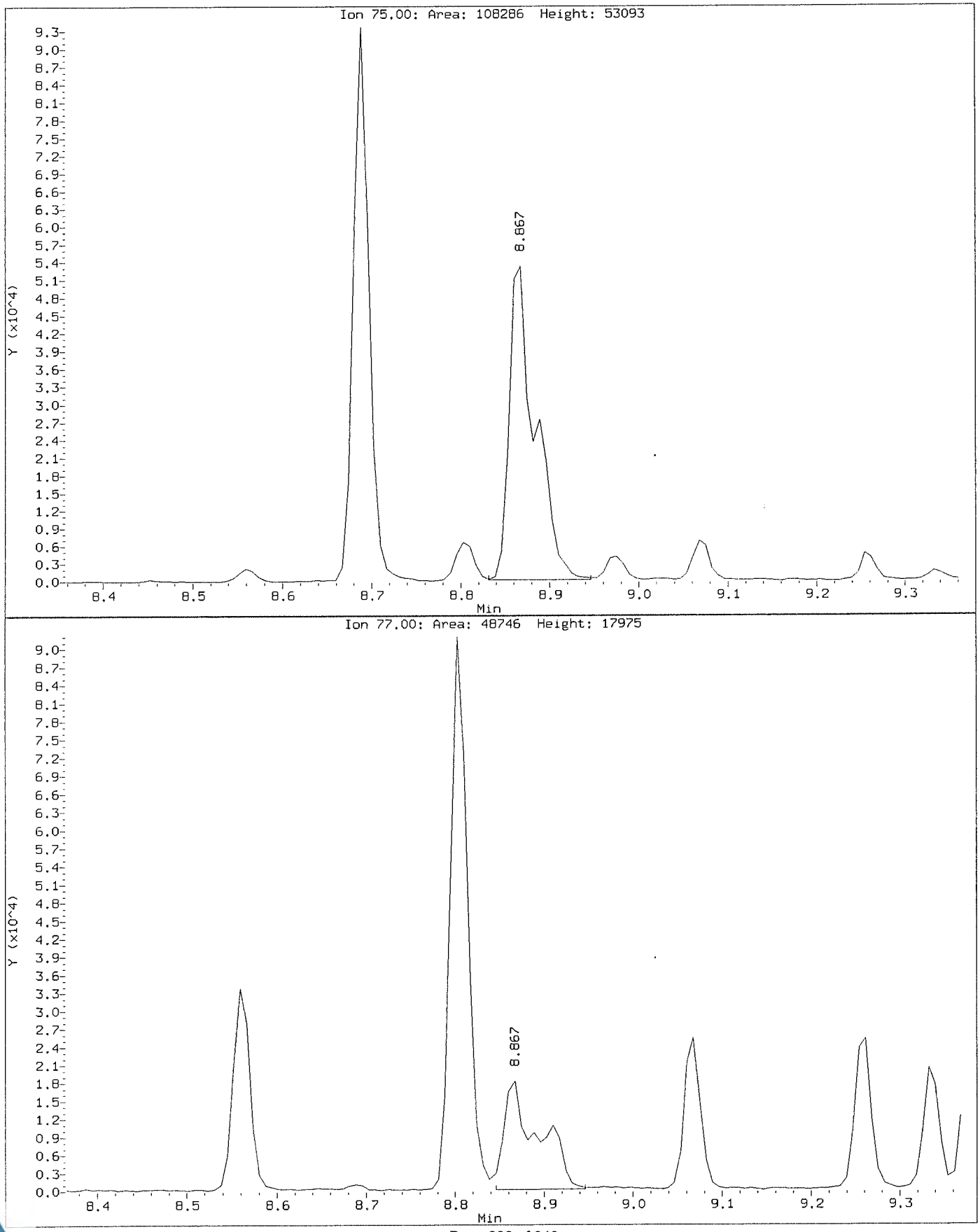
Sample Info: VLCSW-210619;VLCSW-210619;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\Before\X061906.D
Injection Date: 19-JUN-2021 12:59
Instrument: voa6.i
Client Sample ID: VLCSW-210619

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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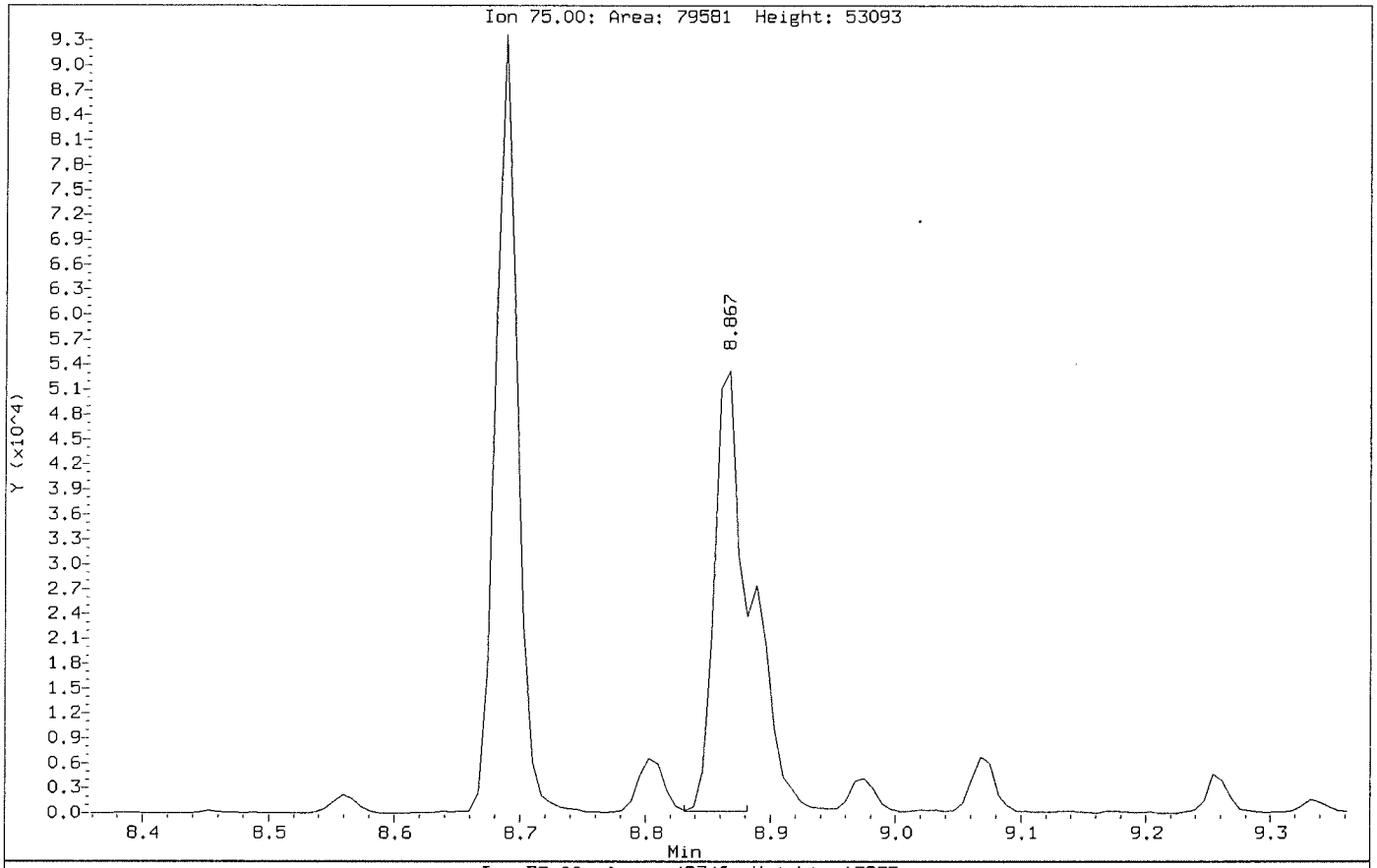
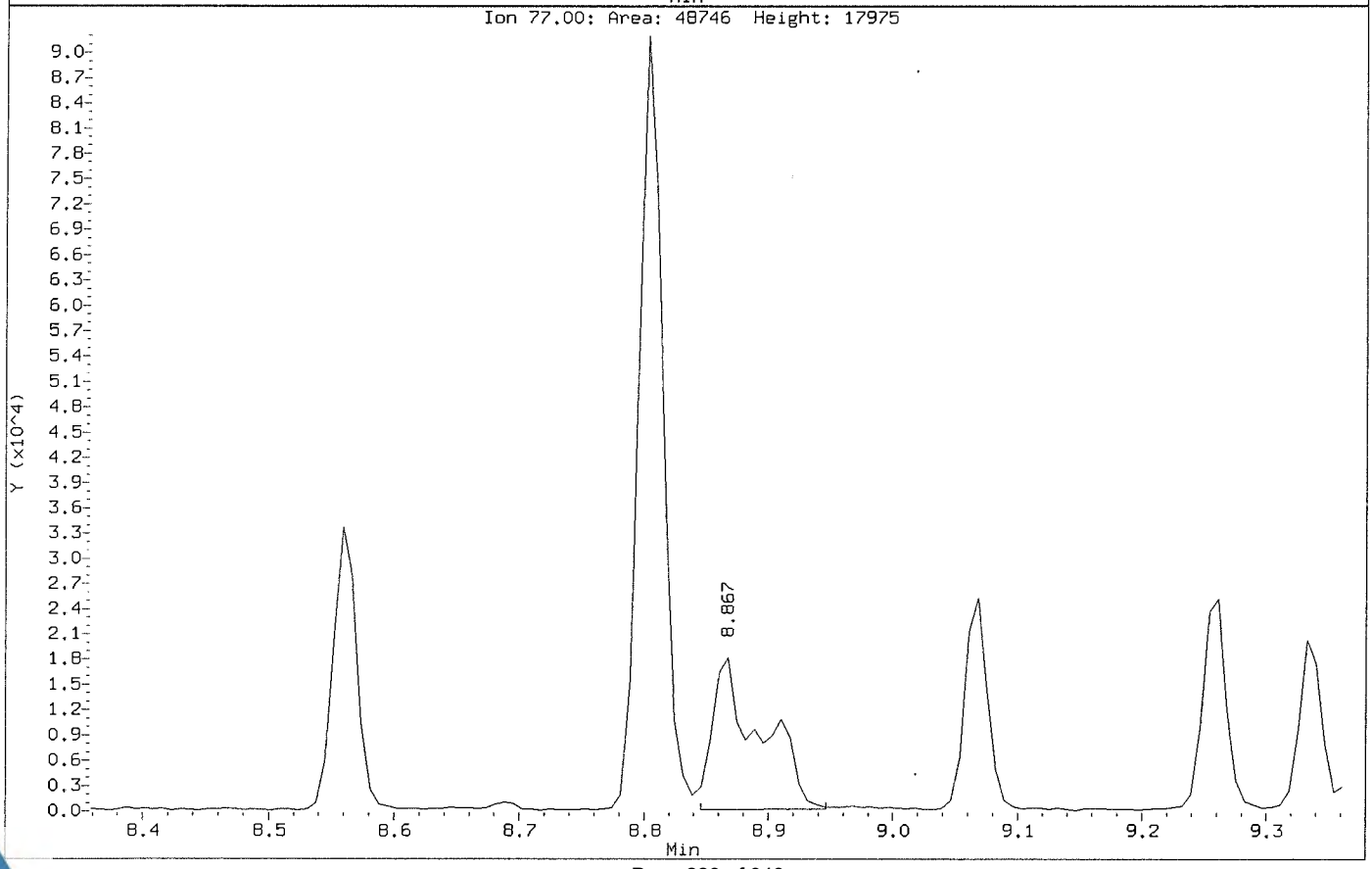
Injection Date: 19-JUN-2021 12:59
Instrument: voa6.i
Client Sample ID: VLCSW-210619

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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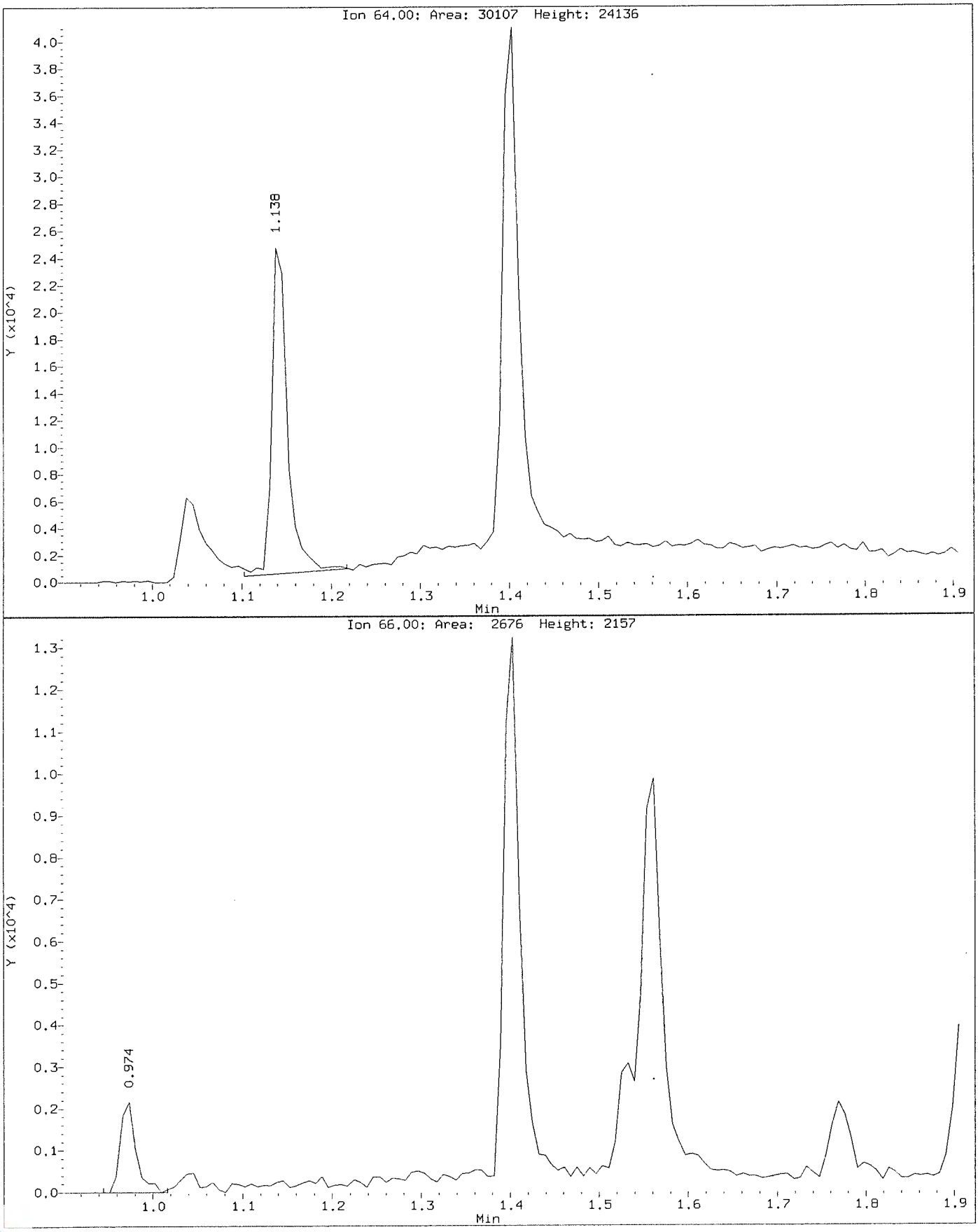
Injection Date: 19-JUN-2021 12:59
Instrument: voa6.i
Client Sample ID: VLCSW-210619

Compound: Chloroethane
CAS Number: 75-00-3



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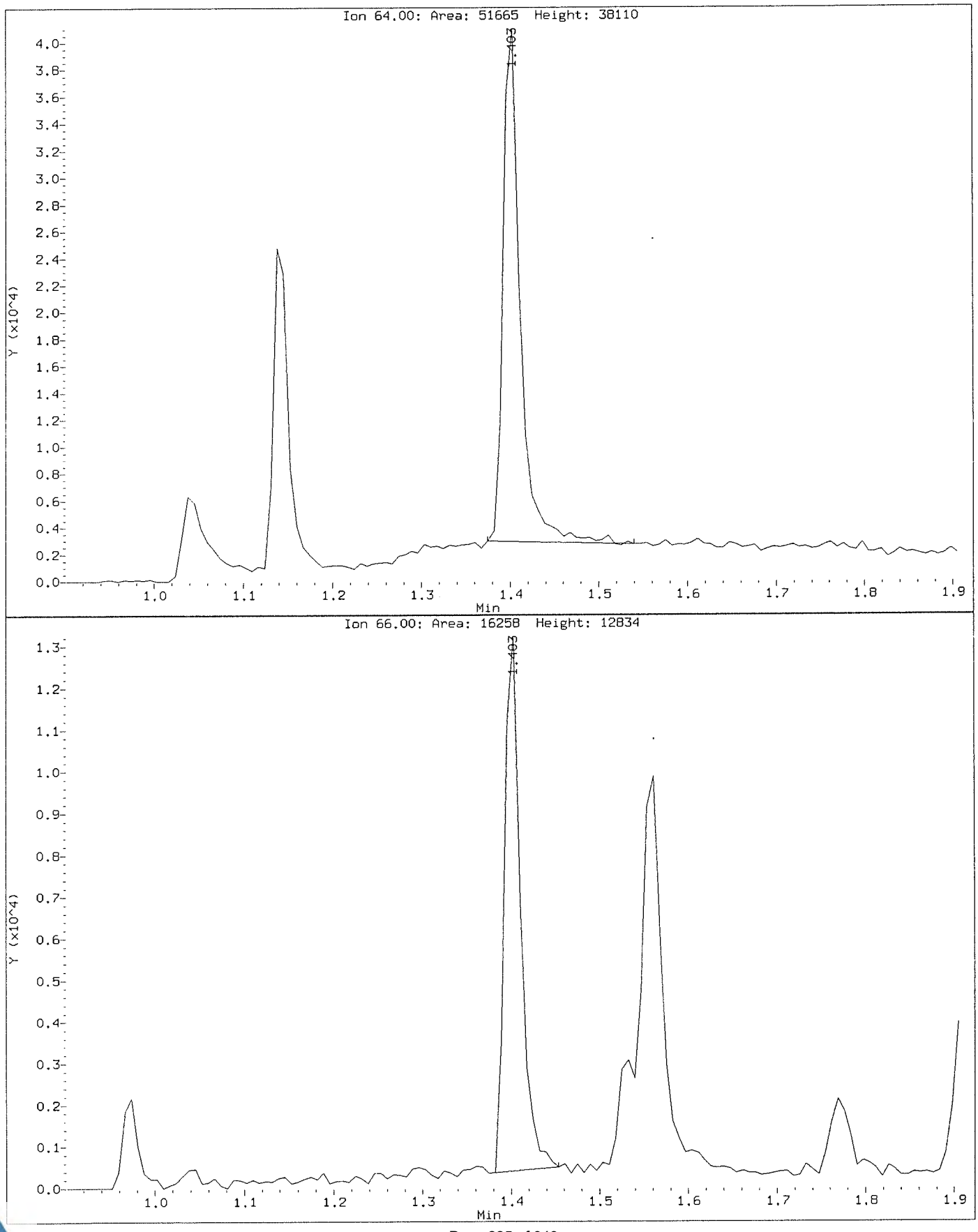
Injection Date: 19-JUN-2021 12:59
Instrument: voa6.i
Client Sample ID: VLCSW-210619

Compound: Chloroethane
CAS Number: 75-00-3



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061908.D
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Inj Date : 19-JUN-2021 13:41
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-210619;VBLKW-210619;3;;BLANK
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:41 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

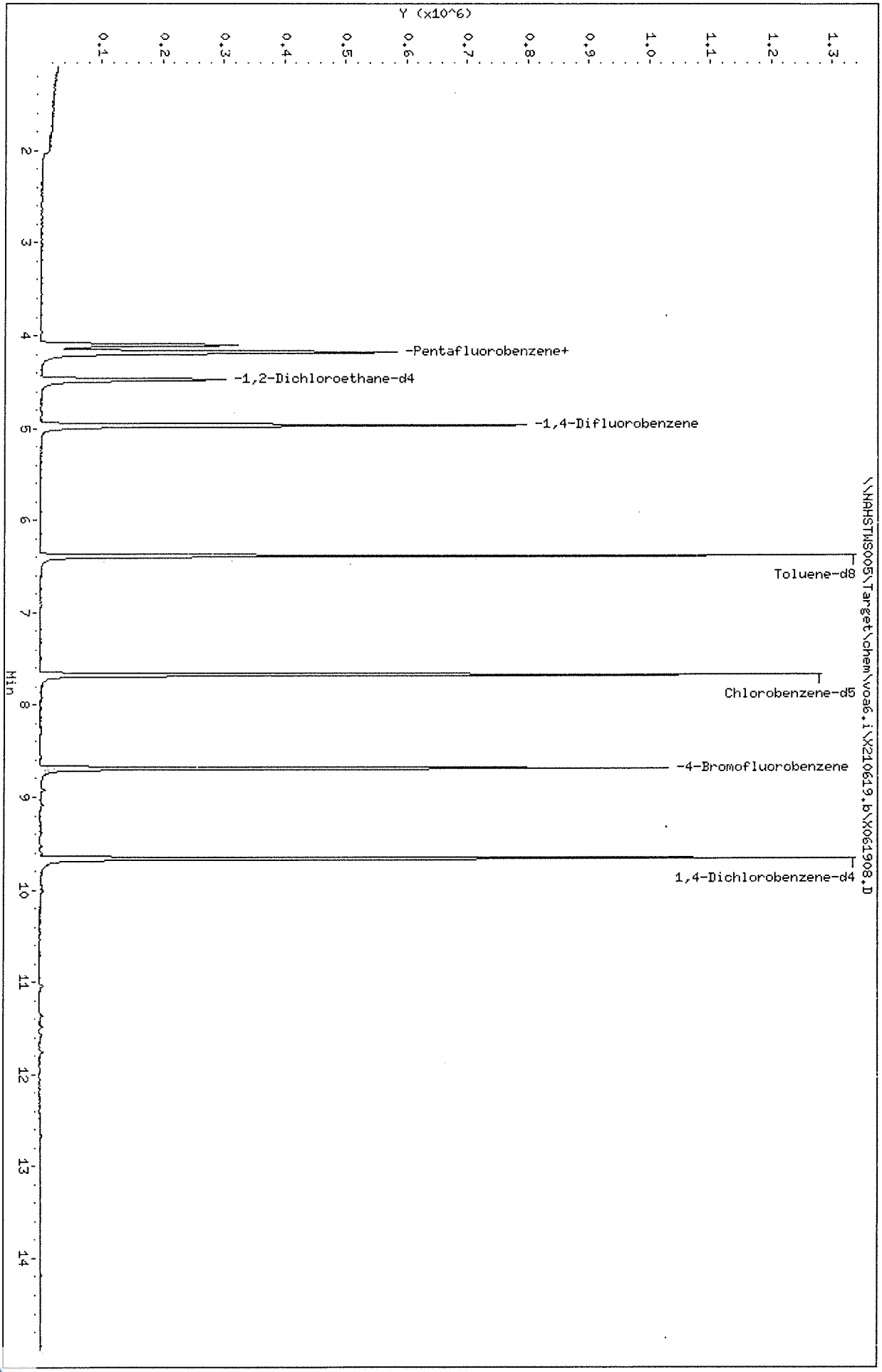
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	529045	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	722008	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	643803	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	339694	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	231011	44.3427	44.34
$ 35 1,2-Dichloroethane-d4	65	4.476	4.476	(1.070)	240171	47.4896	47.48
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	817712	50.9901	50.99
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	280043	49.5375	49.53

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061908.D
Date : 19-JUN-2021 13:41
Client ID: VBLKW-210619
Sample Info: VBLKW-210619;VBLKW-210619;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

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



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061913.D
Lab Smp Id: HS21060937-04MS Client Smp ID: HS21060937-04MS
Inj Date : 19-JUN-2021 15:26
Operator : PC Inst ID: voa6.i
Smp Info : HS21060937-04MS;HS21060937-04MS;3;;MS
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:41 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

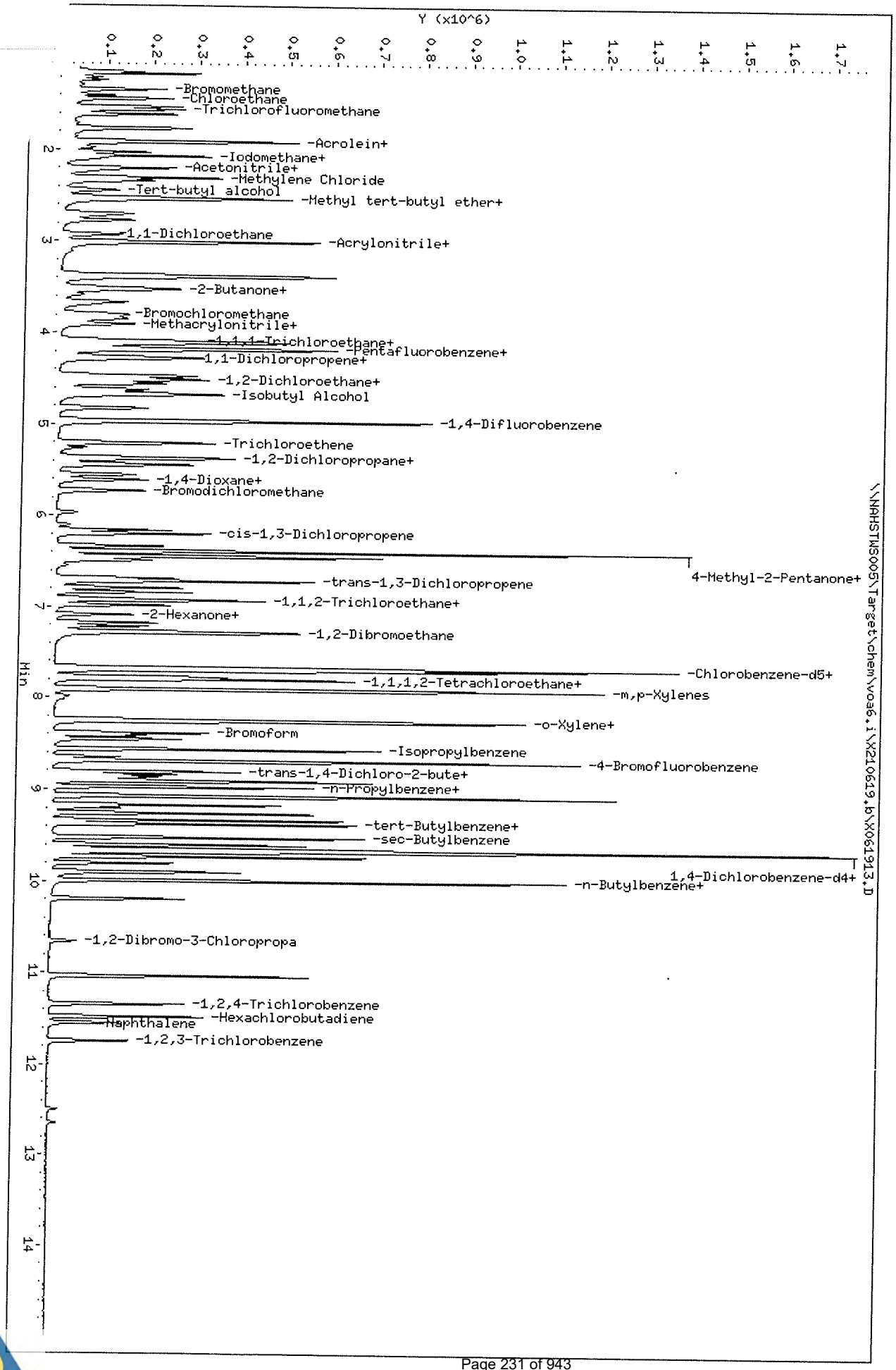
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	536997	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	725367	50.0000	
*	47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	669261	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	370111	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.103	(0.981)	235030	44.4465	44.44
$	35 1,2-Dichloroethane-d4	65	4.469	4.476	(1.069)	233733	45.5036	45.50
$	48 Toluene-d8	98	6.388	6.388	(0.833)	830843	49.8382	49.83
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	292025	49.6897	49.68
	60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	92291	18.6469	18.64
	31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	131444	16.5634	16.56
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	105918	20.0142	20.01
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	64105	17.6821	17.68
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	132705	15.6317	15.63
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	92752	16.7683	16.76
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	111359	20.0448	20.04
	93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	58551	26.1321	26.13
	71 1,2,3-Trichloropropane	75	8.867	8.859	(0.918)	87161	18.8890	18.88(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	89523	24.4650	24.46
	79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	316457	18.7464	18.74
	89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	13503	23.2747	23.27
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	87860	17.8309	17.83
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	185034	18.4319	18.43

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061913.D Page 2
Report Date: 26-Aug-2021 16:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	107134	18.5367	18.53
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	76853	17.9994	17.99
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	313809	18.6792	18.67
83	1,3-Dichlorobenzene	146	9.604	9.604	(0.994)	196398	18.8133	18.81
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	128545	17.8312	17.83
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	198270	18.2007	18.20
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	123346	16.7892	16.78
24	2-Butanone	43	3.588	3.580	(0.858)	51647	31.6118	31.61
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	259683	18.7455	18.74
52	2-Hexanone	43	7.090	7.083	(0.924)	93654	37.6710	37.67
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	292712	17.7429	17.74
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	344639	20.1387	20.13
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	139191	36.1162	36.11
10	Acetone	43	1.976	1.976	(0.473)	43604	27.7229	27.72
37	Benzene	78	4.512	4.512	(0.909)	302496	18.1529	18.15
74	Bromobenzene	156	8.802	8.802	(0.911)	115733	18.8471	18.84
29	Bromochloromethane	128	3.795	3.795	(0.908)	50676	15.6069	15.60
39	Bromodichloromethane	83	5.729	5.722	(1.154)	107810	17.2886	17.28
66	Bromoform	173	8.408	8.408	(1.096)	70527	18.8982	18.89
6	Bromomethane	94	1.338	1.338	(0.320)	97869	17.7437	17.74
19	Carbon Disulfide	76	2.069	2.069	(0.495)	406047	30.9548	30.95
34	Carbon Tetrachloride	117	4.268	4.261	(0.860)	121845	20.2634	20.26
59	Chlorobenzene	112	7.692	7.692	(1.003)	247549	17.7681	17.76
7	Chloroethane	64	1.403	1.403	(0.336)	75186	19.1147	19.11
28	Chloroform	83	3.910	3.910	(0.935)	146552	15.5190	15.51
3	Chloromethane	50	1.073	1.073	(0.257)	79566	14.5534	14.55
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	89385	15.8809	15.88
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	133376	18.1511	18.15
55	Dibromochloromethane	129	7.176	7.176	(0.936)	100604	18.2637	18.26
44	Dibromomethane	93	5.550	5.550	(1.118)	56872	17.7241	17.72
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	86567	17.4127	17.41
61	Ethylbenzene	106	7.799	7.799	(1.017)	127187	19.7879	19.78
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	59407	26.9804	26.98
67	Isopropylbenzene	105	8.559	8.559	(1.116)	388547	19.7847	19.78
62	m,p-Xylenes	106	7.900	7.900	(1.030)	315851	37.6958	37.69
17	Methylene Chloride	84	2.305	2.305	(0.551)	81081	15.7638	15.76
87	n-Butylbenzene	91	9.991	9.991	(1.034)	290974	20.2089	20.20
73	n-Propylbenzene	91	8.910	8.910	(0.922)	444439	19.2507	19.25
92	Naphthalene	128	11.546	11.538	(1.195)	120987	22.8751	22.87
63	o-Xylene	106	8.243	8.243	(1.075)	148725	18.2031	18.20
81	sec-Butylbenzene	105	9.519	9.518	(0.985)	389980	20.0663	20.06
64	Styrene	104	8.258	8.258	(1.077)	246742	18.0728	18.07
78	tert-Butylbenzene	119	9.339	9.332	(0.967)	283787	19.7035	19.70
56	Tetrachloroethene	164	6.925	6.925	(0.903)	88793	21.5516	21.55
50	Toluene	91	6.446	6.446	(0.840)	352788	18.0562	18.05
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	78228	15.6016	15.60
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	115040	18.1481	18.14
38	Trichloroethene	130	5.206	5.206	(1.049)	122155	24.5366	24.53
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	167621	17.2926	17.29
5	Vinyl Chloride	62	1.138	1.138	(0.272)	107280	16.8772	16.87

Flag Legend

- Compound response manually integrated.



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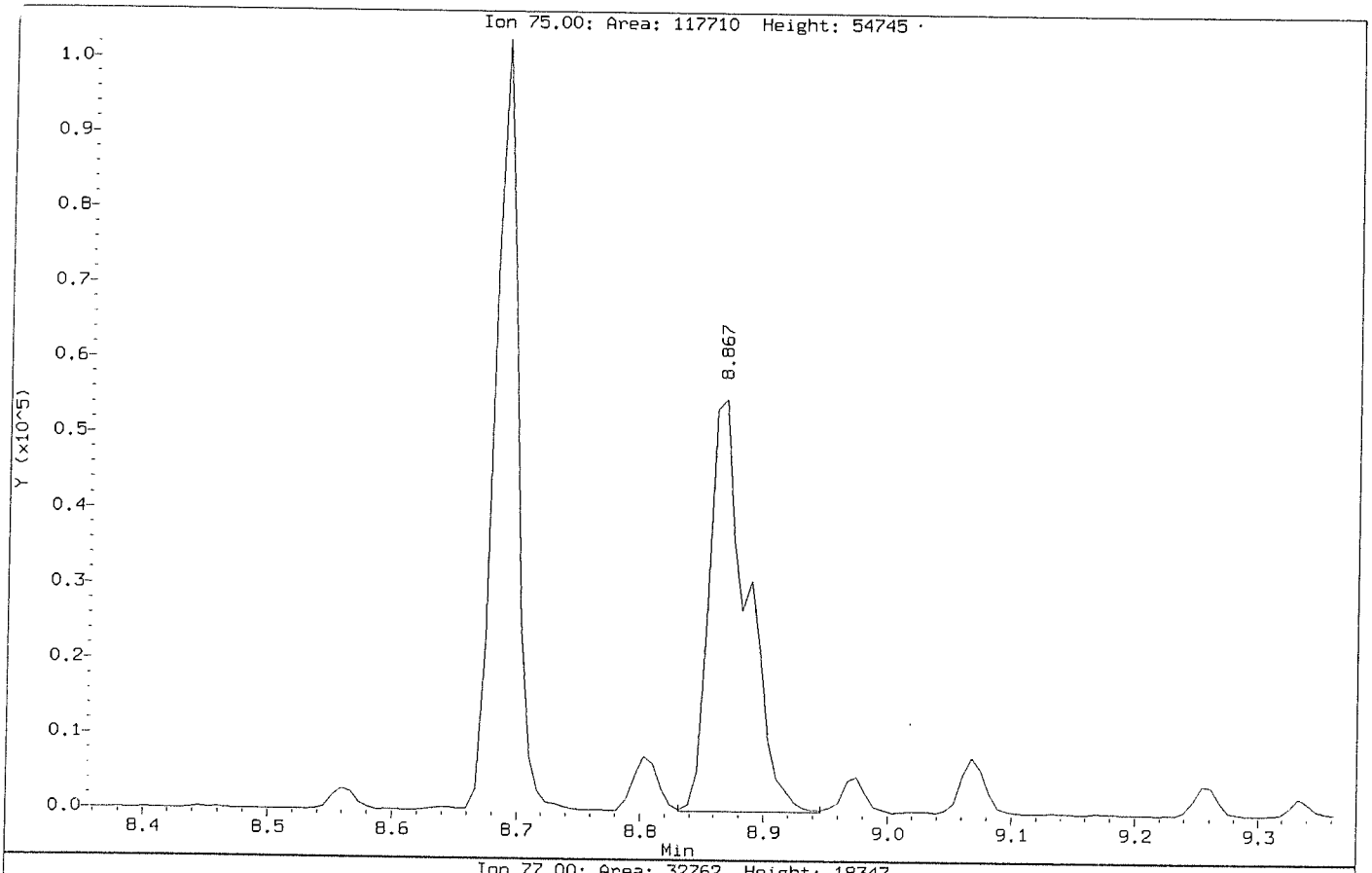
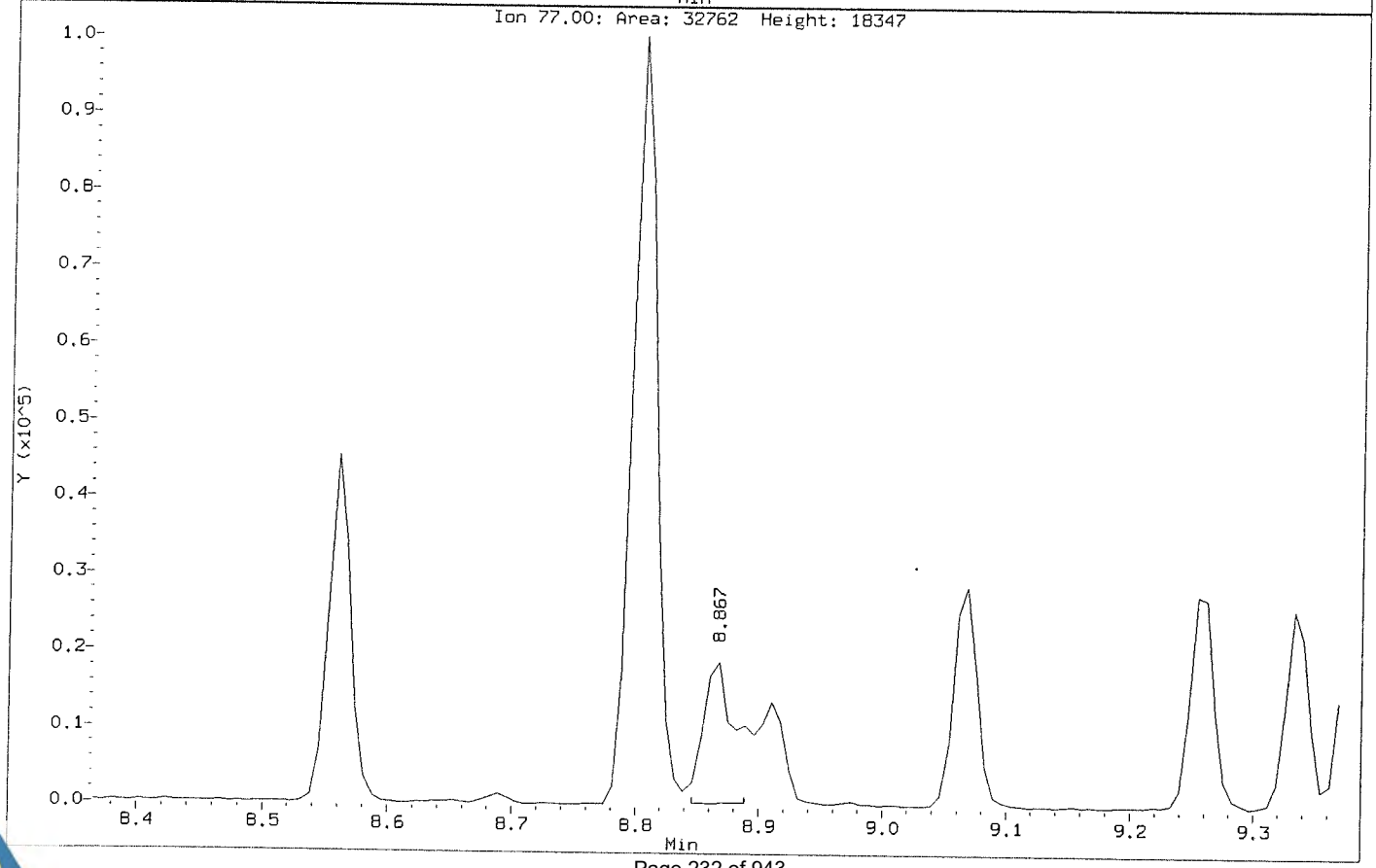
Client ID: HS21060937-04HS
Sample Info: HS21060937-04HS;HS21060937-04HS;3;;HS
Purge Volume: 5.0
Column phase: DB624

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

File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\Before\X061913.D
ection Date: 19-JUN-2021 15:26
trument: voa6.i
ient Sample ID: HS21060937-04MS

ompound: 1,2,3-Trichloropropane
AS Number: 96-18-4





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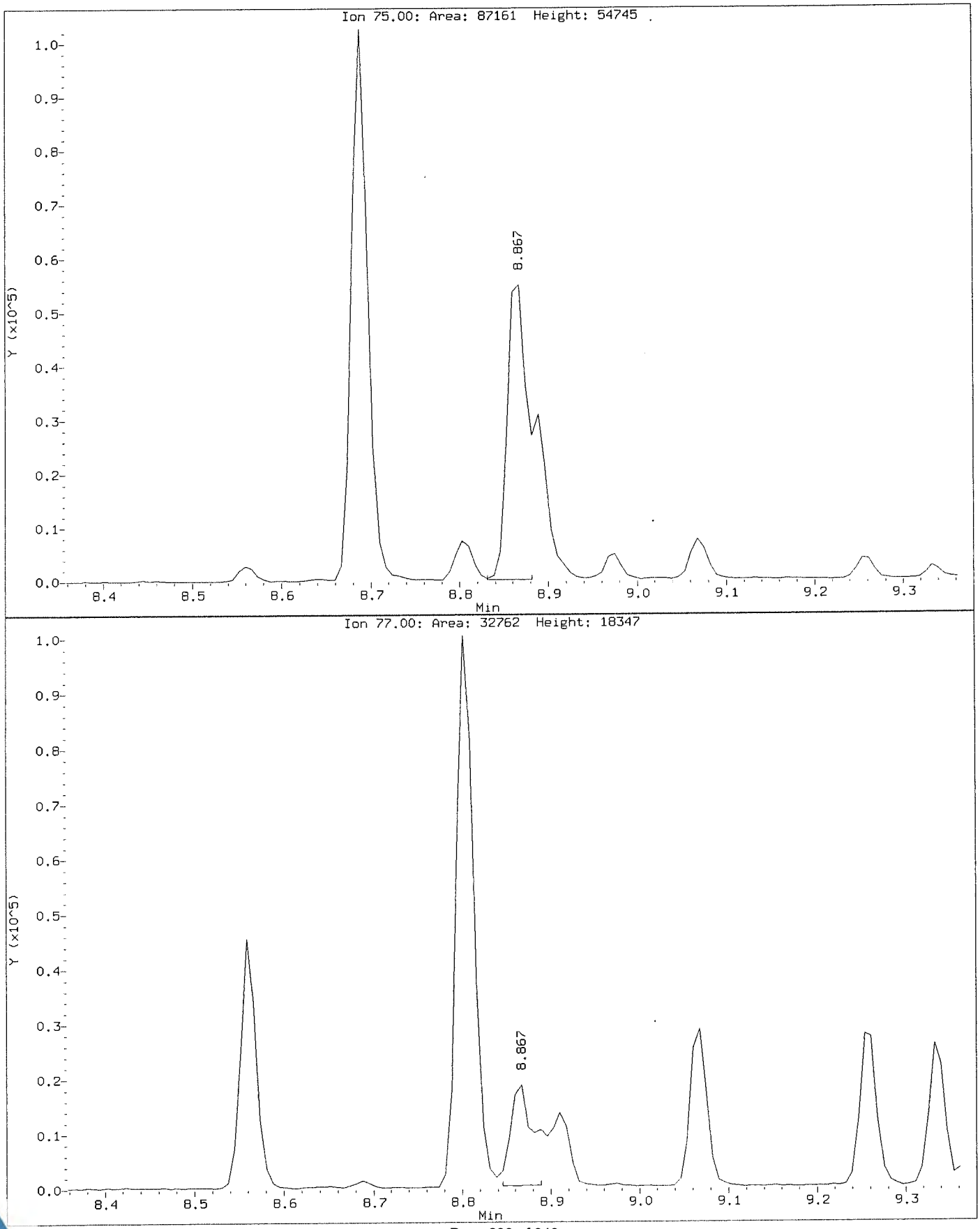
Injection Date: 19-JUN-2021 15:26
Instrument: voa6.i
Client Sample ID: HS21060937-04MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061914.D
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Inj Date : 19-JUN-2021 15:47
Operator : PC Inst ID: voa6.i
Smp Info : HS21060937-04MSD;HS21060937-04MSD;3;;MSD
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:41 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 13 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

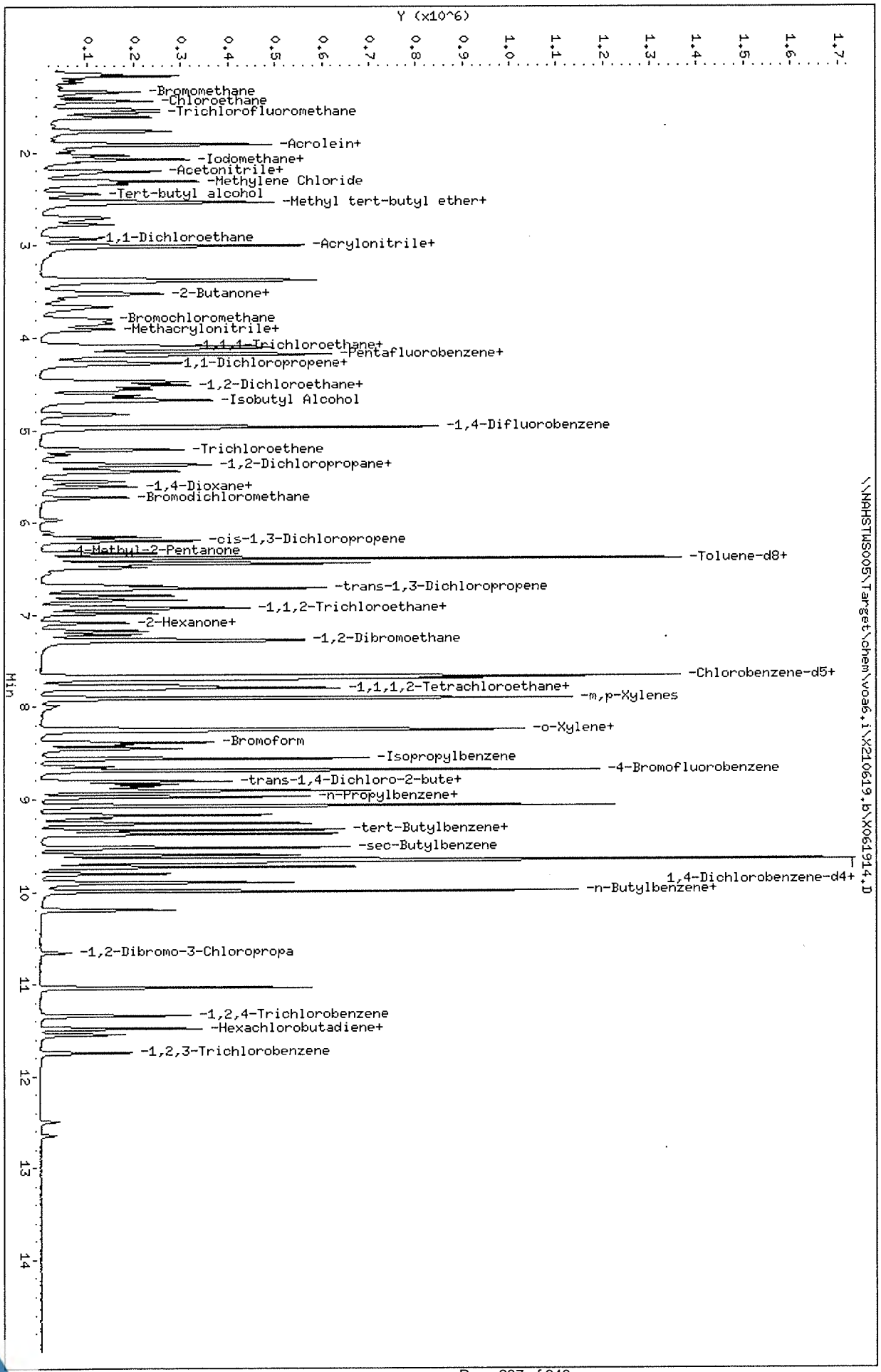
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	553011	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	754115	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	682423	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	358825	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.981)	242026	44.4441	44.44
$ 35 1,2-Dichloroethane-d4	65	4.469	4.476	(1.069)	238601	45.1001	45.10
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	841773	49.5199	49.51
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	297713	49.6807	49.68
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	90841	18.0000	17.99
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	130517	15.9703	15.97
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	111293	21.7916	21.79
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	65930	17.8347	17.83
22 1,1-Dichloroethane	63	2.922	2.921	(0.699)	132218	15.1233	15.12
11 1,1-Dichloroethene	96	1.912	1.911	(0.457)	86934	15.2613	15.26
32 1,1-Dichloropropene	75	4.283	4.282	(0.863)	107361	18.5885	18.58
93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	63262	29.1228	29.12
71 1,2,3-Trichloropropane	75	8.867	8.859	(0.918)	88918	19.8759	19.87(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	92131	25.9696	25.96
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	309492	18.9105	18.91
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.657	(1.103)	14580	25.8633	25.86
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	89627	17.8387	17.83
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	188289	19.3461	19.34

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061914.D Page 2
Report Date: 26-Aug-2021 16:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	105071	17.4868	17.48
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	77595	17.4804	17.48
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	313112	19.2239	19.22
83	1,3-Dichlorobenzene	146	9.605	9.604	(0.994)	196412	19.4064	19.40
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	130716	17.7826	17.78
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	198022	18.7497	18.74
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	121086	16.0043	16.00
24	2-Butanone	43	3.581	3.580	(0.856)	54621	32.4640	32.46
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	256341	19.0863	19.08
52	2-Hexanone	43	7.090	7.083	(0.924)	99015	39.0592	39.05
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	294033	18.3835	18.38
82	p-Isopropyltoluene	119	9.648	9.647	(0.999)	340550	20.5257	20.52
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	144208	36.6963	36.69
10	Acetone	43	1.976	1.976	(0.473)	47438	29.6235	29.62
37	Benzene	78	4.512	4.512	(0.909)	297786	17.1890	17.18
74	Bromobenzene	156	8.802	8.802	(0.911)	114252	19.1911	19.19
29	Bromochloromethane	128	3.795	3.795	(0.908)	50794	15.1903	15.19
39	Bromodichloromethane	83	5.722	5.722	(1.153)	110472	17.0402	17.04
66	Bromoform	173	8.408	8.408	(1.096)	71074	18.6774	18.67
6	Bromomethane	94	1.339	1.338	(0.320)	94231	16.5994	16.59
19	Carbon Disulfide	76	2.069	2.069	(0.495)	397506	29.4262	29.42
34	Carbon Tetrachloride	117	4.261	4.261	(0.859)	119162	19.0617	19.06
59	Chlorobenzene	112	7.692	7.692	(1.003)	240470	16.9271	16.92
7	Chloroethane	64	1.403	1.403	(0.336)	59995	14.4921	14.49 (M)
28	Chloroform	83	3.910	3.910	(0.935)	144899	14.8996	14.89
3	Chloromethane	50	1.074	1.073	(0.257)	80742	14.3007	14.30
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	89172	15.3843	15.38
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	135868	17.7854	17.78
55	Dibromochloromethane	129	7.176	7.176	(0.936)	102381	18.2278	18.22
44	Dibromomethane	93	5.550	5.550	(1.118)	57460	17.2247	17.22
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	85232	16.6384	16.63
61	Ethylbenzene	106	7.800	7.799	(1.017)	128417	19.5940	19.59
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	59599	27.8652	27.86
67	Isopropylbenzene	105	8.559	8.559	(1.116)	364799	19.2160	19.21
62	m,p-Xylenes	106	7.907	7.900	(1.031)	314011	36.7534	36.75
17	Methylene Chloride	84	2.306	2.305	(0.551)	79481	14.9413	14.94
87	n-Butylbenzene	91	9.991	9.991	(1.034)	289697	20.7530	20.75
73	n-Propylbenzene	91	8.910	8.910	(0.922)	442973	19.7907	19.79
92	Naphthalene	128	11.546	11.538	(1.195)	137749	26.8635	26.86
63	o-Xylene	106	8.244	8.243	(1.075)	148933	17.8770	17.87
81	sec-Butylbenzene	105	9.519	9.518	(0.985)	387075	20.5433	20.54
64	Styrene	104	8.258	8.258	(1.077)	247662	17.7903	17.79
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	274290	19.6431	19.64
56	Tetrachloroethene	164	6.926	6.925	(0.903)	88384	21.0386	21.03
50	Toluene	91	6.446	6.446	(0.840)	338220	16.9767	16.97
20	trans-1,2-Dichloroethene	96	2.528	2.527	(0.604)	78527	15.2078	15.20
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	118094	17.9197	17.91
38	Trichloroethene	130	5.207	5.206	(1.049)	105939	20.4682	20.46
8	Trichlorofluoromethane	101	1.561	1.560	(0.373)	159944	16.0228	16.02
5	Vinyl Chloride	62	1.138	1.138	(0.272)	104070	15.8981	15.89

C Flag Legend

M - Compound response manually integrated.



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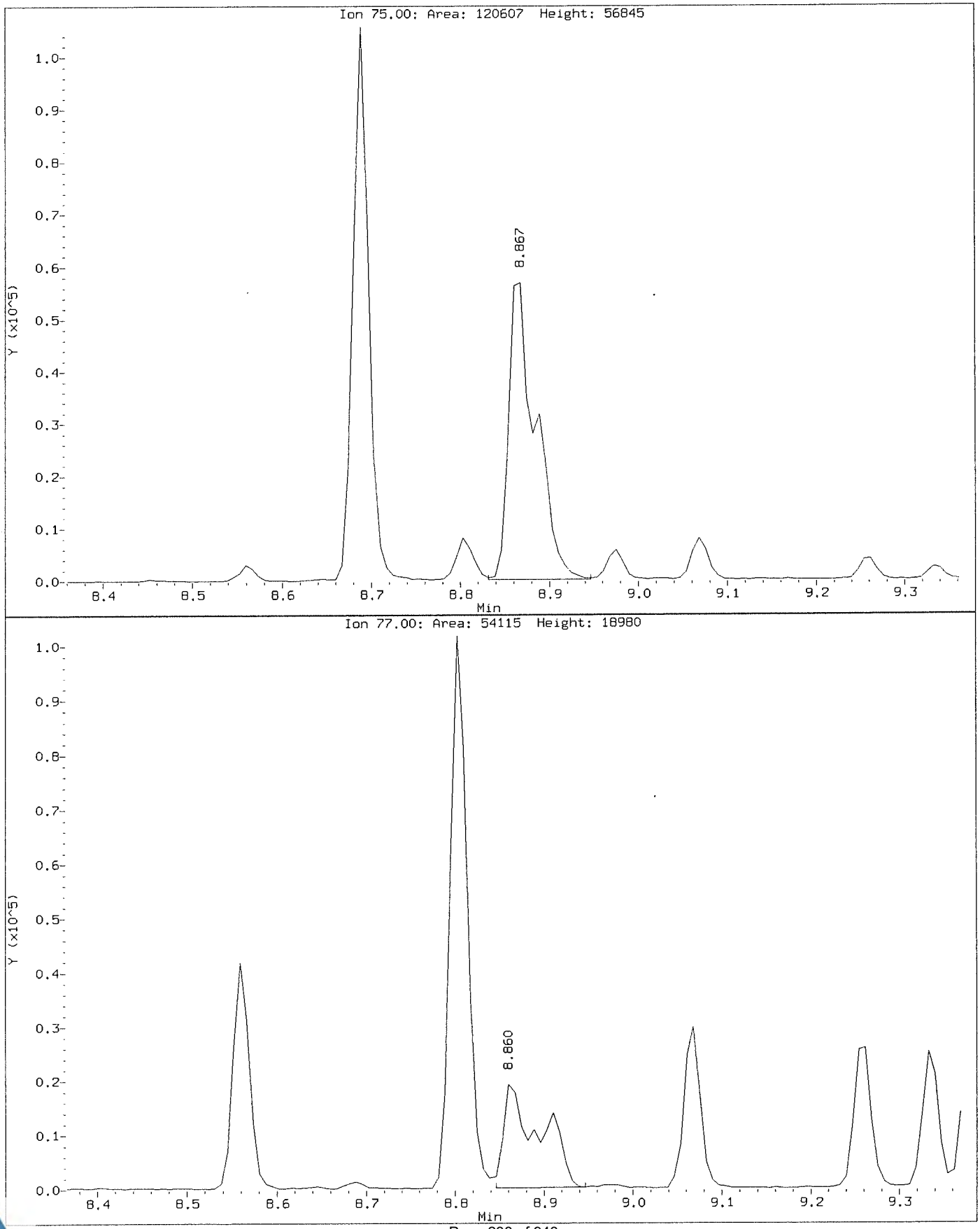
Sample Info: HS21060937-04HSD;HS21060937-04HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\Before\X061914.D
Injection Date: 19-JUN-2021 15:47
Instrument: voa6.i
Client Sample ID: HS21060937-04MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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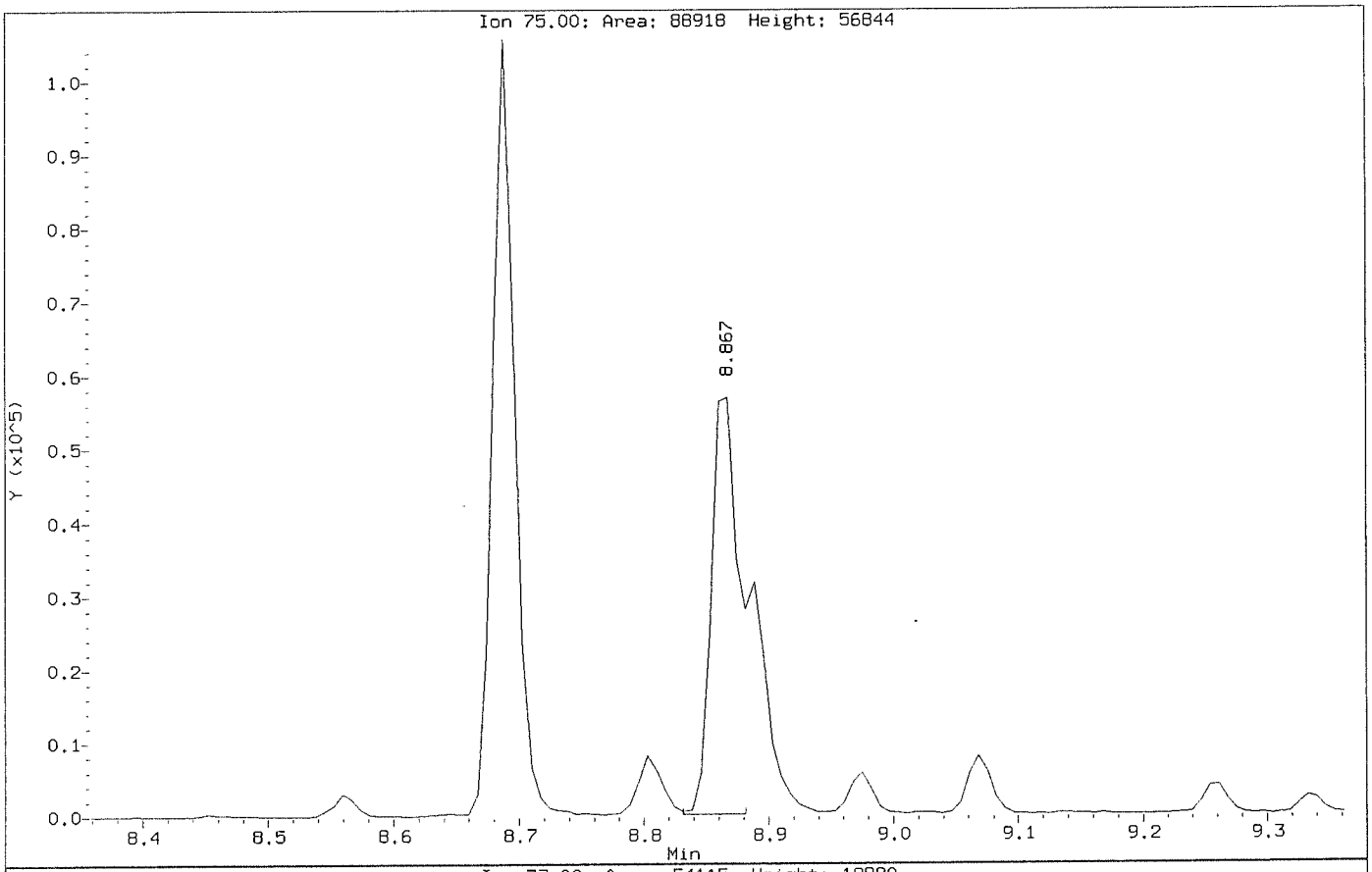
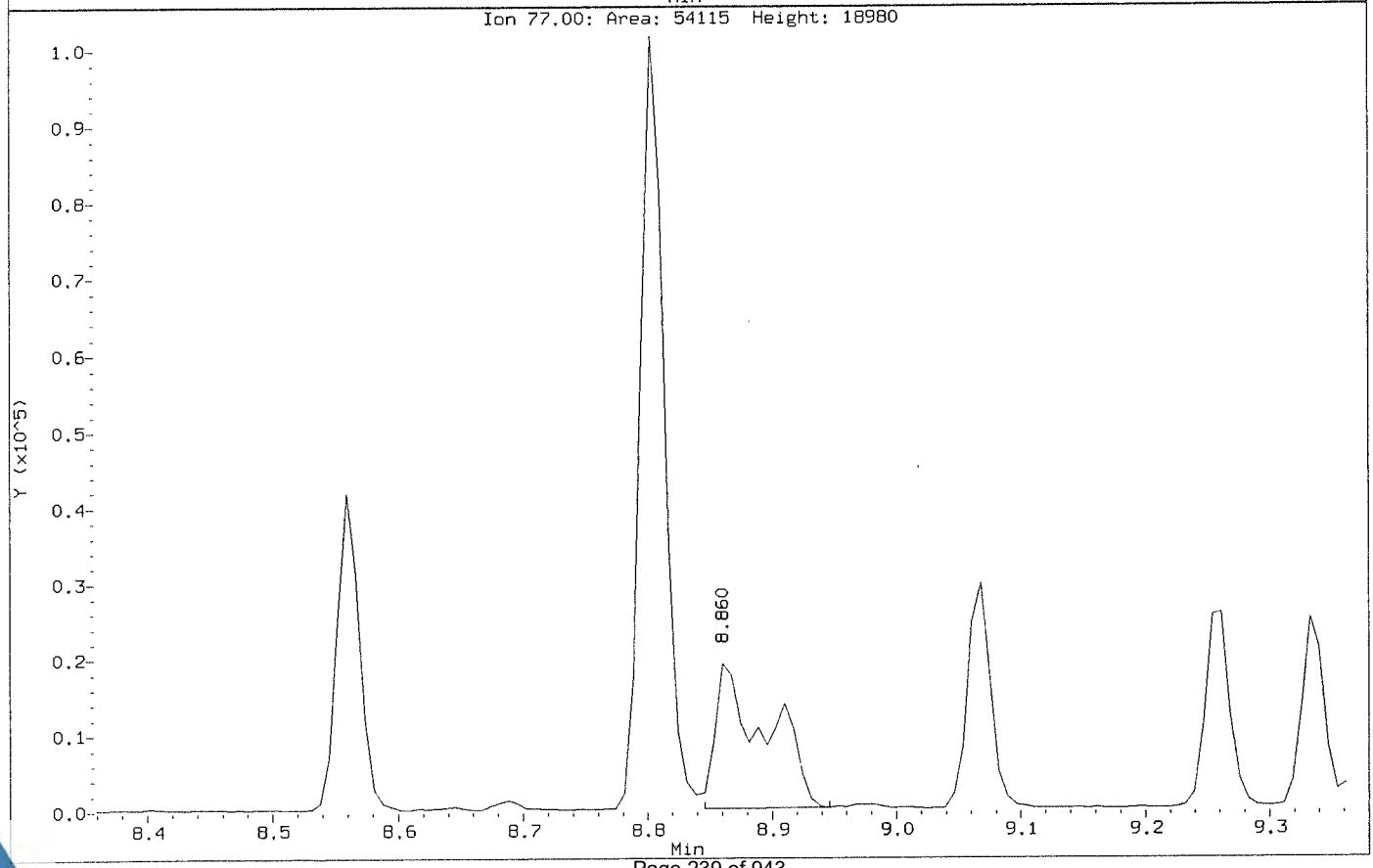
Injection Date: 19-JUN-2021 15:47
Instrument: voa6.i
Client Sample ID: HS21060937-04MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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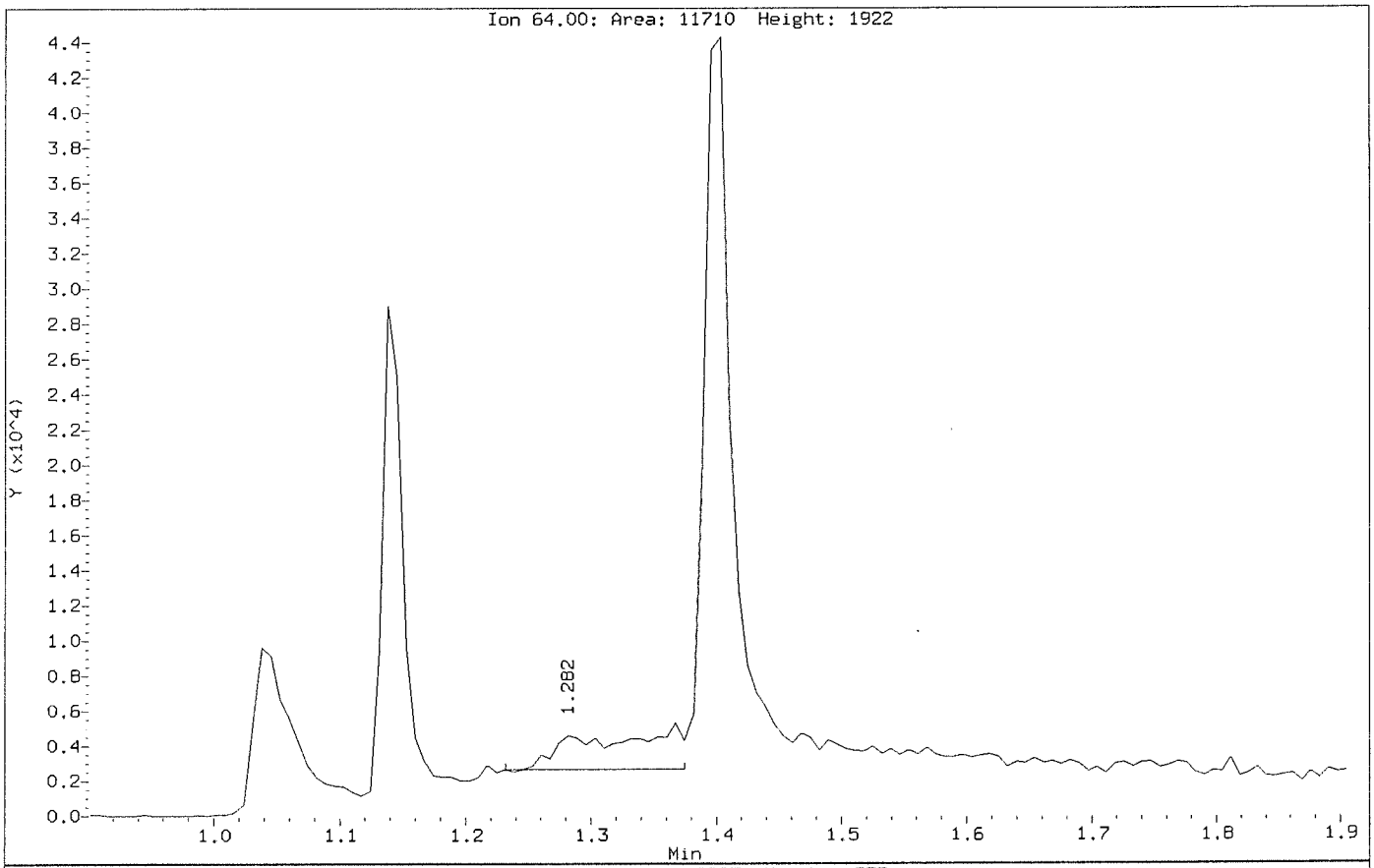
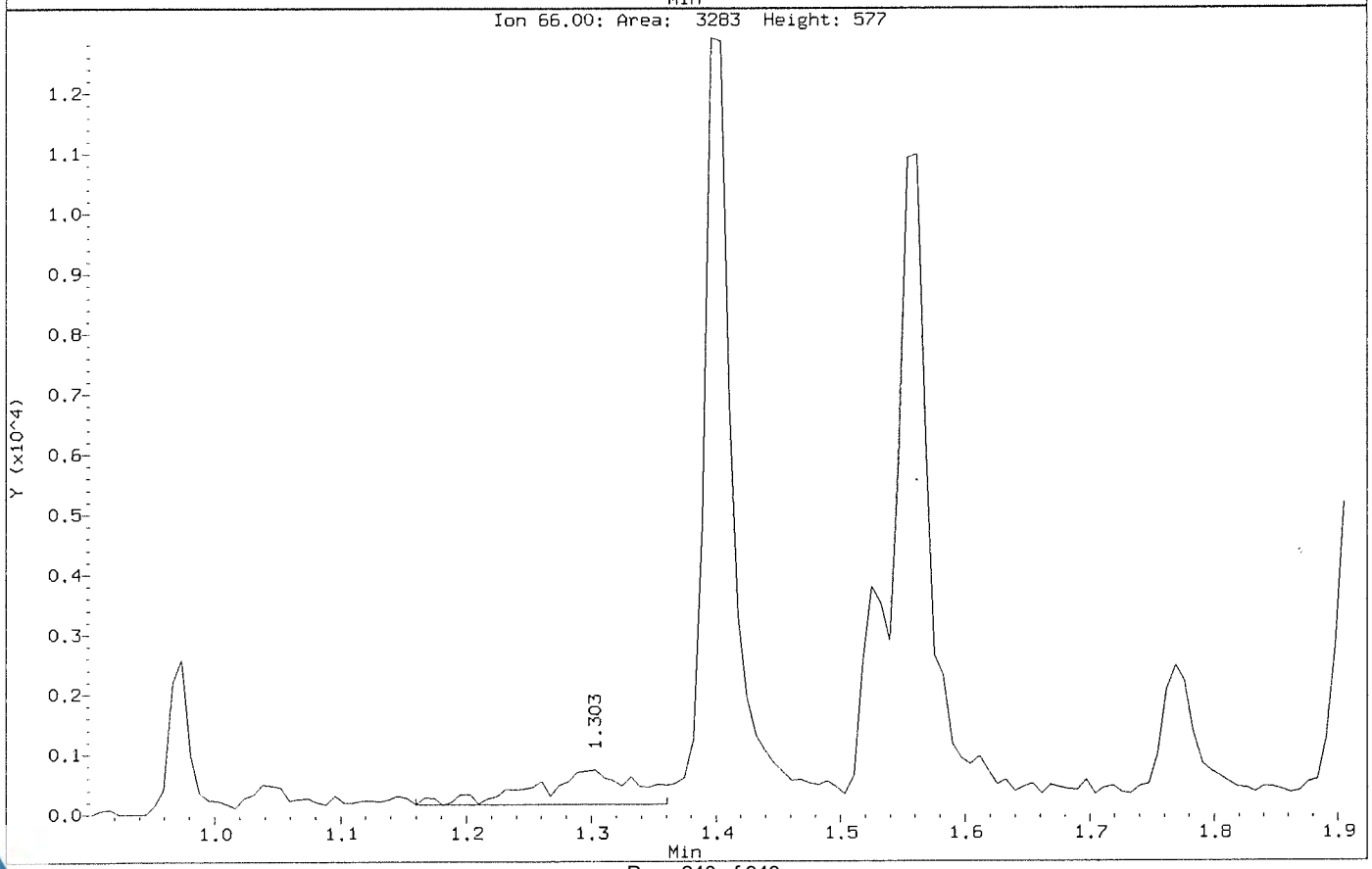
Injection Date: 19-JUN-2021 15:47
Instrument: voa6.i
Client Sample ID: HS21060937-04MSD

Compound: Chloroethane
CAS Number: 75-00-3





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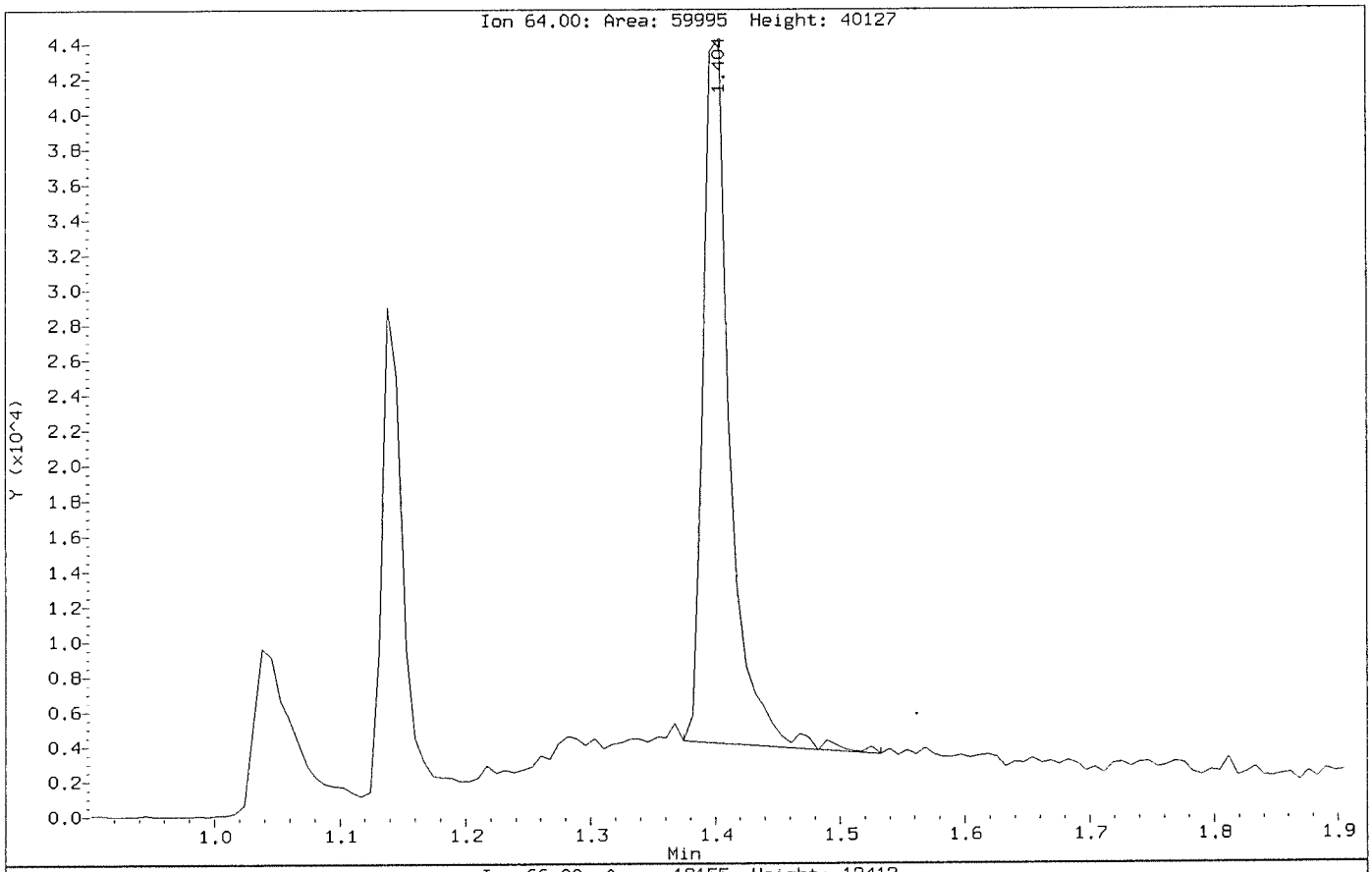
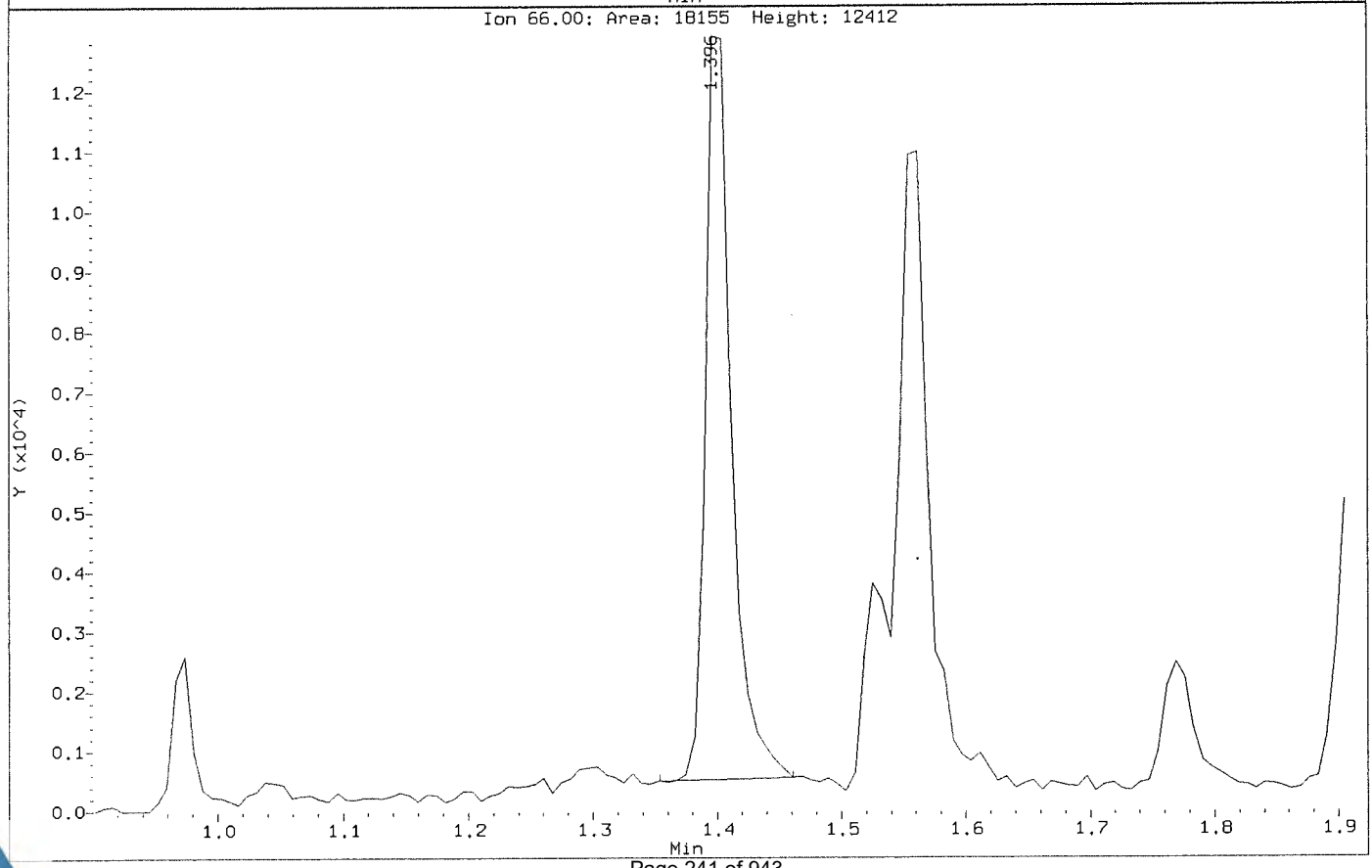
Injection Date: 19-JUN-2021 15:47
Instrument: voa6.i
Client Sample ID: HS21060937-04MSD

Compound: Chloroethane
CAS Number: 75-00-3





ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061917.D
Lab Smp Id: HS21060908-09 Client Smp ID: HS21060908-09
Inj Date : 19-JUN-2021 16:50
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-09;HS21060908-09;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:34 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

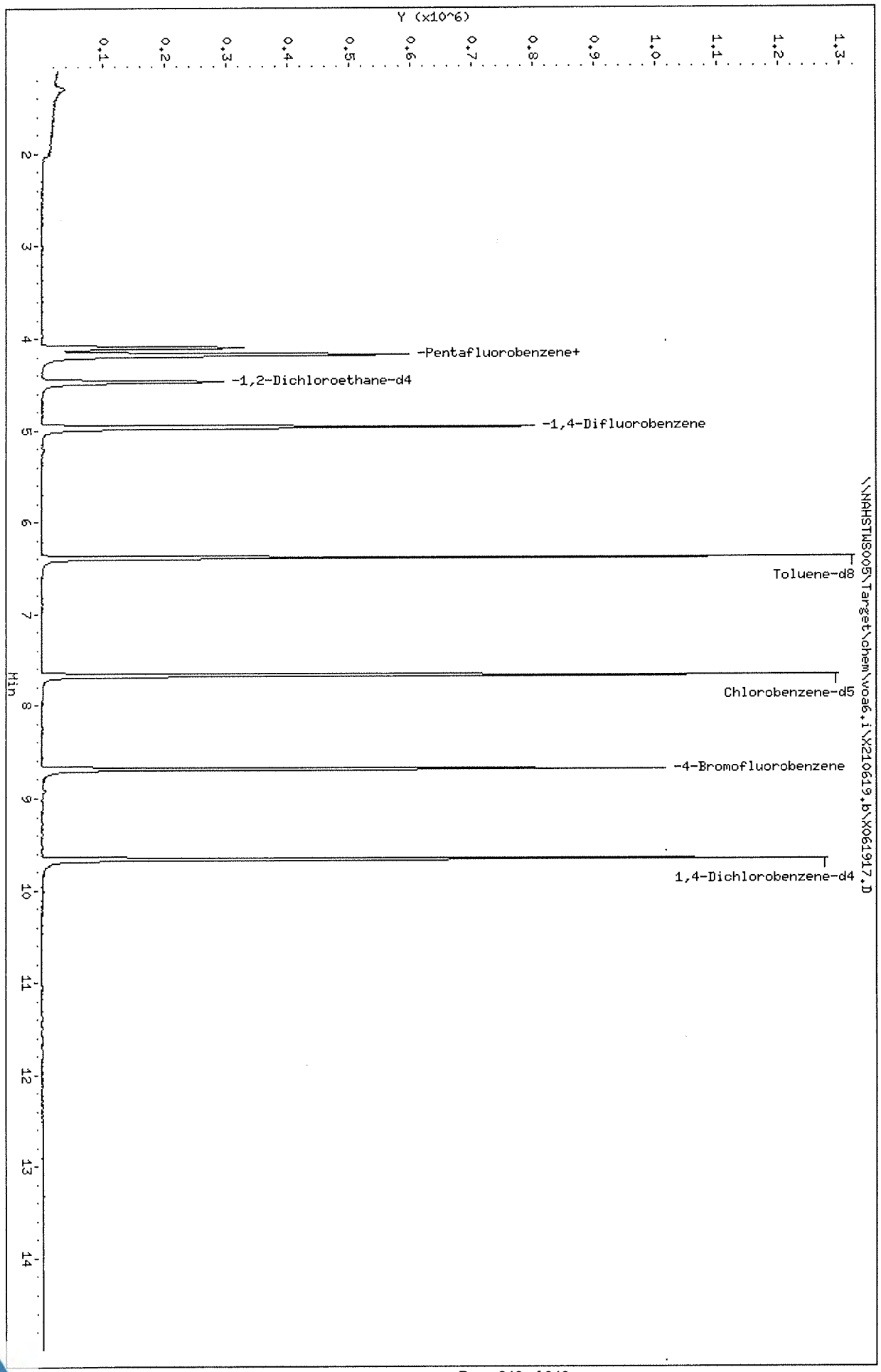
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	536695	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	730129	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	648005	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	328164	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	234970	44.4602	44.46
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	234491	45.6795	45.67
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	821100	50.8693	50.86
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	274814	48.3161	48.31

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061917.D
Date : 19-JUN-2021 16:50
Client ID: HS21060908-09
Sample Info: HS21060908-09;HS21060908-09;;;
Purge Volume: 5.0
Column phase: DB624

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



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061922.D
Lab Smp Id: HS21060908-02 Client Smp ID: HS21060908-02
Inj Date : 19-JUN-2021 18:35
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-02;HS21060908-02;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:34 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

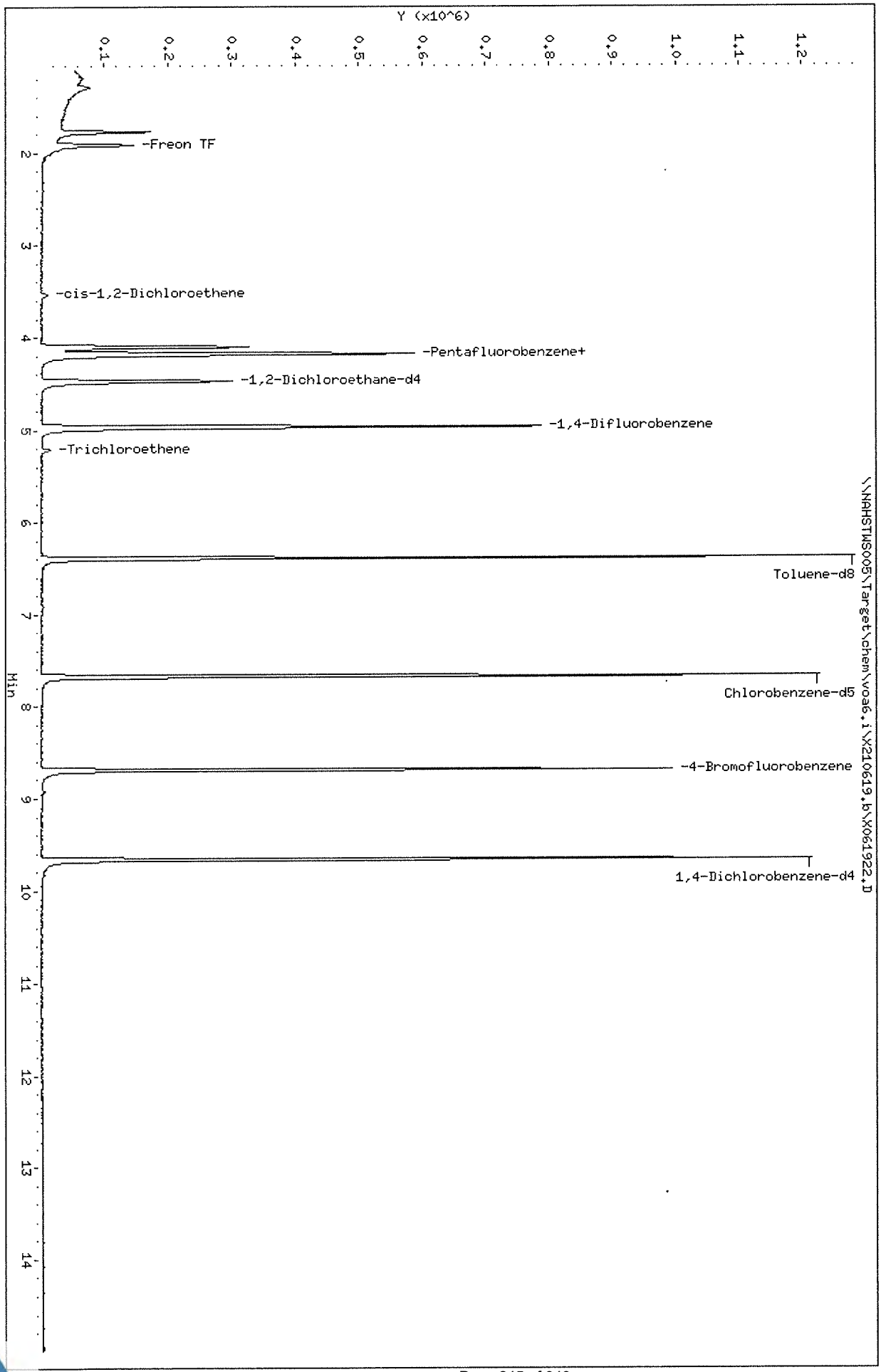
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	531669	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	717289	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	620039	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	313621	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	230804	44.0834	44.08
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	234285	46.0768	46.07
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	806293	52.2050	52.20
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	265461	48.7697	48.76
27 cis-1,2-Dichloroethene	96	3.537	3.523	(0.846)	5702	1.02322	1.02(a)
38 Trichloroethene	130	5.206	5.206	(1.049)	5432	1.10338	1.10(a)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061922.D
Date : 19-JUN-2021 18:35
Client ID: HS21060908-02
Sample Info: HS21060908-02;HS21060908-02;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061922.D

Date : 19-JUN-2021 18:35

Client ID: HS21060908-02

Instrument: voa6.i

Sample Info: HS21060908-02;HS21060908-02;;;

Purge Volume: 5.0

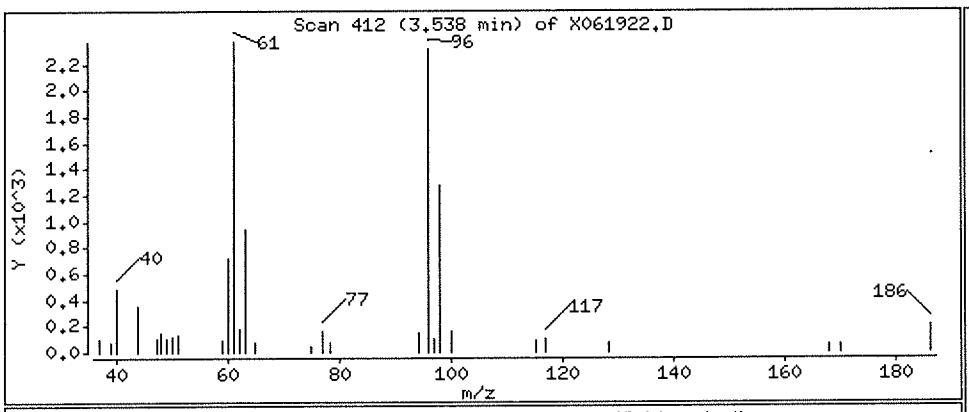
Operator: PC

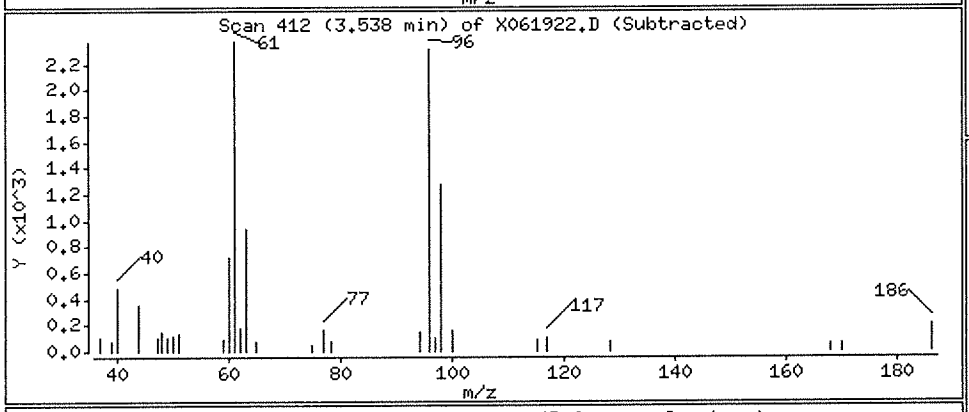
Column phase: DB624

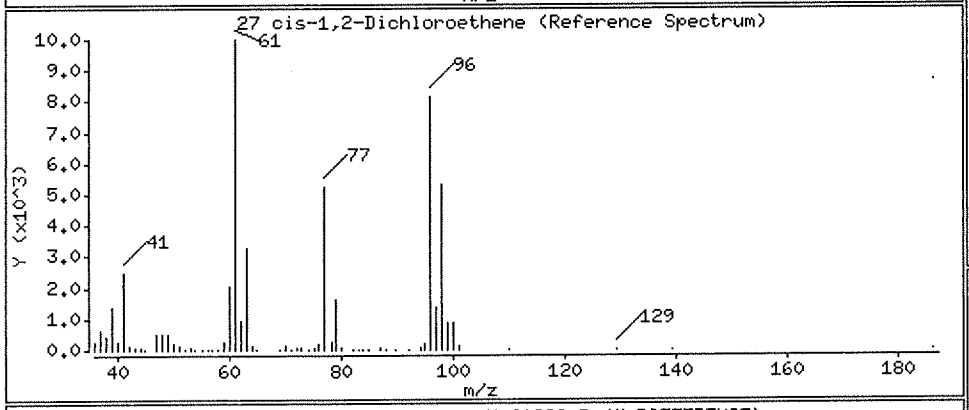
Column diameter: 0.18

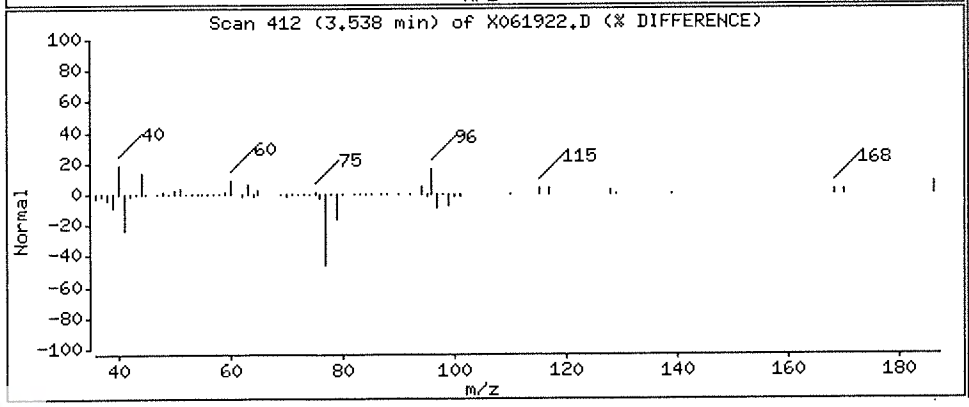
27 cis-1,2-Dichloroethene

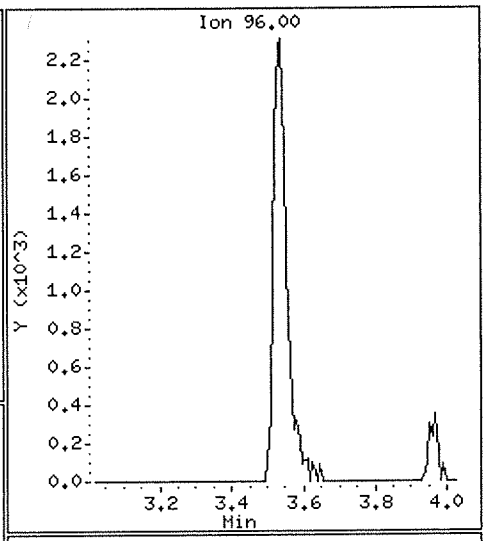
Concentration: 1.02 ug/l

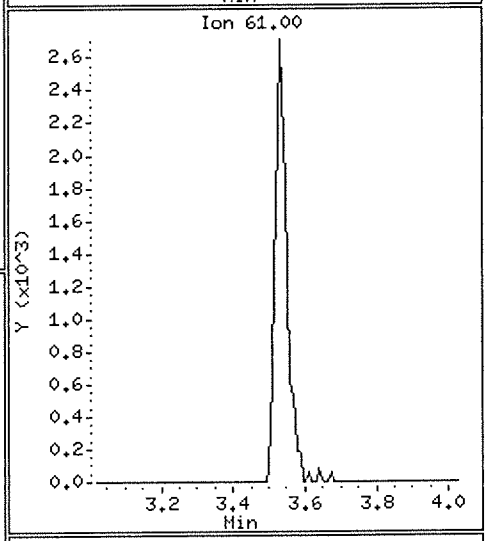


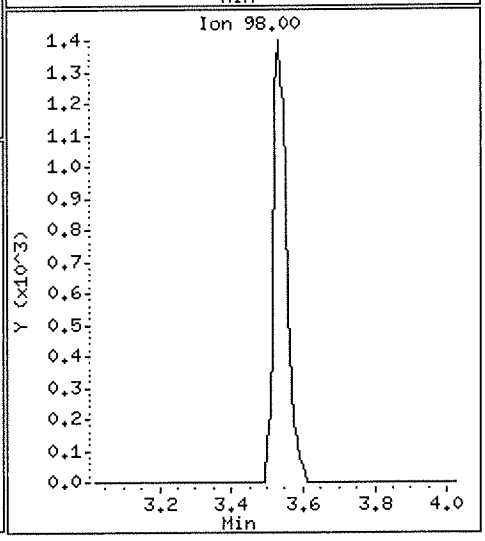












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061922.D

Date : 19-JUN-2021 18:35

Client ID: HS21060908-02

Instrument: voa6.i

Sample Info: HS21060908-02;HS21060908-02;;;

Purge Volume: 5.0

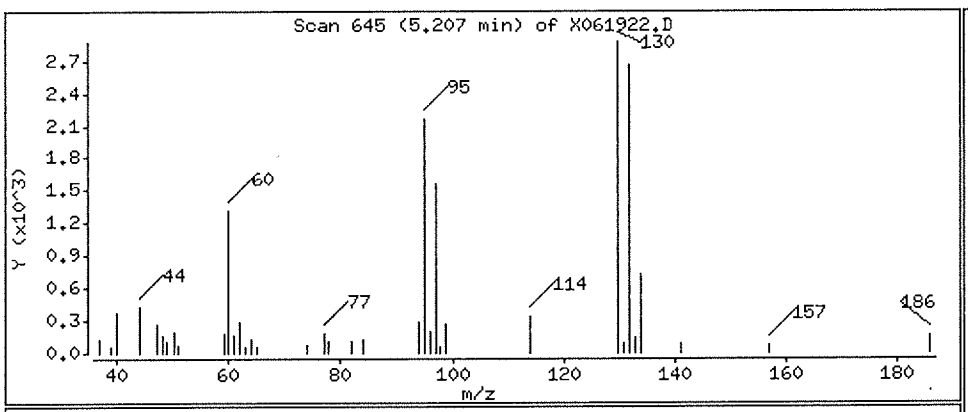
Operator: PC

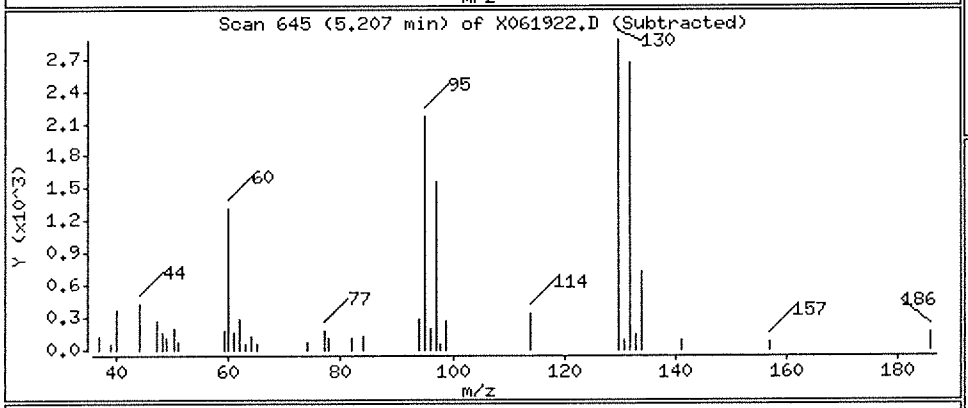
Column phase: DB624

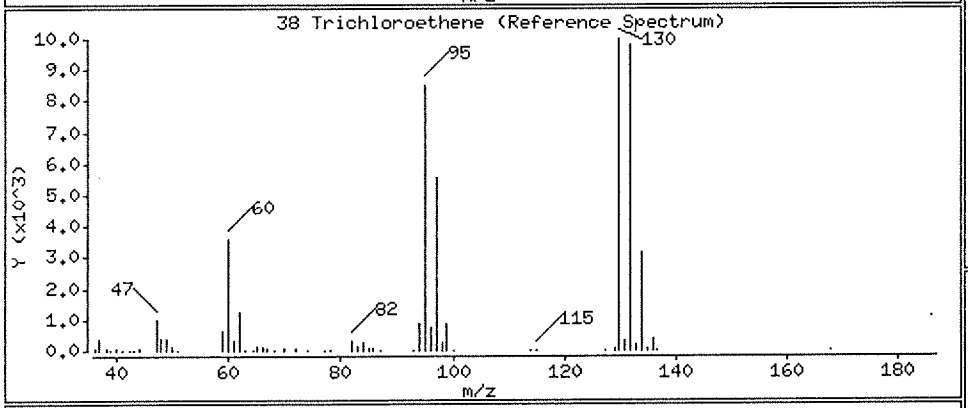
Column diameter: 0.18

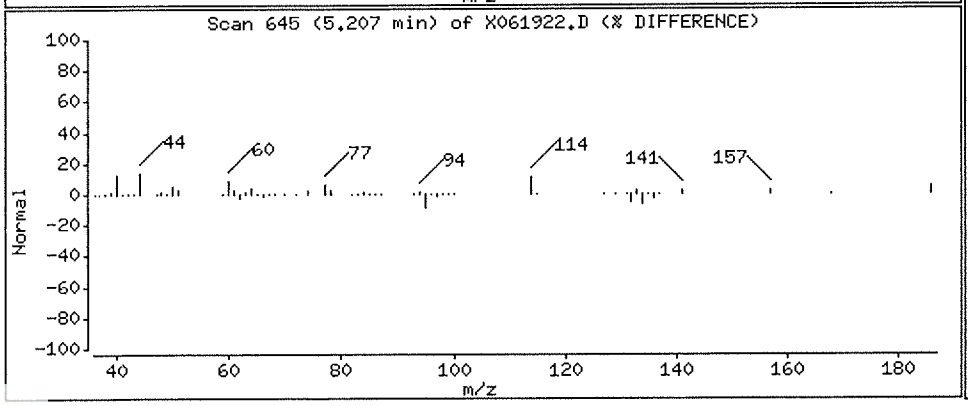
38 Trichloroethene

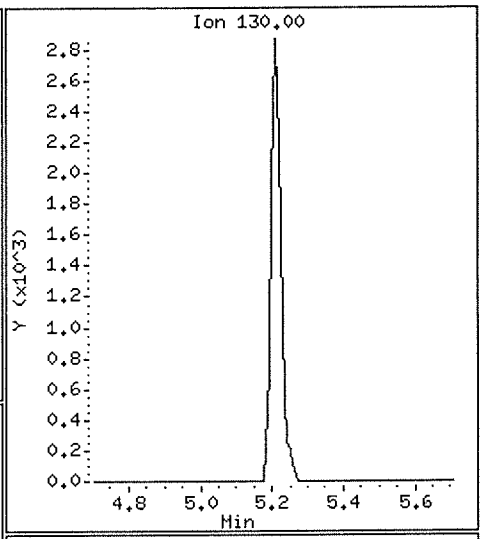
Concentration: 1.10 ug/l

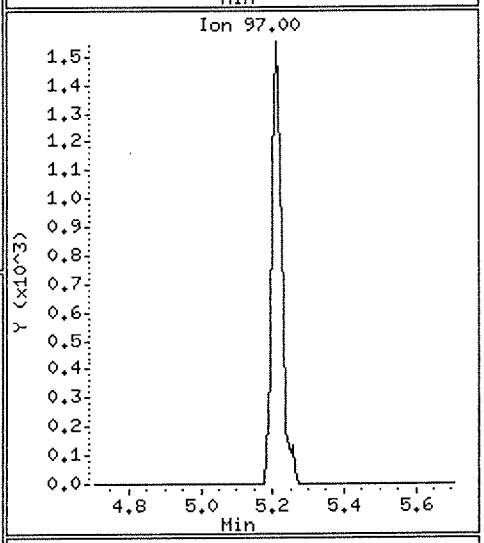


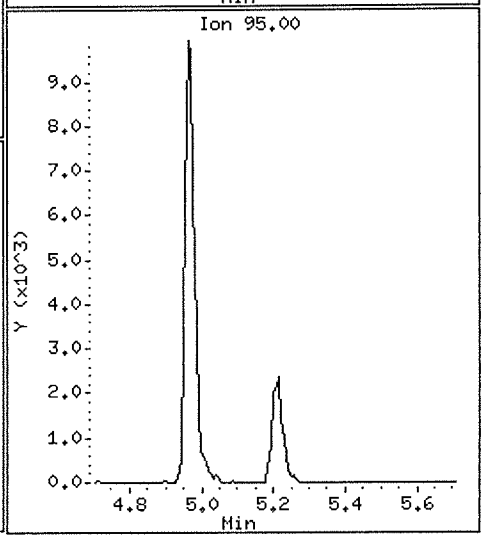












ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061923.D
Lab Smp Id: HS21060908-04 Client Smp ID: HS21060908-04
Inj Date : 19-JUN-2021 18:56
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-04;HS21060908-04;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:34 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	527537	50.0000	
* 36 1,4-Difluorobenzene	114	4.970	4.963	(1.000)	715010	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	632452	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	323742	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	227824	43.8542	43.85
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	231509	45.8846	45.88
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	799724	50.7634	50.76
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	269882	48.6112	48.61

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061923.D

Date : 19-JUN-2021 18:56

Client ID: HS21060908-04

Instrument: voa6.i

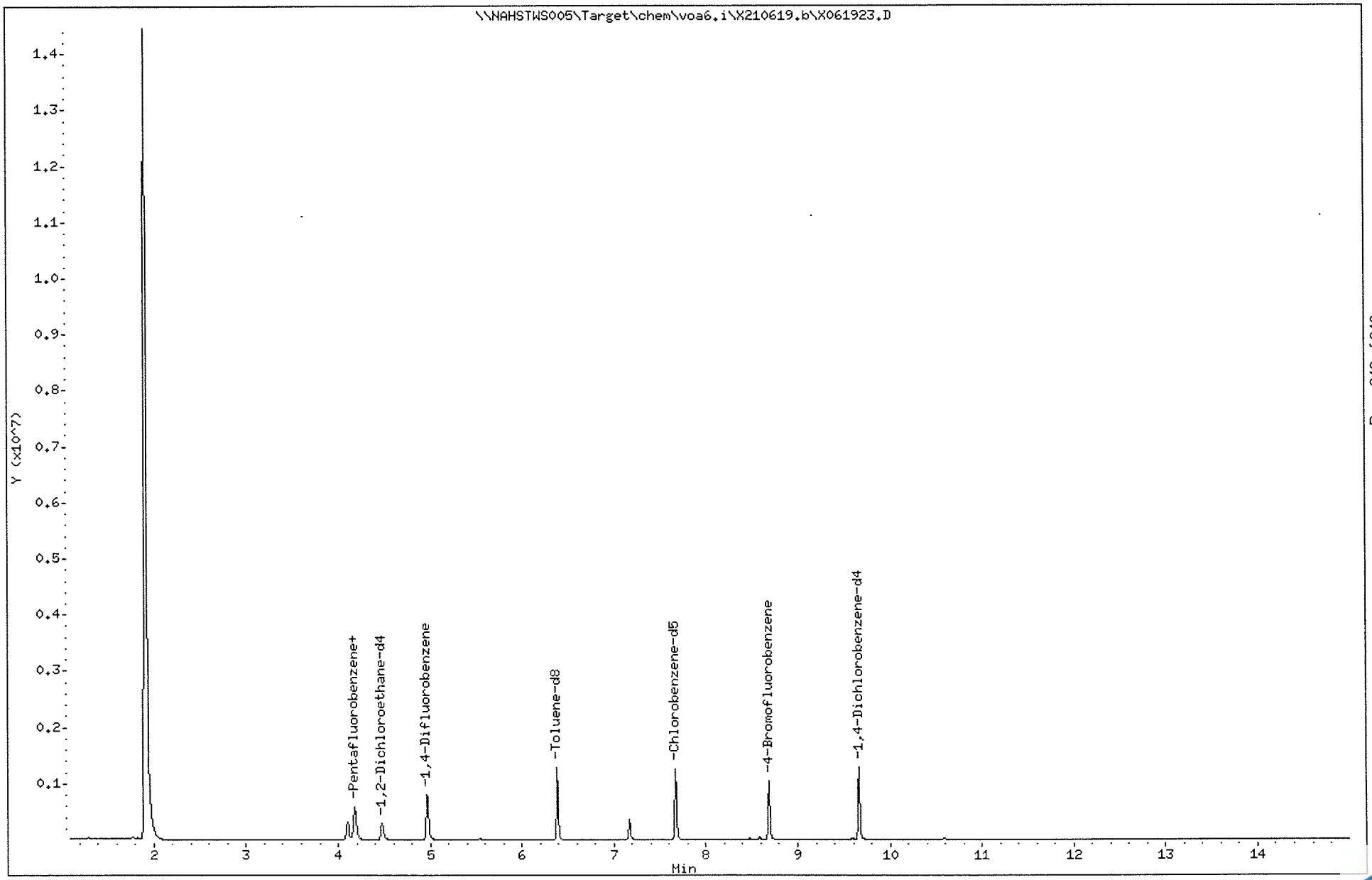
Sample Info: HS21060908-04;HS21060908-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D
Lab Smp Id: HS21060908-06 Client Smp ID: HS21060908-06
Inj Date : 19-JUN-2021 20:42
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-06;HS21060908-06;;;
Misc Info : HS18090001;WATER;0;5;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:34 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 27
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	517068	50.0000	
* 36 1,4-Difluorobenzene	114	4.970	4.963	(1.000)	700805	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.671	(1.000)	603907	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	291030	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	224202	44.0314	44.03
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	224489	45.3867	45.38
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	784207	52.1314	52.13
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	253651	47.8590	47.85
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	3375	1.03167	5.15(a)
33 1,2-Dichloroethane	62	4.555	4.555	(0.916)	17405	3.11703	15.58(a)
28 Chloroform	83	3.910	3.910	(0.935)	9500	1.04477	5.22(a)
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	229185	42.2884	211.44
20 trans-1,2-Dichloroethene	96	2.535	2.528	(0.606)	3201	0.66301	3.31(a)
38 Trichloroethene	130	5.206	5.206	(1.048)	3838026	797.942	3989.71(A)
5 Vinyl Chloride	62	1.145	1.138	(0.274)	15801	2.58161	12.90(a)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D

Date : 19-JUN-2021 20:42

Client ID: HS21060908-06

Instrument: voa6.i

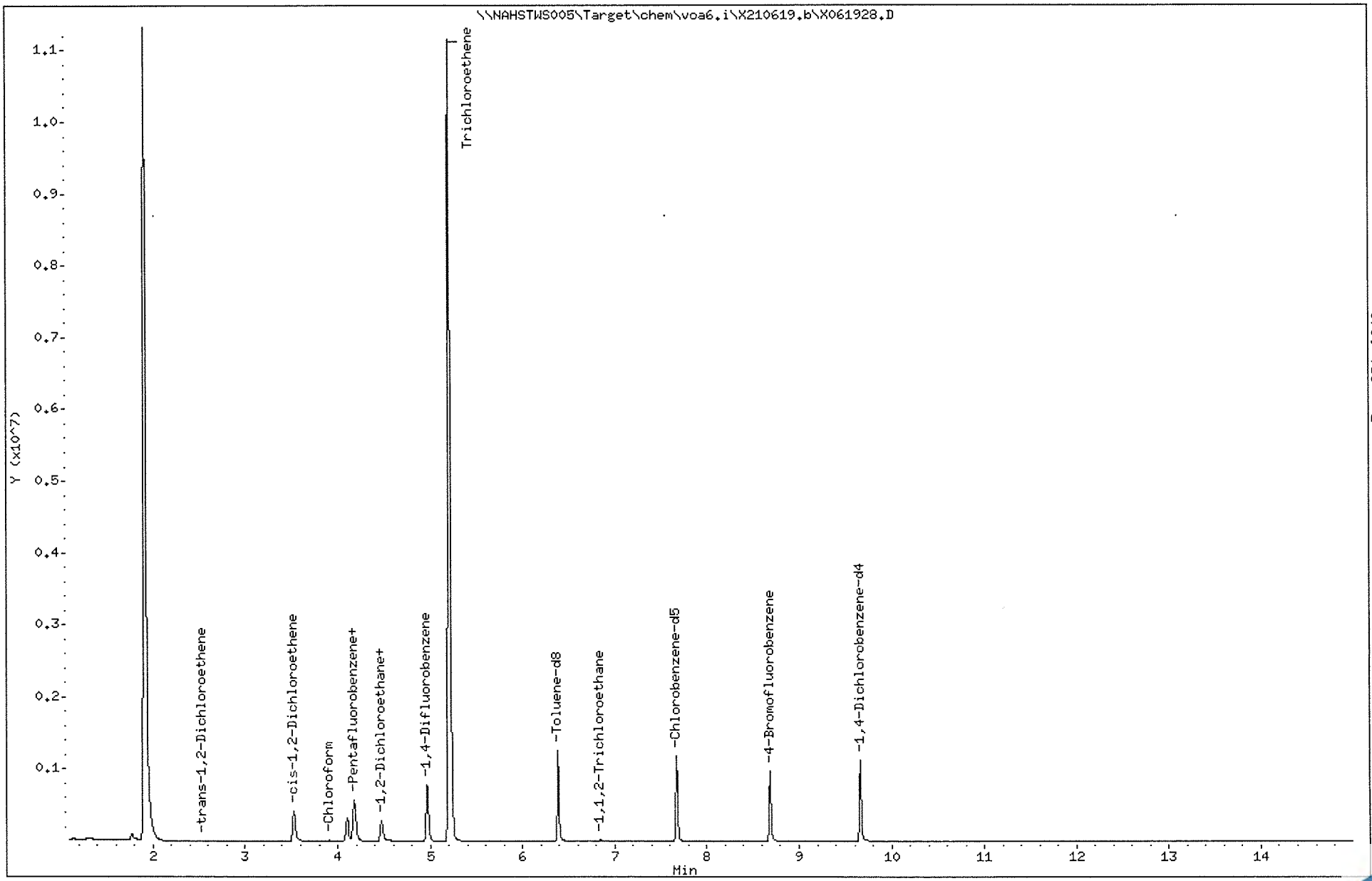
Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D

Date : 19-JUN-2021 20:42

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

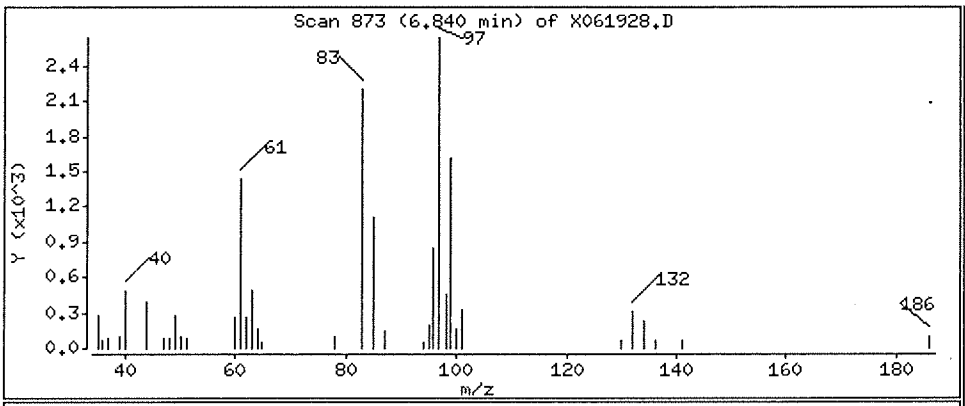
Operator: PC

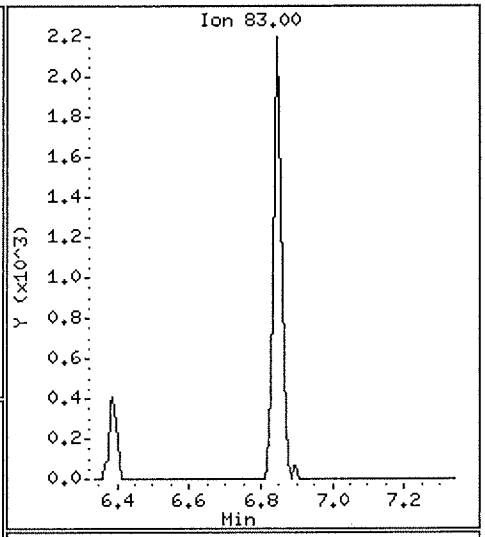
Column phase: DB624

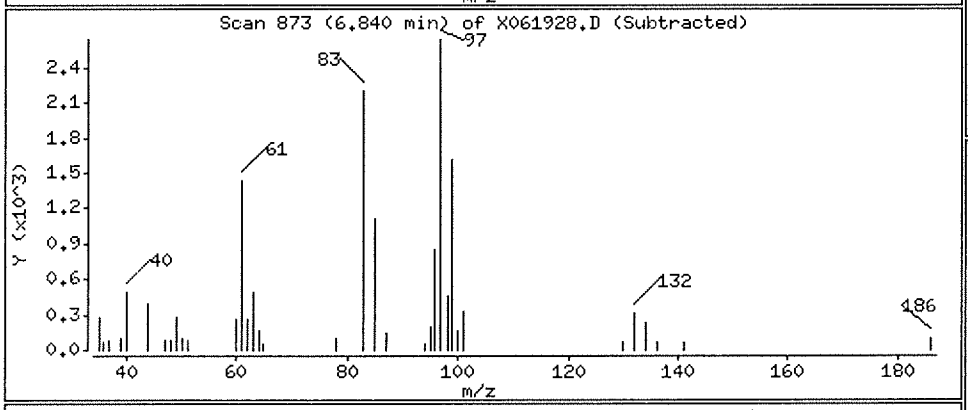
Column diameter: 0.18

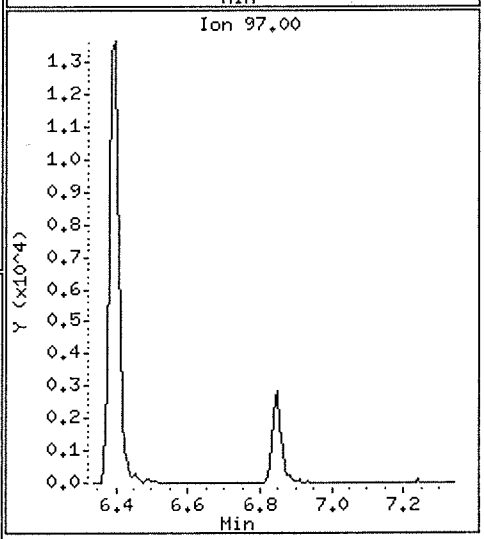
53 1,1,2-Trichloroethane

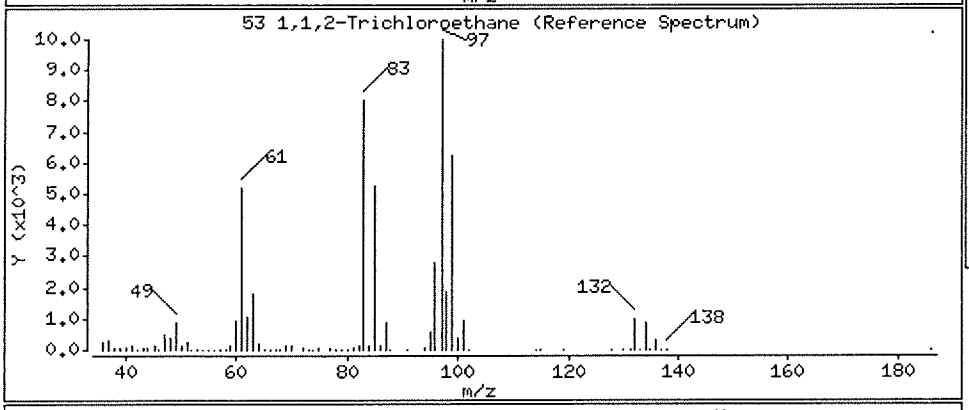
Concentration: 5.15 ug/l

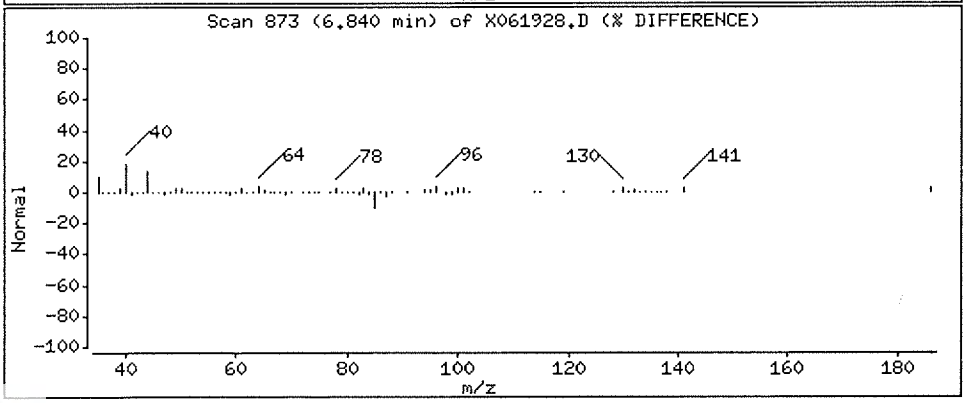












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D

Date : 19-JUN-2021 20:42

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

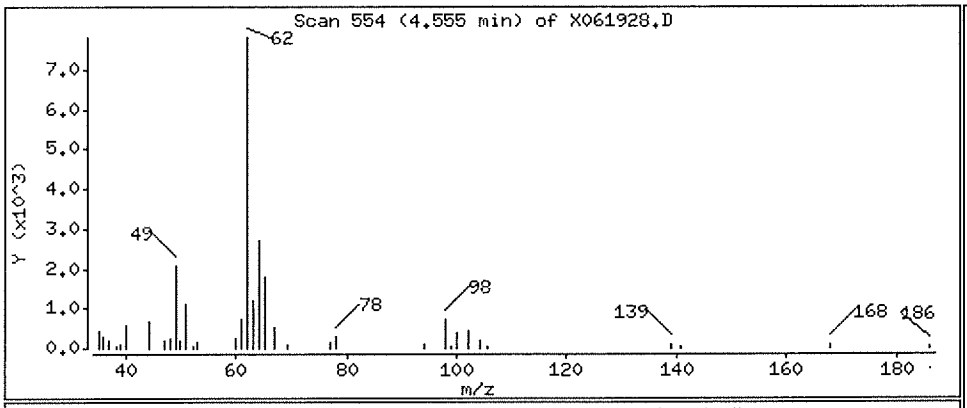
Operator: PC

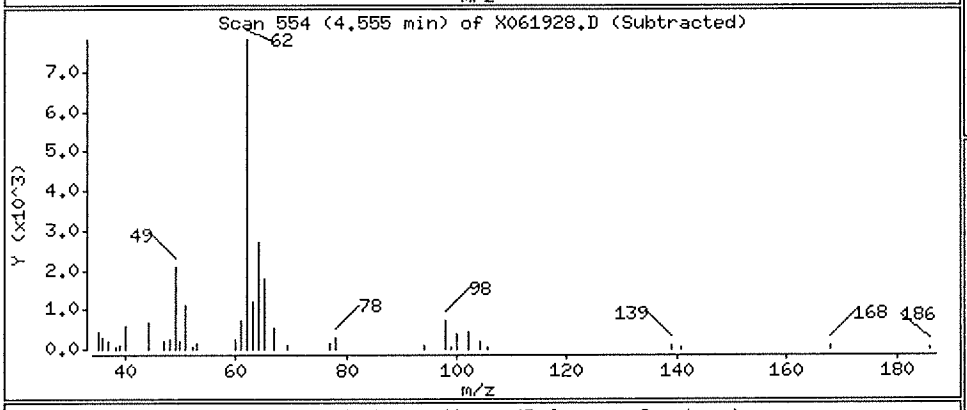
Column phase: DB624

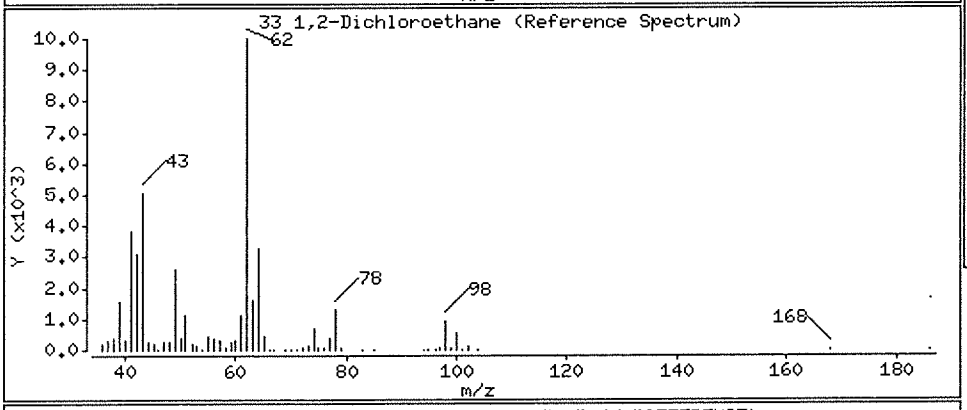
Column diameter: 0.18

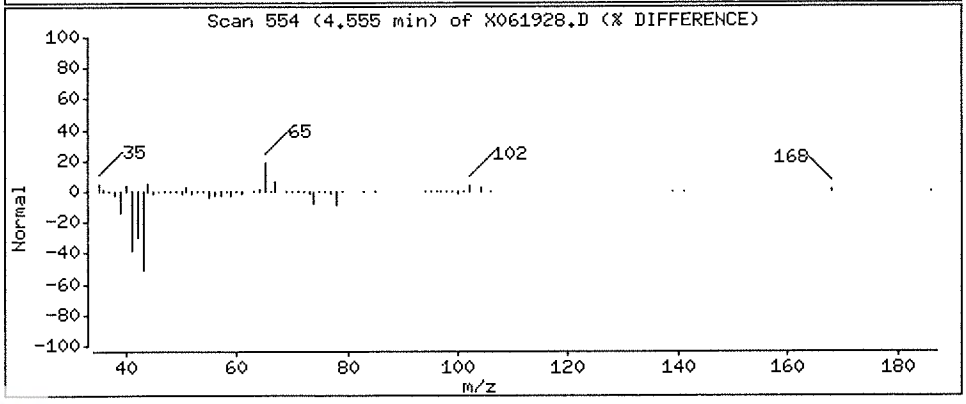
33 1,2-Dichloroethane

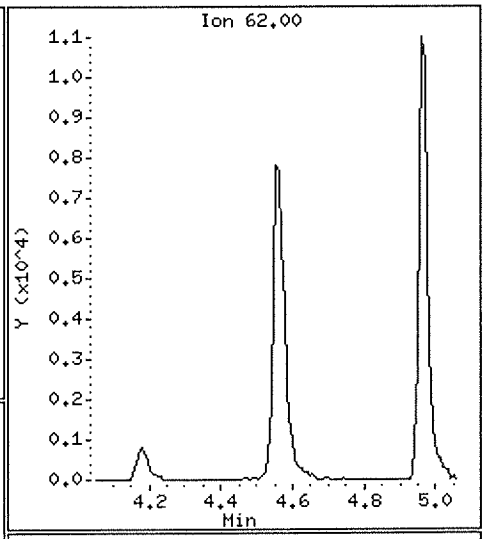
Concentration: 15.58 ug/l

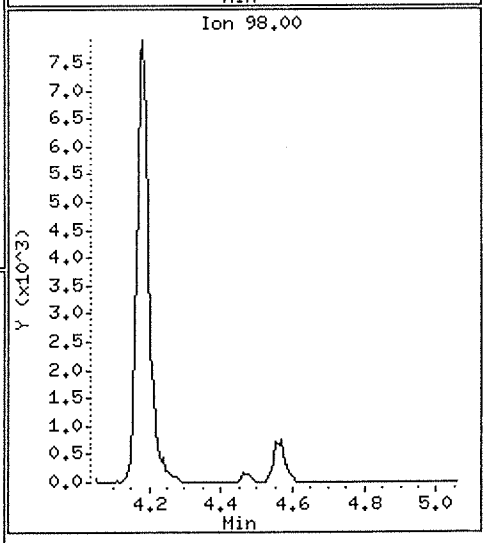












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D

Date : 19-JUN-2021 20:42

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

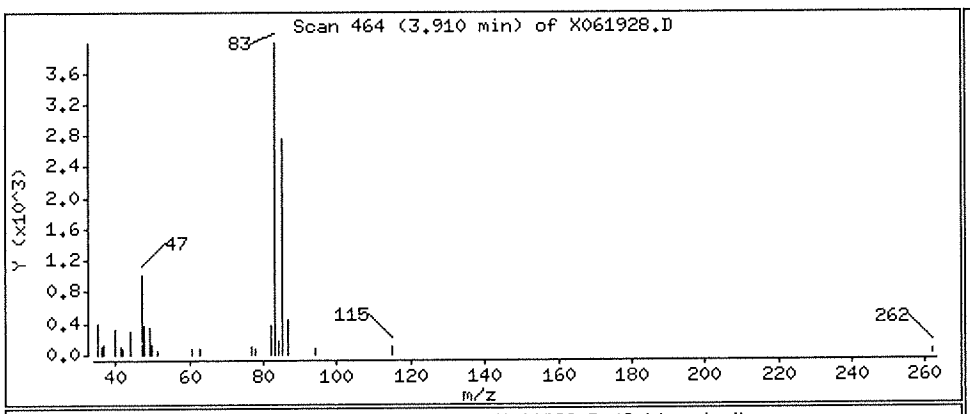
Operator: PC

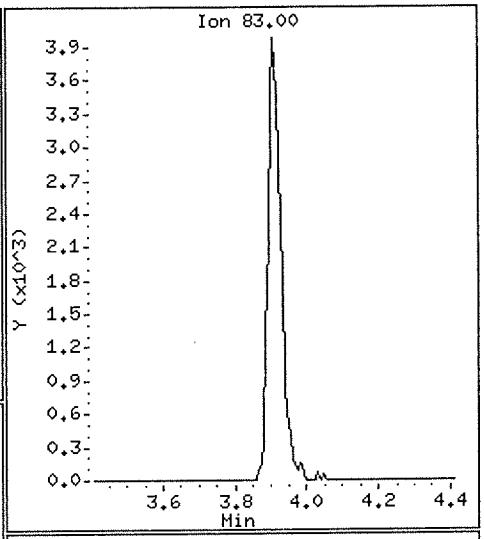
Column phase: DB624

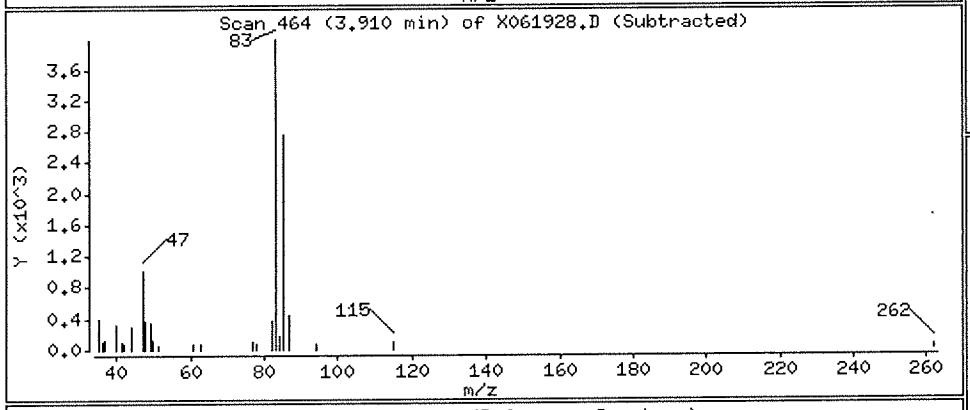
Column diameter: 0.18

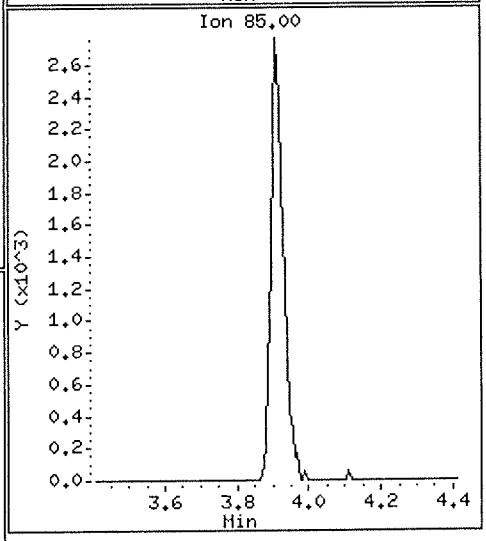
28 Chloroform

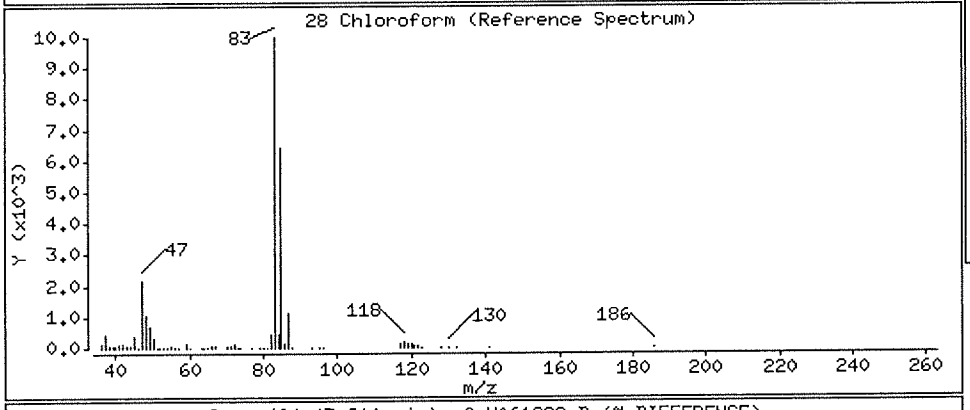
Concentration: 5.22 ug/l

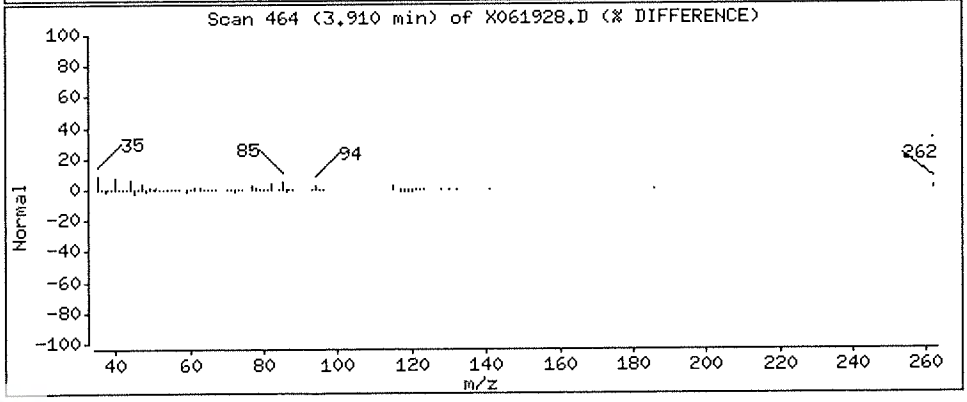












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D

Date : 19-JUN-2021 20:42

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

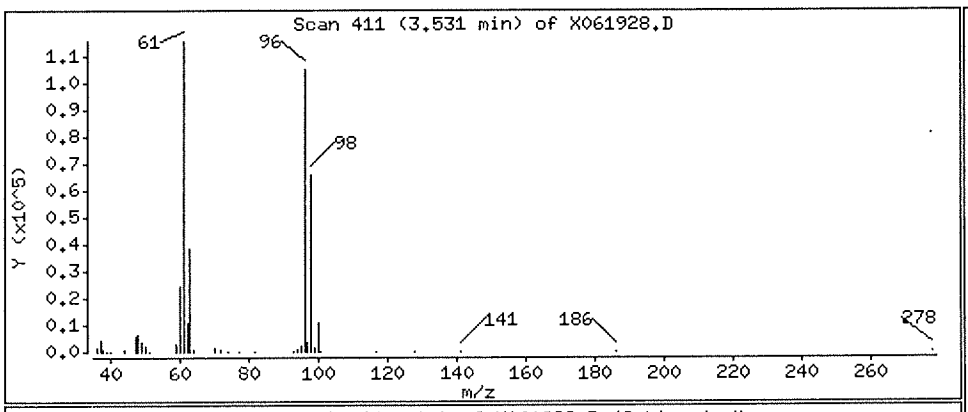
Operator: PC

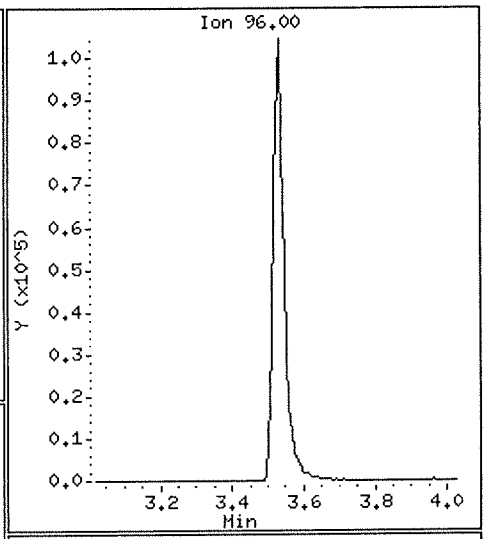
Column phase: DB624

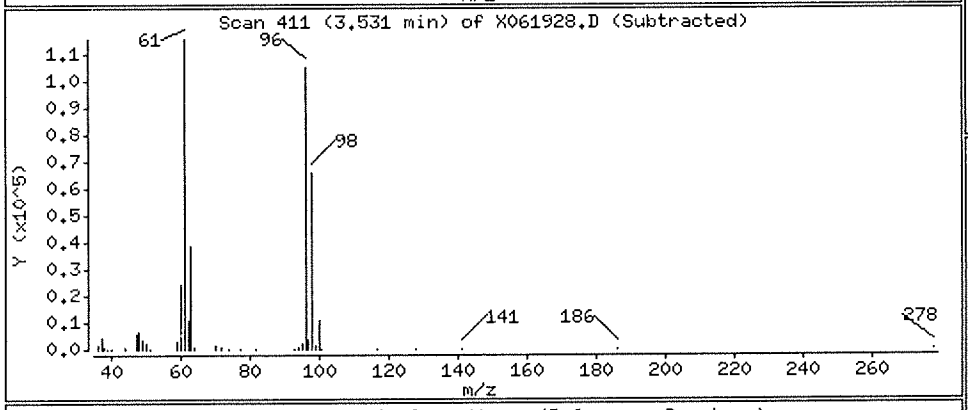
Column diameter: 0.18

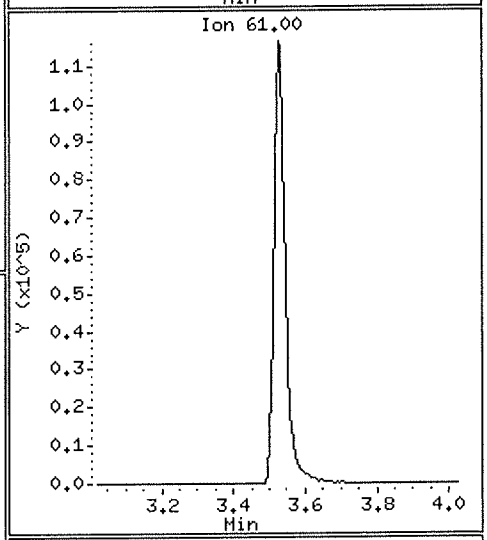
27 cis-1,2-Dichloroethene

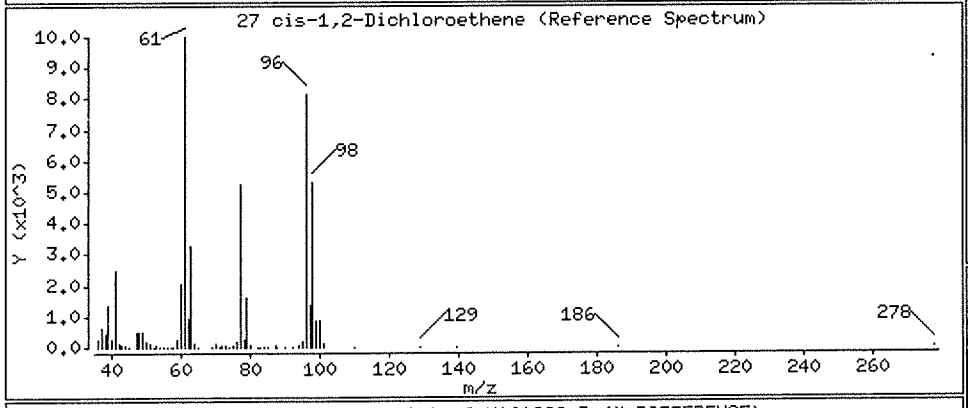
Concentration: 211.44 ug/l

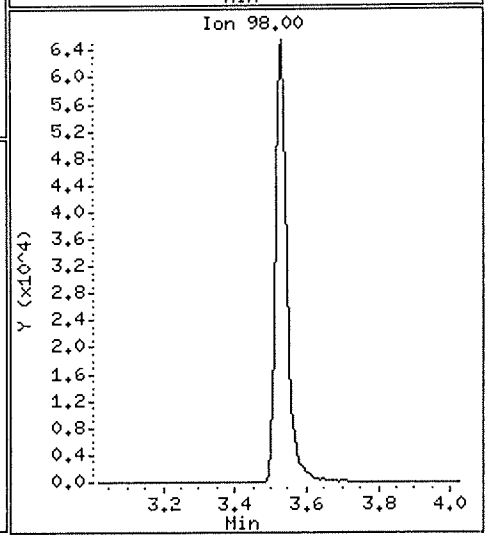


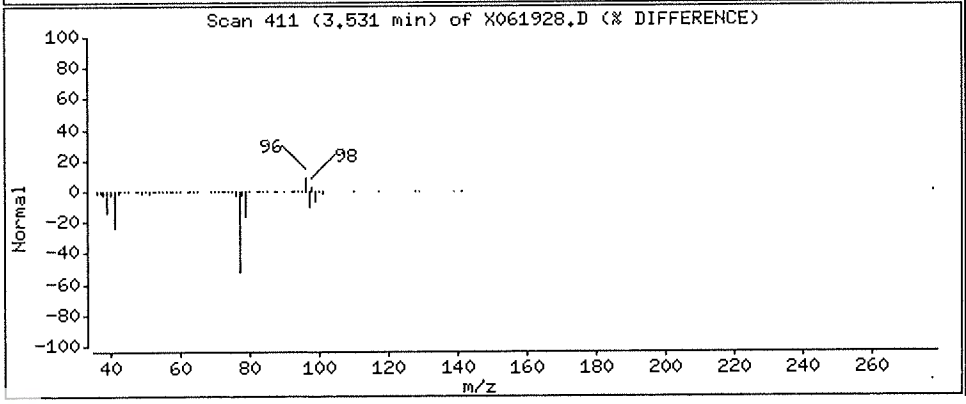












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D

Date : 19-JUN-2021 20:42

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

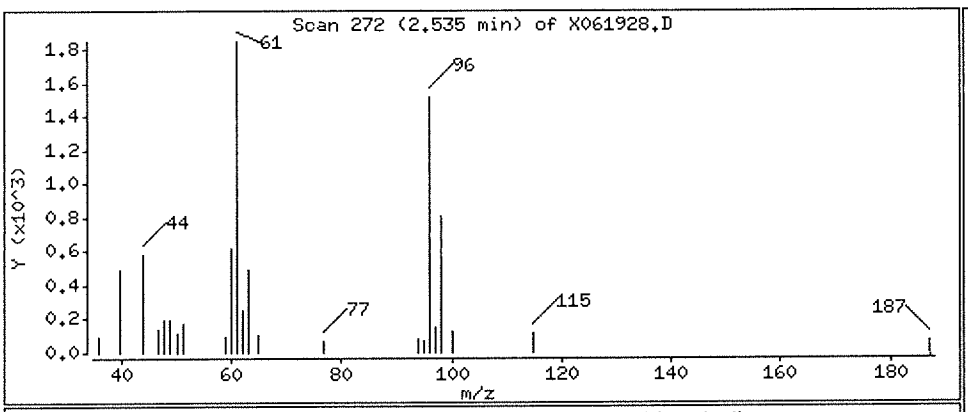
Operator: PC

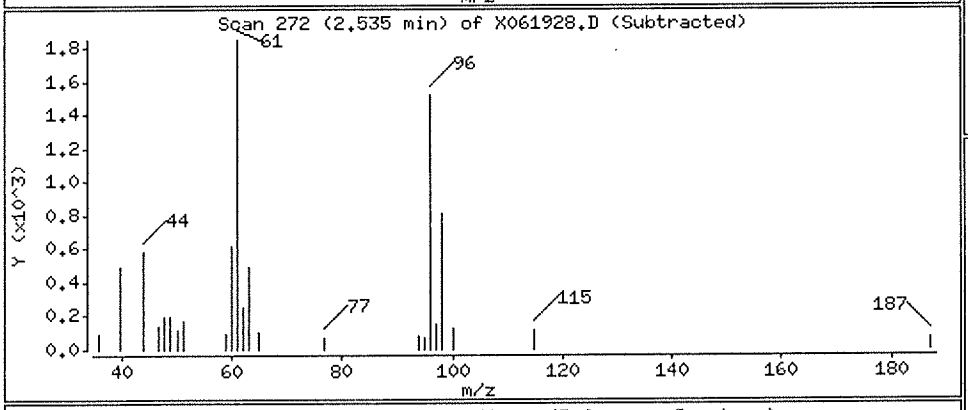
Column phase: DB624

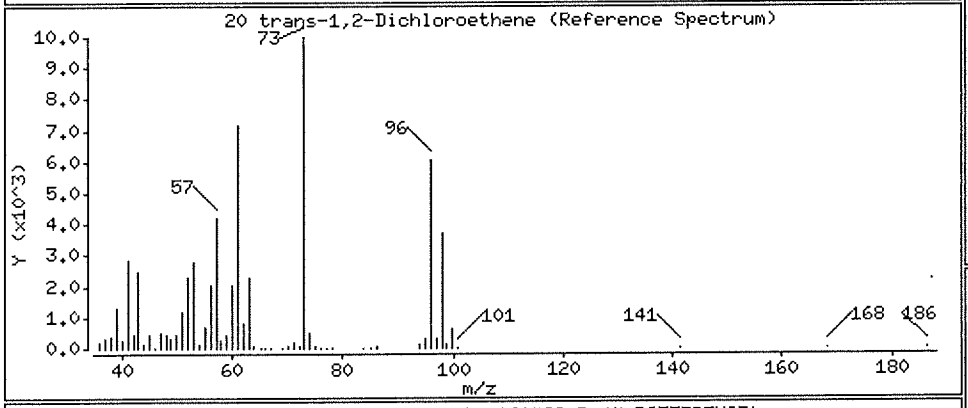
Column diameter: 0.18

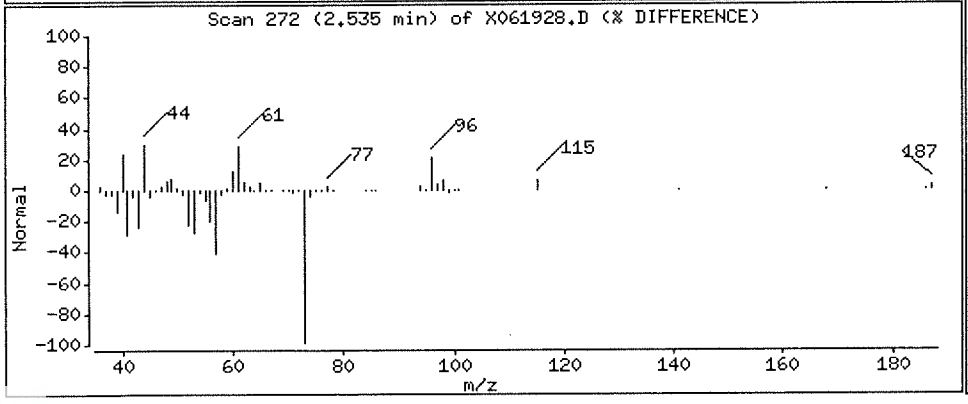
20 trans-1,2-Dichloroethene

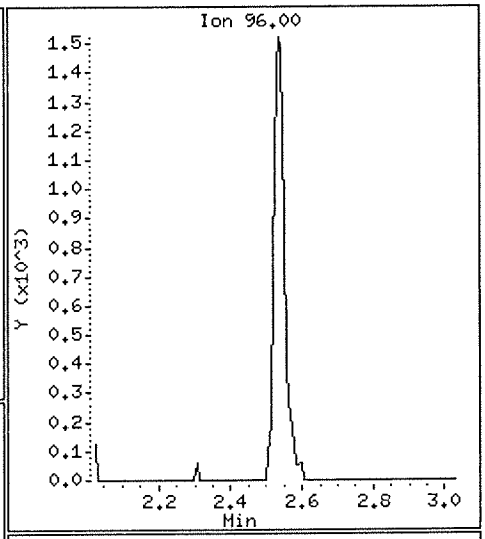
Concentration: 3.31 ug/l

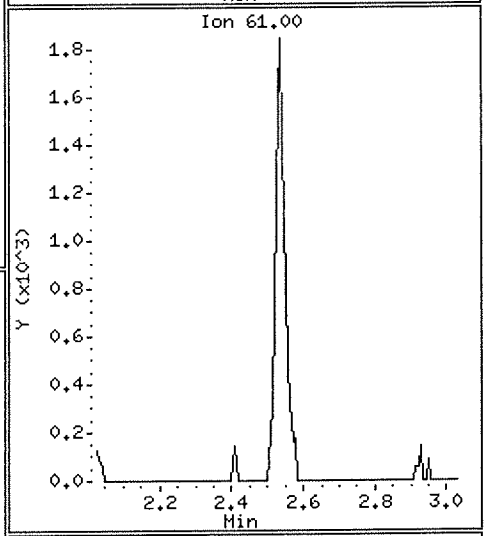


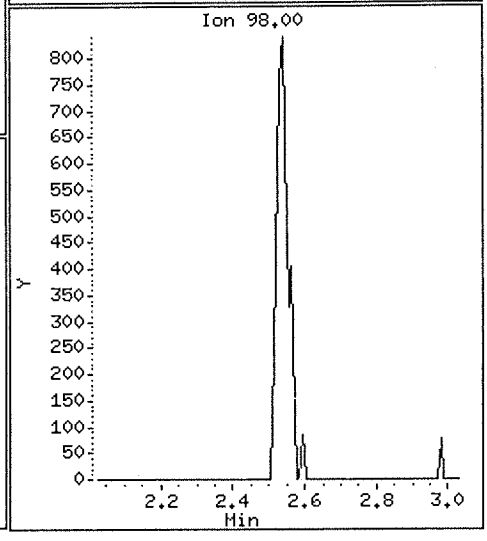












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D

Date : 19-JUN-2021 20:42

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

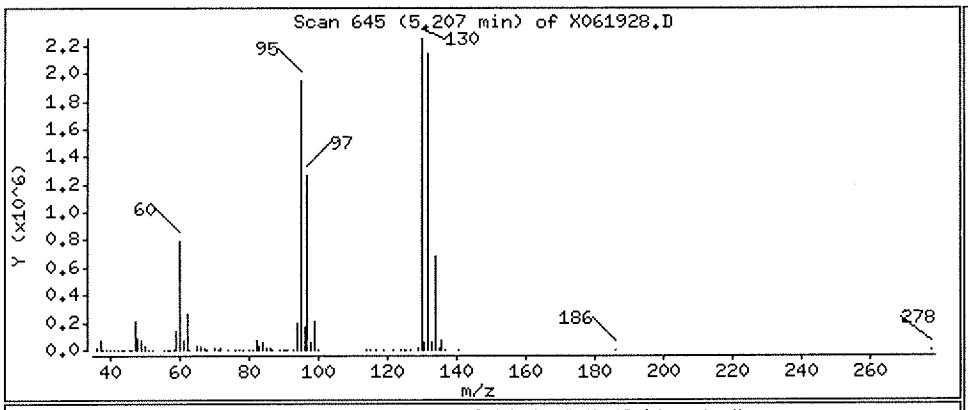
Operator: PC

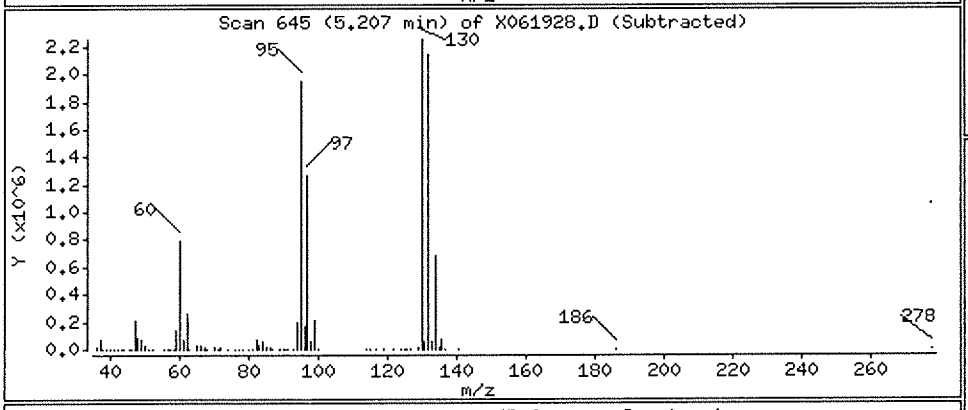
Column phase: DB624

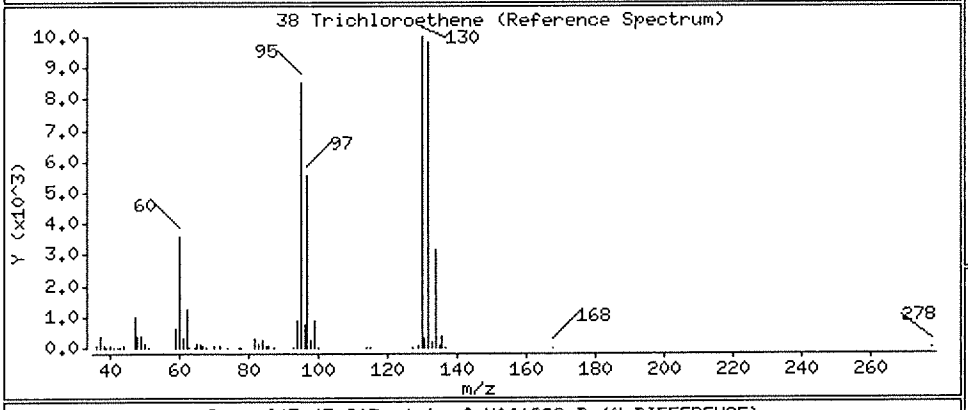
Column diameter: 0.18

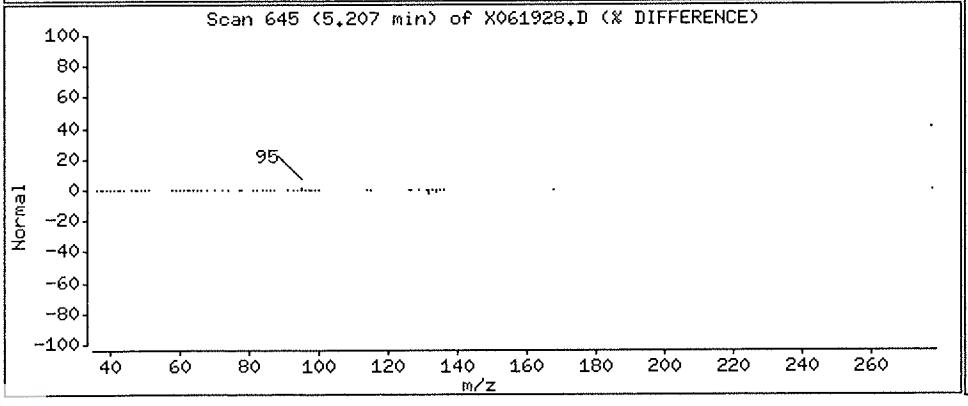
38 Trichloroethene

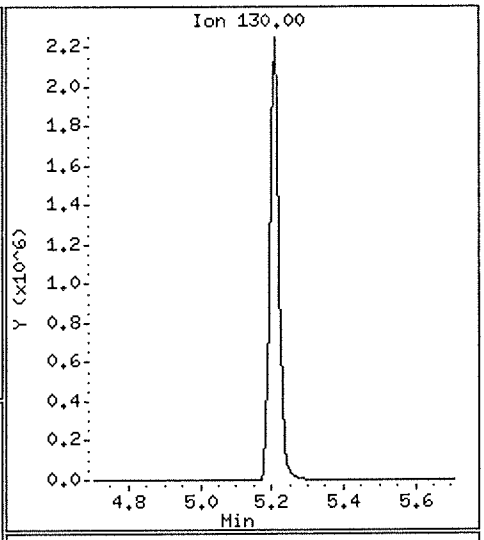
Concentration: 3989.71 ug/l

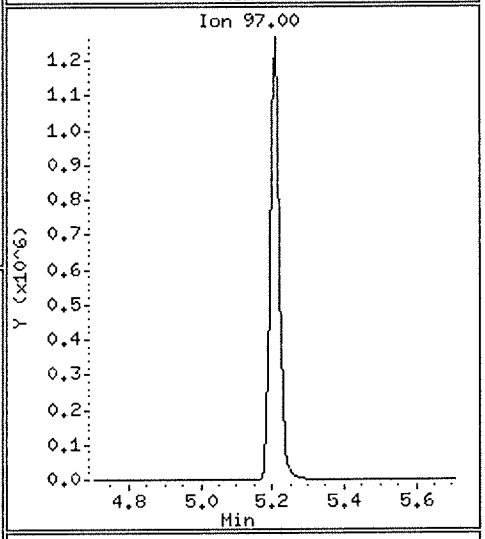


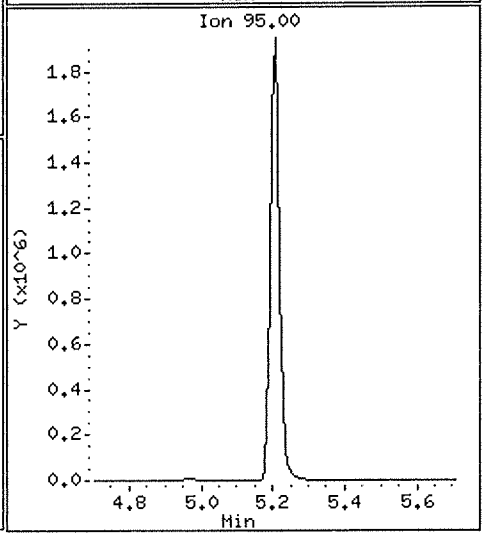












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061928.D

Date : 19-JUN-2021 20:42

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

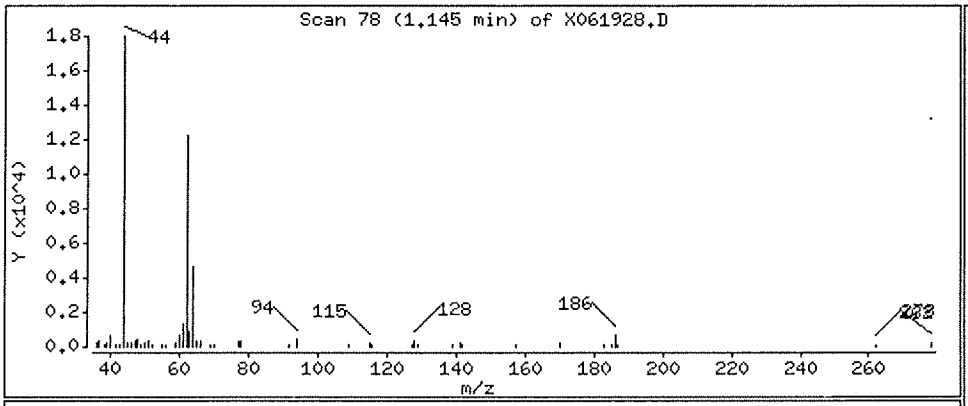
Operator: PC

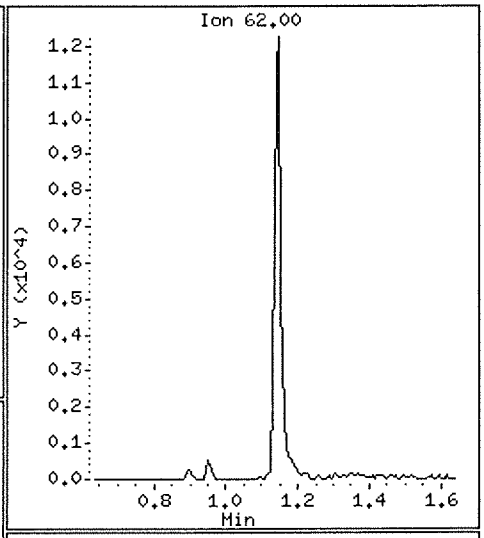
Column phase: DB624

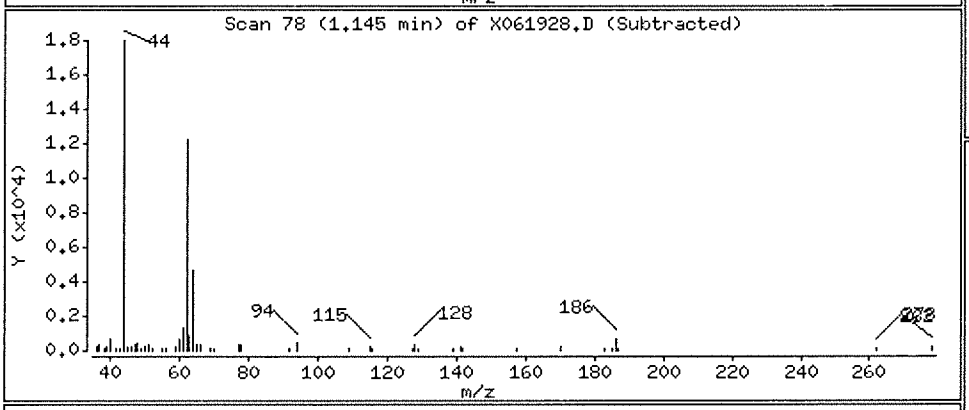
Column diameter: 0.18

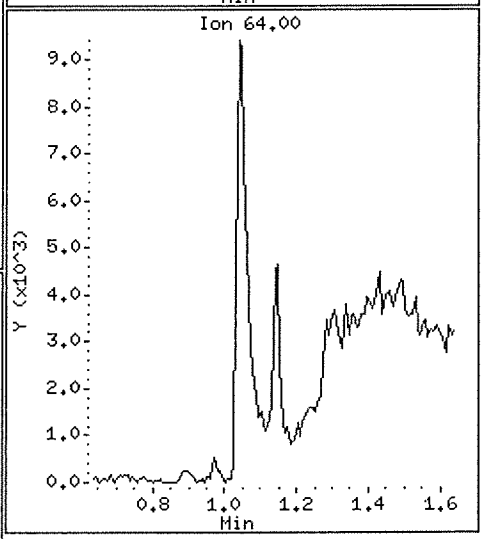
5 Vinyl Chloride

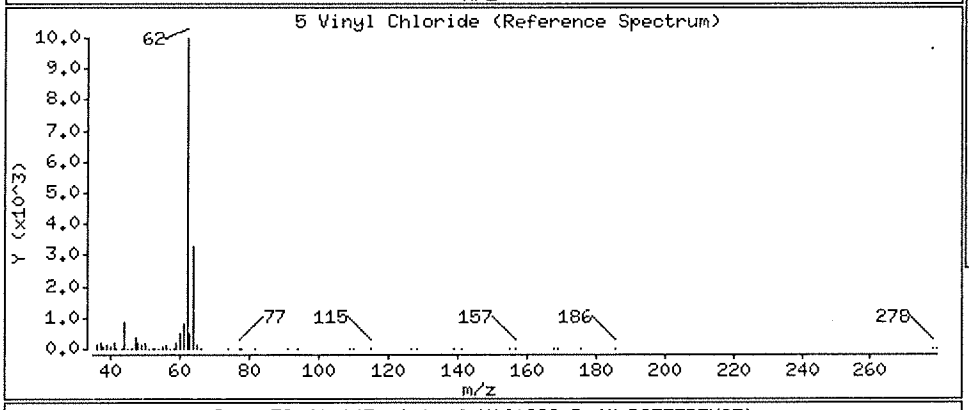
Concentration: 12.90 ug/l

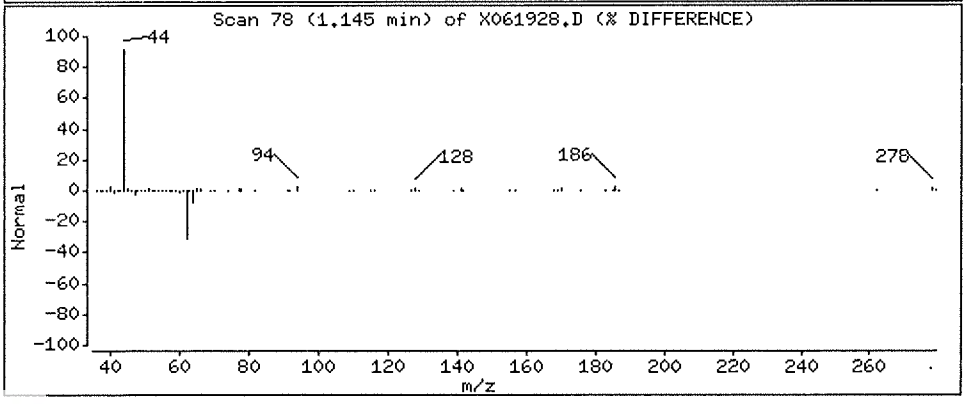












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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061929.D
Lab Smp Id: HS21060908-06 Client Smp ID: HS21060908-06
Inj Date : 19-JUN-2021 21:03
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-06;HS21060908-06;;;
Misc Info : HS18090001;WATER;0;50;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:34 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 28
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

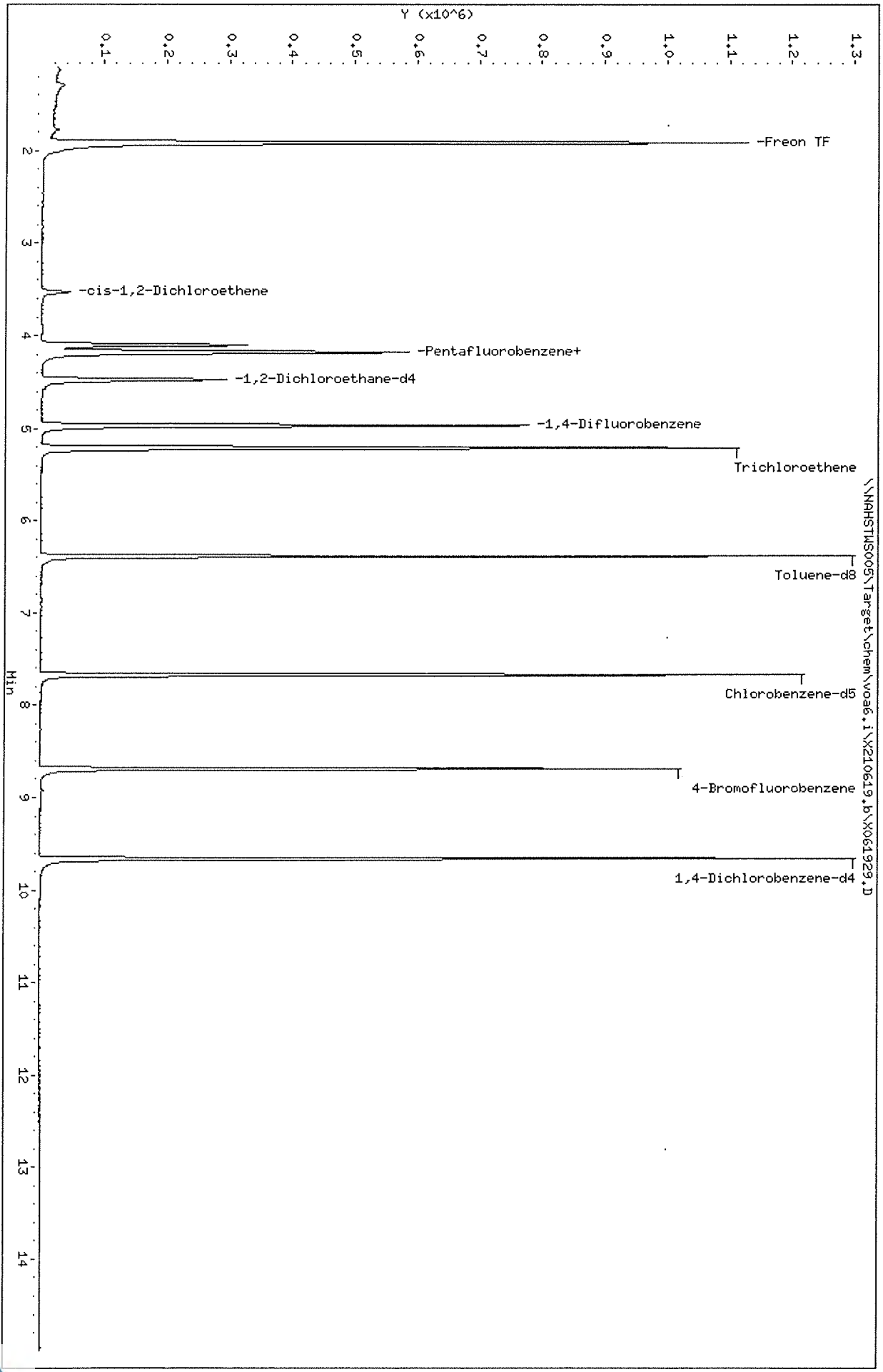
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	519396	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	714522	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	635635	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	329529	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	227760	44.5316	44.53
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	229778	46.2609	46.26
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	804420	50.8058	50.80
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	274479	49.1827	49.18
27 cis-1,2-Dichloroethene	96	3.530	3.523	(0.844)	25516	4.68702	234.35(a)
38 Trichloroethene	130	5.207	5.206	(1.049)	381651	77.8236	3891.18

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061929.D
Date : 19-JUN-2021 21:03
Client ID: HS21060908-06
Sample Info: HS21060908-06;HS21060908-06;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061929.D

Date : 19-JUN-2021 21:03

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

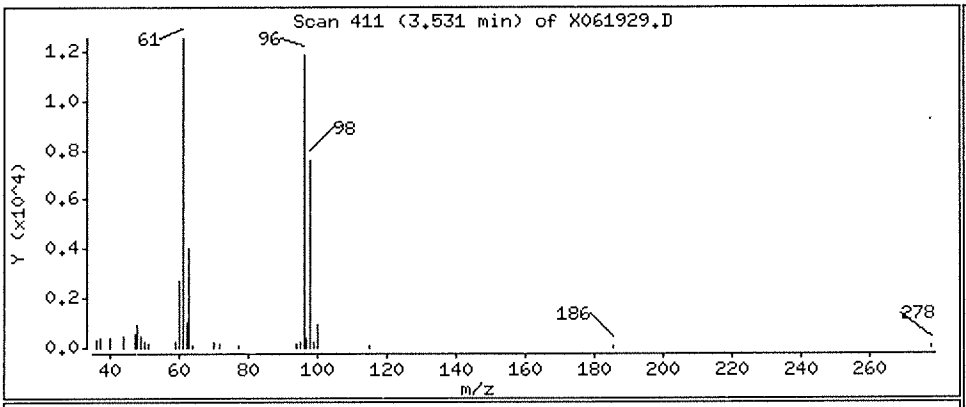
Operator: PC

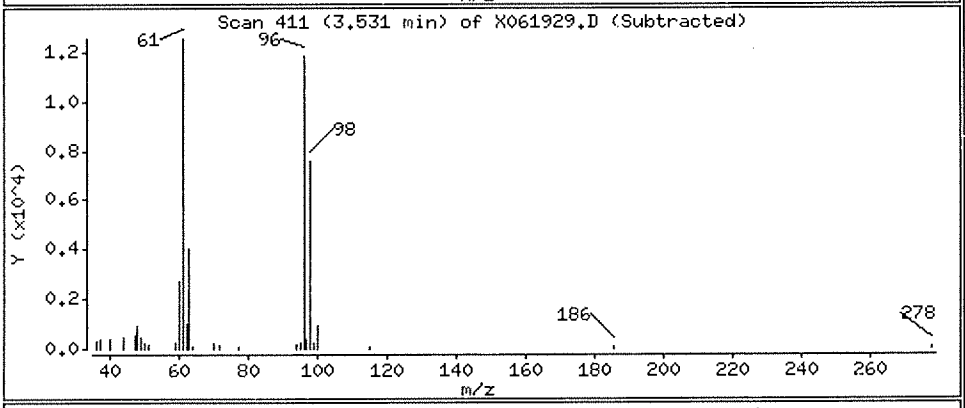
Column phase: DB624

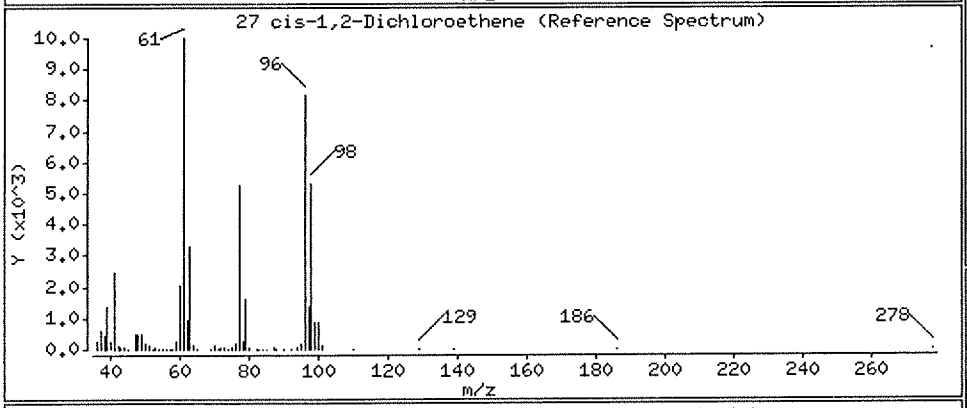
Column diameter: 0.18

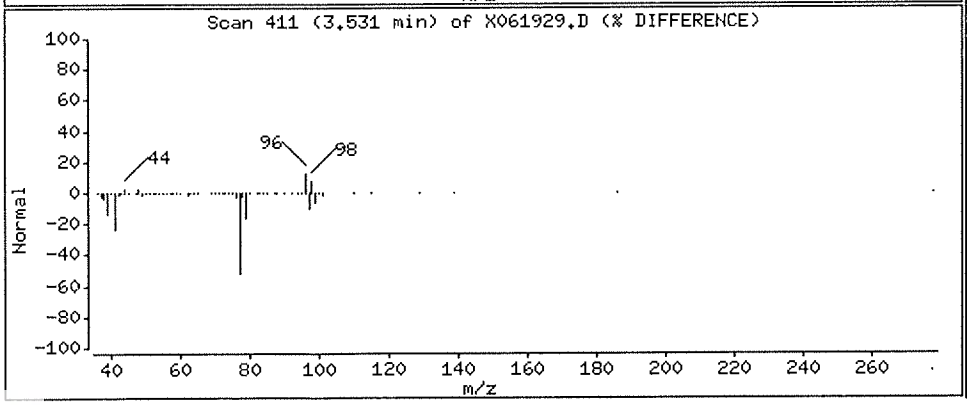
27 cis-1,2-Dichloroethene

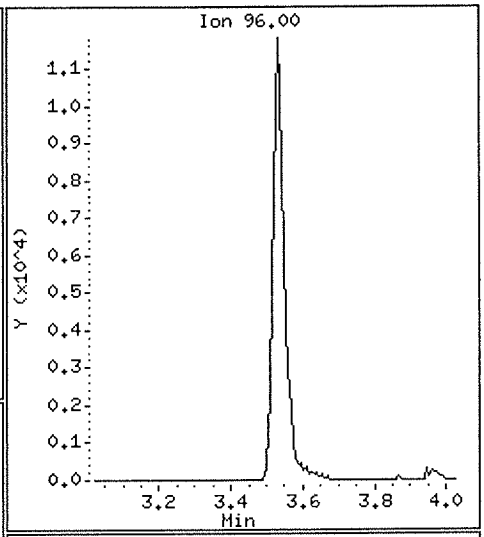
Concentration: 234.35 ug/l

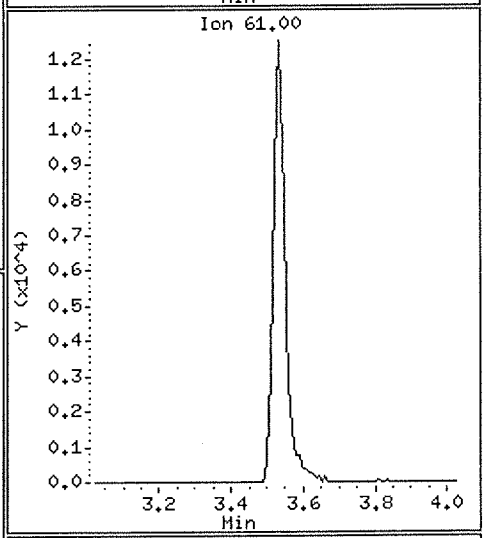


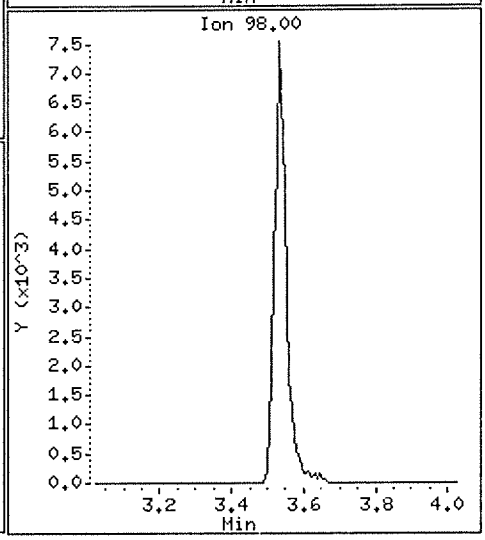












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061929.D

Date : 19-JUN-2021 21:03

Client ID: HS21060908-06

Instrument: voa6.i

Sample Info: HS21060908-06;HS21060908-06;;;

Purge Volume: 5.0

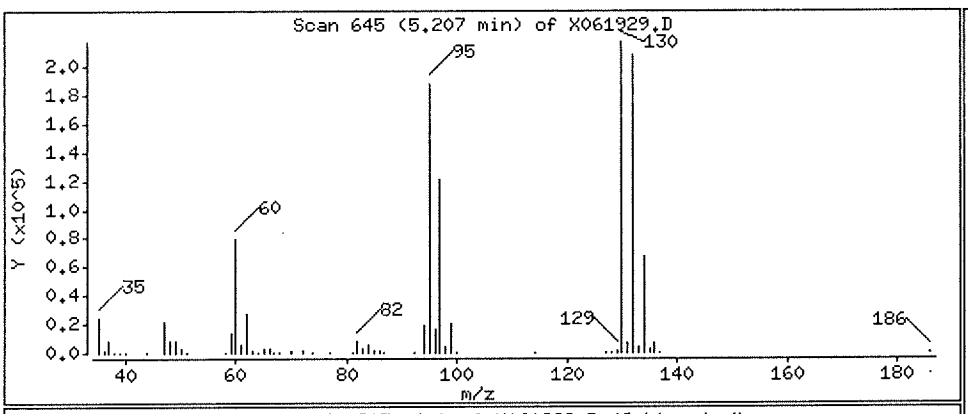
Operator: PC

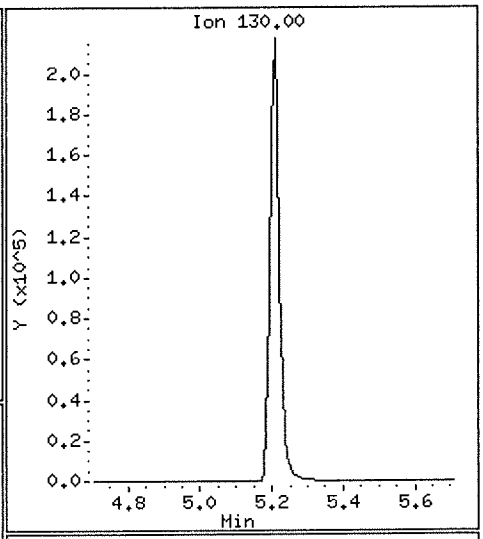
Column phase: DB624

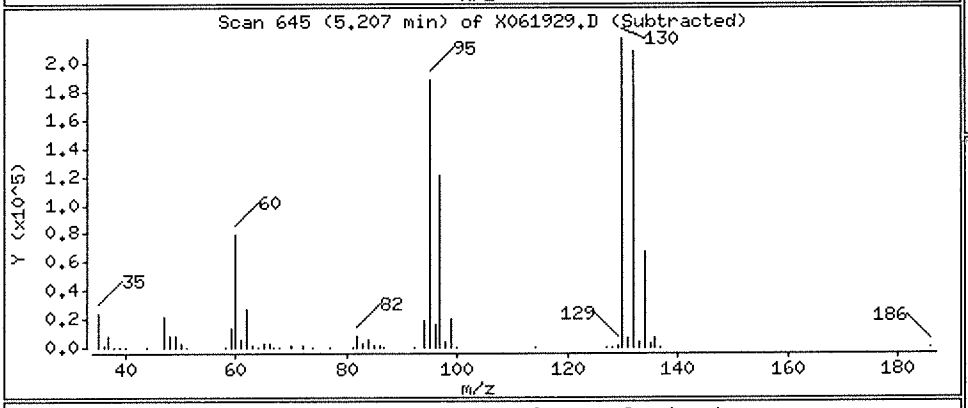
Column diameter: 0.18

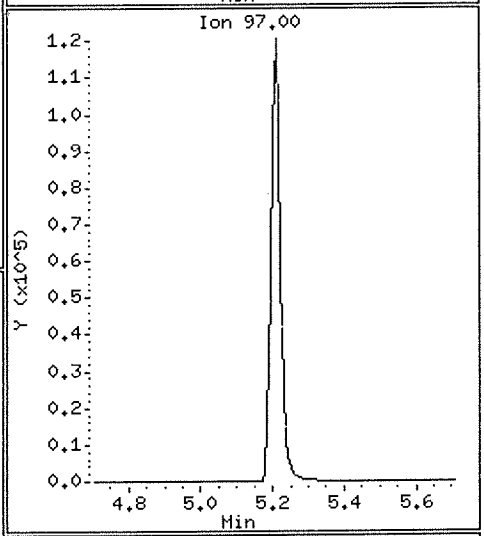
38 Trichloroethene

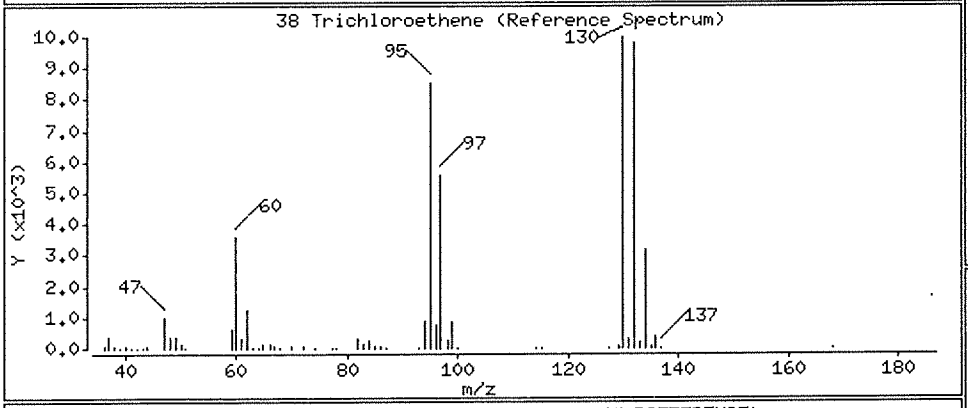
Concentration: 3891.18 ug/l

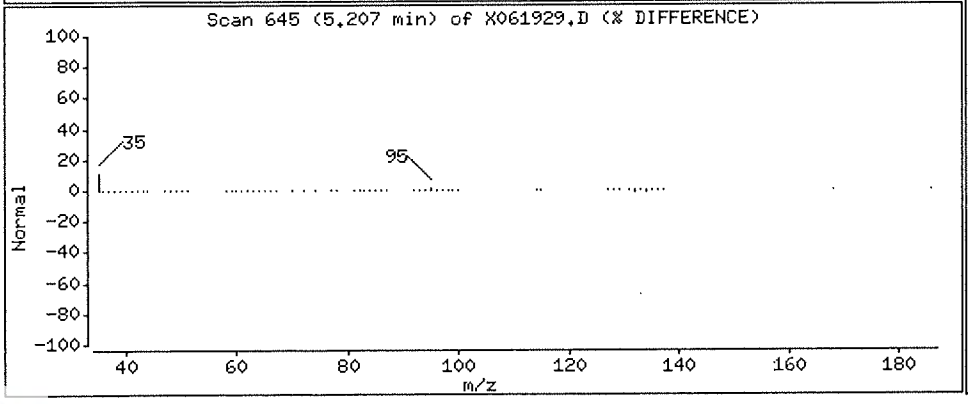


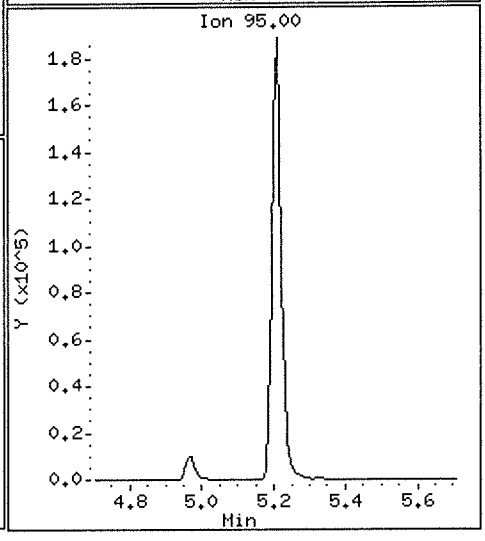












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061931.D Page 1
Report Date: 26-Aug-2021 16:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061931.D
Lab Smp Id: HS21060908-01 Client Smp ID: HS21060908-01
Inj Date : 19-JUN-2021 21:45
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-01;HS21060908-01;;;
Misc Info : HS18090001;WATER;0;100;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:34 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 30
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

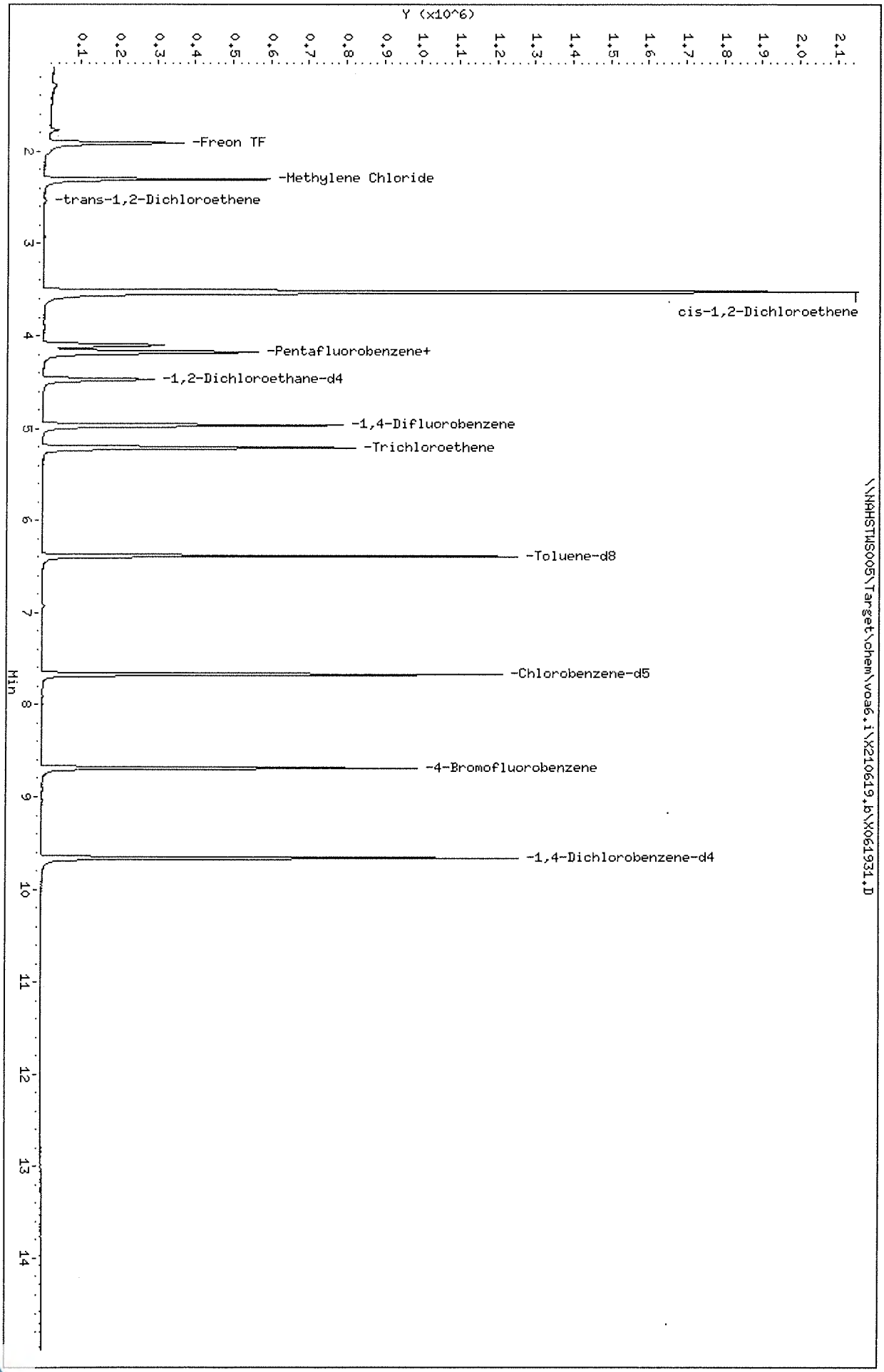
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	512884	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	699824	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	620479	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	326246	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	225713	44.6923	44.69
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	224716	45.8096	45.80
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	786027	50.8568	50.85
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	267229	49.0552	49.05
27 cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	1163378	216.413	21641.34(A)
17 Methylene Chloride	84	2.298	2.305	(0.550)	294460	63.6635	6366.35
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	3149	0.65756	65.75(a)
38 Trichloroethene	130	5.207	5.206	(1.049)	295544	61.5310	6153.10

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061931.D
Date : 19-JUN-2021 21:45
Client ID: HS21060908-01
Sample Info: HS21060908-01;HS21060908-01;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061931.D

Date : 19-JUN-2021 21:45

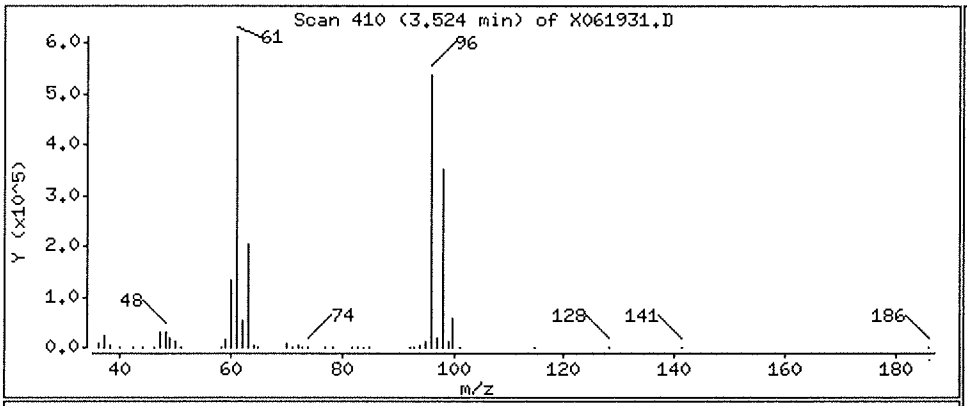
Client ID: HS21060908-01 Instrument: voa6.i

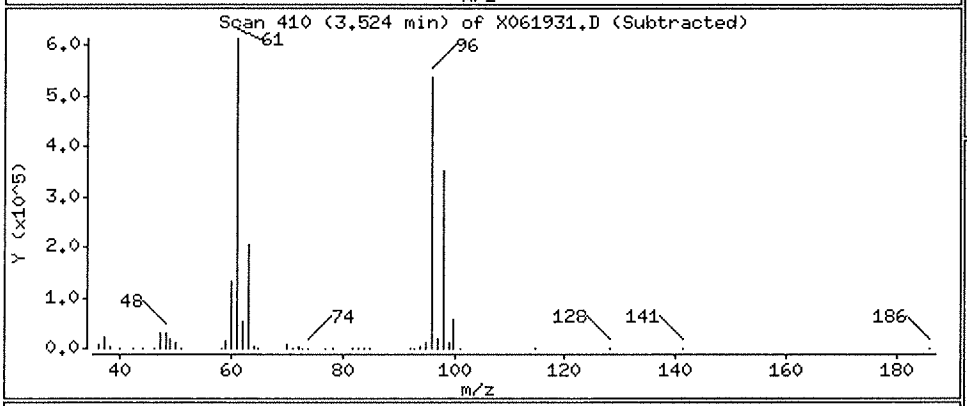
Sample Info: HS21060908-01;HS21060908-01;;;

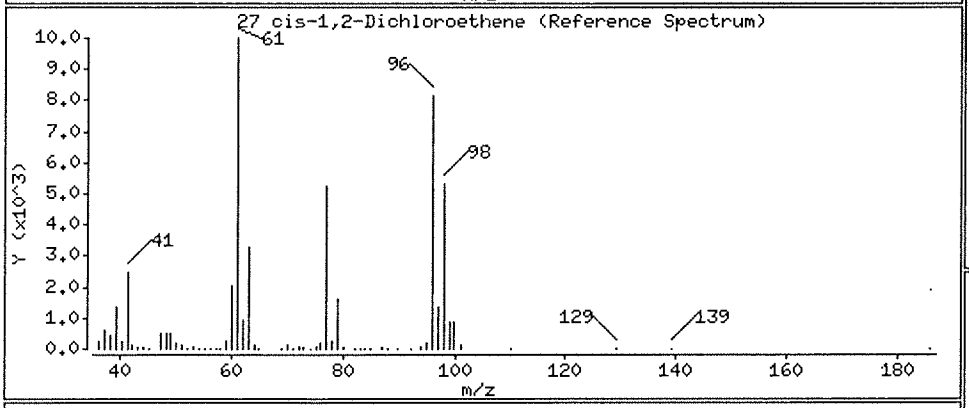
Purge Volume: 5.0 Operator: PC

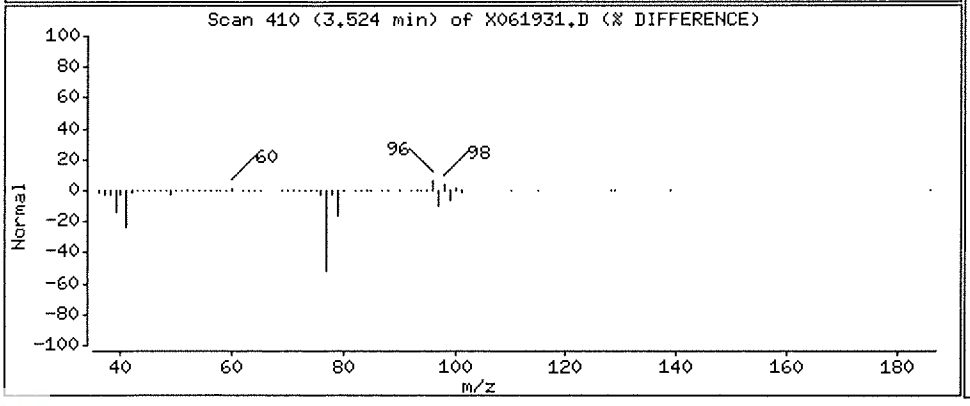
Column phase: DB624 Column diameter: 0.18

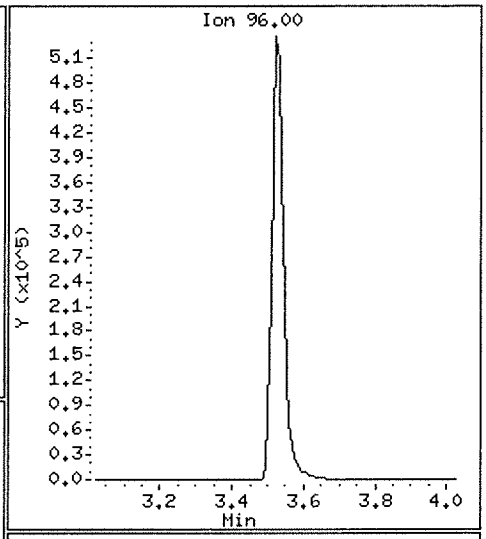
27 cis-1,2-Dichloroethene Concentration: 21641.34 ug/l

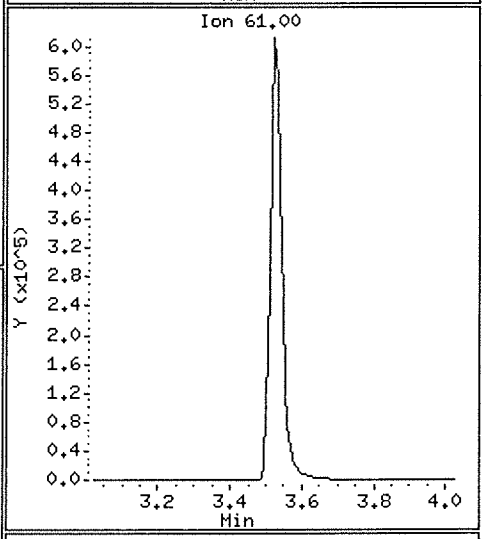


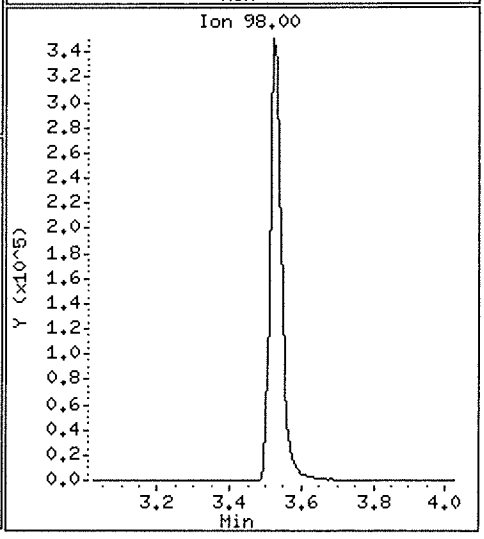












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061931.D

Date : 19-JUN-2021 21:45

Client ID: HS21060908-01

Instrument: voa6.i

Sample Info: HS21060908-01;HS21060908-01;;;

Purge Volume: 5.0

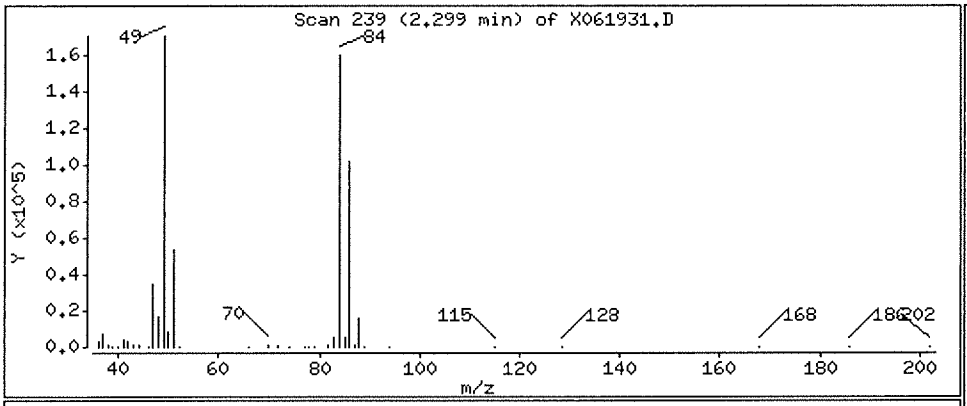
Operator: PC

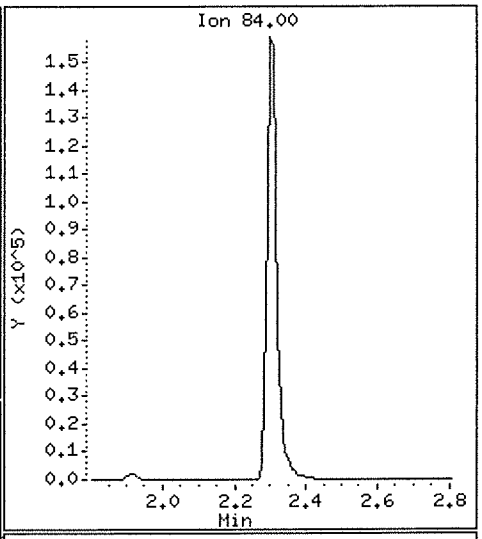
Column phase: DB624

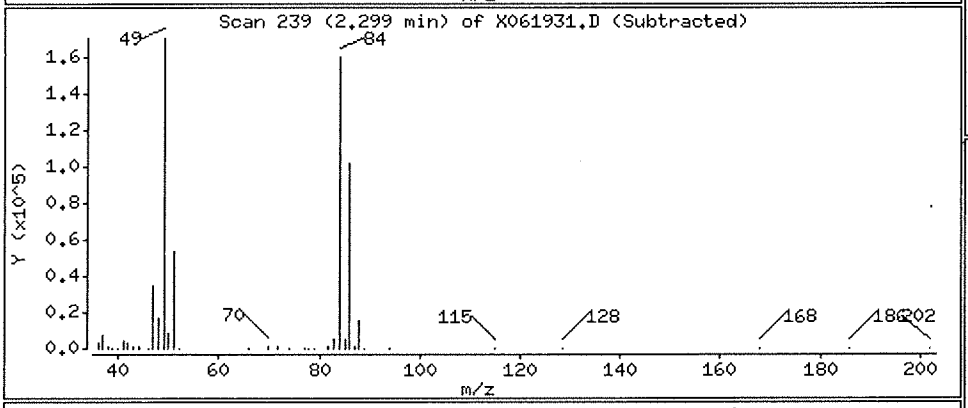
Column diameter: 0.18

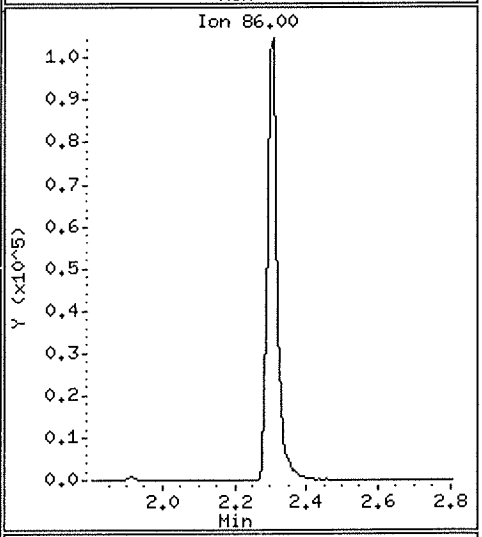
17 Methylene Chloride

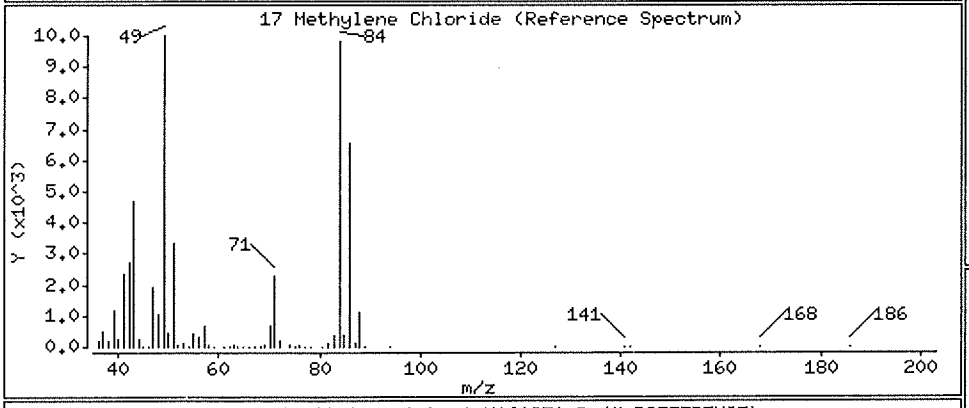
Concentration: 6366.35 ug/l

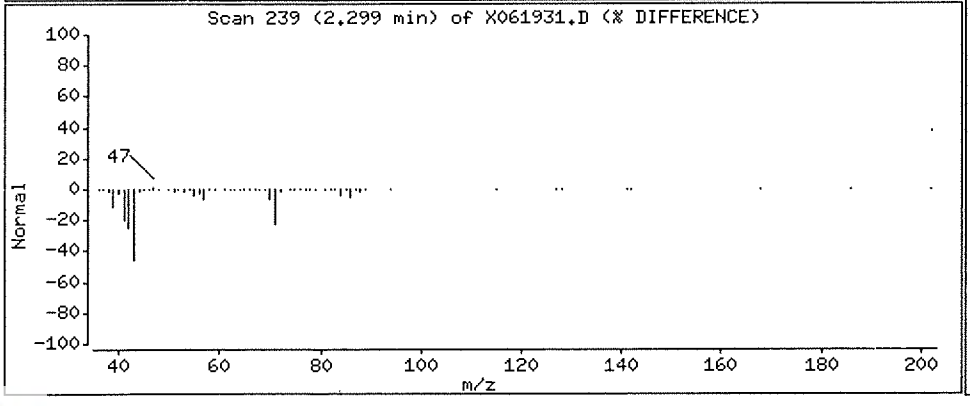


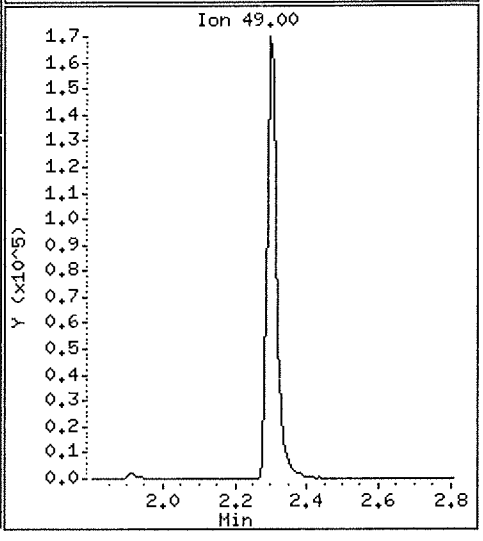












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061931.D

Date : 19-JUN-2021 21:45

Client ID: HS21060908-01

Instrument: voa6.i

Sample Info: HS21060908-01;HS21060908-01;;;

Purge Volume: 5.0

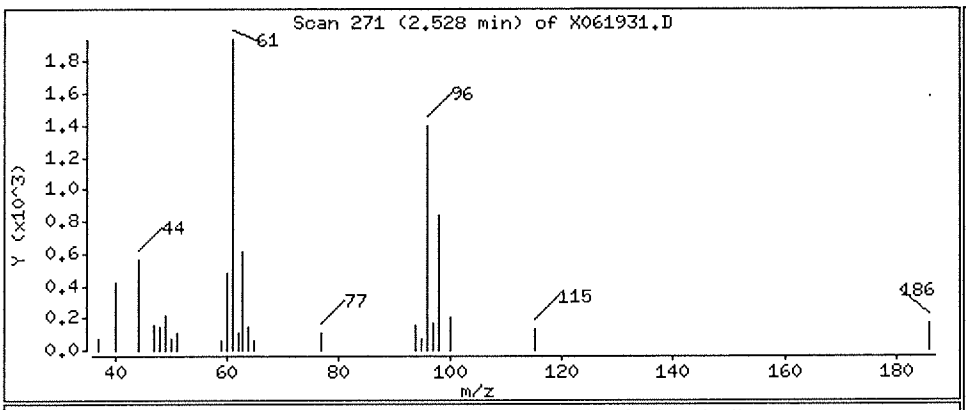
Operator: PC

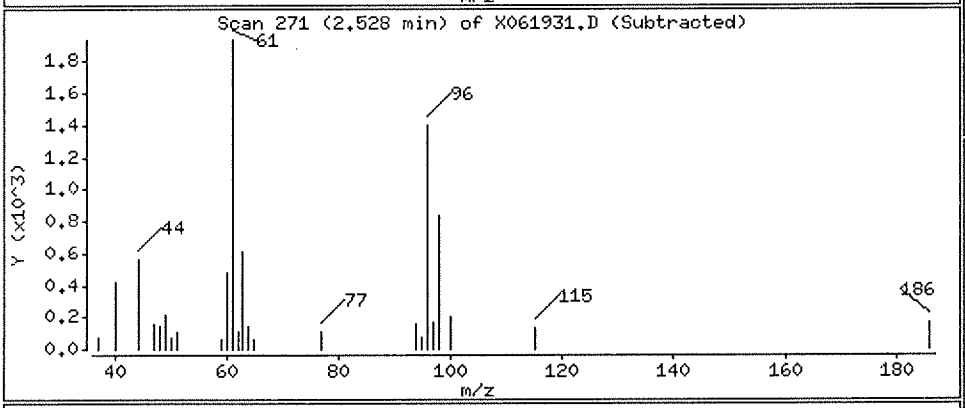
Column phase: DB624

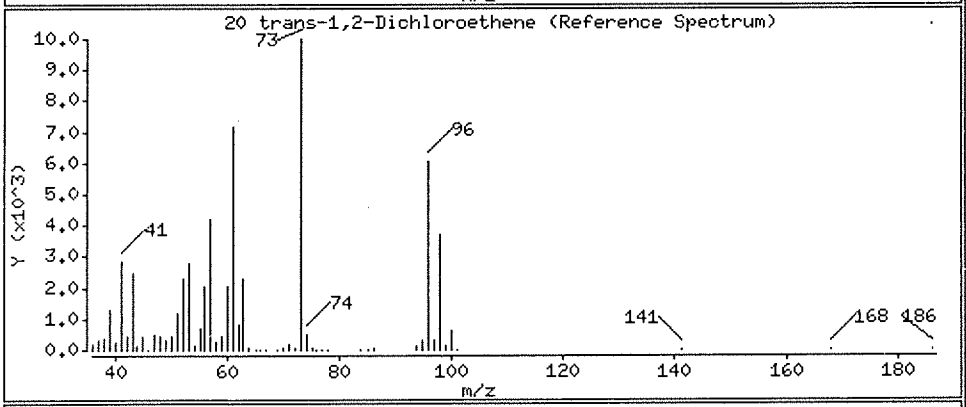
Column diameter: 0.18

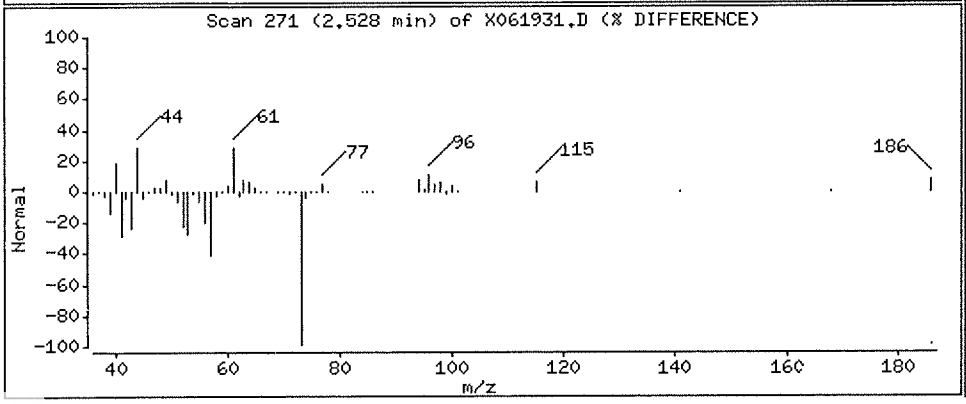
20 trans-1,2-Dichloroethene

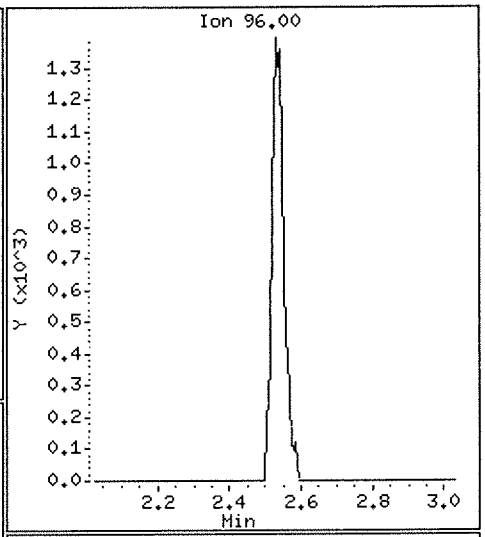
Concentration: 65.75 ug/l

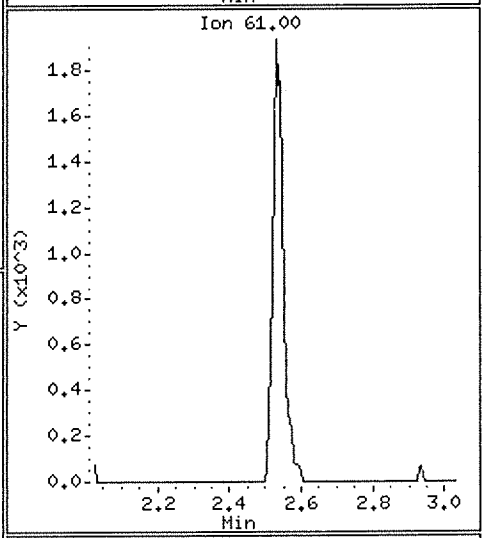


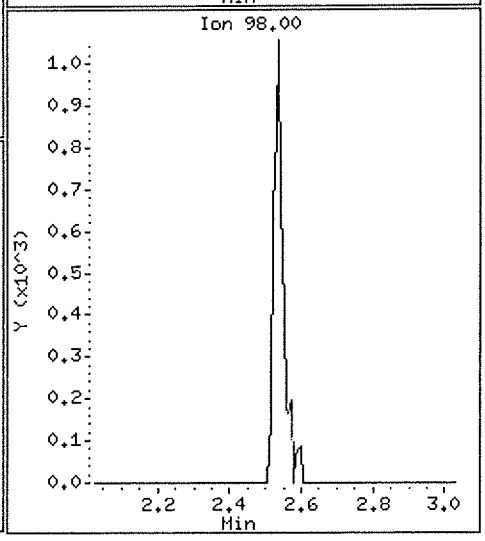












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061931.D

Date : 19-JUN-2021 21:45

Client ID: HS21060908-01

Instrument: voa6.i

Sample Info: HS21060908-01;HS21060908-01;;;

Purge Volume: 5.0

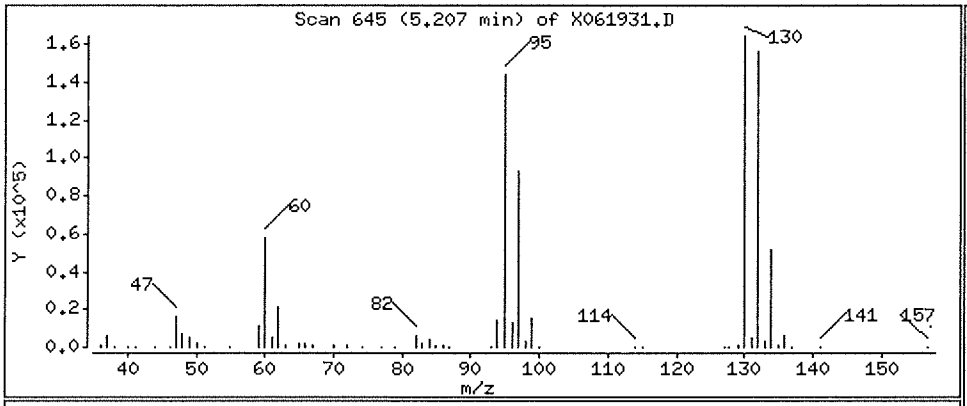
Operator: PC

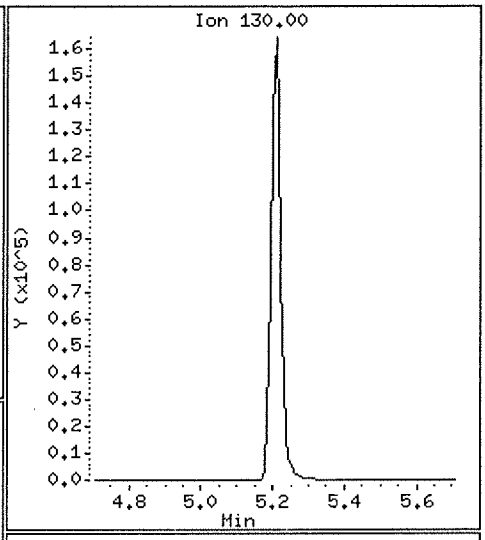
Column phase: DB624

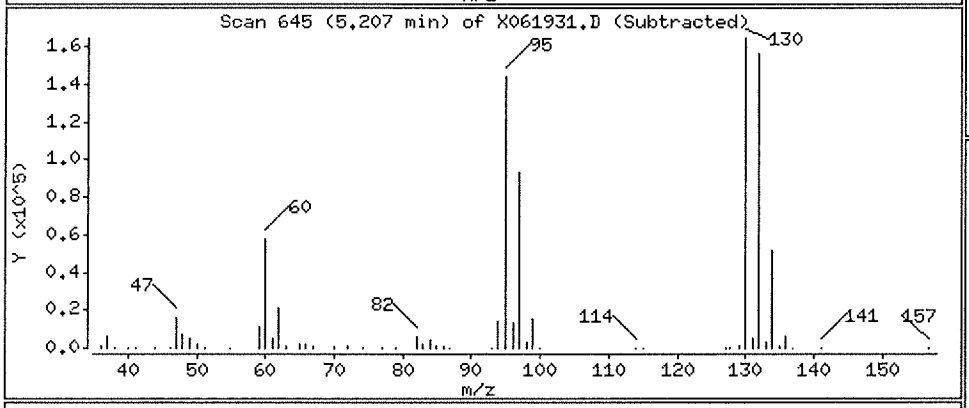
Column diameter: 0.18

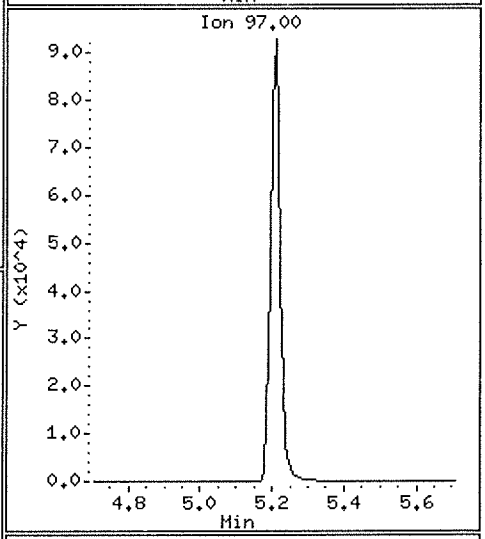
38 Trichloroethene

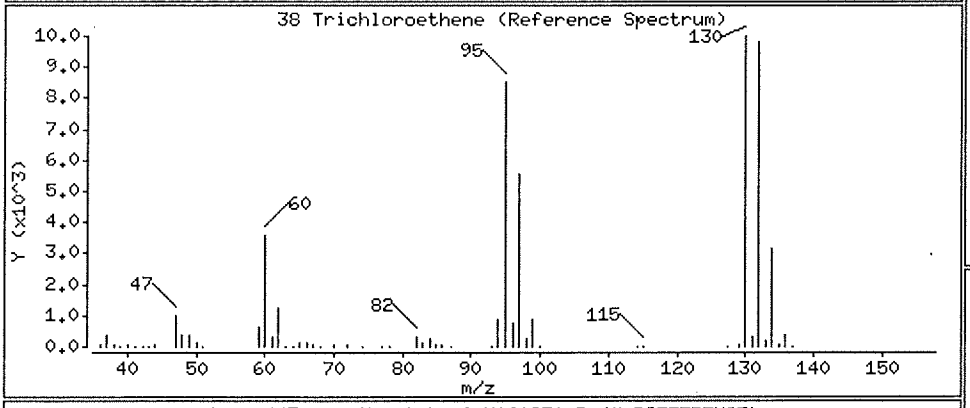
Concentration: 6153.10 ug/l

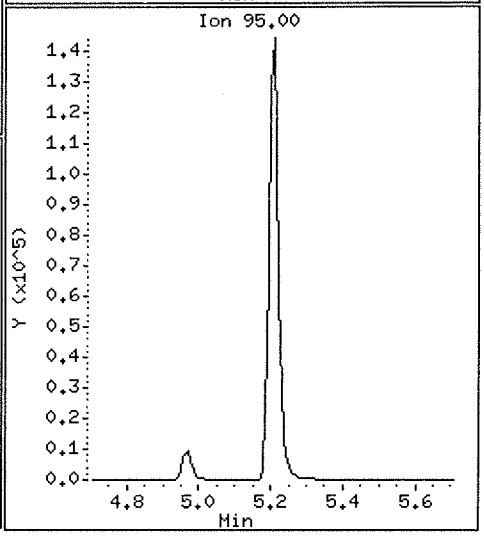


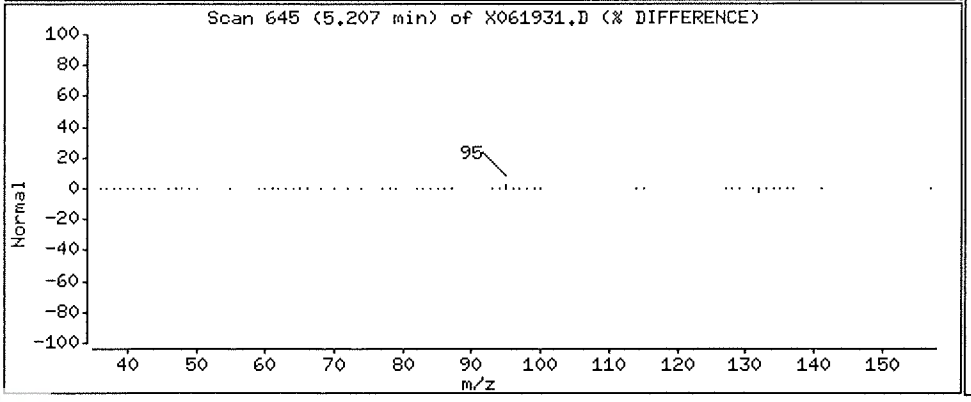












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061932.D Page 1
Report Date: 26-Aug-2021 16:41

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061932.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 19-JUN-2021 22:06
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210619.b\8260W.m
Meth Date : 26-Aug-2021 16:41 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 31 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

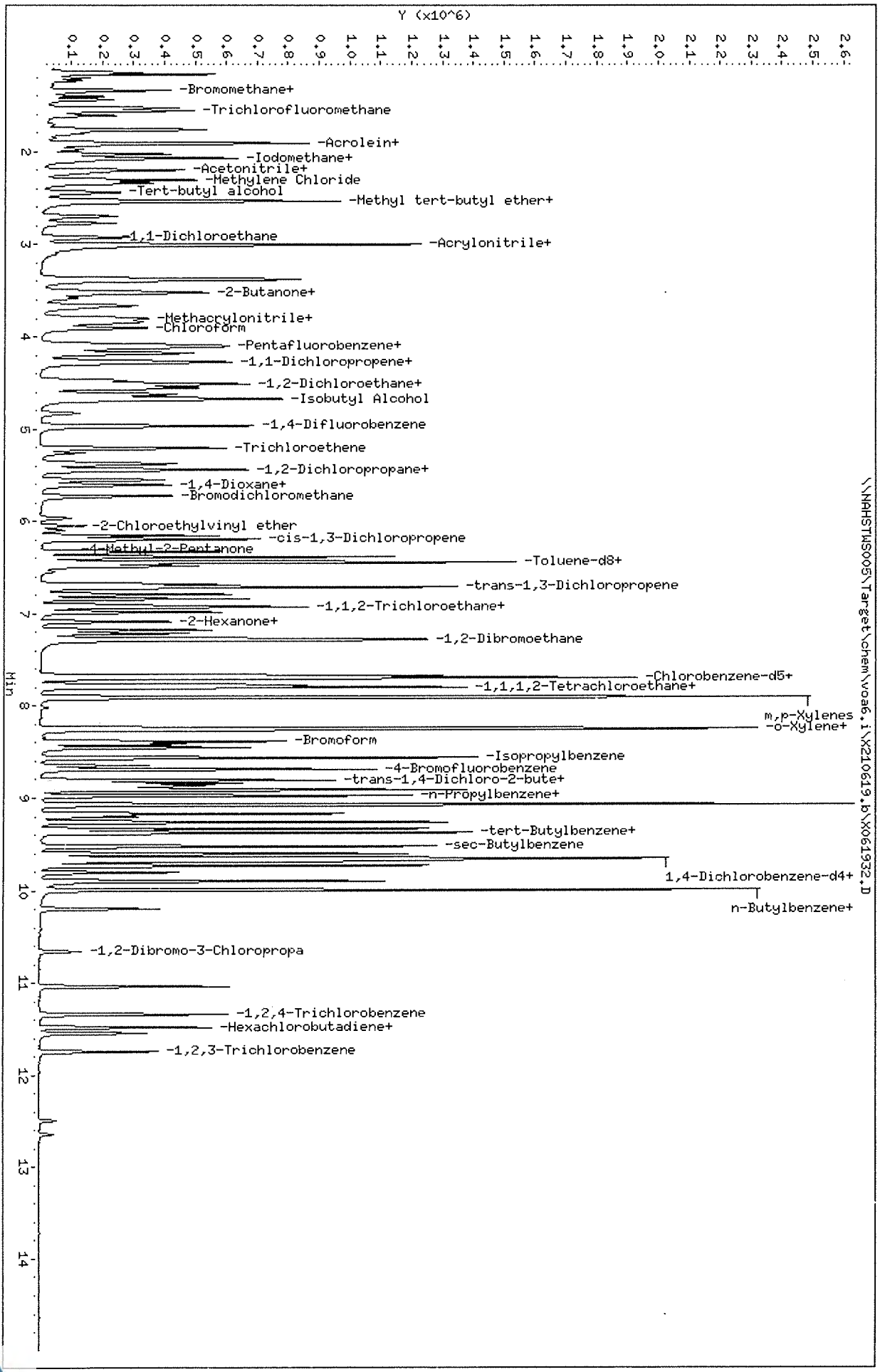
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	421332	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	620854	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	600828	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	338697	50.0000	
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	208754	50.0000	50.33
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	208790	50.0000	51.90
$	48 Toluene-d8	98	6.388	6.388	(0.833)	706018	50.0000	47.17
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	270029	50.0000	51.15
	60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	211342	50.0000	47.56
	31 1,1,1-Trichloroethane	97	4.089	4.089	(0.978)	273361	50.0000	43.90
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	246709	50.0000	52.79
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	150927	50.0000	46.37
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	280593	50.0000	42.12
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	183114	50.0000	42.19
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	217136	50.0000	45.66
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	115290	50.0000	56.22
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	203646	50.0000	48.22(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	176637	50.0000	52.74
	79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	665077	50.0000	43.05
	89 1,2-Dibromo-3-Chloropropane	155	10.658	10.658	(1.103)	30326	50.0000	56.37
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	208737	50.0000	47.18
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	417023	50.0000	45.39

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061932.D Page 2
Report Date: 26-Aug-2021 16:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	240754	50.0000	48.66
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	167717	50.0000	45.89
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	648416	50.0000	42.17
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	429905	50.0000	45.00
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	301772	50.0000	46.62
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	436302	50.0000	43.76
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	198115	50.0000	34.36
24	2-Butanone	43	3.580	3.580	(0.856)	125145	100.000	97.62
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	549554	50.0000	43.34
52	2-Hexanone	43	7.090	7.090	(0.924)	229054	100.000	102.62
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	639296	50.0000	42.34
82	p-Isopropyltoluene	119	9.648	9.648	(0.999)	661428	50.0000	42.23
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	329424	100.000	95.21
10	Acetone	43	1.976	1.976	(0.473)	108853	100.000	101.21
37	Benzene	78	4.512	4.512	(0.909)	657730	50.0000	46.11
74	Bromobenzene	156	8.802	8.802	(0.911)	262876	50.0000	46.77
29	Bromochloromethane	128	3.795	3.795	(0.908)	113796	50.0000	44.66
39	Bromodichloromethane	83	5.722	5.722	(1.153)	250865	50.0000	47.00
66	Bromoform	173	8.408	8.408	(1.096)	174004	50.0000	51.93
6	Bromomethane	94	1.338	1.338	(0.320)	186378	50.0000	42.84
19	Carbon Disulfide	76	2.069	2.069	(0.495)	766781	100.000	74.50
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	241624	50.0000	46.94
59	Chlorobenzene	112	7.692	7.692	(1.003)	547684	50.0000	43.78
7	Chloroethane	64	1.403	1.403	(0.336)	146085	50.0000	49.42
28	Chloroform	83	3.910	3.910	(0.935)	320811	50.0000	43.29
3	Chloromethane	50	1.073	1.073	(0.257)	169296	50.0000	44.16
27	cis-1,2-Dichloroethene	96	3.523	3.523	(0.842)	205428	50.0000	46.51
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	293056	50.0000	46.59
55	Dibromochloromethane	129	7.176	7.176	(0.936)	242254	50.0000	48.98
44	Dibromomethane	93	5.550	5.550	(1.118)	132640	50.0000	48.29
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	175192	50.0000	45.24
61	Ethylbenzene	106	7.799	7.799	(1.017)	267959	50.0000	46.43
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	100523	50.0000	48.20
67	Isopropylbenzene	105	8.559	8.559	(1.116)	790070	50.0000	44.81
62	m,p-Xylenes	106	7.907	7.907	(1.031)	666072	100.000	88.54
17	Methylene Chloride	84	2.305	2.305	(0.551)	174606	50.0000	45.58
87	n-Butylbenzene	91	9.991	9.991	(1.034)	540806	50.0000	41.04
73	n-Propylbenzene	91	8.910	8.910	(0.922)	883539	50.0000	41.81
92	Naphthalene	128	11.539	11.539	(1.194)	259390	50.0000	53.59
63	o-Xylene	106	8.244	8.244	(1.075)	328213	50.0000	44.74
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	749020	50.0000	42.11
64	Styrene	104	8.258	8.258	(1.077)	565630	50.0000	46.14
78	tert-Butylbenzene	119	9.340	9.340	(0.967)	562826	50.0000	42.70
56	Tetrachloroethene	164	6.926	6.926	(0.903)	170512	50.0000	46.10
50	Toluene	91	6.446	6.446	(0.840)	751855	50.0000	42.86
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.604)	166928	50.0000	42.43
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	258776	50.0000	47.69
38	Trichloroethene	130	5.206	5.206	(1.049)	209885	50.0000	49.25
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	323315	50.0000	42.51
5	Vinyl Chloride	62	1.138	1.138	(0.272)	214781	50.0000	43.06

QC Flag Legend

M - Compound response manually integrated.

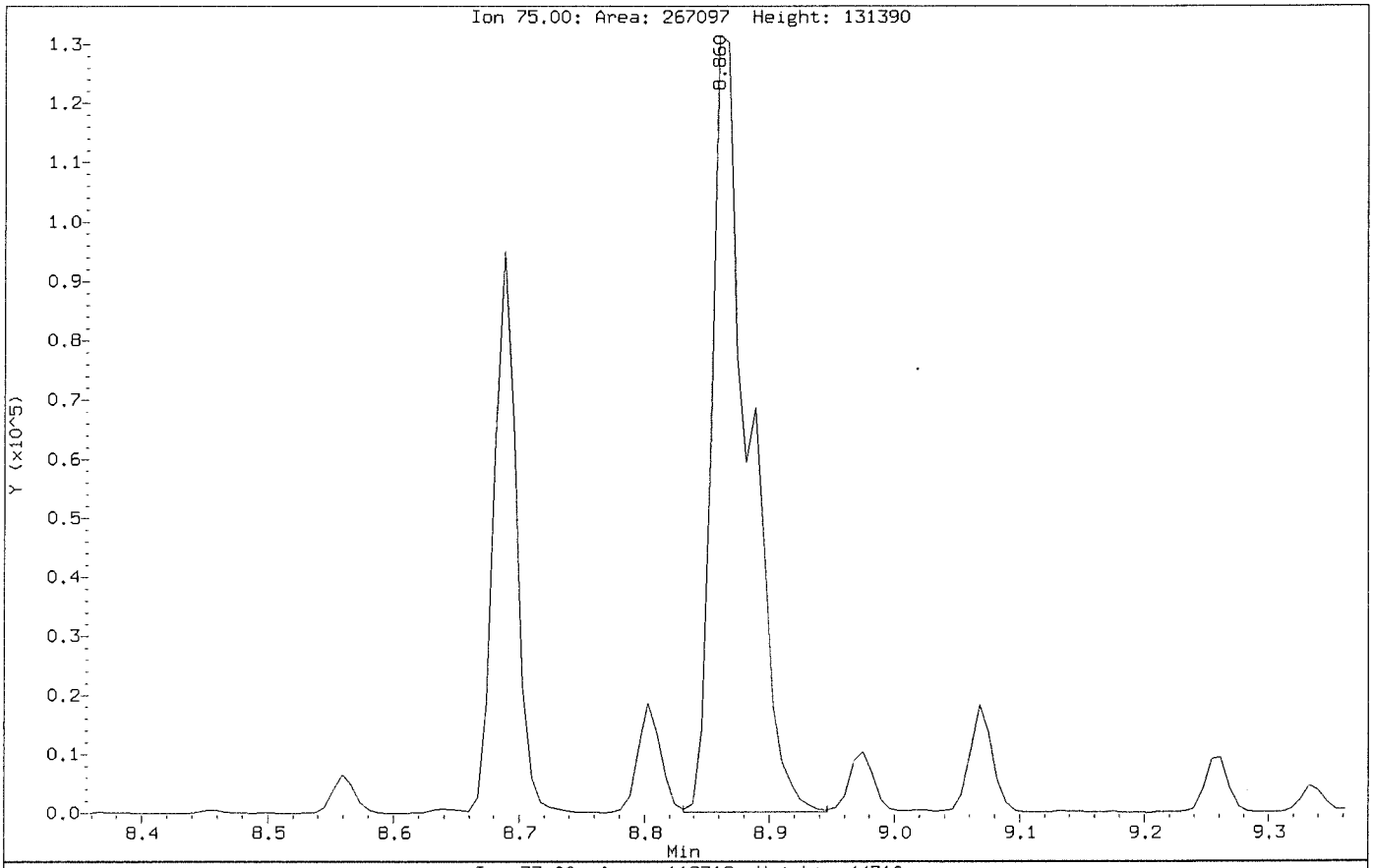


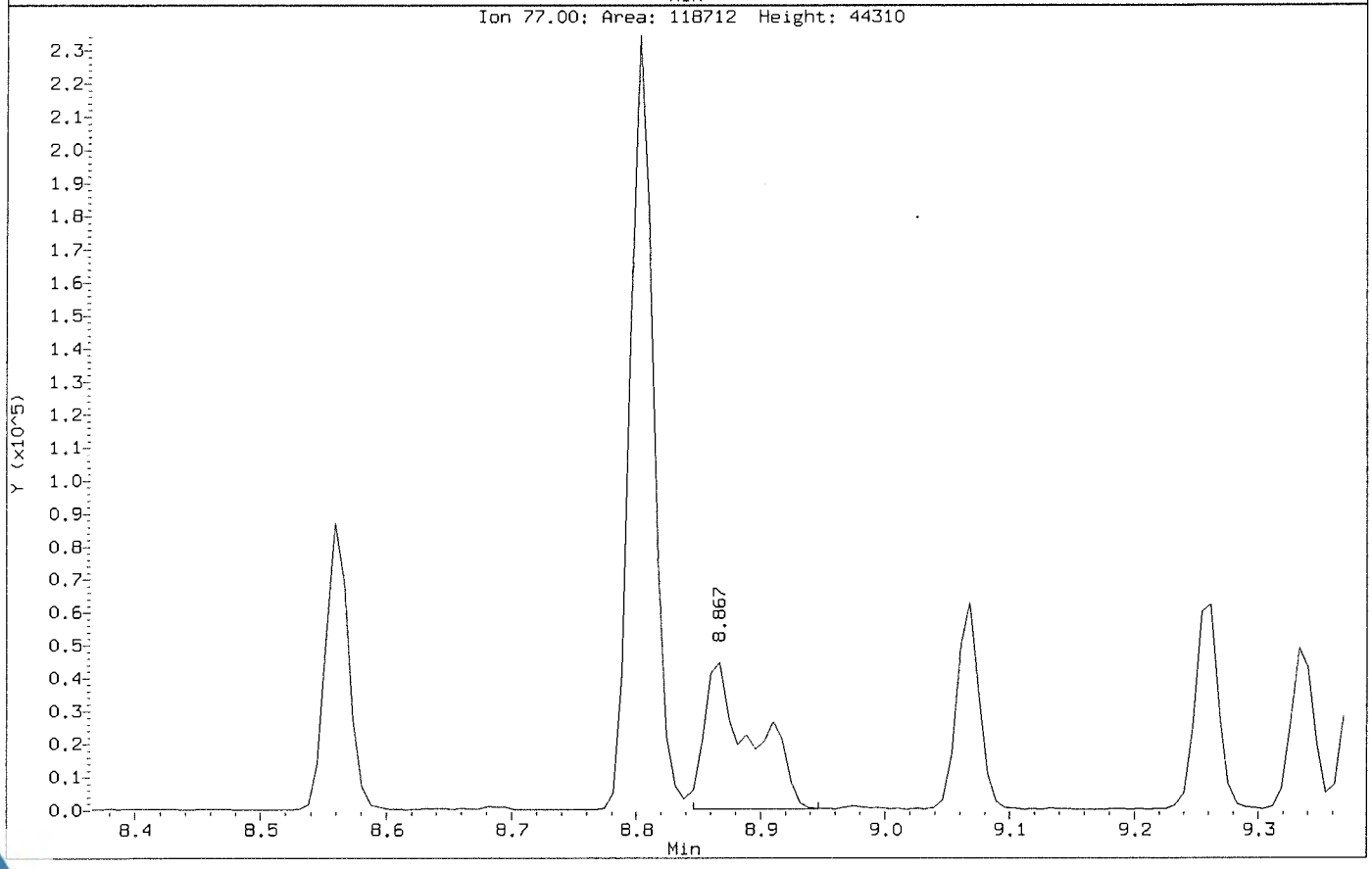
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061932.D
Date : 19-JUN-2021 22:06
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\Before\X061932.D
Injection Date: 19-JUN-2021 22:06
Instrument: voa6.i
Client Sample ID: CCV-END

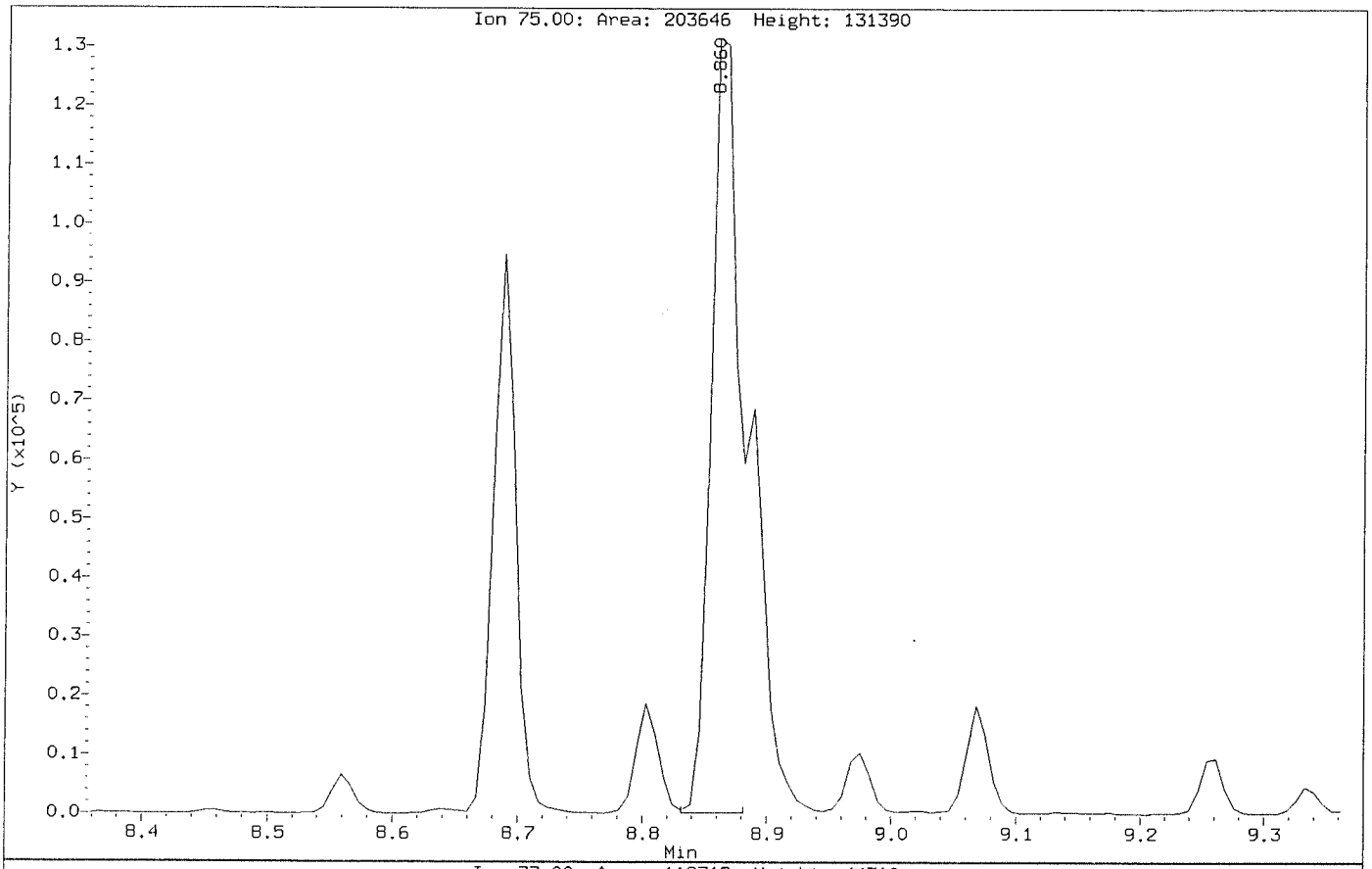
Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4

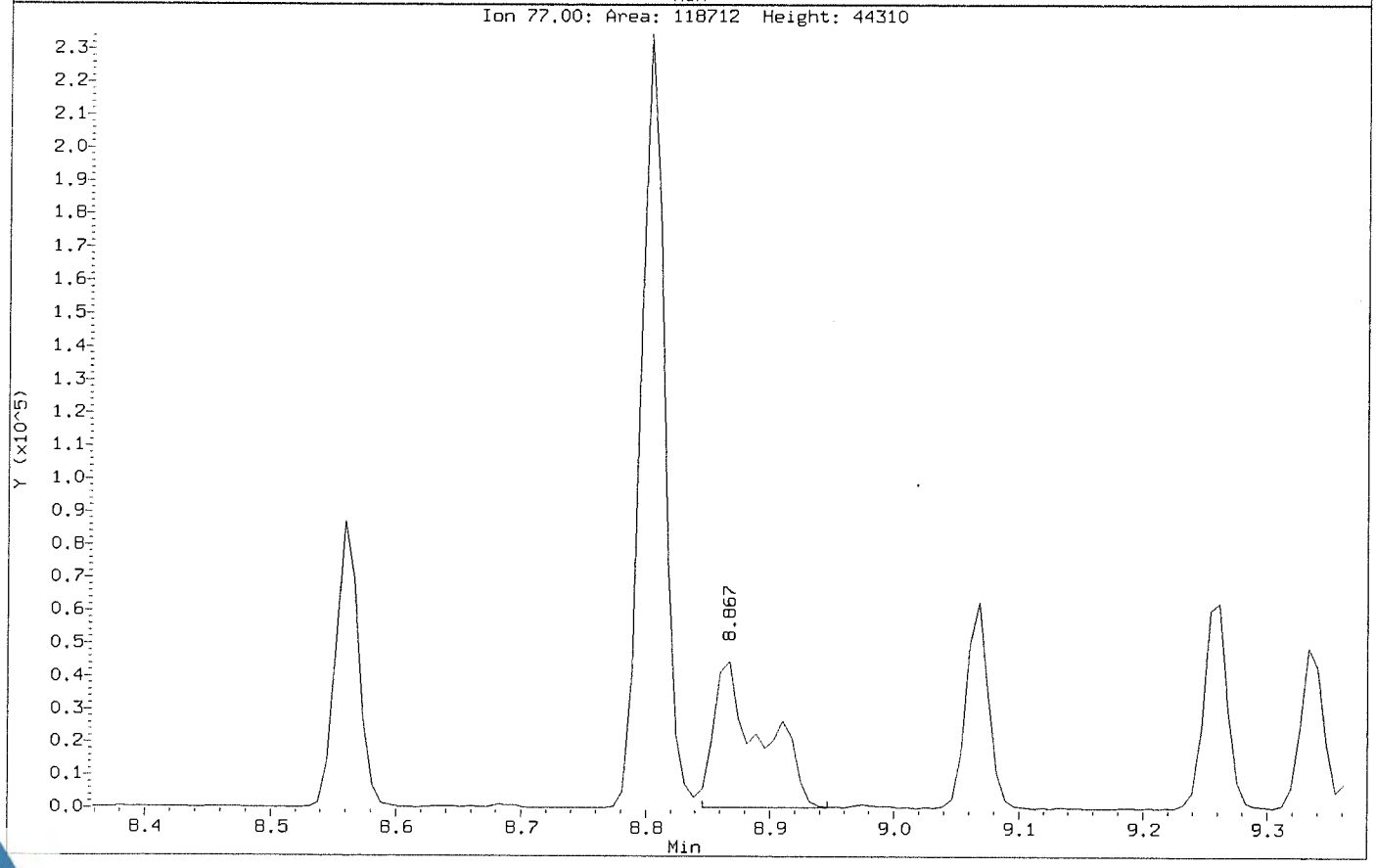




Data File: \\NAHSTWS005\Target\chem\voa6.i\X210619.b\X061932.D
Injection Date: 19-JUN-2021 22:06
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





MSVOA06 -Logbook

Batch: 45255
Date: 06-22-2021
Method: 8260_DOD_W
Comments:

Analyst: Qin Xu
Reviewer:
Laboratory: Houston

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	06-22-2021 10:18 am	1.00	0.00 mL	0.00 mL	X062201.D	Liquid	Y	NA
2	CCV	CCV	06-22-2021 10:38 am	1.00	5.00 mL	0.00 mL	X062202.D	Liquid	Y	NA
3	CCV	CCV	06-22-2021 11:29 am	1.00	5.00 mL	0.00 mL	X062203.D	Liquid	Y	NA
4	VLCSW-210622	LCS	06-22-2021 11:50 am	1.00	5.00 mL	0.00 mL	X062204.D	Liquid	Y	NA
5	BLANK	SAMP	06-22-2021 12:11 pm	1.00	5.00 mL	0.00 mL	X062205.D	Liquid	Y	NA
6	VBLKW-210622	MBLK	06-22-2021 12:32 pm	1.00	5.00 mL	0.00 mL	X062206.D	Liquid	Y	NA
7	HS21060847-02	SAMP	06-22-2021 12:53 pm	1.00	5.00 mL	0.00 mL	X062207.D	Liquid	Y	NA
8	HS21061044-05	SAMP	06-22-2021 01:14 pm	1.00	5.00 mL	0.00 mL	X062208.D	Liquid	Y	NA
9	VBLKW-210622	MBLK	06-22-2021 01:35 pm	1.00	5.00 mL	0.00 mL	X062209.D	Liquid	Y	NA
10	HS21060908-05	SAMP	06-22-2021 01:56 pm	1.00	5.00 mL	0.00 mL	X062210.D	Liquid	Y	NA
11	HS21060908-01	SAMP	06-22-2021 02:17 pm	250.0(	5.00 mL	0.00 mL	X062211.D	Liquid	Y	NA
12	HS21060908-03	SAMP	06-22-2021 02:38 pm	50.00	5.00 mL	0.00 mL	X062212.D	Liquid	Y	NA
13	HS21060908-07	SAMP	06-22-2021 02:59 pm	5.00	5.00 mL	0.00 mL	X062213.D	Liquid	Y	NA
14	HS21060908-07	SAMP	06-22-2021 03:20 pm	50.00	5.00 mL	0.00 mL	X062214.D	Liquid	Y	NA
15	HS21060908-08	SAMP	06-22-2021 03:41 pm	1.00	5.00 mL	0.00 mL	X062215.D	Liquid	Y	NA
16	HS21060908-08	SAMP	06-22-2021 04:02 pm	10.00	5.00 mL	0.00 mL	X062216.D	Liquid	Y	NA
17	HS21060908-03	SAMP	06-22-2021 04:23 pm	1.00	5.00 mL	0.00 mL	X062217.D	Liquid	Y	NA
18	HS21060908-01MS	MS	06-22-2021 04:44 pm	250.0(	5.00 mL	0.00 mL	X062218.D	Liquid	Y	NA
19	HS21060908-01MSD	MSD	06-22-2021 05:05 pm	250.0(	5.00 mL	0.00 mL	X062219.D	Liquid	Y	NA
20	HS21060908-05	SAMP	06-22-2021 05:26 pm	5.00	5.00 mL	0.00 mL	X062220.D	Liquid	Y	NA
21	HS21060847-02	SAMP	06-22-2021 05:47 pm	1.00	5.00 mL	0.00 mL	X062221.D	Liquid	Y	NA
22	HS21061044-05	SAMP	06-22-2021 06:08 pm	1.00	5.00 mL	0.00 mL	X062222.D	Liquid	Y	NA
23	HS21061044-06	SAMP	06-22-2021 06:29 pm	1.00	5.00 mL	0.00 mL	X062223.D	Liquid	Y	NA
24	HS21061044-01	SAMP	06-22-2021 06:50 pm	1.00	5.00 mL	0.00 mL	X062224.D	Liquid	Y	NA
25	HS21061044-02	SAMP	06-22-2021 07:11 pm	1.00	5.00 mL	0.00 mL	X062225.D	Liquid	Y	NA
26	HS21061044-03	SAMP	06-22-2021 07:32 pm	1.00	5.00 mL	0.00 mL	X062226.D	Liquid	Y	NA
27	HS21061044-04	SAMP	06-22-2021 07:53 pm	1.00	5.00 mL	0.00 mL	X062227.D	Liquid	Y	NA
28	HS21061092-01	SAMP	06-22-2021 08:14 pm	1.00	5.00 mL	0.00 mL	X062228.D	Liquid	Y	NA
29	HS21061092-02	SAMP	06-22-2021 08:35 pm	1.00	5.00 mL	0.00 mL	X062229.D	Liquid	Y	NA
30	HS21061092-03	SAMP	06-22-2021 08:57 pm	1.00	5.00 mL	0.00 mL	X062230.D	Liquid	Y	NA
31	HS21061092-04	SAMP	06-22-2021 09:18 pm	1.00	5.00 mL	0.00 mL	X062231.D	Liquid	Y	NA
32	CCV-END	CCV	06-22-2021 09:38 pm	1.00	5.00 mL	0.00 mL	X062232.D	Liquid	Y	NA
33	BLANK	SAMP	06-22-2021 10:00 pm	1.00	5.00 mL	0.00 mL	X062233.D	Liquid	Y	NA

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 #	SMC3 (TOL) #	OTHER #	TOT OUT
01	VLCSW-210622	97	94	95	100	0
02	VBLKW-210622	92	88	102	100	0
03	HS21060908-05	92	88	101	97	0
04	HS21060908-01	91	87	104	95	0
05	HS21060908-03	92	90	105	96	0
06	HS21060908-07	93	89	102	96	0
07	HS21060908-07	92	90	104	96	0
08	HS21060908-08	92	88	104	96	0
09	HS21060908-08	94	89	105	96	0
10	HS21060908-03	93	89	104	99	0
11	HS21060908-01	101	94	94	99	0
12	HS21060908-01	104	95	95	100	0
13	HS21060908-05	92	89	105	92	0
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						

		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(0-130)
SMC2	= Dibromofluoromethane	(0-130)
SMC3 (TOL)	= Toluene-d8	(0-130)
OTHER	= 4-Bromofluorobenzene	(0-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKW-210622

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID: X062209 Lab Sample ID: VBLKW-210622

Date Analyzed: 06/22/21 Time Analyzed: 1335

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VLCSW-210622	VLCSW-210622	X062204	1150
02	HS21060908-0	HS21060908-05	X062210	1356
03	HS21060908-0	HS21060908-01	X062211	1417
04	HS21060908-0	HS21060908-03	X062212	1438
05	HS21060908-0	HS21060908-07	X062213	1459
06	HS21060908-0	HS21060908-07	X062214	1520
07	HS21060908-0	HS21060908-08	X062215	1541
08	HS21060908-0	HS21060908-08	X062216	1602
09	HS21060908-0	HS21060908-03	X062217	1623
10	HS21060908-0	HS21060908-01M	X062218	1644
11	HS21060908-0	HS21060908-01M	X062219	1705
12	HS21060908-0	HS21060908-05	X062220	1726
13				
14				
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30				

COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID: X062201 BFB Injection Date: 06/22/21

Instrument ID: VOA6 BFB Injection Time: 1018

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.0
75	30.0 - 60.0% of mass 95	44.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.9 (1.1)1
174	Greater than 50.0% of mass 95	82.5
175	5.0 - 9.0% of mass 174	6.6 (8.0)1
176	95.0 - 101.0% of mass 174	81.3 (98.5)1
177	5.0 - 9.0% of mass 176	5.0 (6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV	CCV	X062202	06/22/21	1038
02	VLCSW-210622	VLCSW-210622	X062204	06/22/21	1150
03	VBLKW-210622	VBLKW-210622	X062209	06/22/21	1335
04	HS21060908-0	HS21060908-05	X062210	06/22/21	1356
05	HS21060908-0	HS21060908-01	X062211	06/22/21	1417
06	HS21060908-0	HS21060908-03	X062212	06/22/21	1438
07	HS21060908-0	HS21060908-07	X062213	06/22/21	1459
08	HS21060908-0	HS21060908-07	X062214	06/22/21	1520
09	HS21060908-0	HS21060908-08	X062215	06/22/21	1541
10	HS21060908-0	HS21060908-08	X062216	06/22/21	1602
11	HS21060908-0	HS21060908-03	X062217	06/22/21	1623
12	HS21060908-0	HS21060908-01M	X062218	06/22/21	1644
13	HS21060908-0	HS21060908-01M	X062219	06/22/21	1705
14	HS21060908-0	HS21060908-05	X062220	06/22/21	1726
15	CCV-END	CCV-END	X062232	06/22/21	2138
16					
17					
18					
19					
20					
21					
22					

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: VOA6 Calibration Date: 06/22/21 Time: 1038

Lab File ID: X062202 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
cis-1,3-Dichloropropene	0.5060000	0.4884532	0.4884532	0.2	3.47	20.00	AVRG
trans-1,3-Dichloropropene	0.4370000	0.4294842	0.4294842	0.1	1.72	20.00	AVRG
1,3-Dichlorobenzene	1.4100000	1.3506361	1.3506361	0.6	4.21	20.00	AVRG
2,2-Dichloropropane	0.6840000	0.6065741	0.6065741	0.1	11.32	20.00	AVRG
1,1-Dichloropropene	0.3830000	0.3766393	0.3766393	0.1	1.66	20.00	AVRG
Dibromomethane	0.2210000	0.2030560	0.2030560	0.1	8.12	20.00	AVRG
1,2-Dibromoethane	0.3680000	0.3397319	0.3397319	0.1	7.68	20.00	AVRG
trans-1,2-Dichloroethene	0.4670000	0.3871698	0.3871698	0.1	17.09	20.00	AVRG
1,1,1,2-Tetrachloroethane	0.3700000	0.3588408	0.3588408	0.1	3.02	20.00	AVRG
1,1,1-Trichloroethane	0.7390000	0.6448298	0.6448298	0.1	12.74	20.00	AVRG
1,1,2,2-Tetrachloroethane	51.181309	50.000000	0.7066886	0.3	-2.36	20.00	LINR
1,1,2-Trichloroethane	0.2710000	0.2477285	0.2477285	0.1	8.59	20.00	AVRG
1,1-Dichloroethane	0.7900000	0.6426045	0.6426045	0.2	18.66	20.00	AVRG
1,1-Dichloroethene	0.5150000	0.4289486	0.4289486	0.1	16.71	20.00	AVRG
Trichloroethene	0.3430000	0.3455090	0.3455090	0.2	-0.73	20.00	AVRG
1,2,3-Trichlorobenzene	0.3030000	0.3544946	0.3544946	0.01	-16.99	20.00	AVRG
Trichlorofluoromethane	0.9020000	0.7874996	0.7874996	0.1	12.69	20.00	AVRG
1,2,4-Trichlorobenzene	0.4940000	0.5890179	0.5890179	0.1	-19.23	20.00	AVRG
1,2,4-Trimethylbenzene	2.2800000	2.1150774	2.1150774	0.1	7.23	20.00	AVRG
Tetrachloroethene	0.3080000	0.3260158	0.3260158	0.2	-5.85	20.00	AVRG
1,2-Dichlorobenzene	1.3560000	1.2977868	1.2977868	0.4	4.29	20.00	AVRG
1,2-Dichloroethane	0.3980000	0.3685959	0.3685959	0.1	7.39	20.00	AVRG
1,2-Dichloropropane	0.2940000	0.2702996	0.2702996	0.1	8.06	20.00	AVRG
1,3,5-Trimethylbenzene	2.2700000	2.1077348	2.1077348	0.1	7.15	20.00	AVRG
1,3-Dichloropropane	0.5390000	0.4961115	0.4961115	0.1	7.96	20.00	AVRG
1,4-Dichlorobenzene	1.4720000	1.3721446	1.3721446	0.4	6.78	20.00	AVRG
Toluene	1.4600000	1.3111591	1.3111591	0.4	10.19	20.00	AVRG
2-Butanone	0.1520000	0.1315192	0.1315192	0.1	13.47	20.00	AVRG
2-Chlorotoluene	1.8720000	1.7207350	1.7207350	0.1	8.08	20.00	AVRG
2-Hexanone	0.1860000	0.1758938	0.1758938	0.1	5.43	20.00	AVRG
4-Chlorotoluene	2.2280000	2.0027287	2.0027287	0.1	10.11	20.00	AVRG
tert-Butylbenzene	1.9460000	1.8300654	1.8300654	0.1	5.96	20.00	AVRG
4-Methyl-2-Pentanone	0.2880000	0.2548242	0.2548242	0.1	11.52	20.00	AVRG
Acetone	85.656774	100.00000	0.1104257	0.1	14.34	20.00	LINR
Benzene	1.1480000	1.1285556	1.1285556	0.5	1.69	20.00	AVRG
Bromobenzene	0.8300000	0.7973084	0.7973084	0.1	3.94	20.00	AVRG
Bromochloromethane	0.3020000	0.2624287	0.2624287	0.1	13.10	20.00	AVRG
Bromodichloromethane	0.4300000	0.4014058	0.4014058	0.2	6.65	20.00	AVRG
Bromoform	0.2790000	0.2841243	0.2841243	0.1	-1.84	20.00	AVRG
Bromomethane	41.658741	50.000000	0.4300257	0.1	16.68	20.00	LINR
Carbon Disulfide	1.2210000	0.9773407	0.9773407	0.1	19.96	20.00	AVRG
Carbon Tetrachloride	0.4140000	0.4181306	0.4181306	0.1	-1.00	20.00	AVRG

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date: 06/22/21 Time: 1038

Lab File ID: X062202 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE	
Chlorobenzene	1.0410000	0.9413412	0.9413412	0.5	9.57	20.00	AVRG	
Chloroethane	41.036924	50.000000	0.2895102	0.1	17.93	20.00	LINR	
Chloroform	0.8790000	0.7229167	0.7229167	0.2	17.76	20.00	AVRG	
Chloromethane	41.553464	50.000000	0.3794522	0.1	16.89	20.00	LINR	
cis-1,2-Dichloroethene	0.5240000	0.4446045	0.4446045	0.1	15.15	20.00	AVRG	
Dibromochloromethane	0.4120000	0.4026747	0.4026747	0.1	2.26	20.00	AVRG	
Dichlorodifluoromethane	45.014065	50.000000	0.4136914	0.1	9.97	20.00	LINR	
Ethylbenzene	0.4800000	0.4763446	0.4763446	0.1	0.76	20.00	AVRG	
Hexachlorobutadiene	62.377189	50.000000	0.3906507	0.1	-24.75	20.00	2RDR	<-
Isopropylbenzene	1.4670000	1.4405128	1.4405128	0.1	1.80	20.00	AVRG	
m,p-Xylenes	0.6260000	0.5970228	0.5970228	0.1	4.63	20.00	AVRG	
Methylene Chloride	43.172269	50.000000	0.3931104	0.1	13.66	20.00	LINR	
n-Butylbenzene	1.9450000	1.9267438	1.9267438	0.5	0.94	20.00	AVRG	
n-Propylbenzene	3.1190000	2.9254817	2.9254817	0.1	6.20	20.00	AVRG	
Naphthalene	0.7140000	0.8494464	0.8494464	0.2	-18.97	20.00	AVRG	
o-Xylene	0.6100000	0.5723358	0.5723358	0.3	6.17	20.00	AVRG	
sec-Butylbenzene	2.6250000	2.5311802	2.5311802	0.1	3.57	20.00	AVRG	
Styrene	1.0200000	0.9861739	0.9861739	0.3	3.32	20.00	AVRG	
Vinyl Chloride	0.5920000	0.5014769	0.5014769	0.1	15.29	20.00	AVRG	
1,2,3-Trichloropropane	0.6230000	0.5967602	0.5967602	0.1	4.21	20.00	AVRG	
p-Isopropyltoluene	2.3120000	2.2513958	2.2513958	0.1	2.62	20.00	AVRG	
1,2-Dibromo-3-Chloropropane	57.089494	50.000000	9.07e-002	0.05	-14.18	20.00	LINR	
1,2-Dichloroethane-d4	47.502932	50.000000	0.4540966	0.1	4.99	20.00	LINR	
Dibromofluoromethane	47.330660	50.000000	0.4659707	0.1	5.34	20.00	LINR	
Toluene-d8	1.2450000	1.1726555	1.1726555	0.1	5.81	20.00	AVRG	
4-Bromofluorobenzene	51.993237	50.000000	0.4568774	0.1	-3.99	20.00	LINR	

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: VOA6 Calibration Date: 06/22/21 Time: 2138

Lab File ID: X062232 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
cis-1,3-Dichloropropene	0.5060000	0.4981574	0.4981574	0.2	1.55	50.00	AVRG
trans-1,3-Dichloropropene	0.4370000	0.4421577	0.4421577	0.1	-1.18	50.00	AVRG
1,3-Dichlorobenzene	1.4100000	1.3618443	1.3618443	0.6	3.42	50.00	AVRG
2,2-Dichloropropane	0.6840000	0.5880729	0.5880729	0.1	14.02	50.00	AVRG
1,1-Dichloropropene	0.3830000	0.3925079	0.3925079	0.1	-2.48	50.00	AVRG
Dibromomethane	0.2210000	0.2172344	0.2172344	0.1	1.70	50.00	AVRG
1,2-Dibromoethane	0.3680000	0.3579050	0.3579050	0.1	2.74	50.00	AVRG
trans-1,2-Dichloroethene	0.4670000	0.4080736	0.4080736	0.1	12.62	50.00	AVRG
1,1,1,2-Tetrachloroethane	0.3700000	0.3768949	0.3768949	0.1	-1.86	50.00	AVRG
1,1,1-Trichloroethane	0.7390000	0.6867917	0.6867917	0.1	7.06	50.00	AVRG
1,1,2,2-Tetrachloroethane	54.345266	50.000000	0.7493771	0.3	-8.69	50.00	LINR
1,1,2-Trichloroethane	0.2710000	0.2584619	0.2584619	0.1	4.63	50.00	AVRG
1,1-Dichloroethane	0.7900000	0.6747682	0.6747682	0.2	14.59	50.00	AVRG
1,1-Dichloroethene	0.5150000	0.4573426	0.4573426	0.1	11.20	50.00	AVRG
Trichloroethene	0.3430000	0.3638472	0.3638472	0.2	-6.08	50.00	AVRG
1,2,3-Trichlorobenzene	0.3030000	0.3524151	0.3524151	0.01	-16.31	50.00	AVRG
Trichlorofluoromethane	0.9020000	0.8456170	0.8456170	0.1	6.25	50.00	AVRG
1,2,4-Trichlorobenzene	0.4940000	0.5757914	0.5757914	0.1	-16.56	50.00	AVRG
1,2,4-Trimethylbenzene	2.2800000	2.1936206	2.1936206	0.1	3.79	50.00	AVRG
Tetrachloroethene	0.3080000	0.3351699	0.3351699	0.2	-8.82	50.00	AVRG
1,2-Dichlorobenzene	1.3560000	1.3174155	1.3174155	0.4	2.84	50.00	AVRG
1,2-Dichloroethane	0.3980000	0.3965404	0.3965404	0.1	0.37	50.00	AVRG
1,2-Dichloropropane	0.2940000	0.2852873	0.2852873	0.1	2.96	50.00	AVRG
1,3,5-Trimethylbenzene	2.2700000	2.1673978	2.1673978	0.1	4.52	50.00	AVRG
1,3-Dichloropropane	0.5390000	0.5107354	0.5107354	0.1	5.24	50.00	AVRG
1,4-Dichlorobenzene	1.4720000	1.3795888	1.3795888	0.4	6.28	50.00	AVRG
Toluene	1.4600000	1.3543583	1.3543583	0.4	7.24	50.00	AVRG
2-Butanone	0.1520000	0.1392071	0.1392071	0.1	8.42	50.00	AVRG
2-Chlorotoluene	1.8720000	1.7616729	1.7616729	0.1	5.89	50.00	AVRG
2-Hexanone	0.1860000	0.1842706	0.1842706	0.1	0.93	50.00	AVRG
4-Chlorotoluene	2.2280000	2.0409133	2.0409133	0.1	8.40	50.00	AVRG
tert-Butylbenzene	1.9460000	1.9204153	1.9204153	0.1	1.31	50.00	AVRG
4-Methyl-2-Pentanone	0.2880000	0.2654452	0.2654452	0.1	7.83	50.00	AVRG
Acetone	89.156428	100.00000	0.1146438	0.1	10.84	50.00	LINR
Benzene	1.1480000	1.1128089	1.1128089	0.5	3.06	50.00	AVRG
Bromobenzene	0.8300000	0.8176480	0.8176480	0.1	1.49	50.00	AVRG
Bromochloromethane	0.3020000	0.2745907	0.2745907	0.1	9.08	50.00	AVRG
Bromodichloromethane	0.4300000	0.4172129	0.4172129	0.2	2.97	50.00	AVRG
Bromoform	0.2790000	0.2984265	0.2984265	0.1	-6.96	50.00	AVRG
Bromomethane	42.238693	50.000000	0.4360344	0.1	15.52	50.00	LINR
Carbon Disulfide	1.2210000	0.9947154	0.9947154	0.1	18.53	50.00	AVRG
Carbon Tetrachloride	0.4140000	0.4398154	0.4398154	0.1	-6.24	50.00	AVRG

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: VOA6 Calibration Date: 06/22/21 Time: 2138

Lab File ID: X062232 Init. Calib. Date(s): 05/26/21 05/26/21

Init. Calib. Times: 1234 1604

GC Column: DB624 ID: 0.18 (mm)

COMPOUND	RRF or AMOUNT	RRF50.000 or AMOUNT	CCAL RRF50.000	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
Chlorobenzene	1.0410000	0.9598508	0.9598508	0.5	7.80	50.00	AVRG
Chloroethane	49.516964	50.000000	0.3473398	0.1	0.97	50.00	LINR
Chloroform	0.8790000	0.7684776	0.7684776	0.2	12.57	50.00	AVRG
Chloromethane	47.220779	50.000000	0.4279986	0.1	5.56	50.00	LINR
cis-1,2-Dichloroethene	0.5240000	0.4624751	0.4624751	0.1	11.74	50.00	AVRG
Dibromochloromethane	0.4120000	0.4186418	0.4186418	0.1	-1.61	50.00	AVRG
Dichlorodifluoromethane	49.769482	50.000000	0.4571919	0.1	0.46	50.00	LINR
Ethylbenzene	0.4800000	0.4961060	0.4961060	0.1	-3.36	50.00	AVRG
Hexachlorobutadiene	58.286092	50.000000	0.3633019	0.1	-16.57	50.00	2RDR
Isopropylbenzene	1.4670000	1.5082545	1.5082545	0.1	-2.81	50.00	AVRG
m,p-Xylenes	0.6260000	0.6241729	0.6241729	0.1	0.29	50.00	AVRG
Methylene Chloride	45.466985	50.000000	0.4133814	0.1	9.07	50.00	LINR
n-Butylbenzene	1.9450000	1.9582850	1.9582850	0.5	-0.68	50.00	AVRG
n-Propylbenzene	3.1190000	3.0176057	3.0176057	0.1	3.25	50.00	AVRG
Naphthalene	0.7140000	0.8138825	0.8138825	0.2	-13.99	50.00	AVRG
o-Xylene	0.6100000	0.5926573	0.5926573	0.3	2.84	50.00	AVRG
sec-Butylbenzene	2.6250000	2.6468041	2.6468041	0.1	-0.83	50.00	AVRG
Styrene	1.0200000	1.0113785	1.0113785	0.3	0.84	50.00	AVRG
Vinyl Chloride	0.5920000	0.5464480	0.5464480	0.1	7.69	50.00	AVRG
1,2,3-Trichloropropane	0.6230000	0.6150216	0.6150216	0.1	1.28	50.00	AVRG
p-Isopropyltoluene	2.3120000	2.2992684	2.2992684	0.1	0.55	50.00	AVRG
1,2-Dibromo-3-Chloropropane	56.645888	50.000000	9.e-002	0.05	-13.29	50.00	LINR
1,2-Dichloroethane-d4	49.550898	50.000000	0.4733922	0.1	0.90	50.00	LINR
Dibromofluoromethane	47.479090	50.000000	0.4674270	0.1	5.04	50.00	LINR
Toluene-d8	1.2450000	1.1585346	1.1585346	0.1	6.94	50.00	AVRG
4-Bromofluorobenzene	51.617295	50.000000	0.4535255	0.1	-3.23	50.00	LINR

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID (Standard): X062202 Date Analyzed: 06/22/21

Instrument ID: VOA6 Time Analyzed: 1038

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	IS1(CBZ) RT #	IS2(DFB) AREA #	IS2(DFB) RT #	IS3(DCB) AREA #	IS3(DCB) RT #
	12 HOUR STD	563718	7.67	592413	4.96	317734	9.66
	UPPER LIMIT	1127436	8.17	1184826	5.46	635468	10.16
	LOWER LIMIT	281859	7.17	296207	4.46	158867	9.16
	CLIENT SAMPLE NO.						
01	VLCSW-210622	536404	7.67	568300	4.96	291426	9.66
02	VBLKW-210622	591079	7.67	665124	4.96	314426	9.66
03	HS21060908-05	593515	7.67	674334	4.96	307122	9.66
04	HS21060908-01	571481	7.67	654204	4.96	283888	9.66
05	HS21060908-03	575669	7.67	671117	4.96	293386	9.66
06	HS21060908-07	593072	7.67	663688	4.96	309761	9.66
07	HS21060908-07	580732	7.67	663603	4.96	297368	9.66
08	HS21060908-08	568599	7.67	657913	4.96	283412	9.66
09	HS21060908-08	553881	7.67	645995	4.96	277021	9.66
10	HS21060908-03	575595	7.67	658136	4.96	292424	9.66
11	HS21060908-01	503030	7.67	525742	4.96	271534	9.66
12	HS21060908-01	491934	7.67	521111	4.96	270747	9.66
13	HS21060908-05	560138	7.67	667384	4.96	274735	9.66
14							
15							
16							
17							
18							
19							
20							

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID (Standard): X062202 Date Analyzed: 06/22/21

Instrument ID: VOA6 Time Analyzed: 1038

GC Column: DB624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	421505	4.18				
	UPPER LIMIT	843010	4.68				
	LOWER LIMIT	210753	3.68				
	CLIENT SAMPLE NO.						
01	VLCSW-210622	409919	4.18				
02	VBLKW-210622	496540	4.18				
03	HS21060908-05	491489	4.18				
04	HS21060908-01	491784	4.18				
05	HS21060908-03	487609	4.18				
06	HS21060908-07	490321	4.18				
07	HS21060908-07	489028	4.18				
08	HS21060908-08	482890	4.18				
09	HS21060908-08	480250	4.18				
10	HS21060908-03	489436	4.18				
11	HS21060908-01	376592	4.18				
12	HS21060908-01	369506	4.18				
13	HS21060908-05	493136	4.18				
14							
15							
16							
17							
18							
19							
20							

IS4 = Pentafluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062201.D Page 1

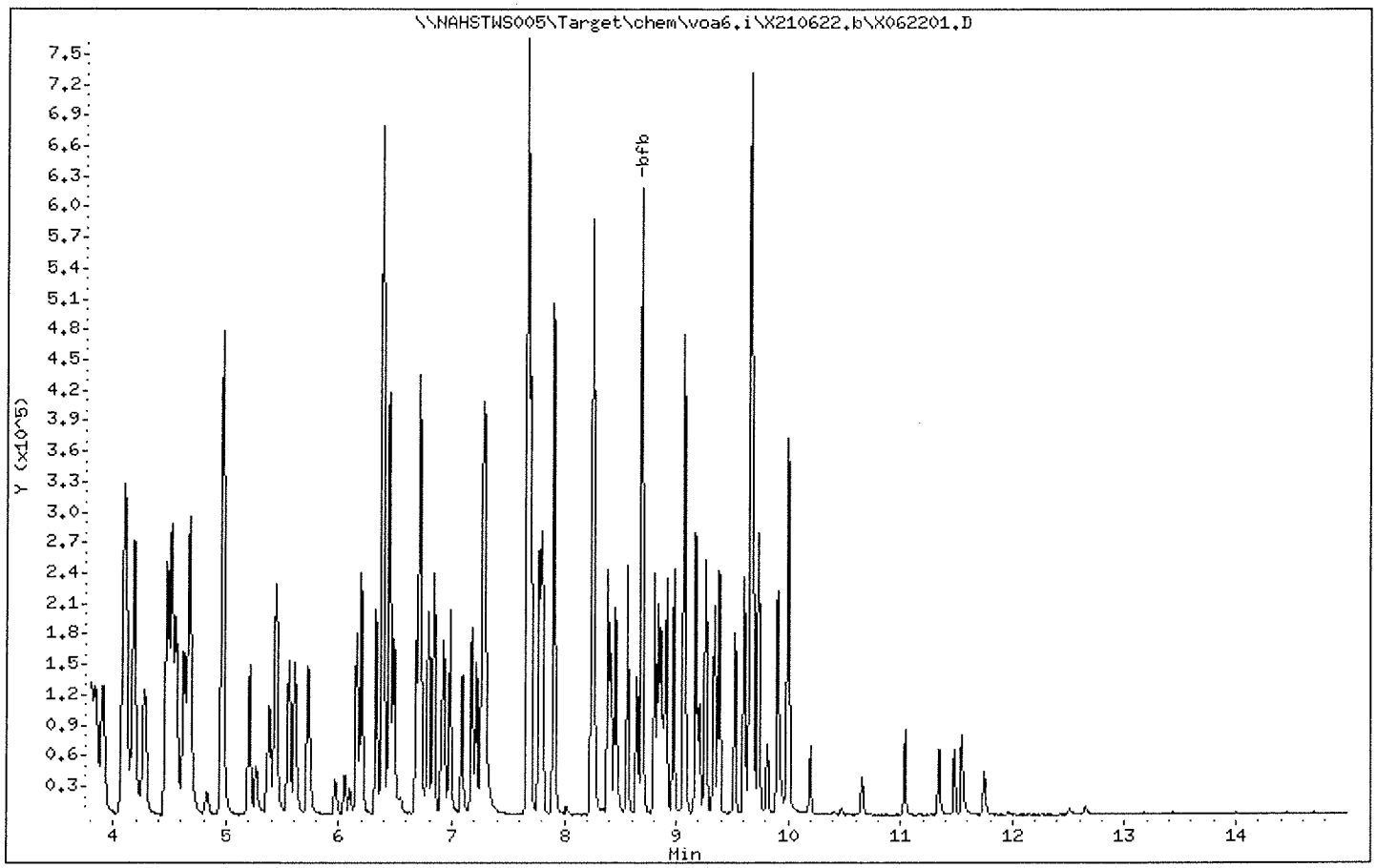
Date : 22-JUN-2021 10:18

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\X210622.b\X062201.D

Date : 22-JUN-2021 10:18

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

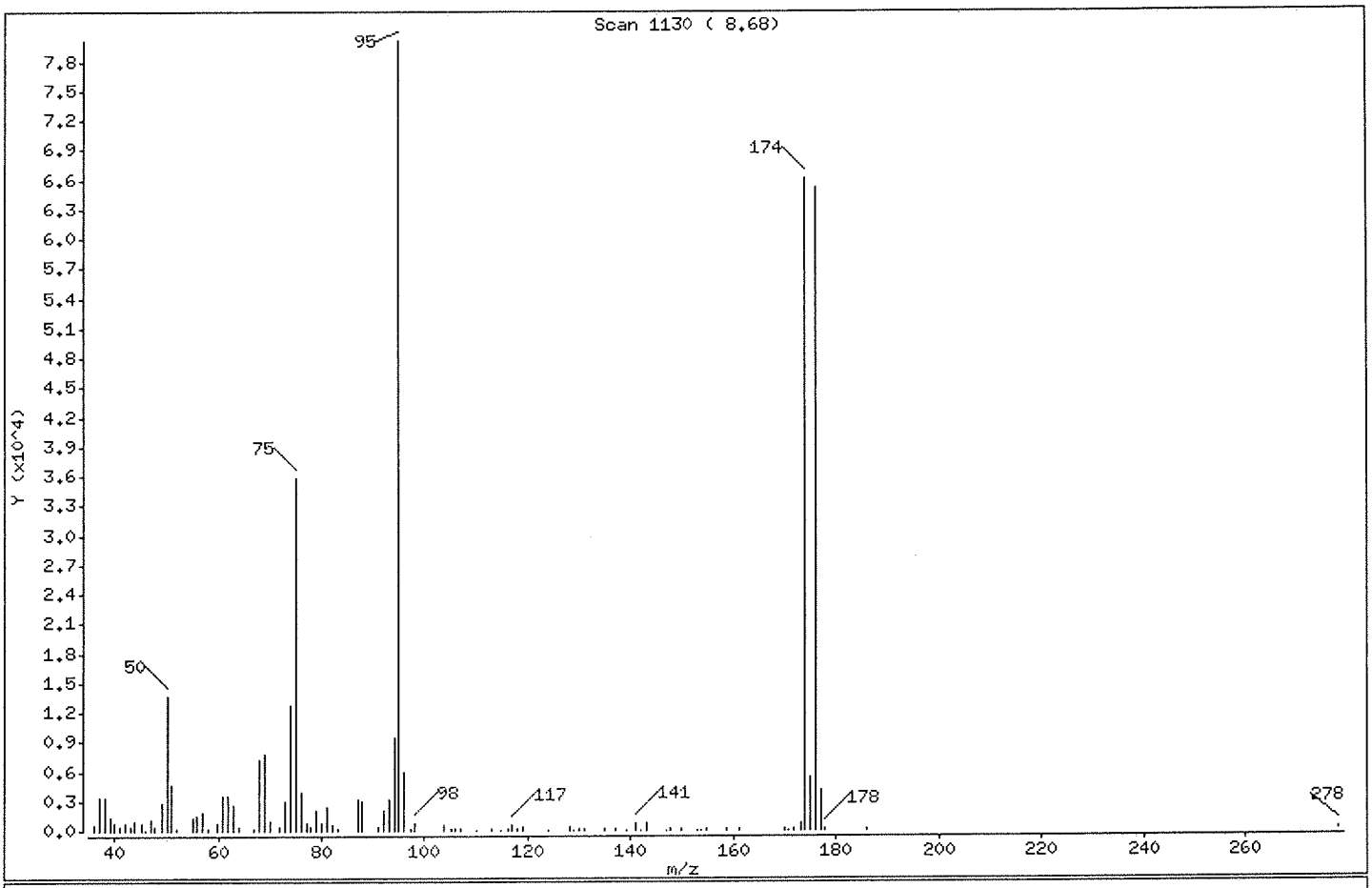
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.03
75	30.00 - 60.00% of mass 95	44.60
96	5.00 - 9.00% of mass 95	7.27
173	Less than 2.00% of mass 174	0.92 (1.11)
174	Greater than 50.00% of mass 95	82.50
175	5.00 - 9.00% of mass 174	6.62 (8.02)
176	95.00 - 101.00% of mass 174	81.26 (98.50)
177	5.00 - 9.00% of mass 176	4.96 (6.11)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062201.D

Date : 22-JUN-2021 10:18

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: X062201.D
Spectrum: Scan 1130 (8.68)
Location of Maximum: 95.00
Number of points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	641	63.10	2543	95.00	80128	142.00	76
37.00	3365	64.00	326	96.00	5823	142.90	663
38.10	3245	66.90	165	97.20	148	146.80	66
39.10	1278	68.00	7176	98.10	690	147.80	147
40.00	697	69.00	7737	103.90	488	149.90	144
41.00	327	70.00	940	105.00	165	153.00	67
42.10	721	72.00	412	105.80	264	153.80	77
43.10	384	73.00	2939	106.90	207	154.90	237
44.00	919	74.00	12725	110.00	92	158.80	186
45.10	666	75.10	35736	112.90	149	161.00	103
46.00	55	76.10	3889	114.80	59	169.90	151
47.10	1023	77.00	719	116.10	222	170.70	65
47.90	362	77.90	411	117.00	553	171.70	114
49.00	2774	79.00	2090	117.80	269	173.00	737
50.10	13648	79.90	714	119.00	431	173.90	66104
51.00	4538	80.90	2383	123.90	74	174.90	5301
52.00	256	82.00	485	128.00	348	175.90	65112
55.10	1252	83.10	137	129.00	89	176.90	3978
56.00	1498	87.00	3208	130.00	243	177.80	187
57.00	1809	87.90	2990	130.90	106	186.10	147
58.00	136	91.00	361	134.80	96	278.10	116
59.90	730	92.00	2088	137.00	122		
61.00	3594	93.00	3186	139.00	57		
62.00	3582	94.00	9326	141.00	663		

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062202.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 22-JUN-2021 10:38
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:59 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

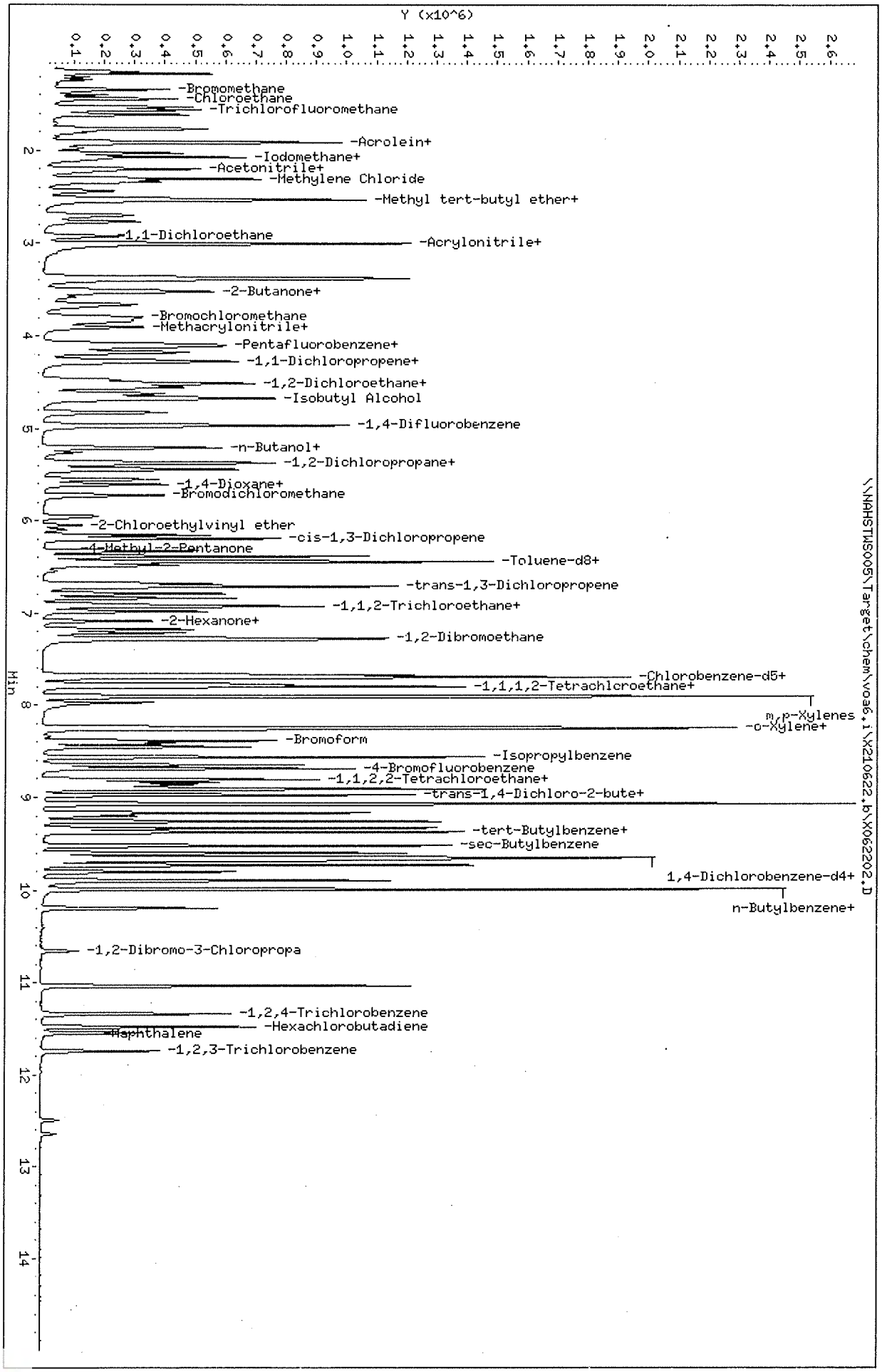
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	421505	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	592413	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	563718	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	317734	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	196409	50.0000	47.33
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	191404	50.0000	47.50
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	661047	50.0000	47.07
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	257550	50.0000	51.99
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	202285	50.0000	48.52
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	271799	50.0000	43.63
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	224539	50.0000	51.18
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	139649	50.0000	45.73
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	270861	50.0000	40.64
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	180804	50.0000	41.64
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	223126	50.0000	49.17
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	112635	50.0000	58.55(M)
71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	189611	50.0000	47.86(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	187151	50.0000	59.57
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	672032	50.0000	46.37
89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	28813	50.0000	57.08
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	191513	50.0000	46.14
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	412351	50.0000	47.84

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	218361	50.0000	46.26
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	160129	50.0000	45.91
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	669699	50.0000	46.43
83	1,3-Dichlorobenzene	146	9.604	9.604	(0.994)	429143	50.0000	47.88
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	279667	50.0000	46.05
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	435977	50.0000	46.61
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	255674	50.0000	44.33
24	2-Butanone	43	3.580	3.580	(0.856)	110872	100.000	86.45
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	546736	50.0000	45.97
52	2-Hexanone	43	7.083	7.083	(0.923)	198309	100.000	94.70
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	636335	50.0000	44.93
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	715345	50.0000	48.69
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	287298	100.000	88.50
10	Acetone	43	1.976	1.976	(0.473)	93090	100.000	85.65
37	Benzene	78	4.512	4.512	(0.909)	668571	50.0000	49.12
74	Bromobenzene	156	8.802	8.802	(0.911)	253332	50.0000	48.05
29	Bromochloromethane	128	3.795	3.795	(0.908)	110615	50.0000	43.40
39	Bromodichloromethane	83	5.722	5.722	(1.153)	237798	50.0000	46.69
66	Bromoform	173	8.408	8.408	(1.096)	160166	50.0000	50.95
6	Bromomethane	94	1.338	1.338	(0.320)	181258	50.0000	41.65
19	Carbon Disulfide	76	2.069	2.069	(0.495)	823908	100.000	80.02(M)
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	247706	50.0000	50.43
59	Chlorobenzene	112	7.692	7.692	(1.003)	530651	50.0000	45.21
7	Chloroethane	64	1.403	1.403	(0.336)	122030	50.0000	41.03(M)
28	Chloroform	83	3.910	3.910	(0.935)	304713	50.0000	41.10
3	Chloromethane	50	1.073	1.073	(0.257)	159941	50.0000	41.55
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	187403	50.0000	42.41
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	289366	50.0000	48.21
55	Dibromochloromethane	129	7.176	7.176	(0.936)	226995	50.0000	48.92
44	Dibromomethane	93	5.550	5.550	(1.118)	120293	50.0000	45.90
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	174373	50.0000	45.01
61	Ethylbenzene	106	7.799	7.799	(1.017)	268524	50.0000	49.59
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	124123	50.0000	62.37(M)
67	Isopropylbenzene	105	8.559	8.559	(1.116)	812043	50.0000	49.09
62	m,p-Xylenes	106	7.907	7.907	(1.031)	673105	100.000	95.37
17	Methylene Chloride	84	2.305	2.305	(0.551)	165698	50.0000	43.17
87	n-Butylbenzene	91	9.991	9.991	(1.034)	612192	50.0000	49.52
73	n-Propylbenzene	91	8.910	8.910	(0.922)	929525	50.0000	46.89
92	Naphthalene	128	11.546	11.546	(1.195)	269898	50.0000	59.44
63	o-Xylene	106	8.243	8.243	(1.075)	322636	50.0000	46.88
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	804242	50.0000	48.20
64	Styrene	104	8.258	8.258	(1.077)	555924	50.0000	48.34
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	581474	50.0000	47.02
56	Tetrachloroethene	164	6.925	6.925	(0.903)	183781	50.0000	52.95
50	Toluene	91	6.446	6.446	(0.840)	739124	50.0000	44.91
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	163194	50.0000	41.46
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	254432	50.0000	49.14
38	Trichloroethene	130	5.206	5.206	(1.049)	204684	50.0000	50.34
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	331935	50.0000	43.62
5	Vinyl Chloride	62	1.138	1.138	(0.272)	211375	50.0000	42.36

QC Flag Legend

M - Compound response manually integrated.



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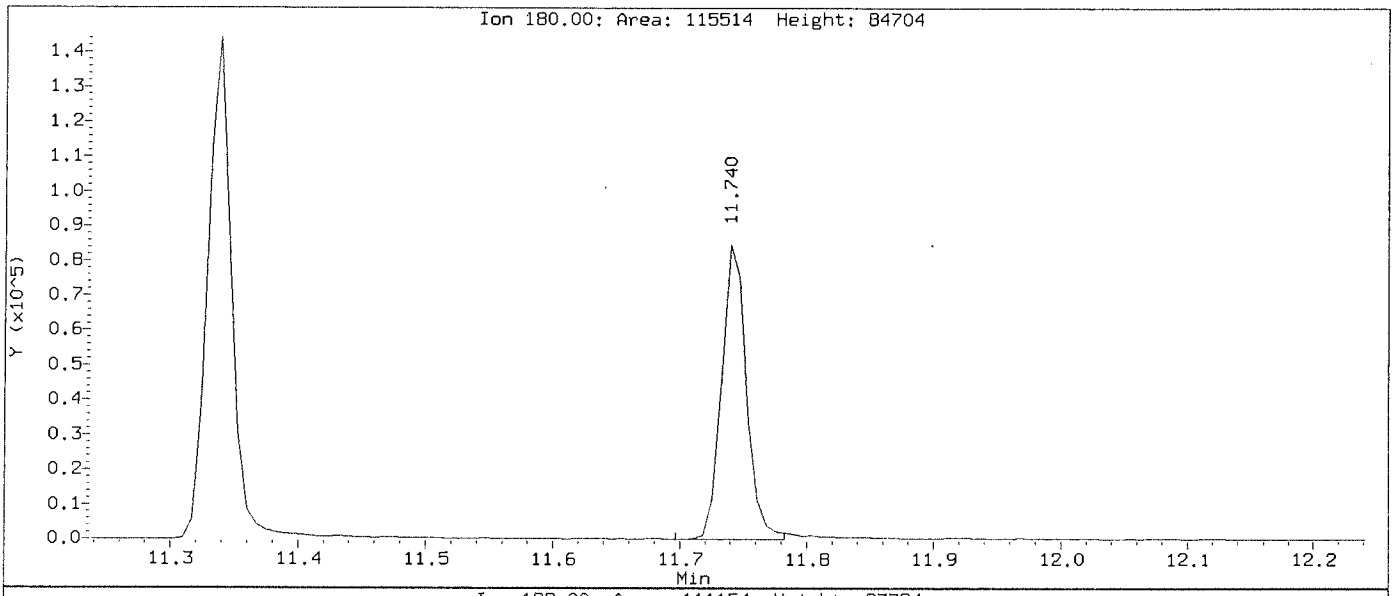
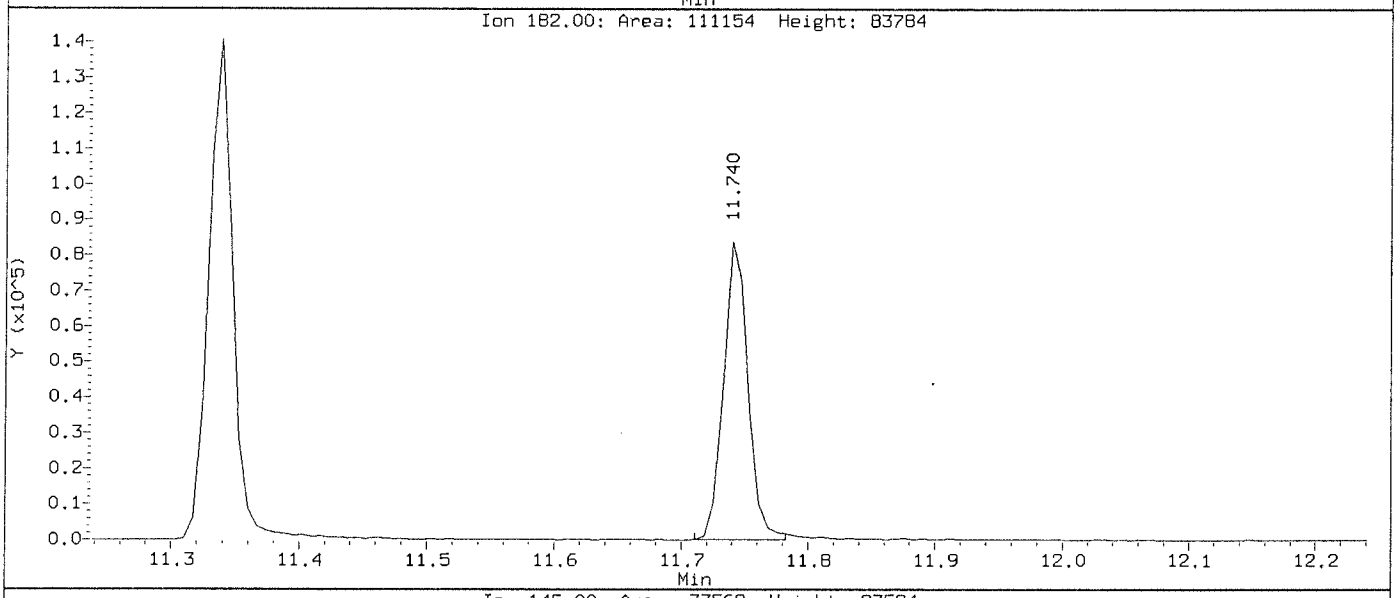
Date : 22-JUN-2021 10:38
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

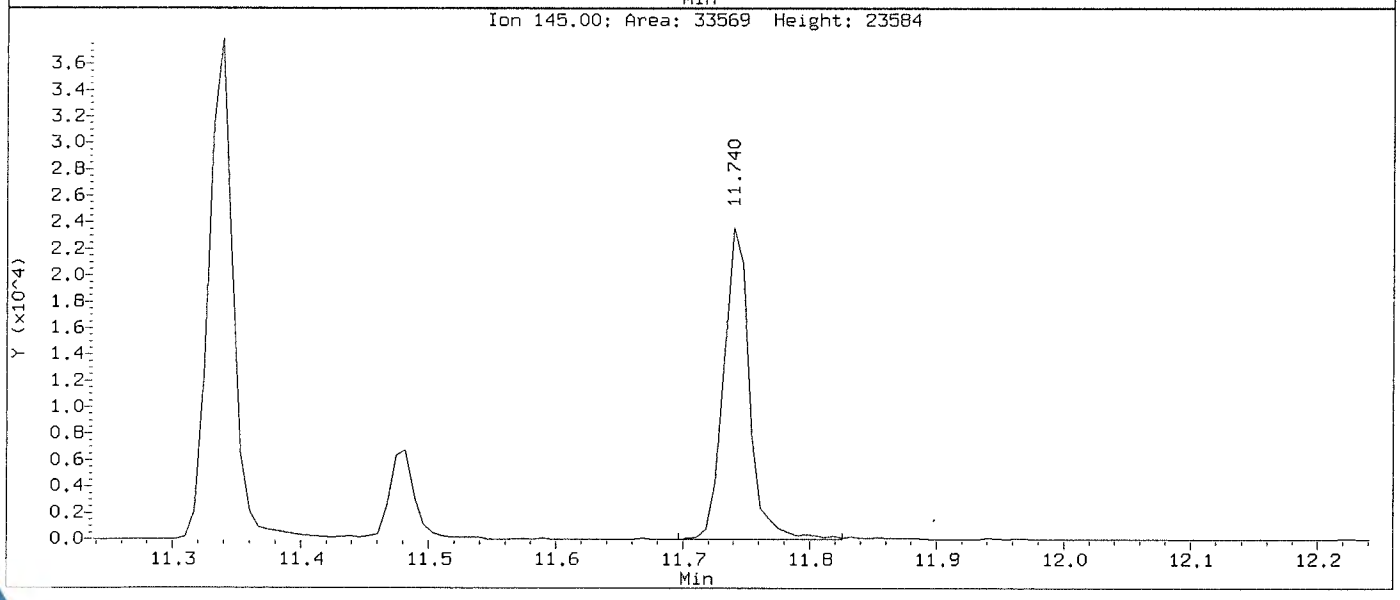
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\Before\X062202.D
Injection Date: 22-JUN-2021 10:38
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichlorobenzene
CAS Number: 87-61-6







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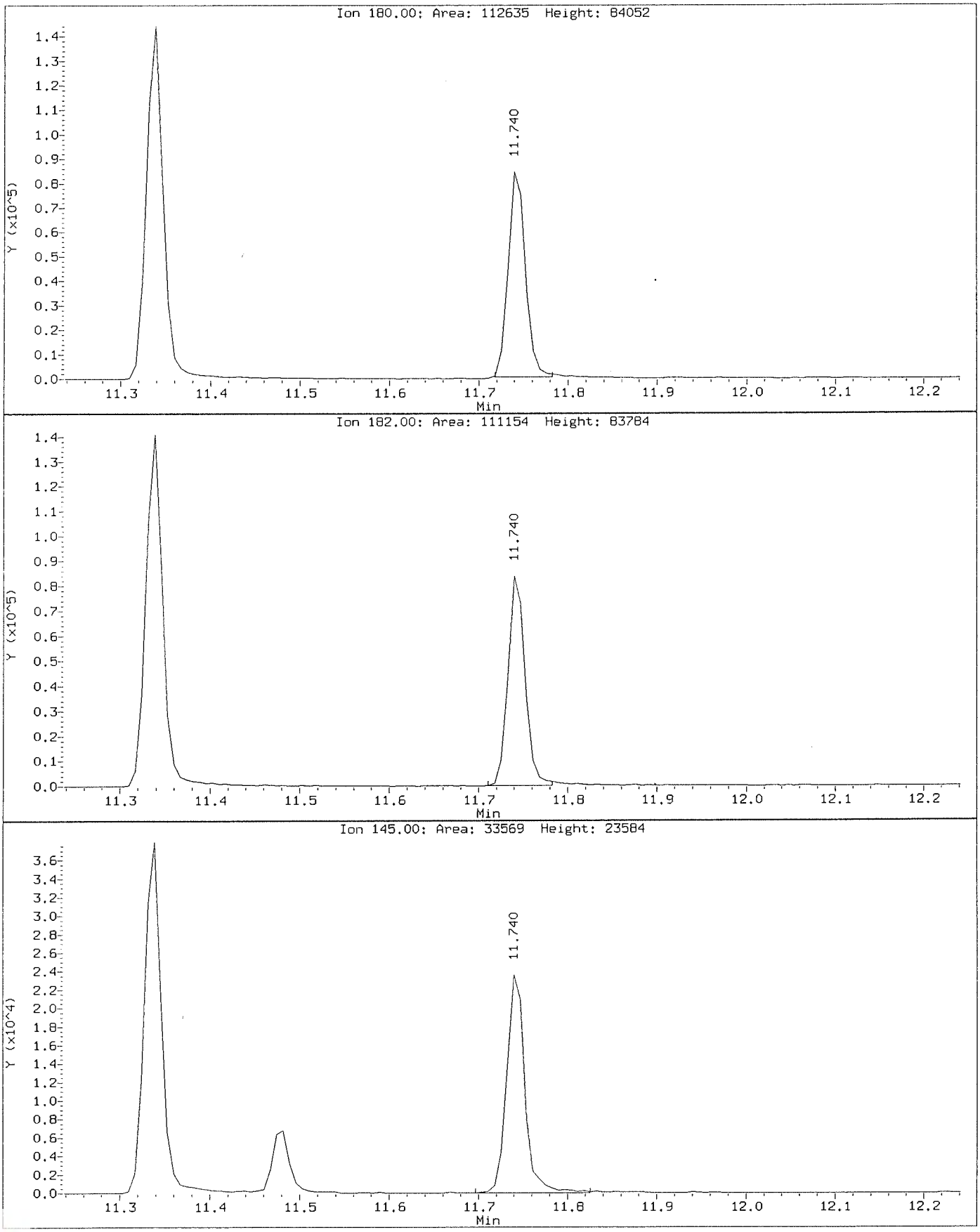
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichlorobenzene
CAS Number: 87-61-6



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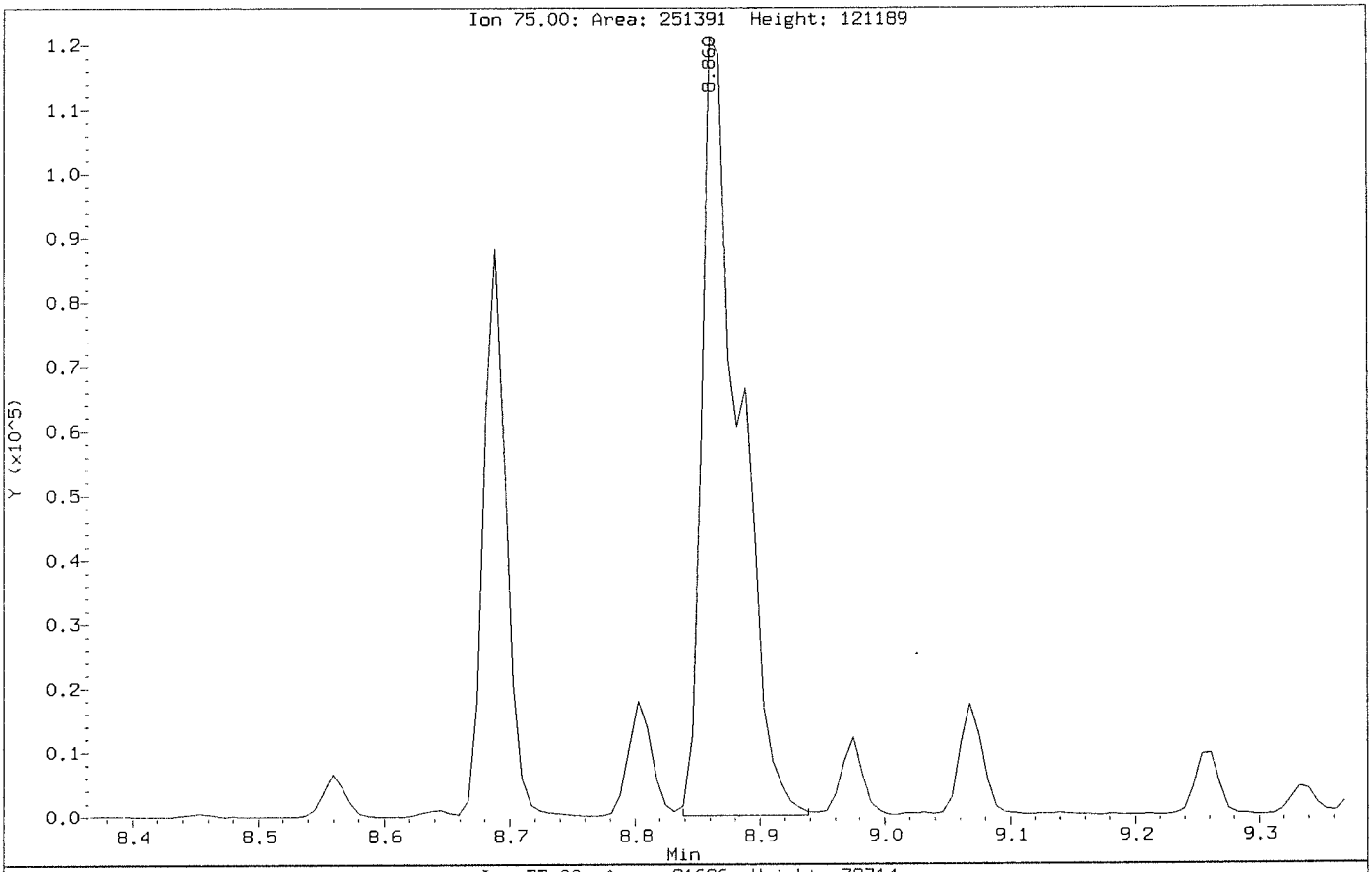
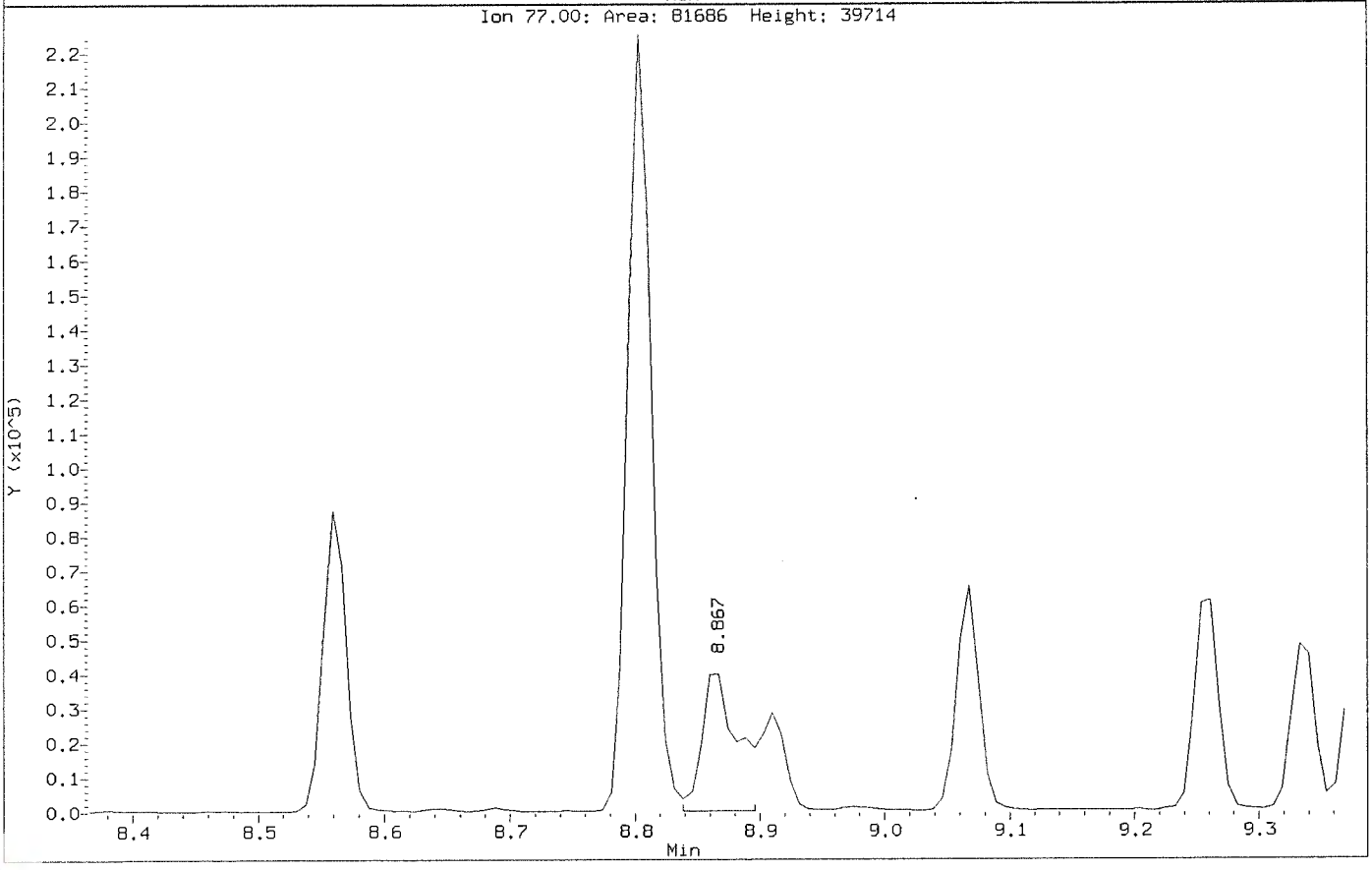
Injection Date: 22-JUN-2021 10:38
Instrument: voa6.i
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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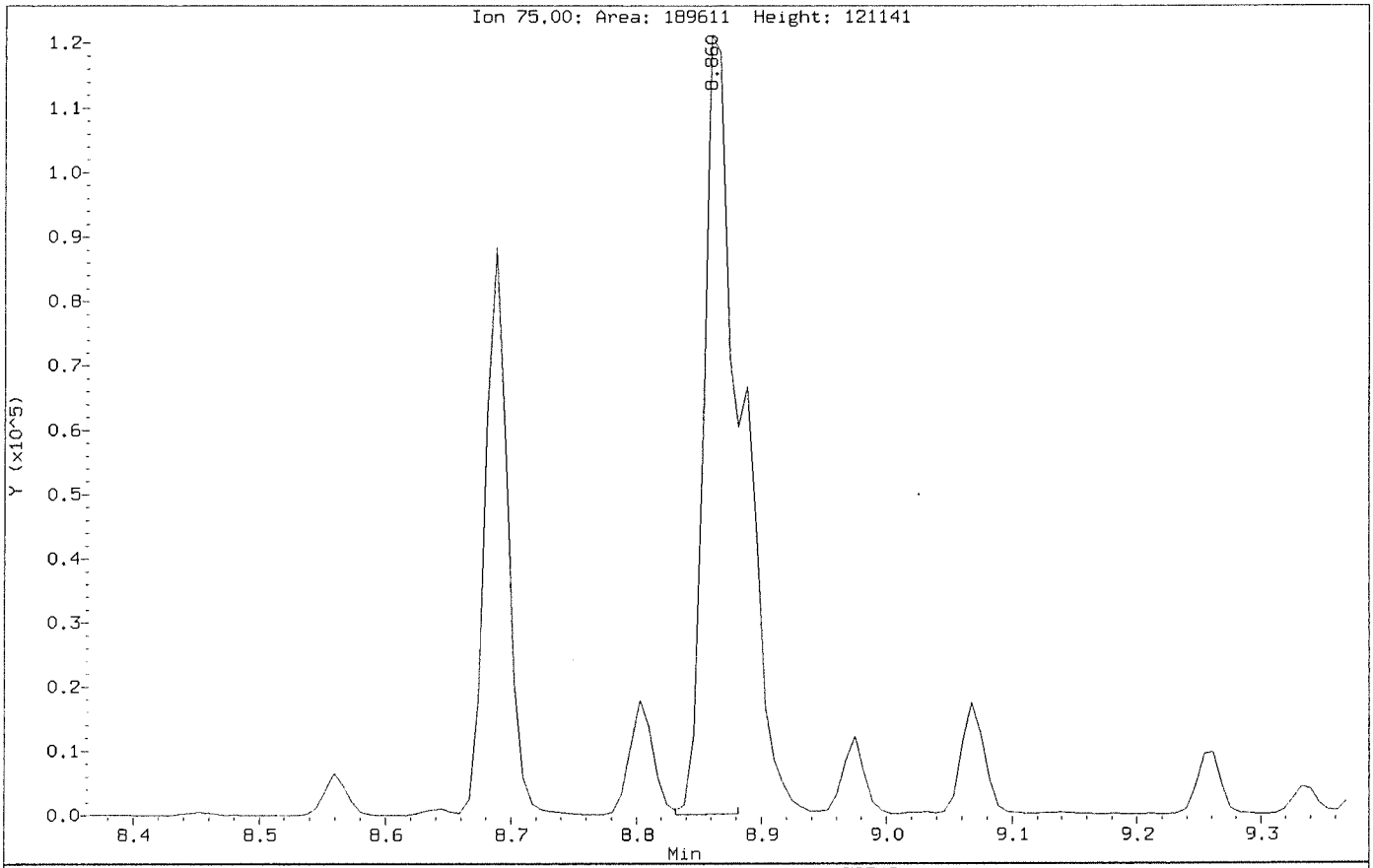
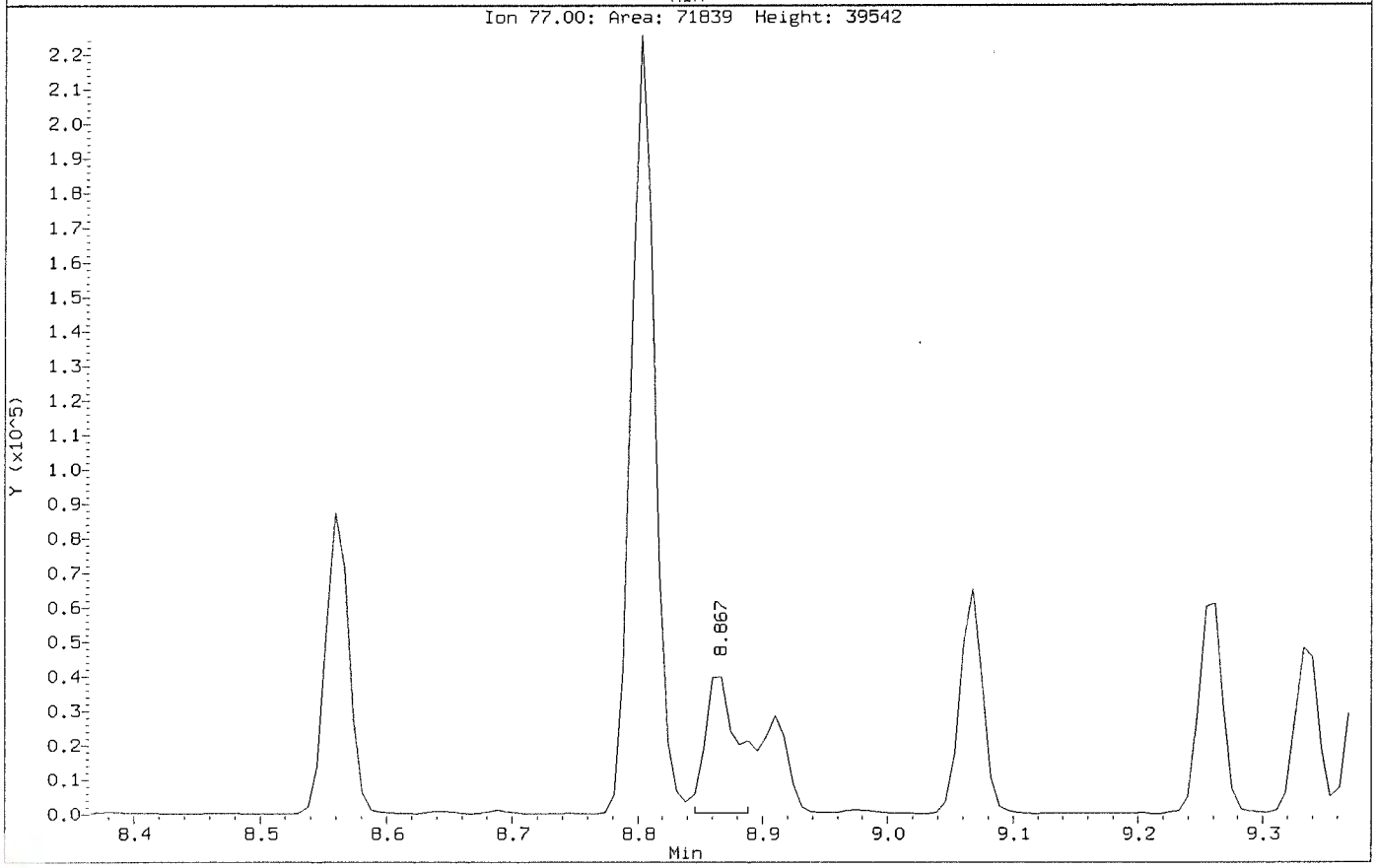
Client Sample ID: CCV

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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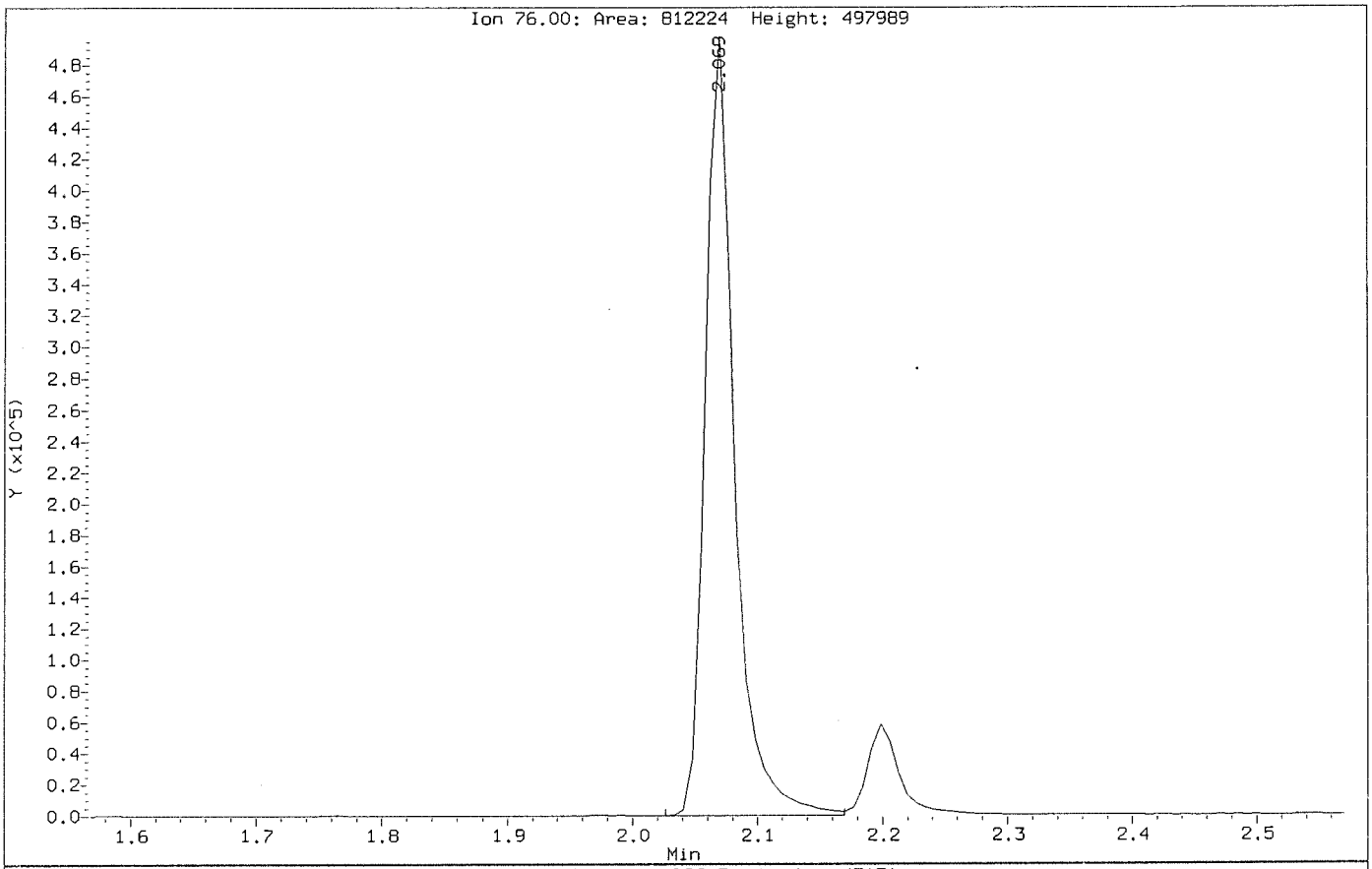
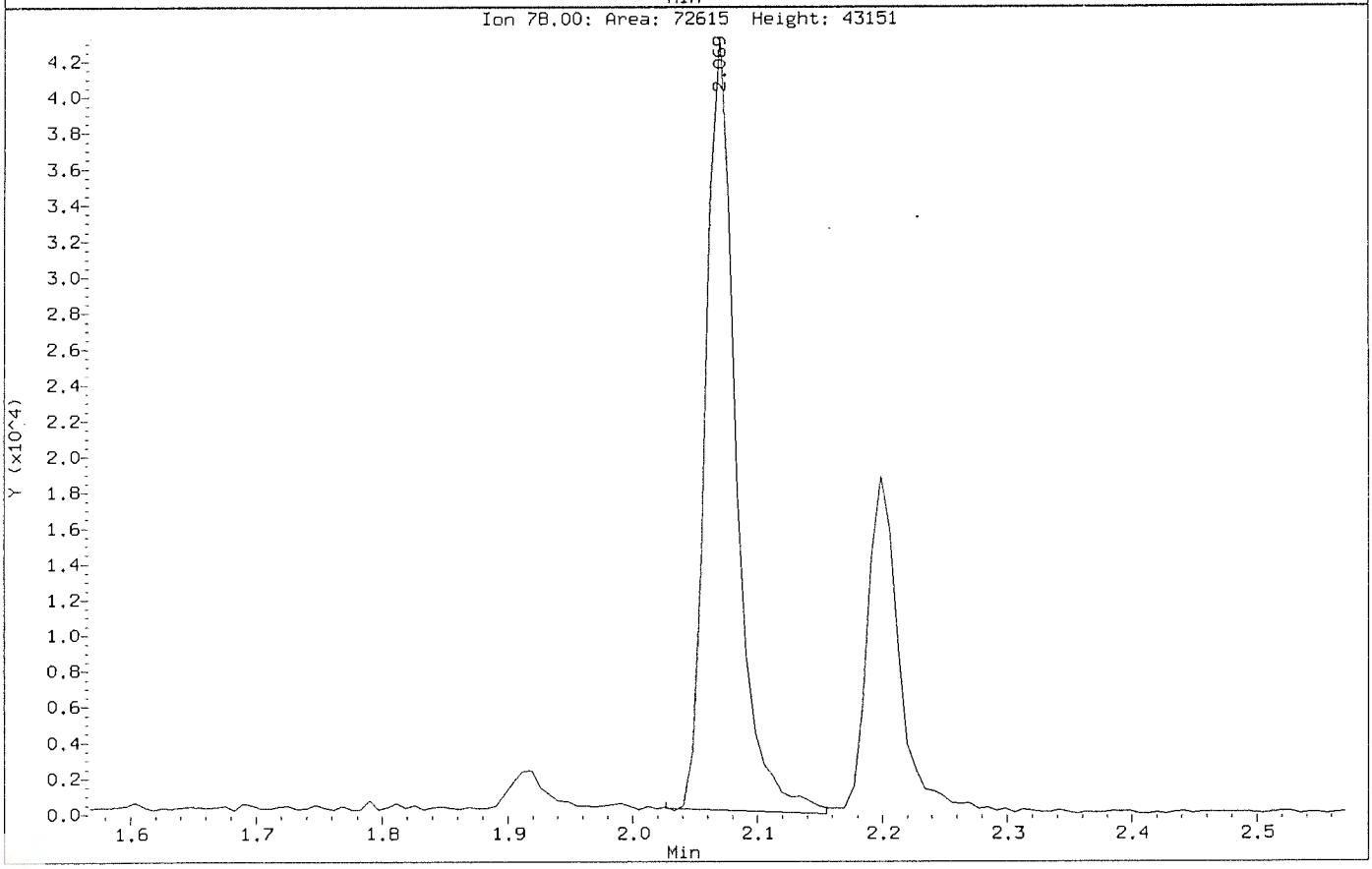
Injection Date: 22-JUN-2021 10:38
Instrument: voa6.i
Client Sample ID: CCV

Compound: Carbon Disulfide
CAS Number: 75-15-0





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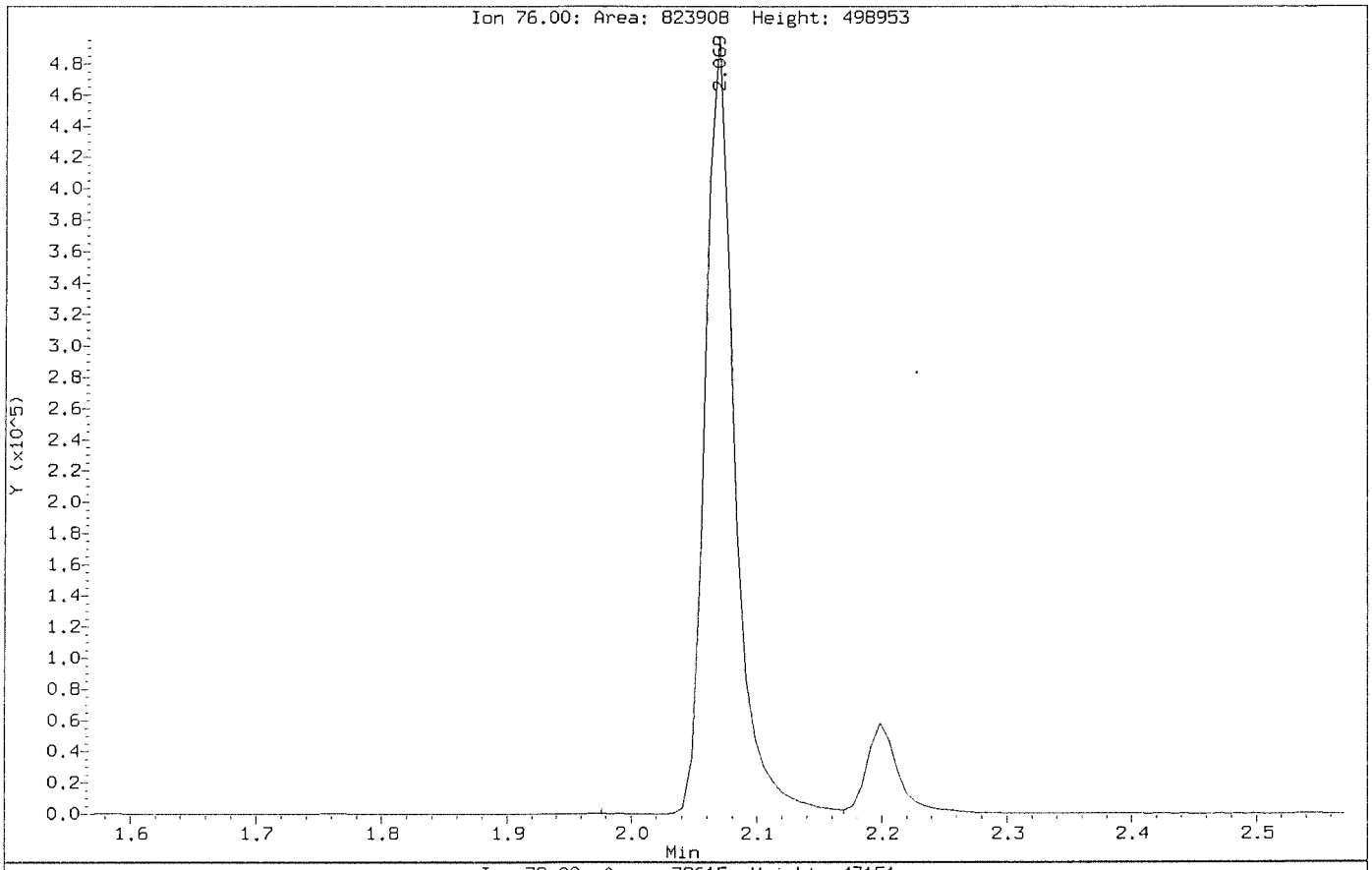
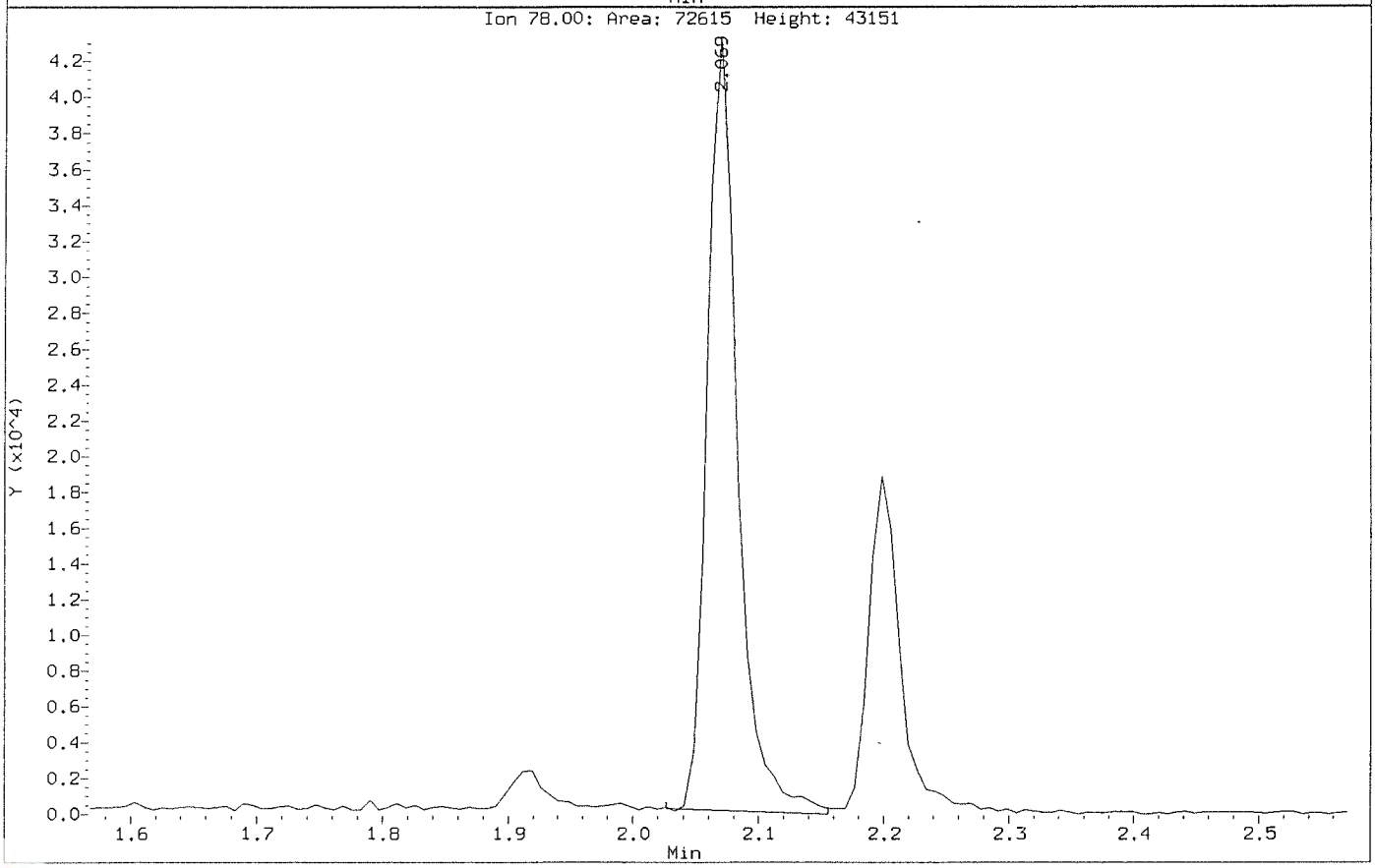
Instrument: voa6.i
Client Sample ID: CCV

Compound: Carbon Disulfide
CAS Number: 75-15-0





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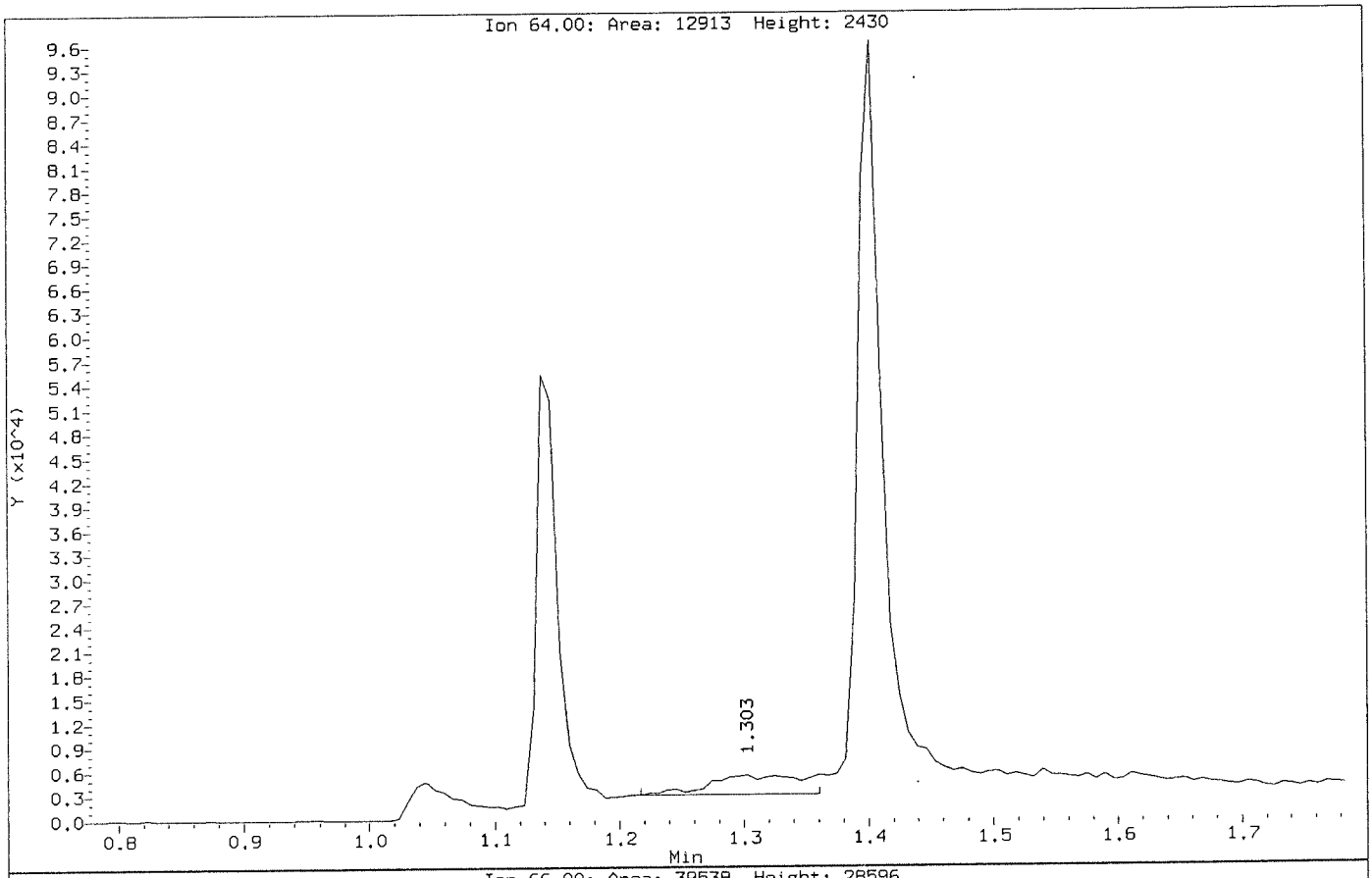
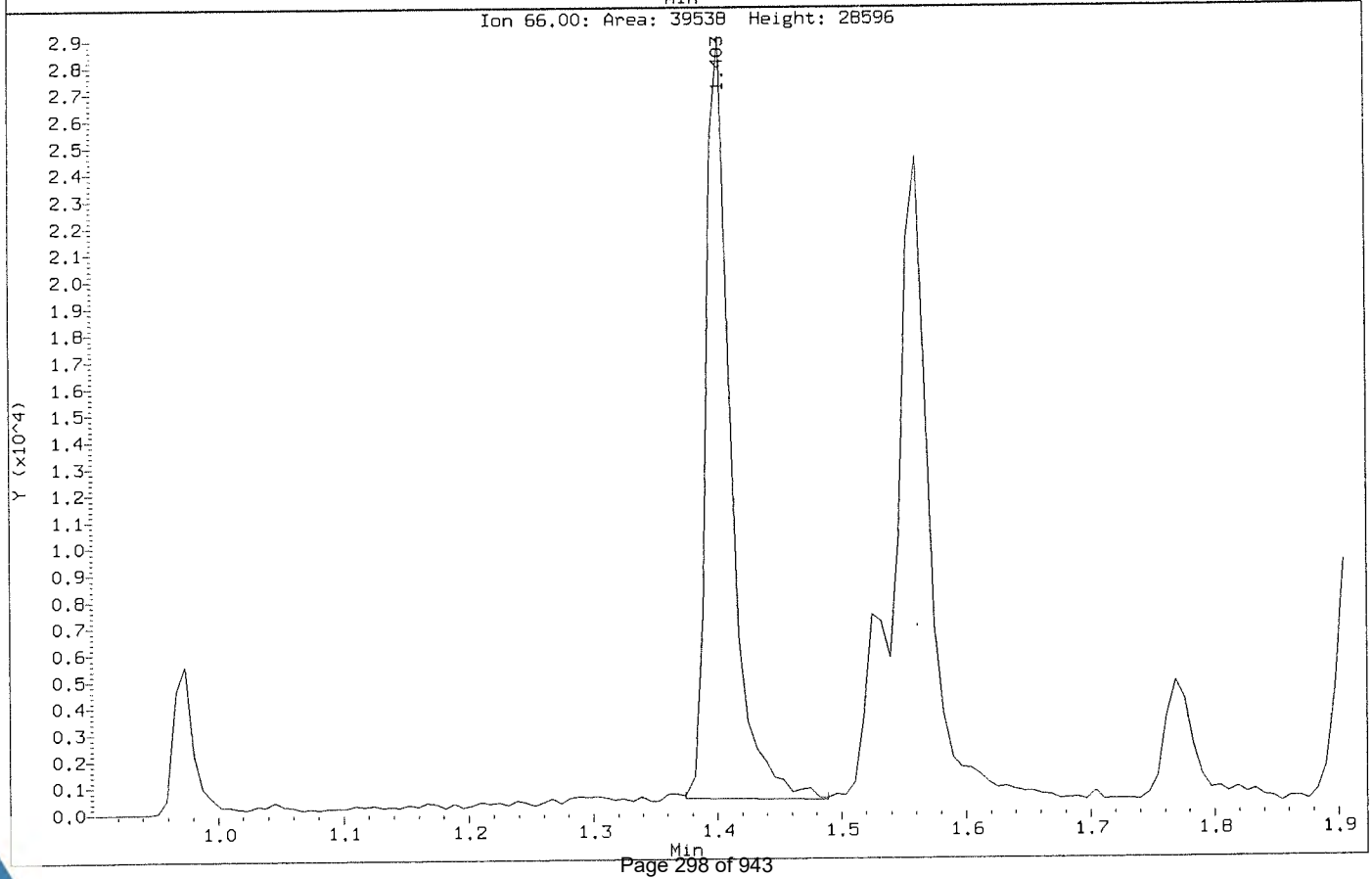
Injection Date: 22-JUN-2021 10:38
Instrument: voa6.i
Client Sample ID: CCV

Compound: Chloroethane
CAS Number: 75-00-3





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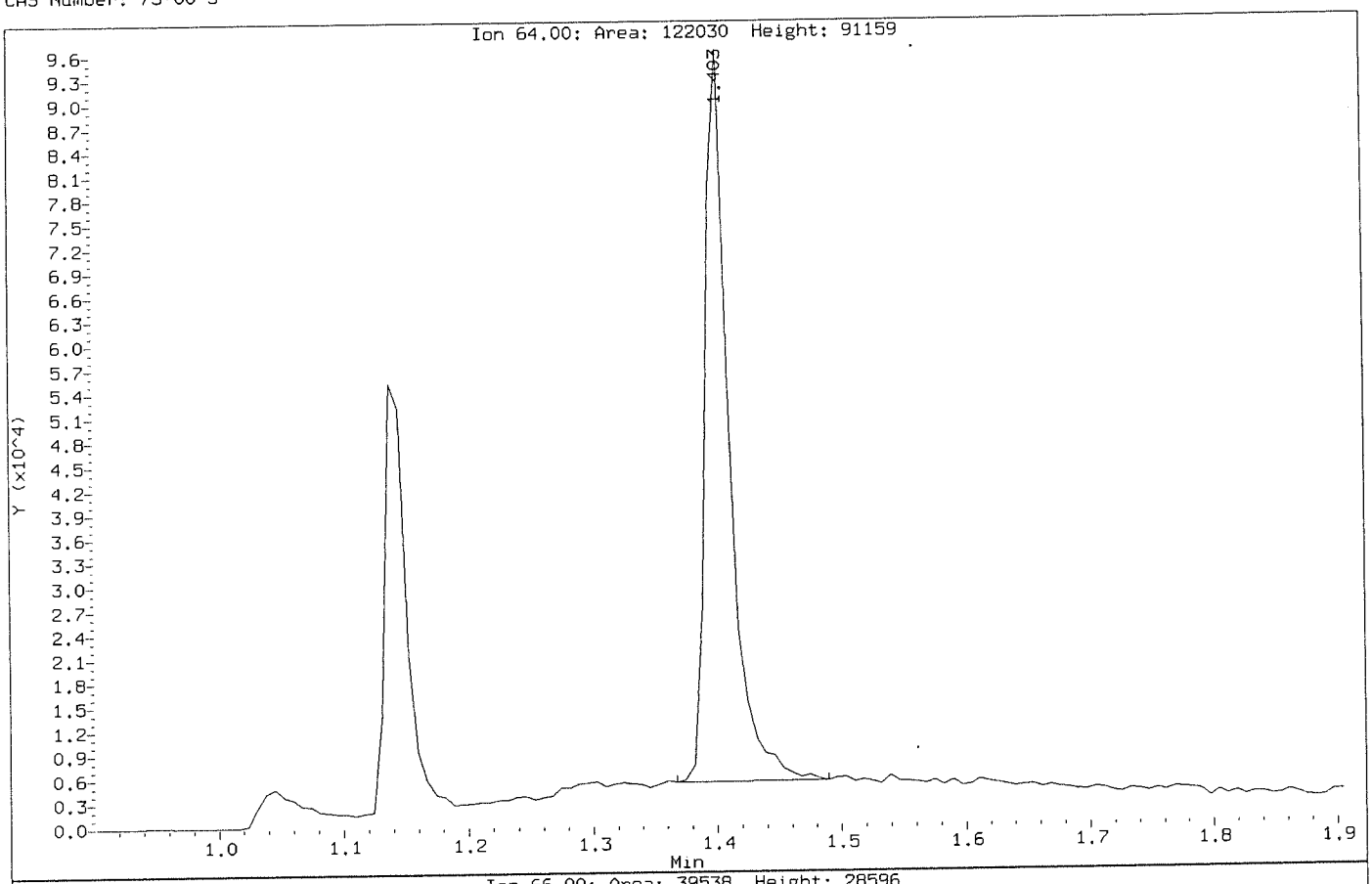
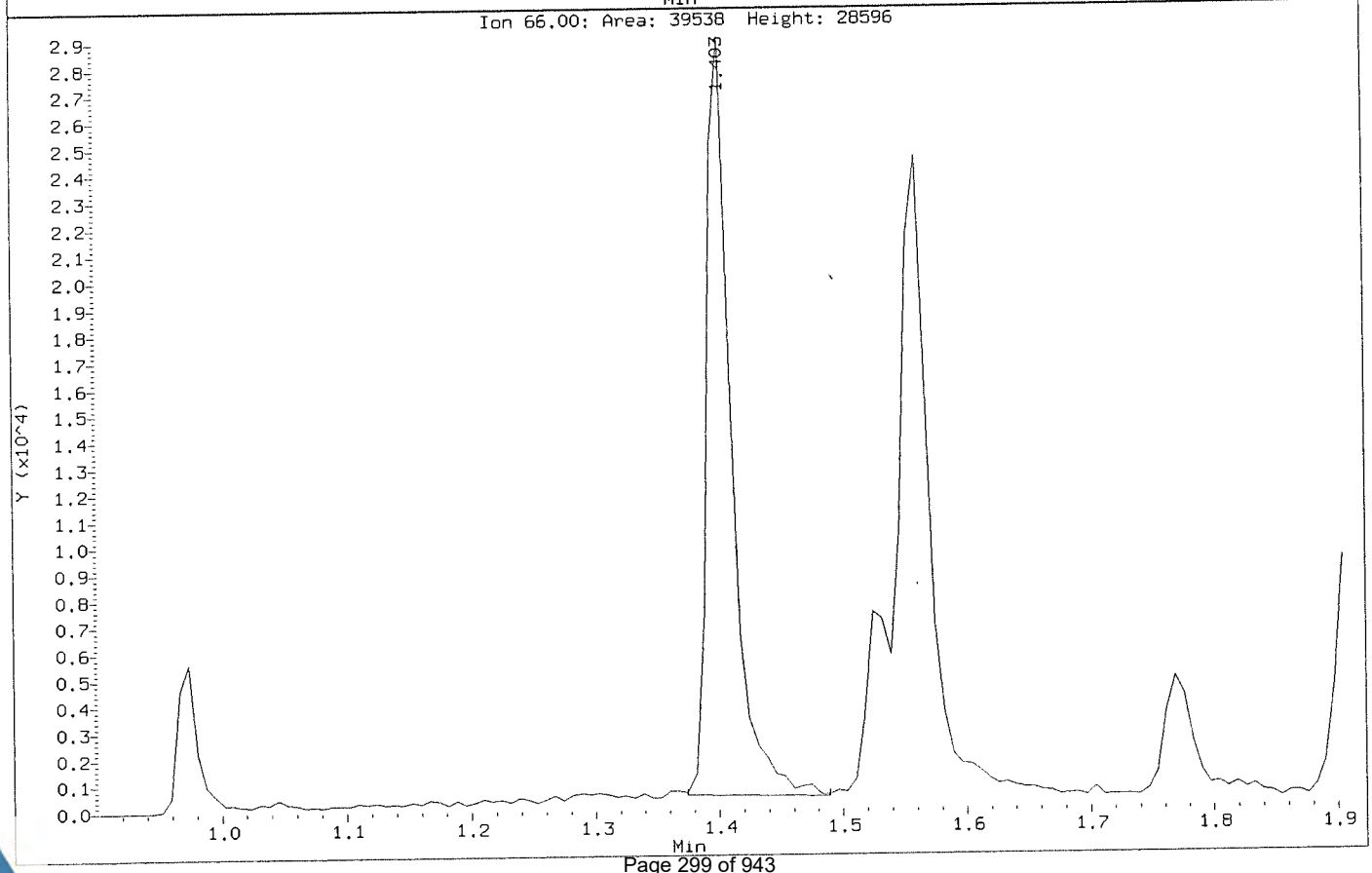
Client Sample ID: CCV

Compound: Chloroethane
CAS Number: 75-00-3





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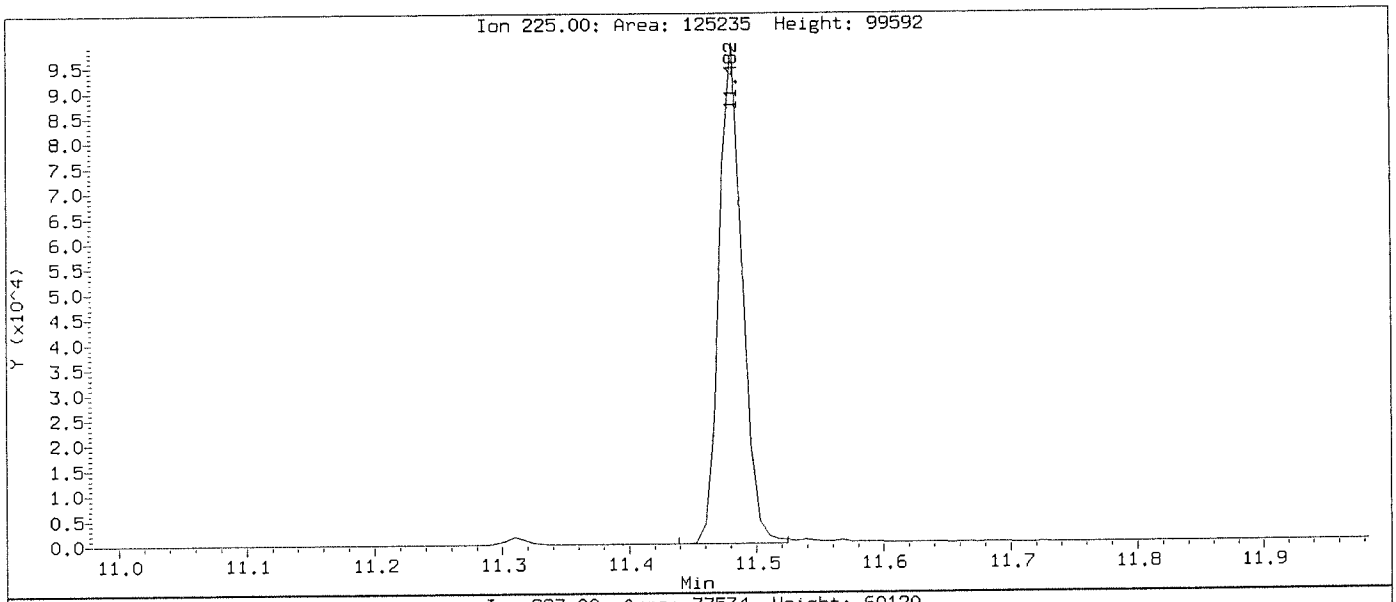
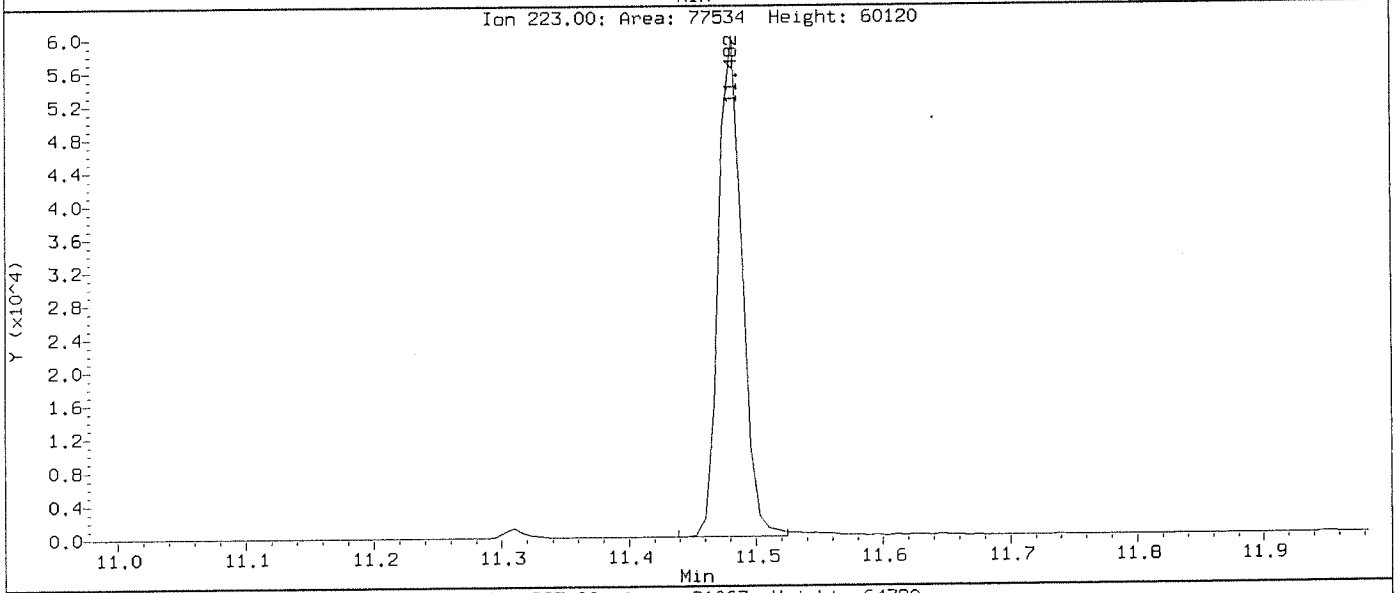
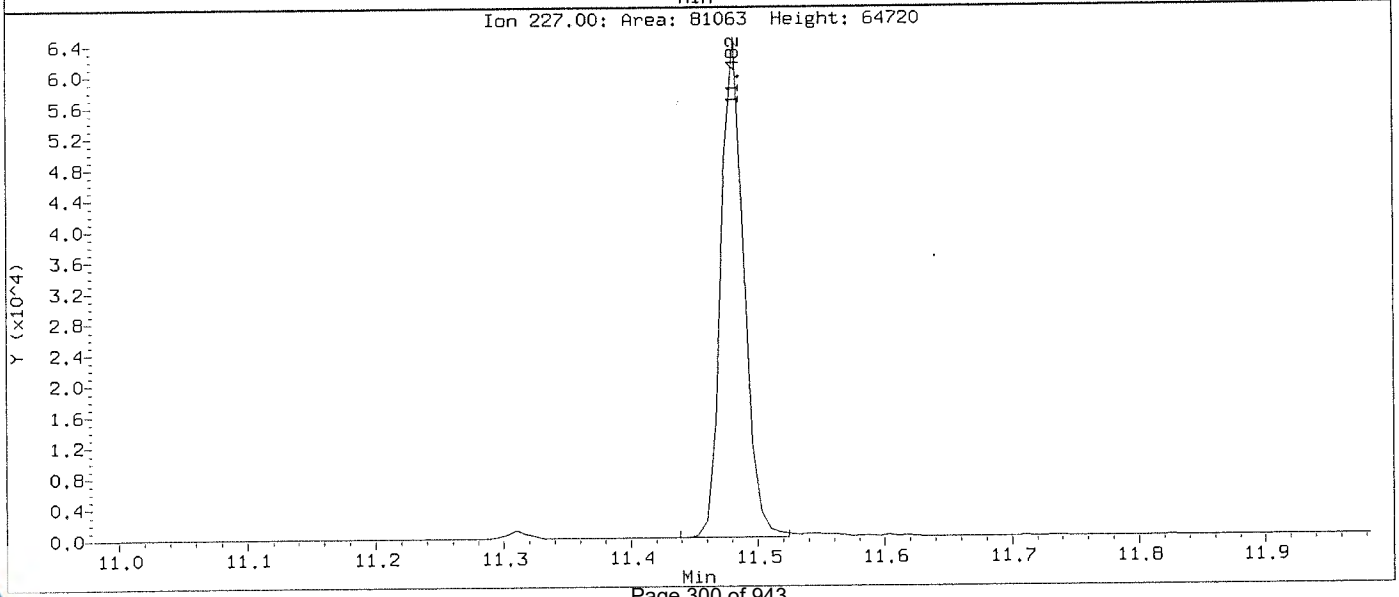
Injection Date: 22-JUN-2021 10:38
Instrument: voa6.i
Client Sample ID: CCV

Compound: Hexachlorobutadiene
CAS Number: 87-68-3







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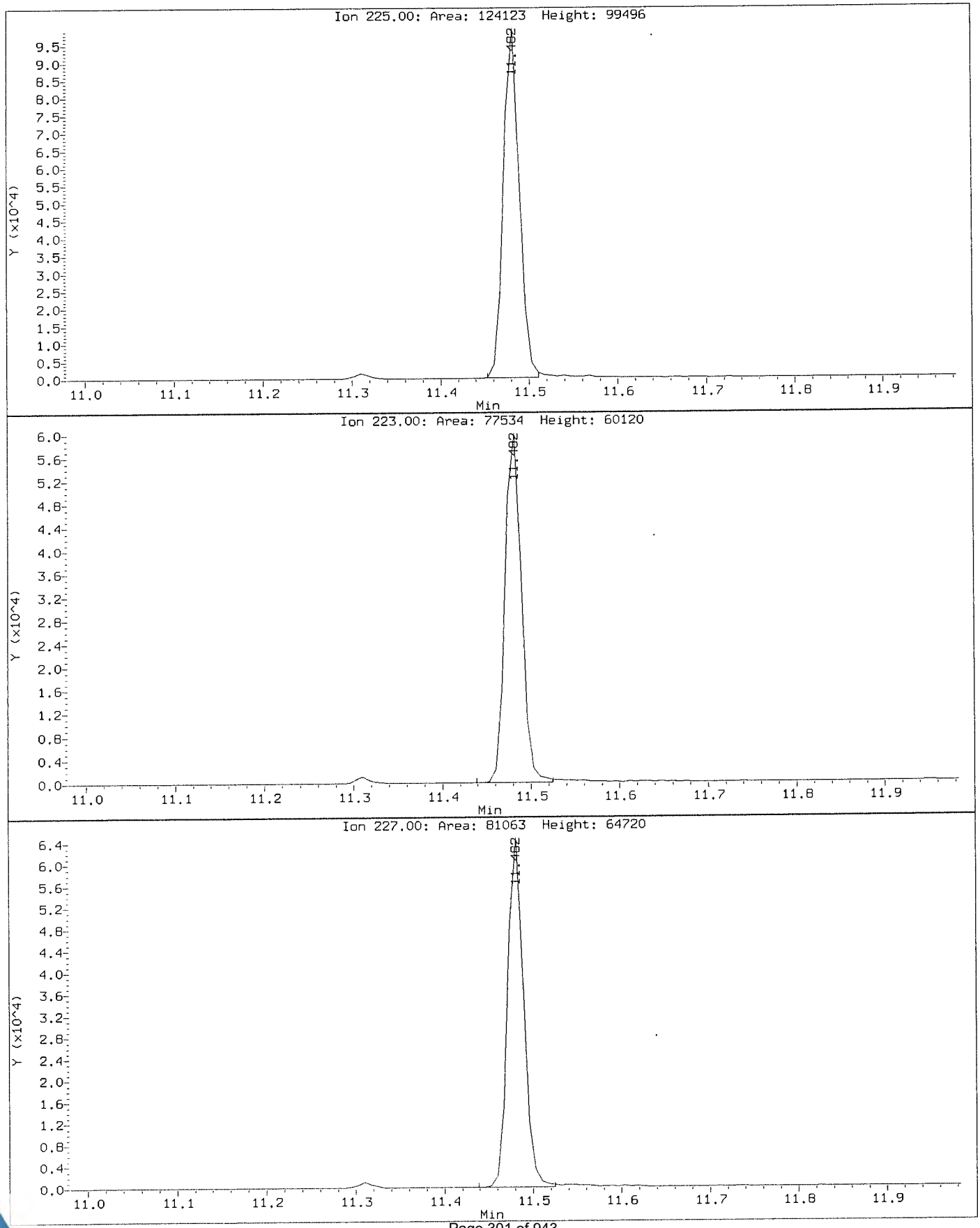
Injection Date: 22-JUN-2021 10:38
Instrument: voa6.i
Client Sample ID: CCV

Compound: Hexachlorobutadiene
CAS Number: 87-68-3



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062204.D Page 1
Report Date: 27-Aug-2021 08:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062204.D
Lab Smp Id: VLCSW-210622 Client Smp ID: VLCSW-210622
Inj Date : 22-JUN-2021 11:50
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-210622;VLCSW-210622;3;;LCS
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:59 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.182	4.182	(1.000)	409919	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	568300	50.0000	
*	47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	536404	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	291426	50.0000	
$	30 Dibromofluoromethane	113	4.096	4.096	(0.979)	189455	46.9439	46.94
$	35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	190675	48.6764	48.67
$	48 Toluene-d8	98	6.388	6.388	(0.833)	635116	47.5335	47.53
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	235253	49.9404	49.94
	60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	69658	17.5599	17.55
	31 1,1,1-Trichloroethane	97	4.089	4.082	(0.978)	98193	16.2093	16.20
	68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	83249	19.9758	19.97
	53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	51072	17.5763	17.57
	22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	100721	15.5422	15.54
	11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	68084	16.1244	16.12
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	80183	18.4221	18.42
	93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	45017	25.5165	25.51
	71 1,2,3-Trichloropropane	75	8.867	8.860	(0.918)	65843	18.1218	18.12(M)
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	67145	23.3039	23.30
	79 1,2,4-Trimethylbenzene	105	9.382	9.375	(0.971)	228970	17.2261	17.22
	89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	10287	22.5355	22.53
	57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	70085	17.7464	17.74
	88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	141526	17.9044	17.90

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062204.D Page 2
Report Date: 27-Aug-2021 08:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	81010	17.8906	17.89
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	60451	18.0710	18.07
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	231467	17.4979	17.49
83	1,3-Dichlorobenzene	146	9.604	9.604	(0.994)	146386	17.8086	17.80
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	100188	17.3398	17.33
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	150776	17.5779	17.57
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	95857	17.0923	17.09
24	2-Butanone	43	3.588	3.580	(0.858)	39545	31.7080	31.70
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	190784	17.4904	17.49
52	2-Hexanone	43	7.090	7.083	(0.924)	73102	36.6871	36.68
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	215008	16.5517	16.55
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	249218	18.4948	18.49
45	4-Methyl-2-Pentanone	43	6.331	6.324	(0.825)	108664	35.1787	35.17
10	Acetone	43	1.976	1.976	(0.473)	35854	30.3225	30.32
37	Benzene	78	4.512	4.512	(0.909)	249440	19.1061	19.10
74	Bromobenzene	156	8.802	8.802	(0.911)	90305	18.6768	18.67
29	Bromochloromethane	128	3.795	3.795	(0.908)	41900	16.9045	16.90
39	Bromodichloromethane	83	5.729	5.722	(1.154)	84763	17.3495	17.34
66	Bromoform	173	8.408	8.408	(1.096)	55334	18.4995	18.49
6	Bromomethane	94	1.338	1.338	(0.320)	73409	17.4377	17.43
19	Carbon Disulfide	76	2.069	2.069	(0.495)	308396	30.7989	30.79
34	Carbon Tetrachloride	117	4.261	4.268	(0.859)	88148	18.7110	18.71
59	Chlorobenzene	112	7.692	7.692	(1.003)	187484	16.7899	16.78
7	Chloroethane	64	1.403	1.403	(0.336)	51335	16.9474	16.94 (M)
28	Chloroform	83	3.910	3.910	(0.935)	114219	15.8447	15.84 (M)
3	Chloromethane	50	1.073	1.073	(0.257)	63016	15.2024	15.20 (M)
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	69079	16.0779	16.07 (M)
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	103611	17.9975	17.99
55	Dibromochloromethane	129	7.176	7.176	(0.936)	80722	18.2839	18.28
44	Dibromomethane	93	5.550	5.550	(1.118)	45229	17.9913	17.99
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	64683	17.0398	17.03
61	Ethylbenzene	106	7.799	7.799	(1.017)	93142	18.0804	18.08
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	48930	28.1508	28.15
67	Isopropylbenzene	105	8.559	8.559	(1.116)	279699	17.7697	17.76
62	m,p-Xylenes	106	7.900	7.907	(1.030)	231104	34.4130	34.41
17	Methylene Chloride	84	2.305	2.305	(0.551)	61722	15.7164	15.71
87	n-Butylbenzene	91	9.991	9.991	(1.034)	212141	18.7118	18.71
73	n-Propylbenzene	91	8.910	8.910	(0.922)	322163	17.7220	17.72
92	Naphthalene	128	11.546	11.546	(1.195)	97862	23.4986	23.49
63	o-Xylene	106	8.243	8.243	(1.075)	112150	17.1263	17.12
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	278905	18.2257	18.22
64	Styrene	104	8.258	8.258	(1.077)	185395	16.9427	16.94
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	202266	17.8352	17.83
56	Tetrachloroethene	164	6.925	6.925	(0.903)	64500	19.5328	19.53
50	Toluene	91	6.446	6.446	(0.840)	263817	16.8468	16.84
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	60117	15.7065	15.70
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	88525	17.8249	17.82
38	Trichloroethene	130	5.206	5.206	(1.049)	73351	18.8057	18.80
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	123628	16.7079	16.70
5	Vinyl Chloride	62	1.138	1.138	(0.272)	79195	16.3212	16.32

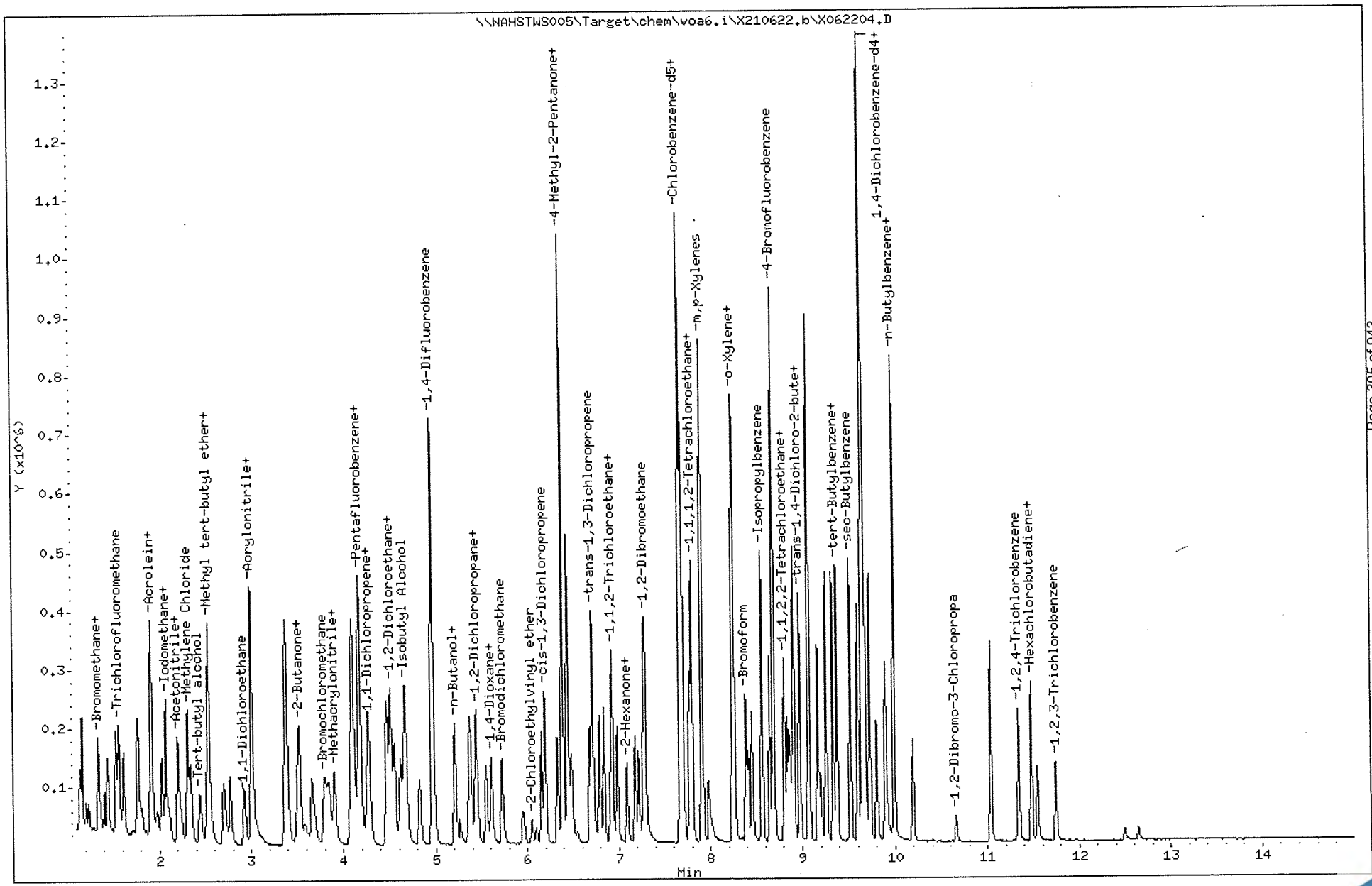
QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062204.D
Date : 22-JUN-2021 11:50
Client ID: VLCSW-210622
Sample Info: VLCSW-210622;VLCSW-210622;3;;LCS
Purge Volume: 5.0
Column phase: DB624

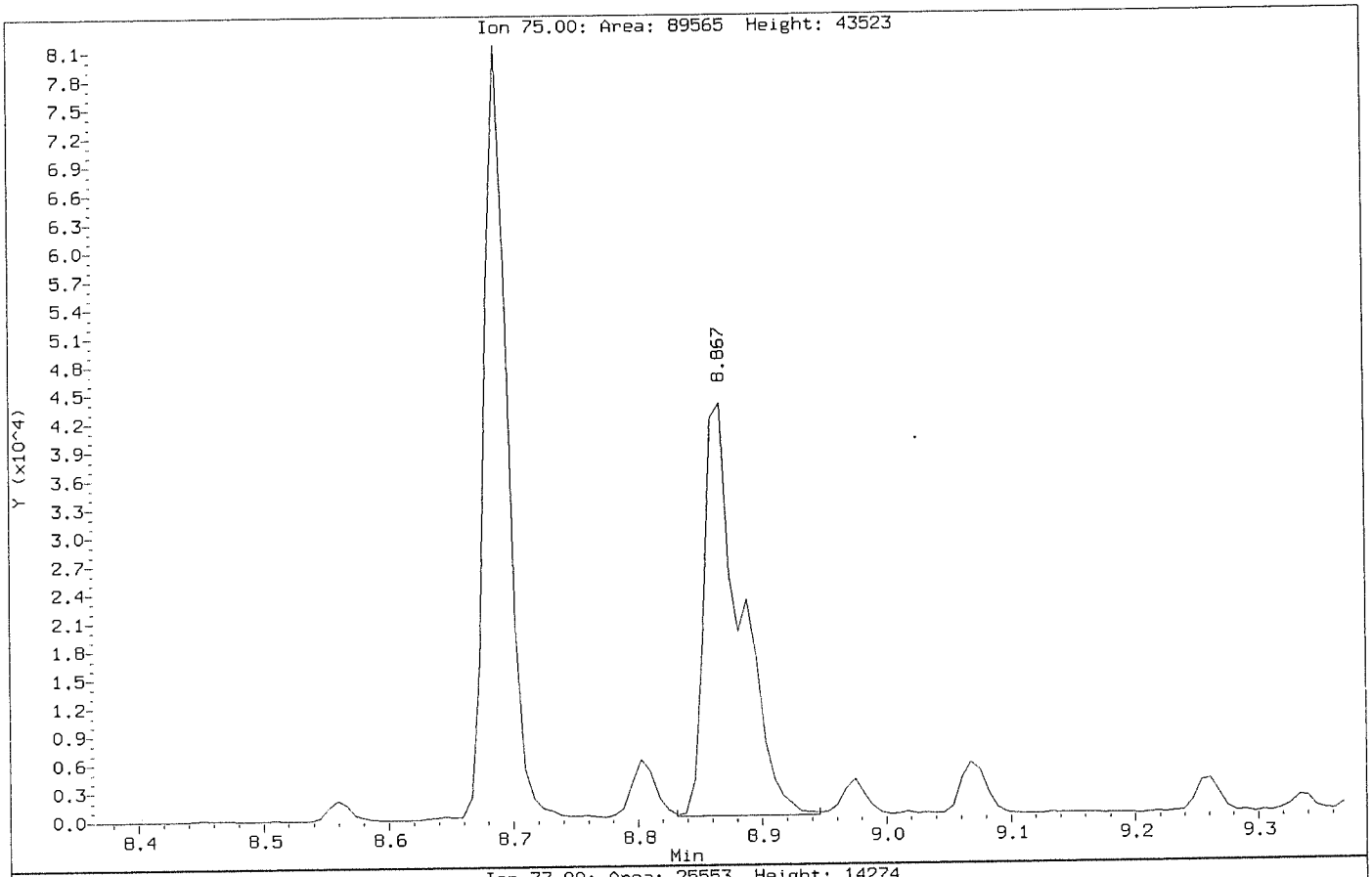
Instrument: voa6.i

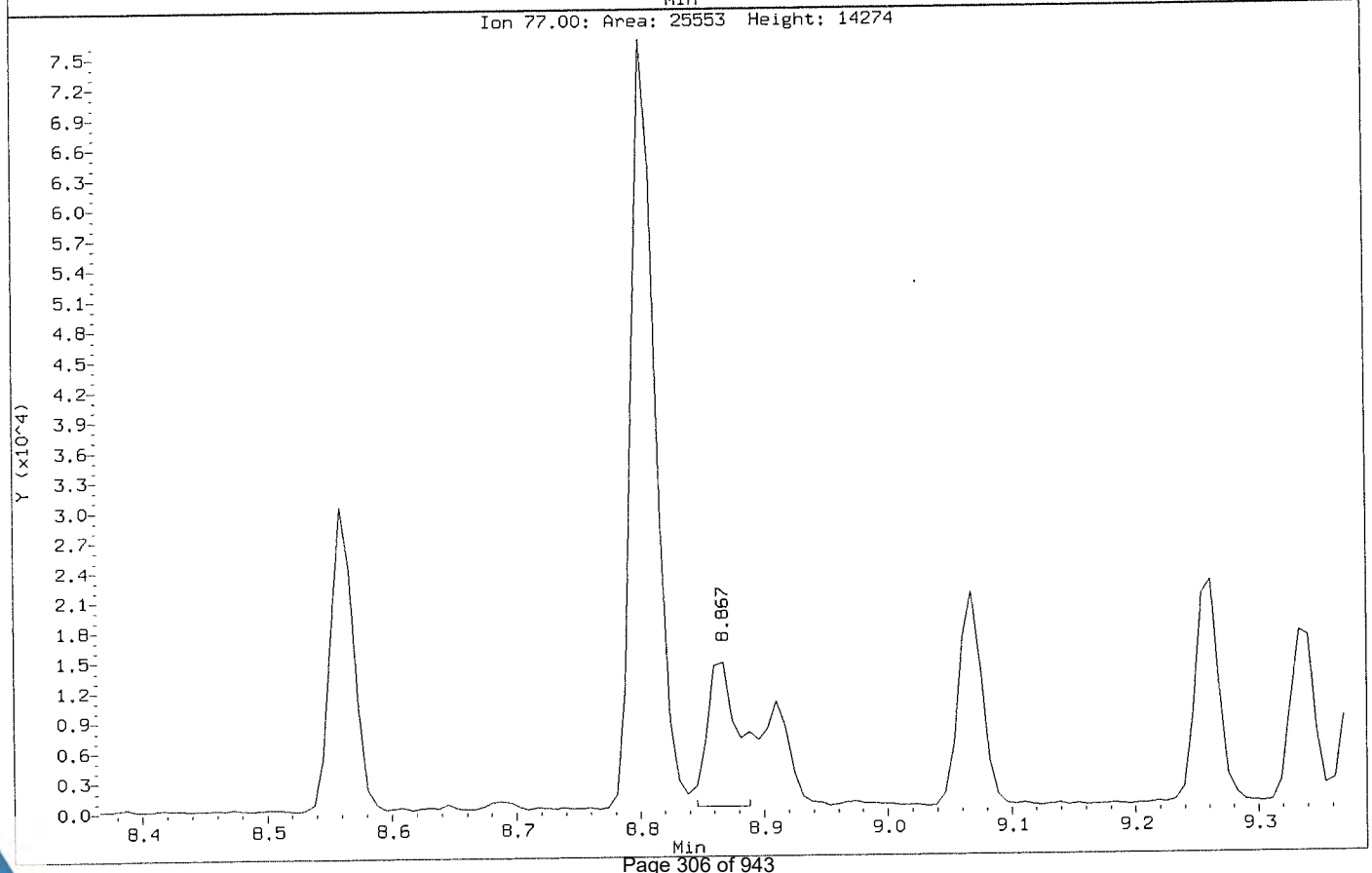
Operator: PC
Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\Before\X062204.D
Injection Date: 22-JUN-2021 11:50
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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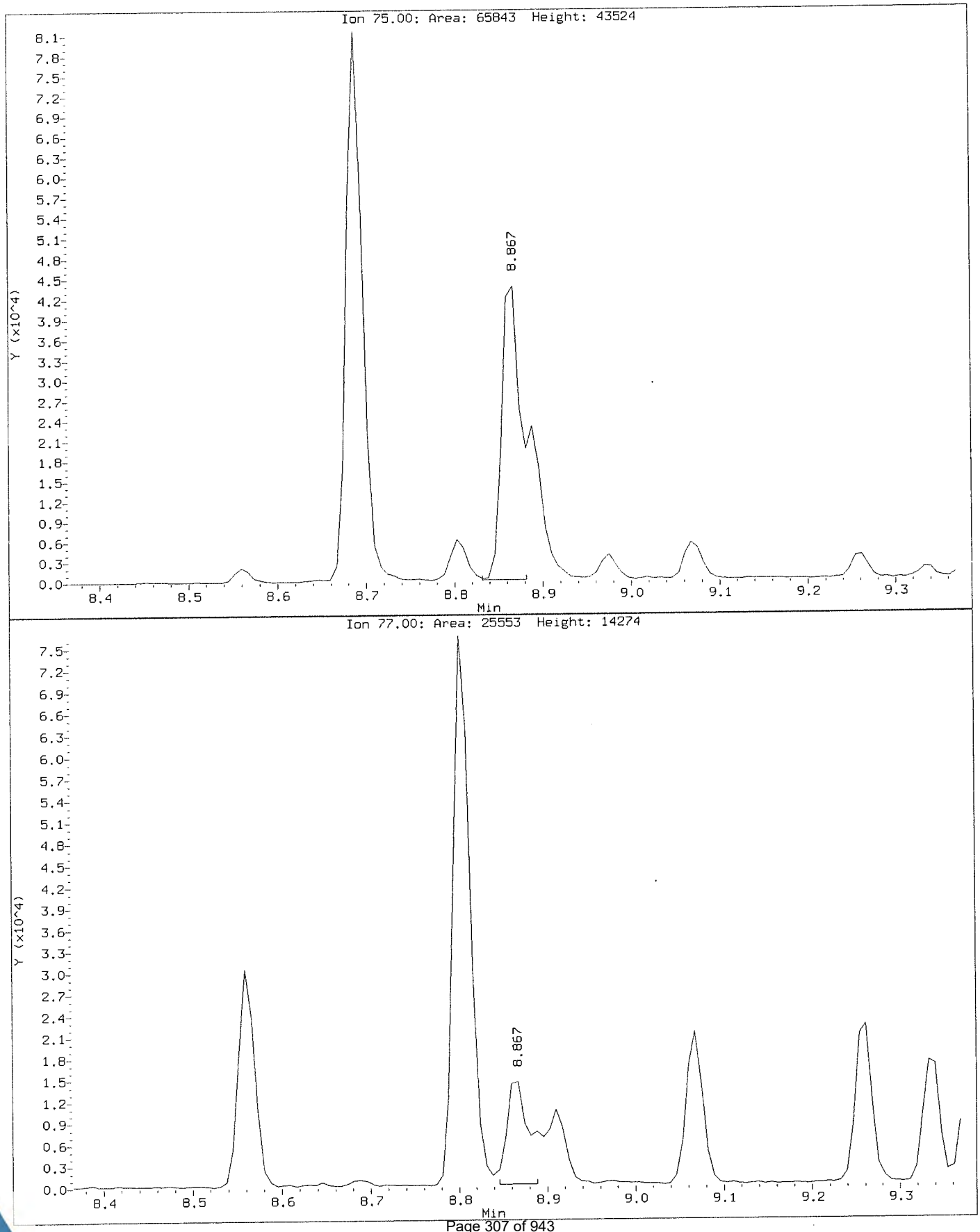
Injection Date: 22-JUN-2021 11:50
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4



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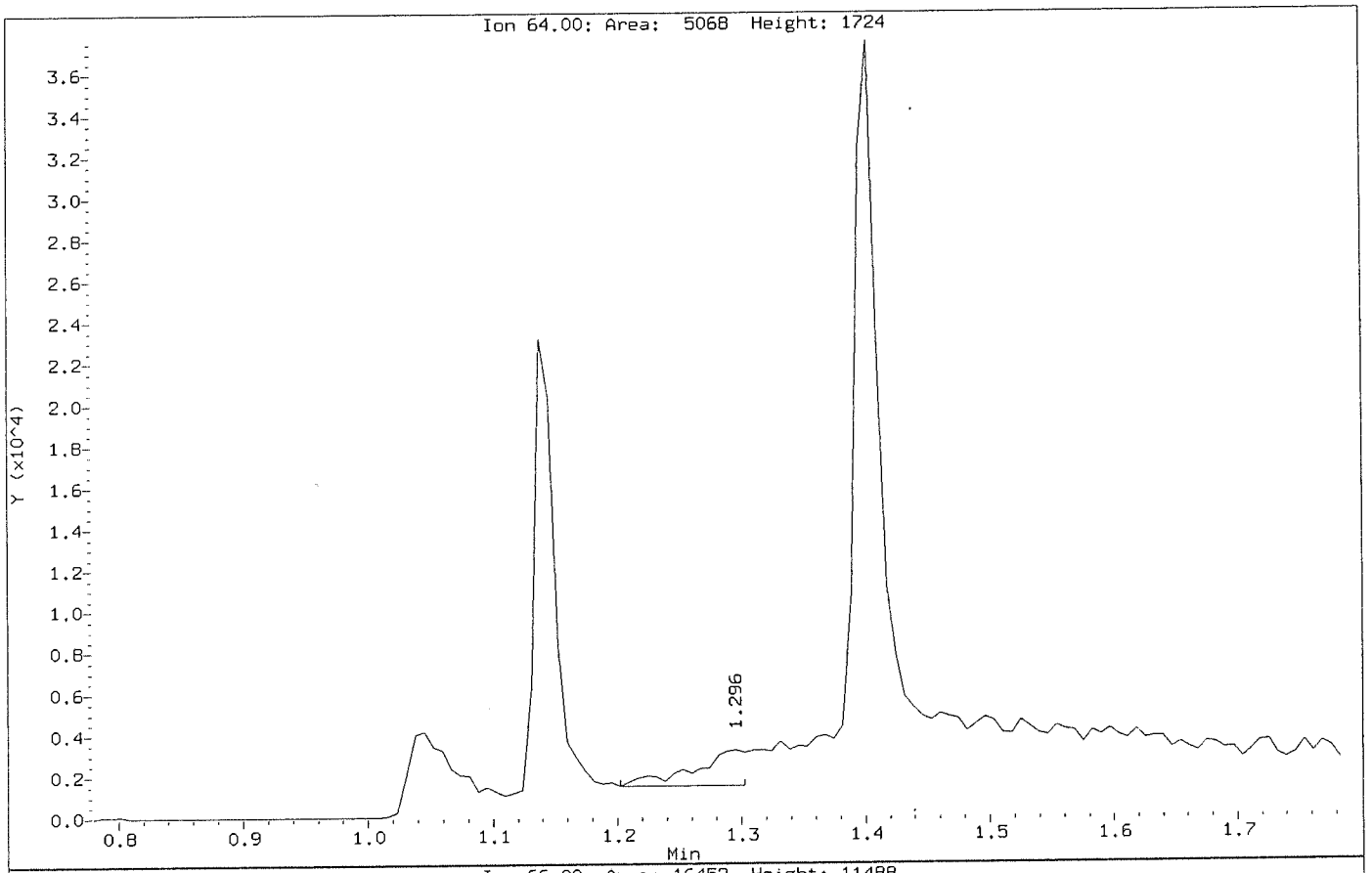
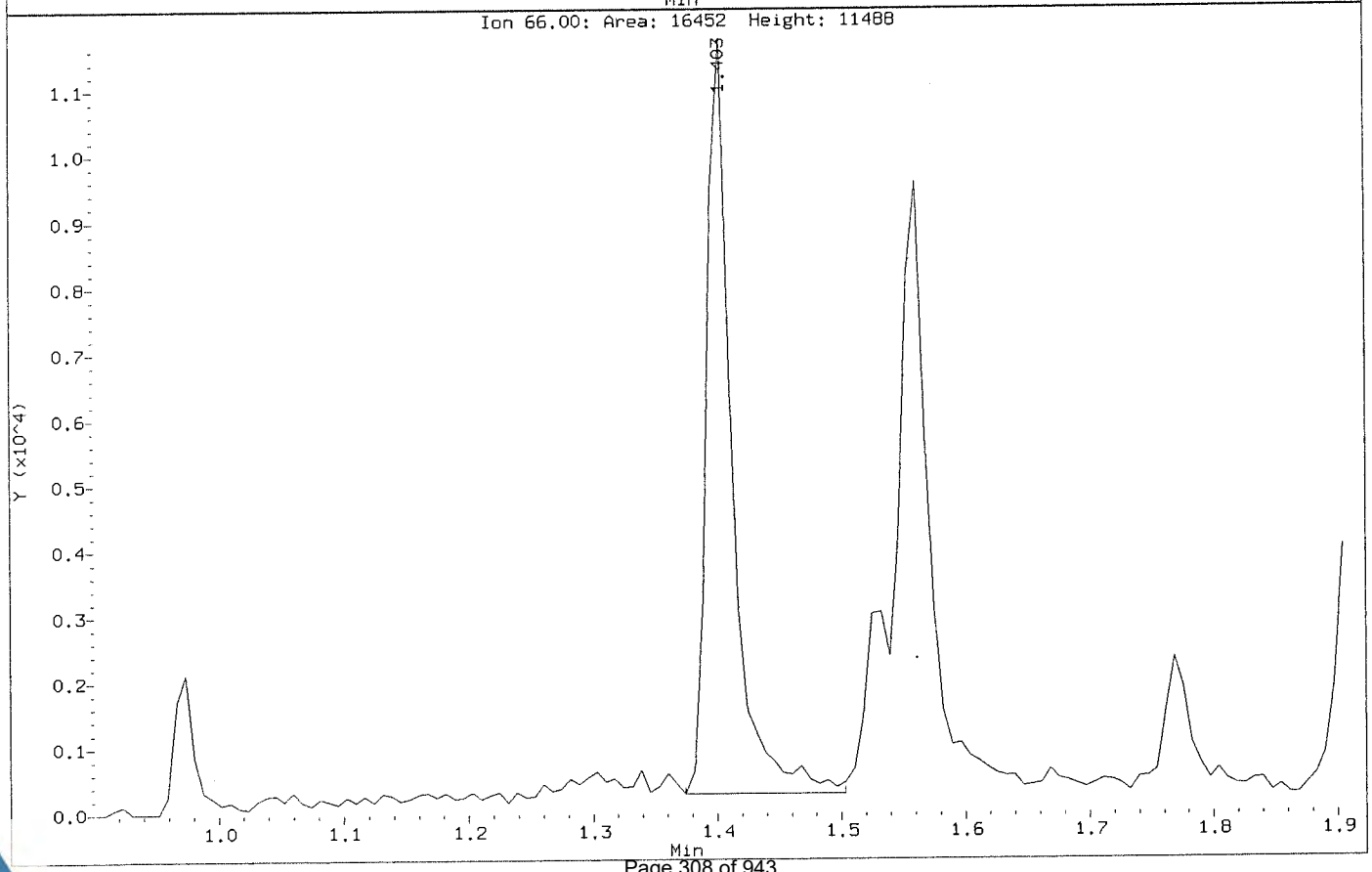
Injection Date: 22-JUN-2021 11:50
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: Chloroethane
CAS Number: 75-00-3





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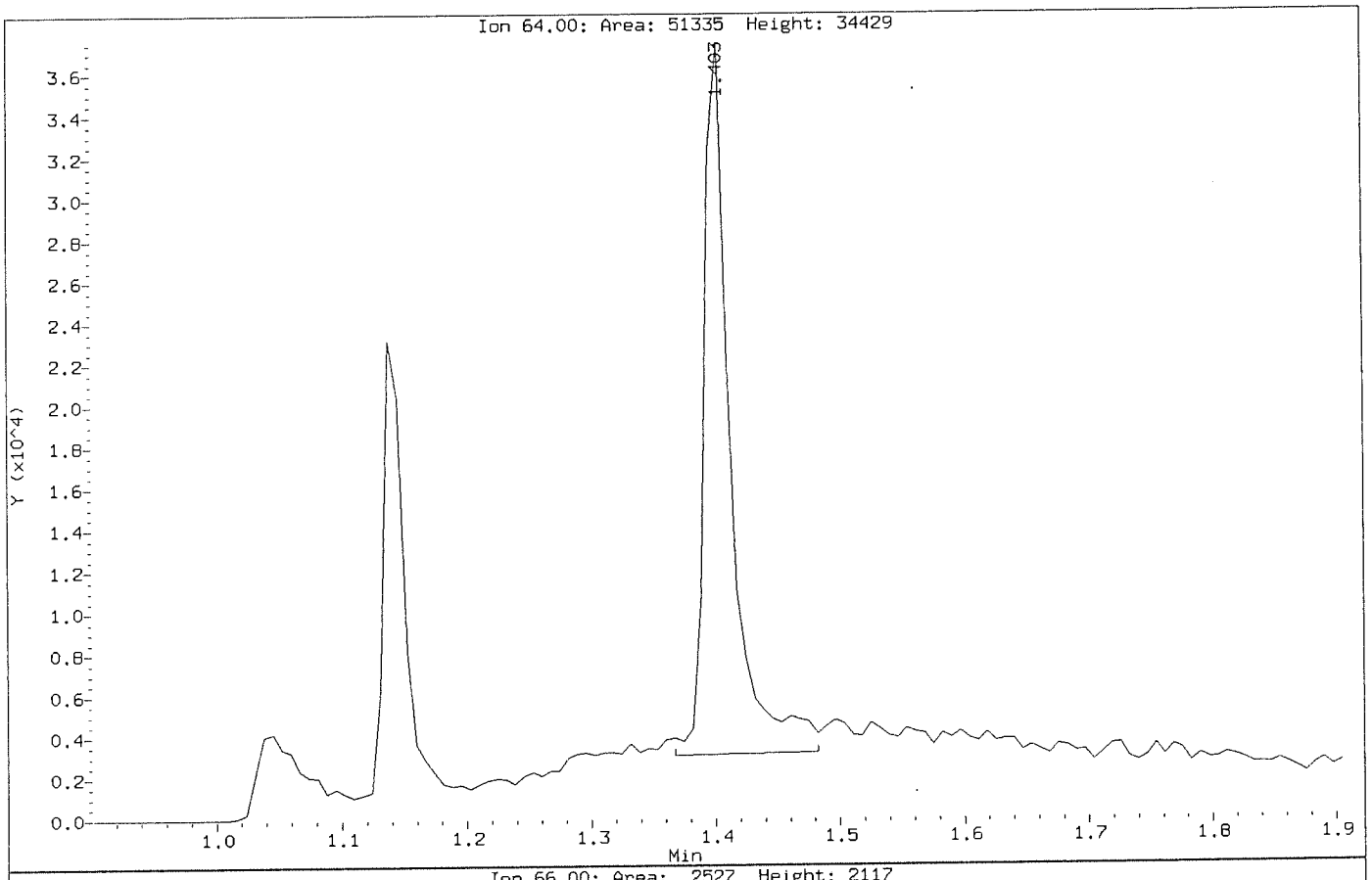
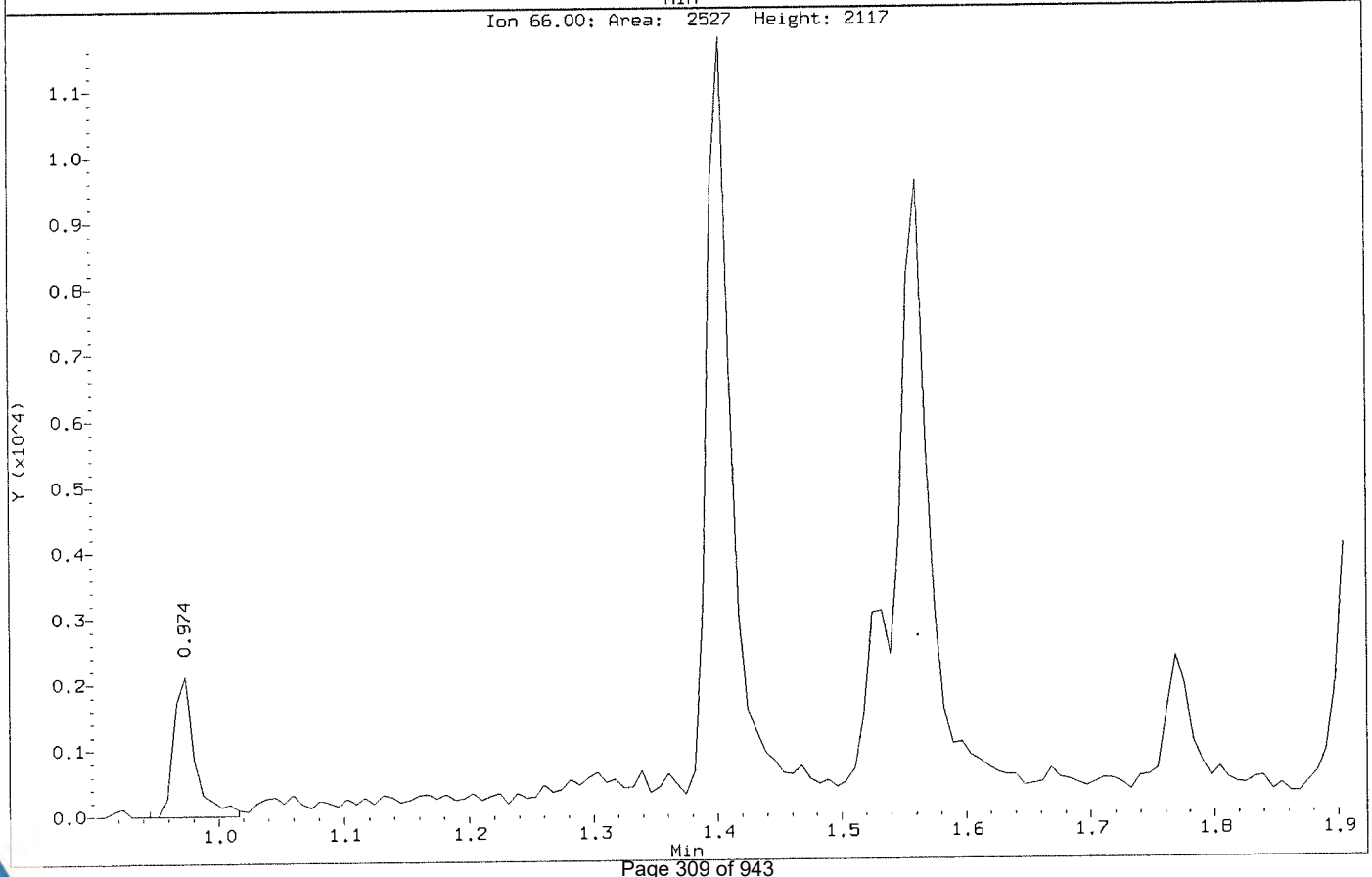
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: Chloroethane
CAS Number: 75-00-3





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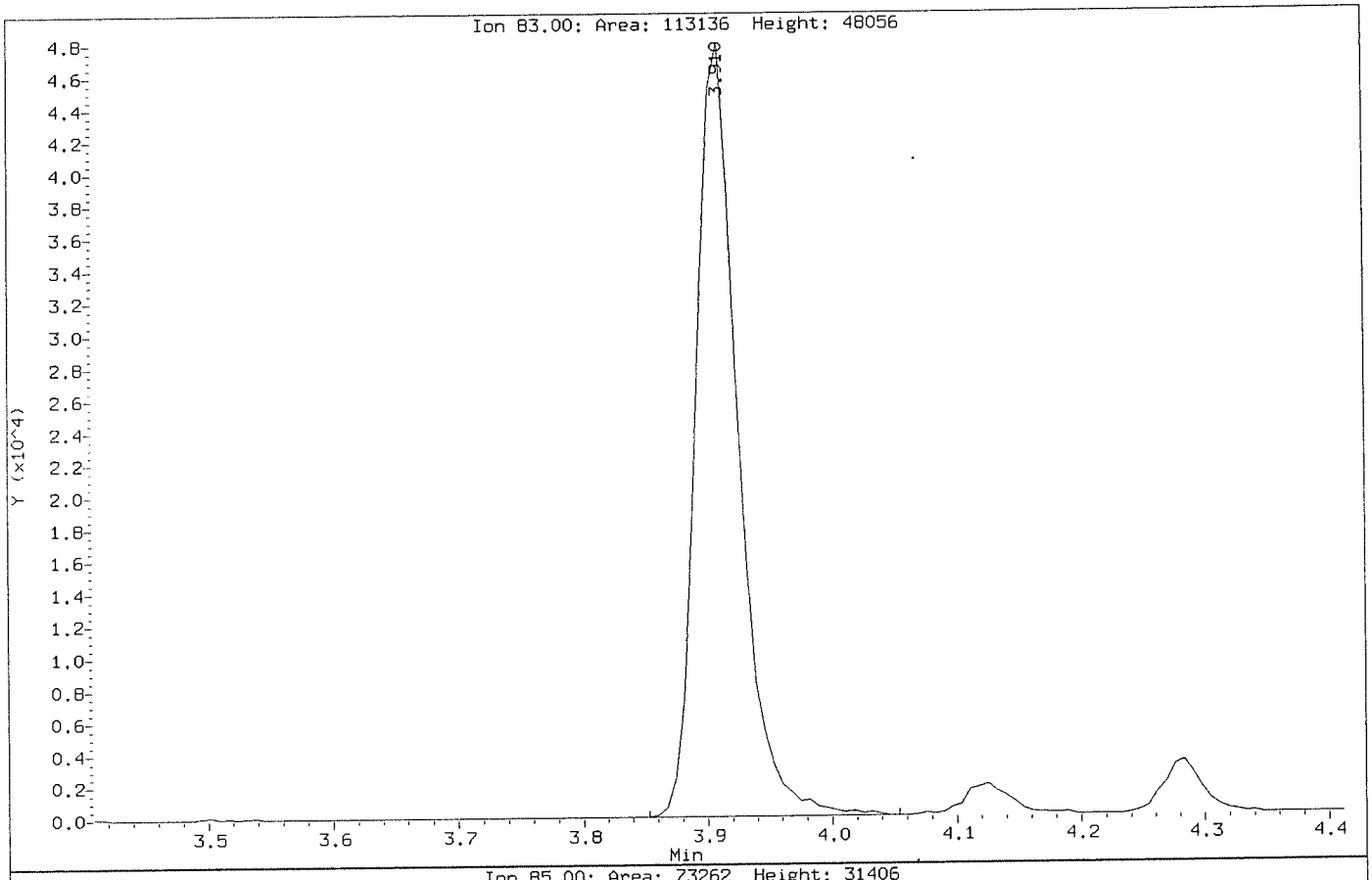
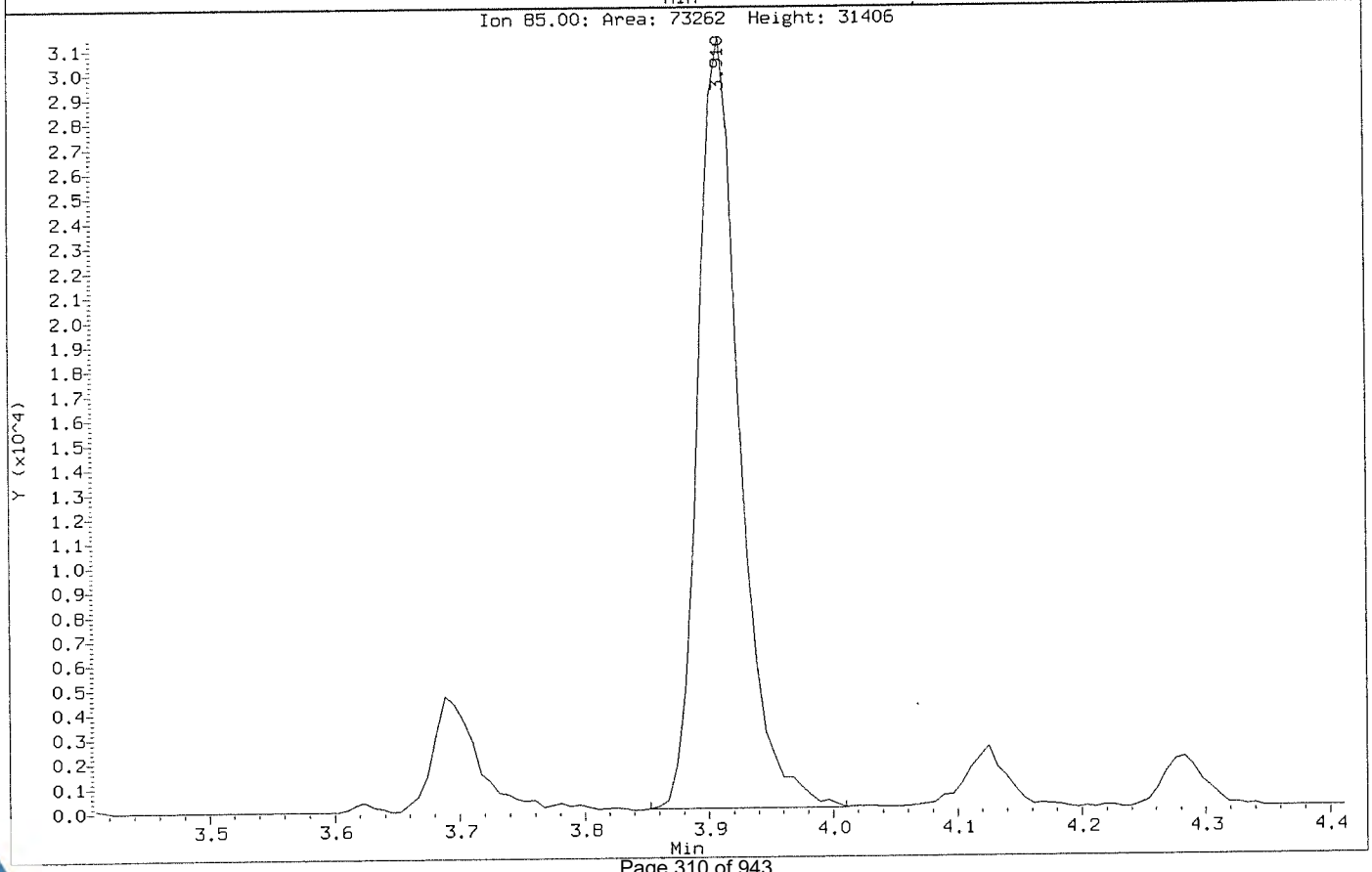
Injection Date: 22-JUN-2021 11:50
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: Chloroform
CAS Number: 67-66-3





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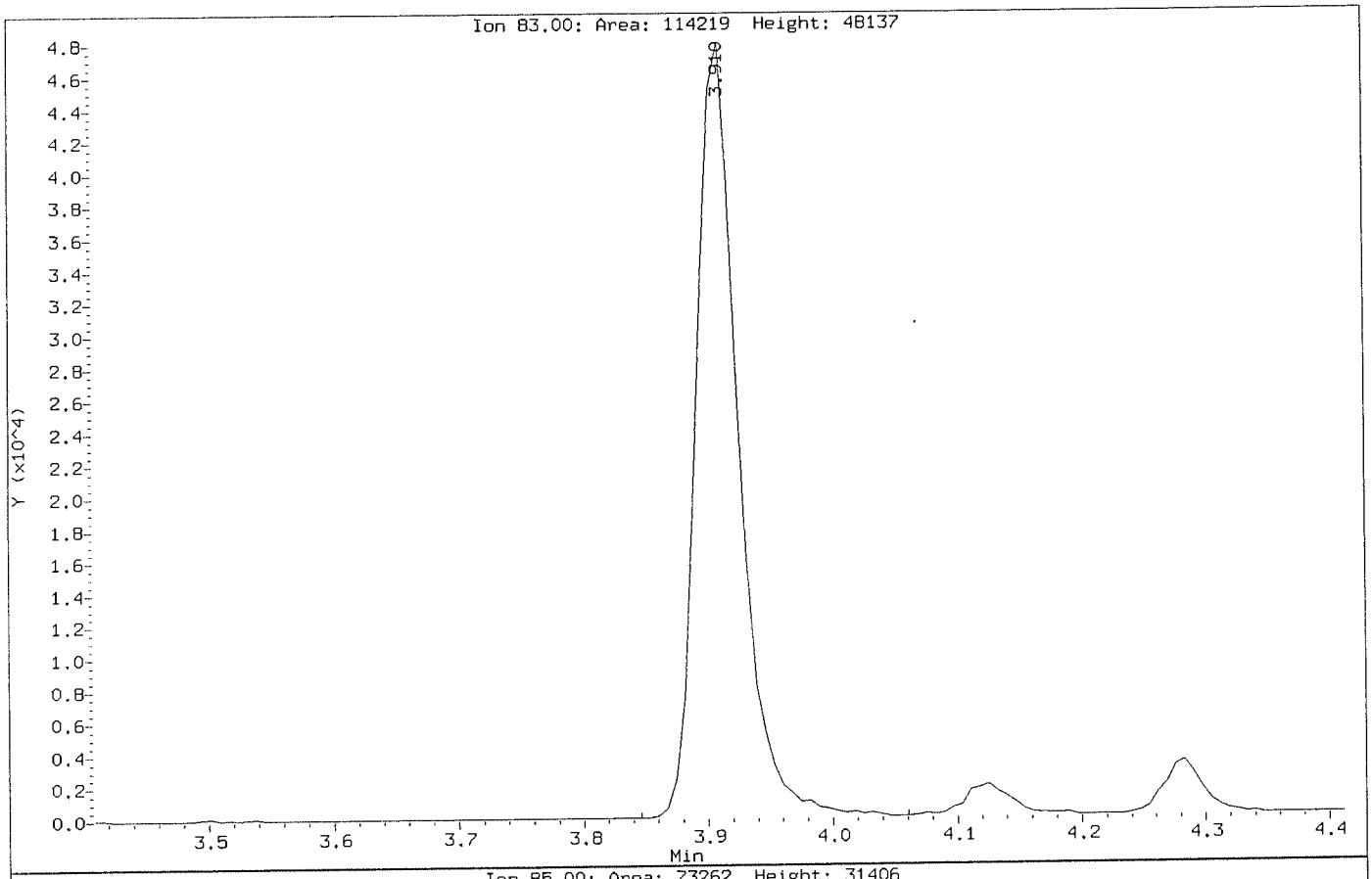
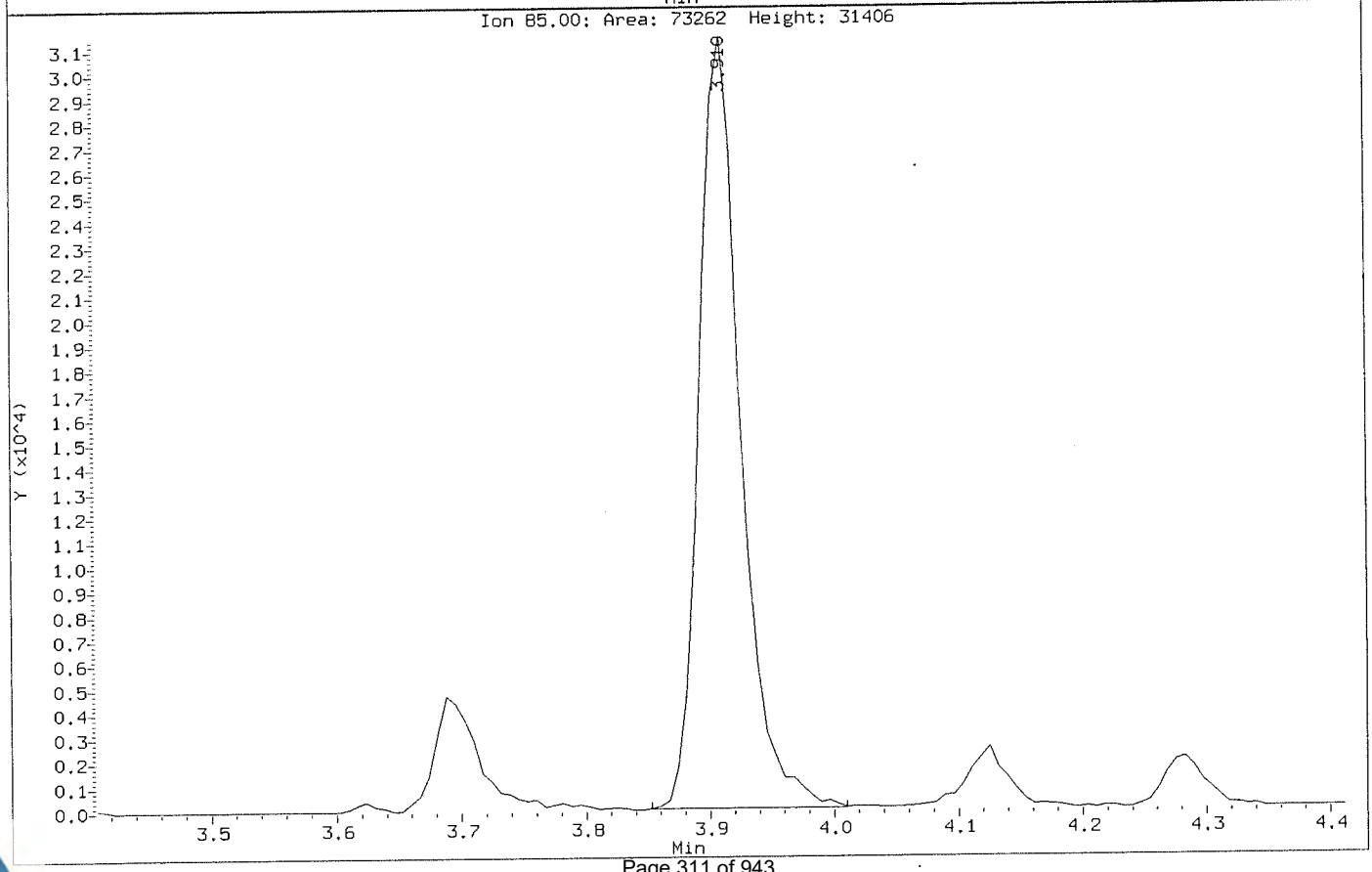
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: Chloroform
CAS Number: 67-66-3





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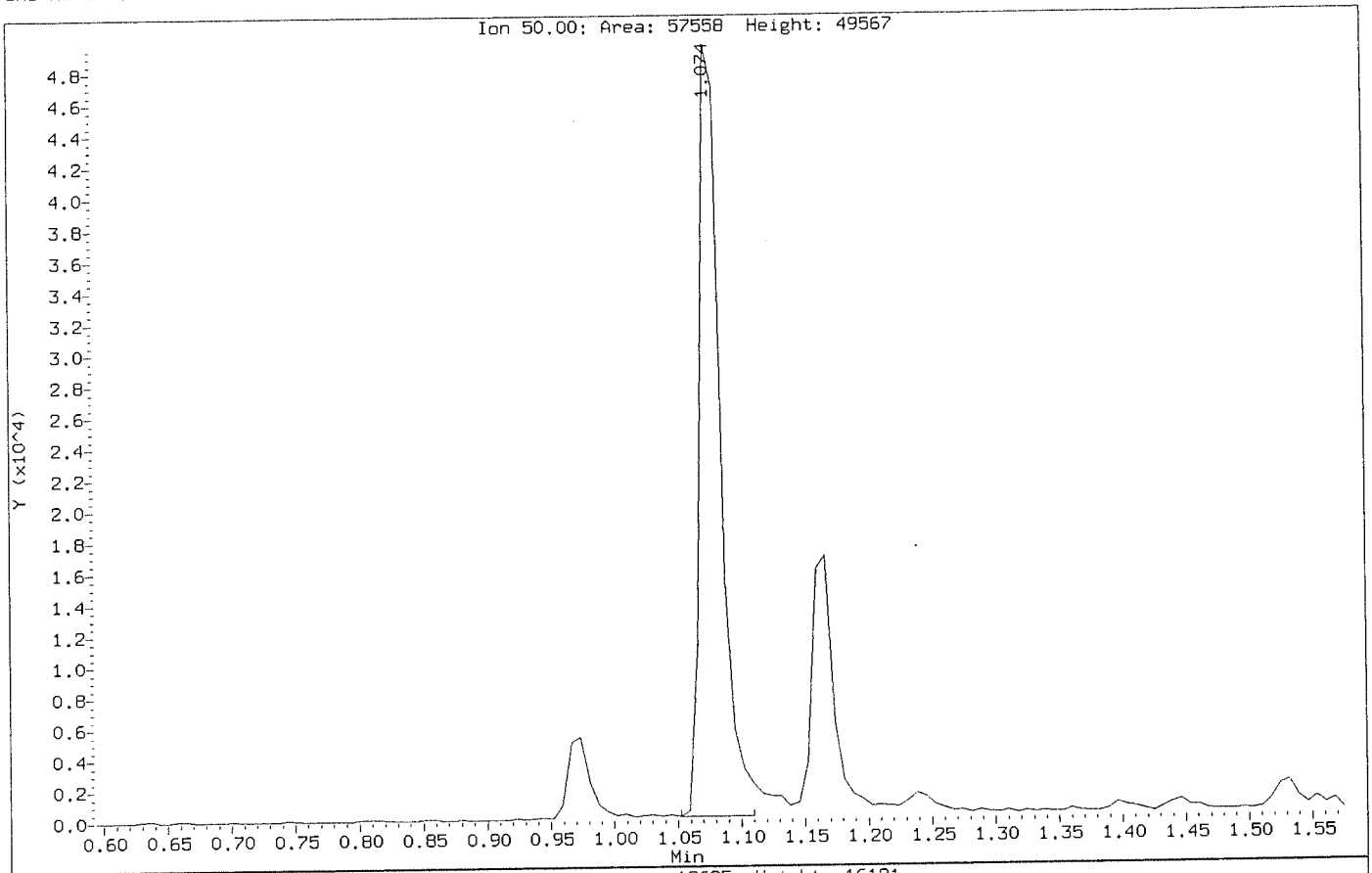
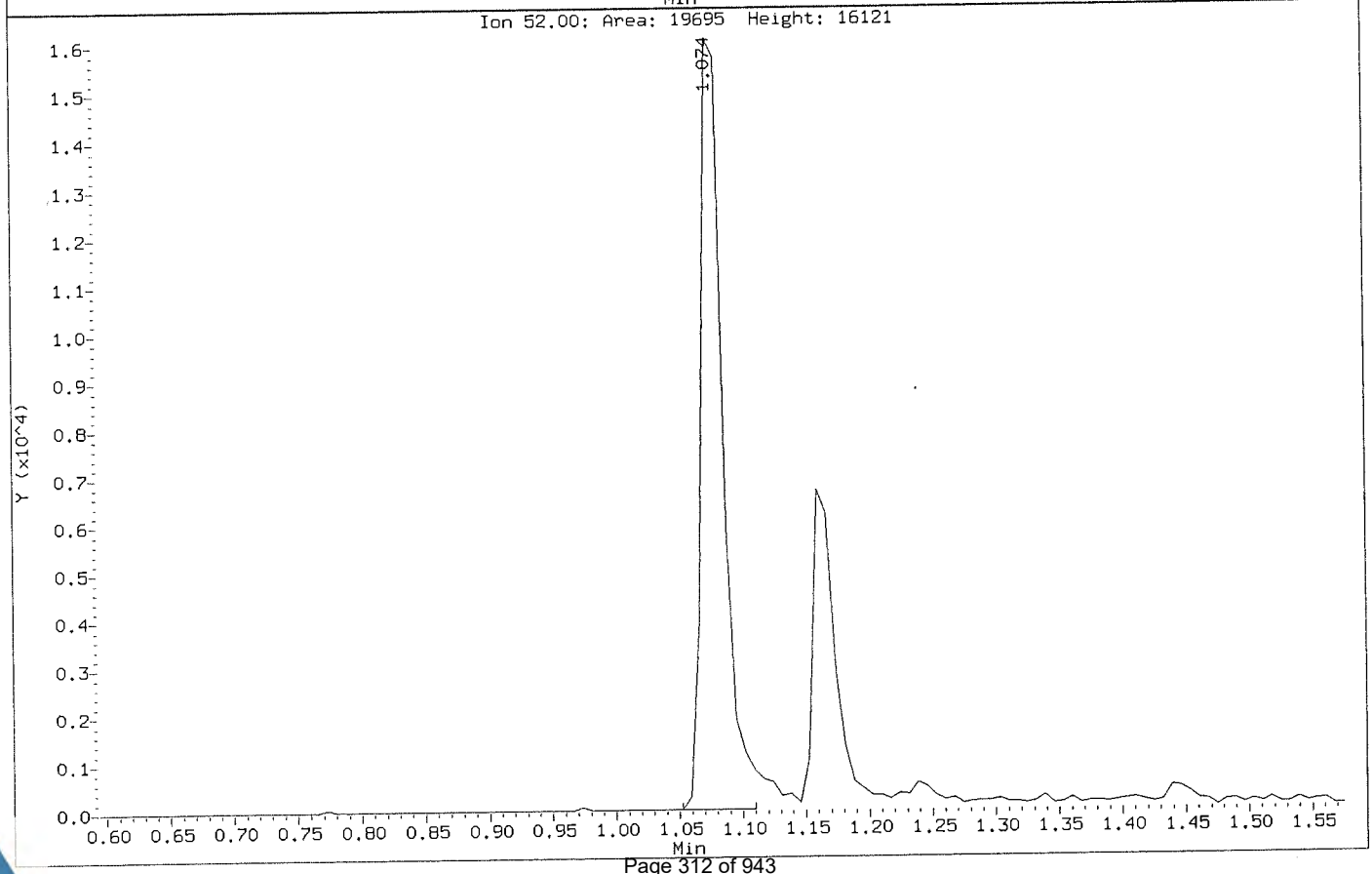
Injection Date: 22-JUN-2021 11:50
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: Chloromethane
CAS Number: 74-87-3





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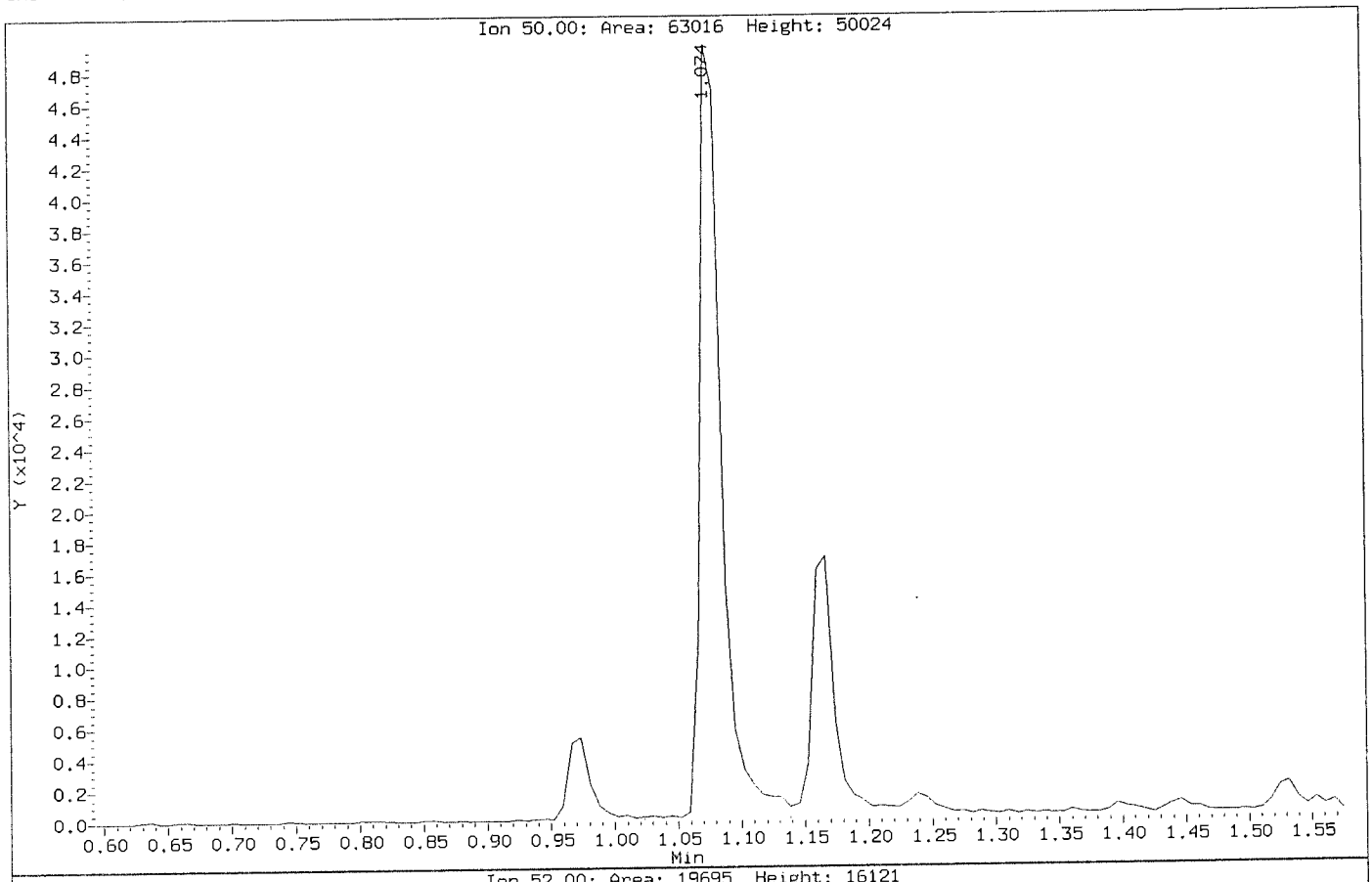
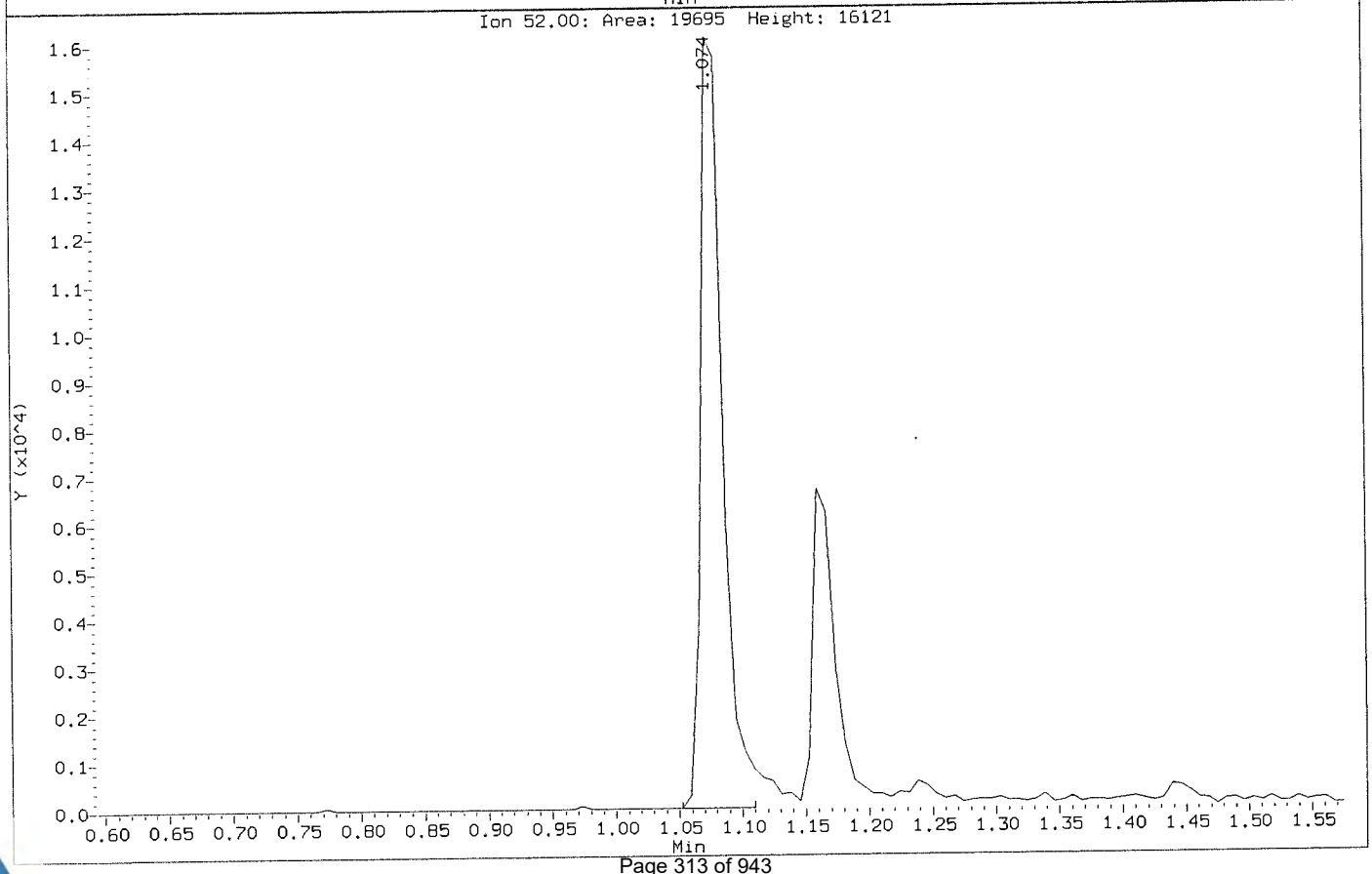
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: Chloromethane
CAS Number: 74-87-3





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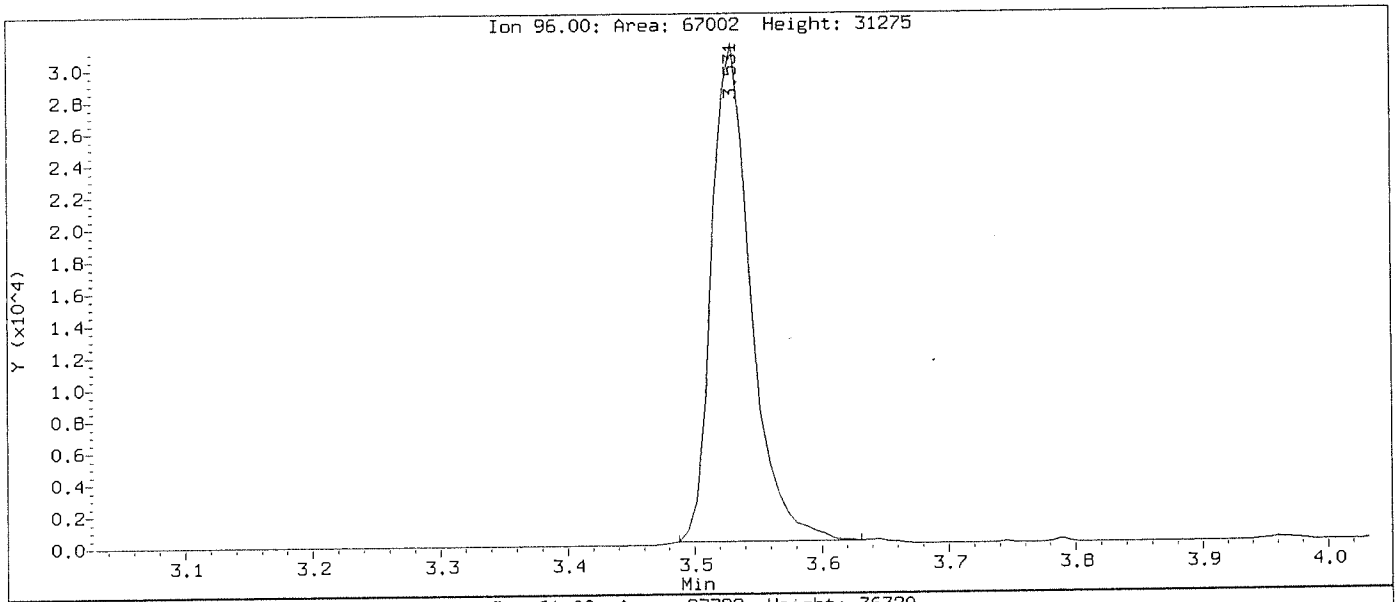
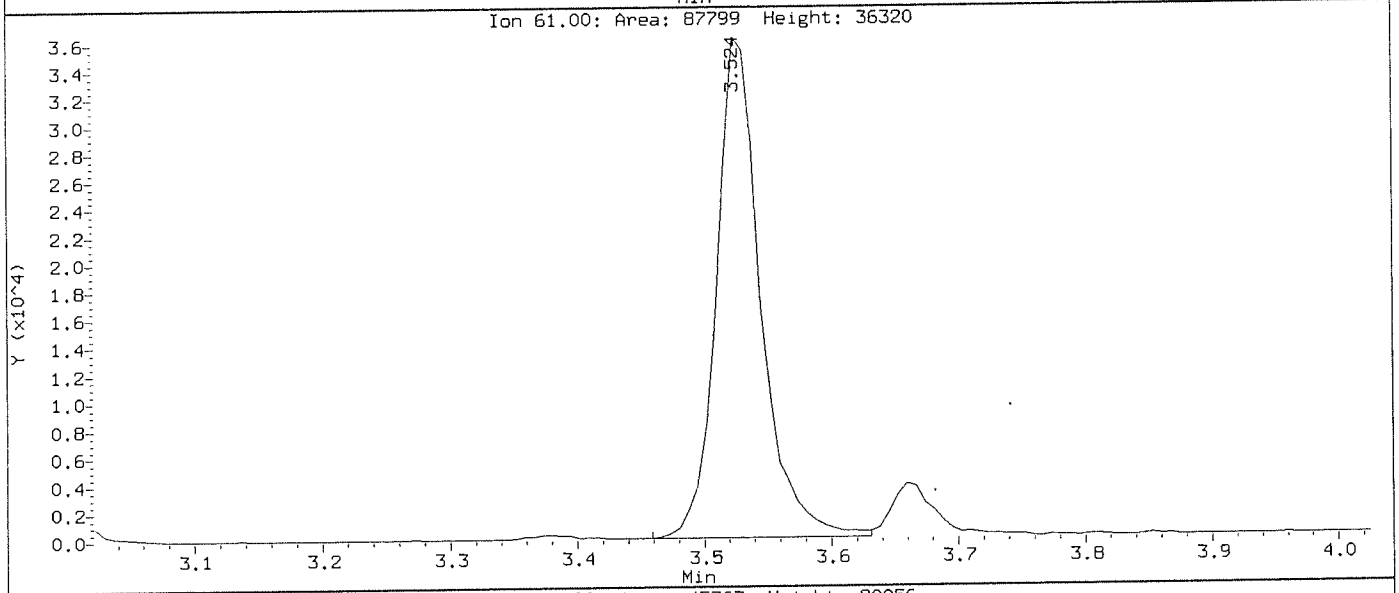
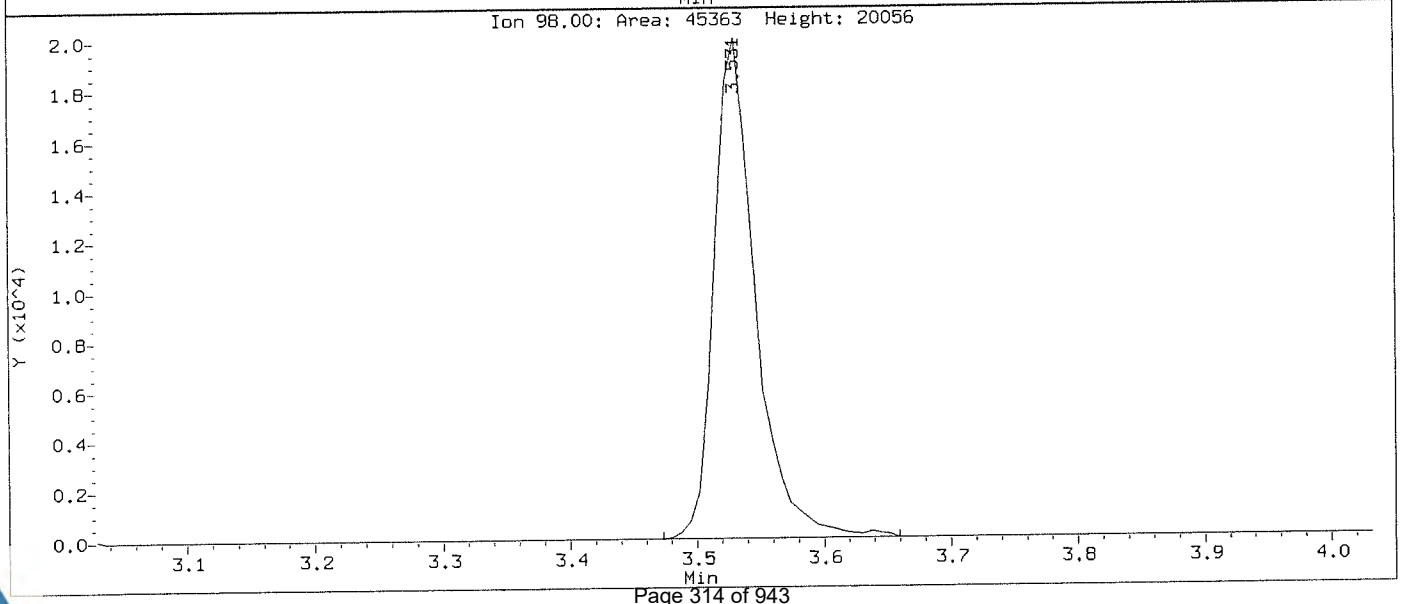
Injection Date: 22-JUN-2021 11:50
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2

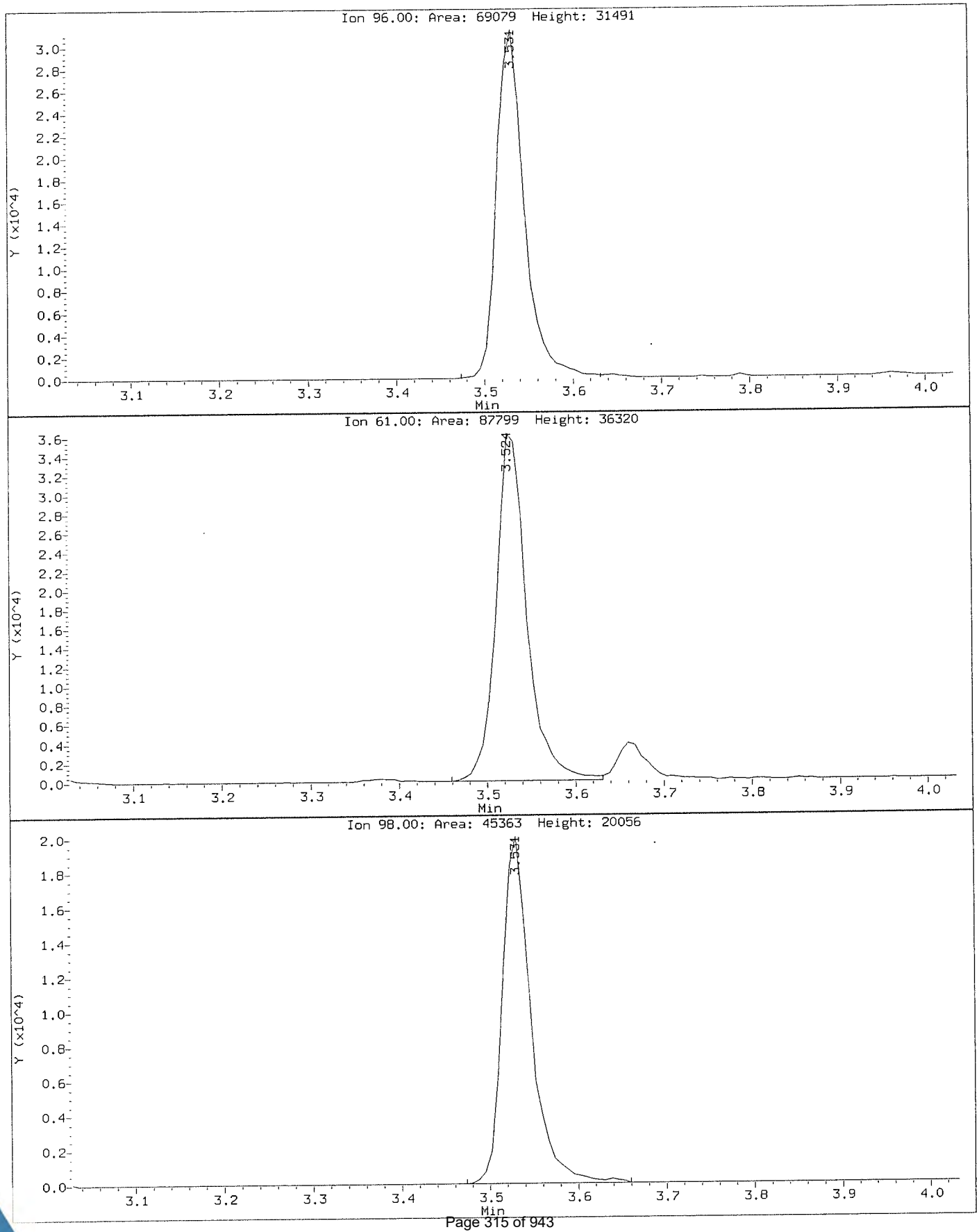






Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062204.D
Injection Date: 22-JUN-2021 11:50
Instrument: voa6.i
Client Sample ID: VLCSW-210622

Compound: cis-1,2-Dichloroethene
CAS Number: 156-59-2



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062209.D
Lab Smp Id: VBLKW-210622 Client Smp ID: VBLKW-210622
Inj Date : 22-JUN-2021 13:35
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-210622;VBLKW-210622;3;;BLANK
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:59 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 9 QC Sample: BLANK
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

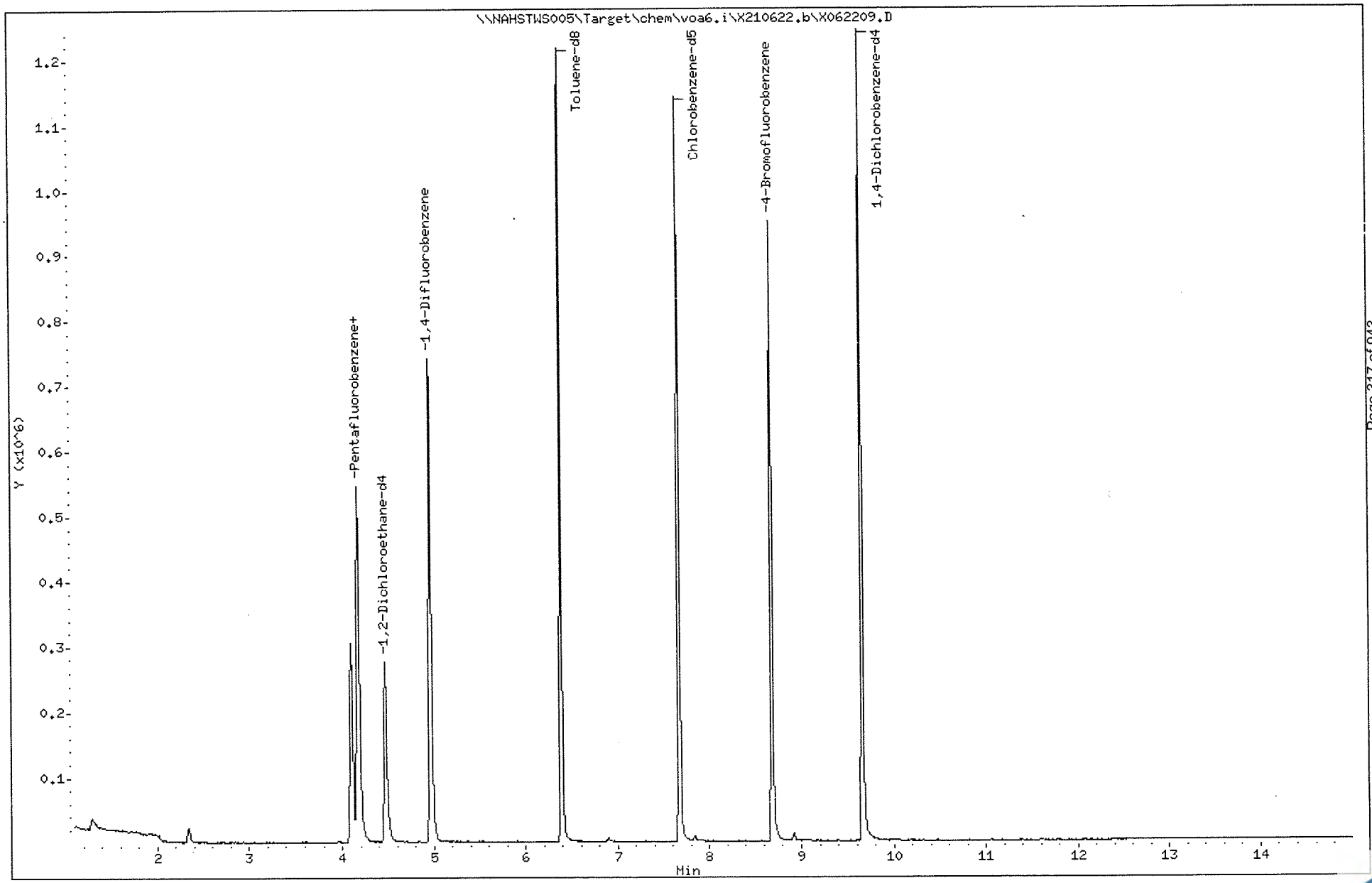
Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	496540	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	665124	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	591079	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	314426	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	215699	44.1131	44.11
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	217385	45.7732	45.77
$ 48 Toluene-d8	98	6.389	6.388	(0.833)	753863	51.2018	51.20
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	260033	50.0924	50.09

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062209.D
Date : 22-JUN-2021 13:35
Client ID: VBLKW-210622
Sample Info: VBLKW-210622;VBLKW-210622;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i

Operator: PC
Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D Page 1
Report Date: 27-Aug-2021 08:56

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D
Lab Smp Id: HS21060908-05 Client Smp ID: HS21060908-05
Inj Date : 22-JUN-2021 13:56
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-05;HS21060908-05;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

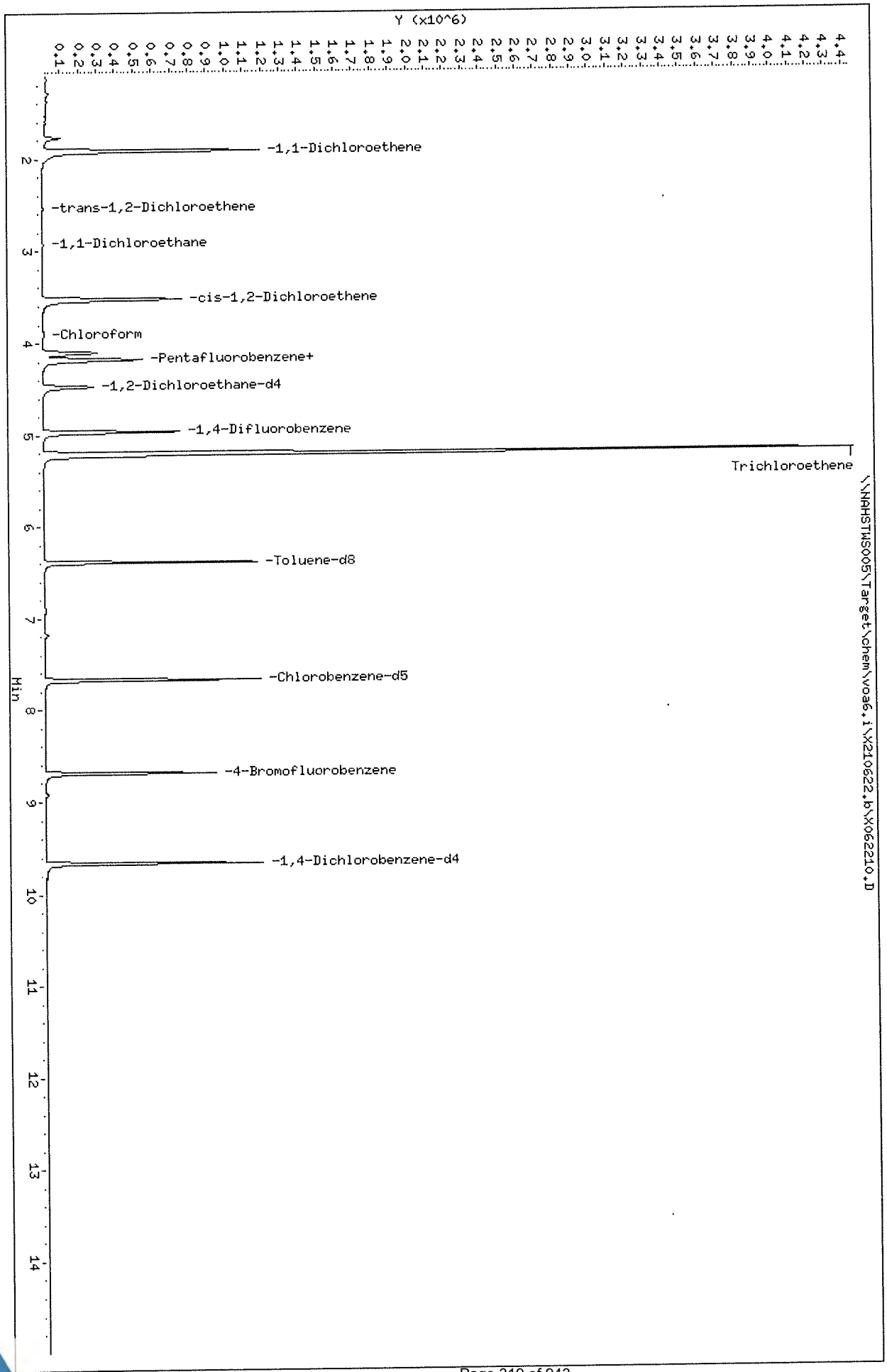
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	491489	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	674334	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	593515	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	307122	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	212957	43.9995	43.99
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	216840	46.1331	46.13
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	748973	50.6609	50.66
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	253012	48.5631	48.56
22 1,1-Dichloroethane	63	2.922	2.921	(0.699)	5773	0.74298	0.74(a)
11 1,1-Dichloroethene	96	1.912	1.911	(0.457)	12247	2.41909	2.41(a)
28 Chloroform	83	3.910	3.910	(0.935)	8390	0.97071	0.97(a)
27 cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	427242	82.9359	82.93
20 trans-1,2-Dichloroethene	96	2.535	2.527	(0.606)	3487	0.75983	0.75(a)
38 Trichloroethene	130	5.207	5.206	(1.049)	1521804	328.810	328.80(A)
5 Vinyl Chloride	62	1.138	1.138	(0.272)	5117	0.87954	0.87(a)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D
Date : 22-JUN-2021 13:56
Client ID: HS21060908-05
Sample Info: HS21060908-05;HS21060908-05;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D

Date : 22-JUN-2021 13:56

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

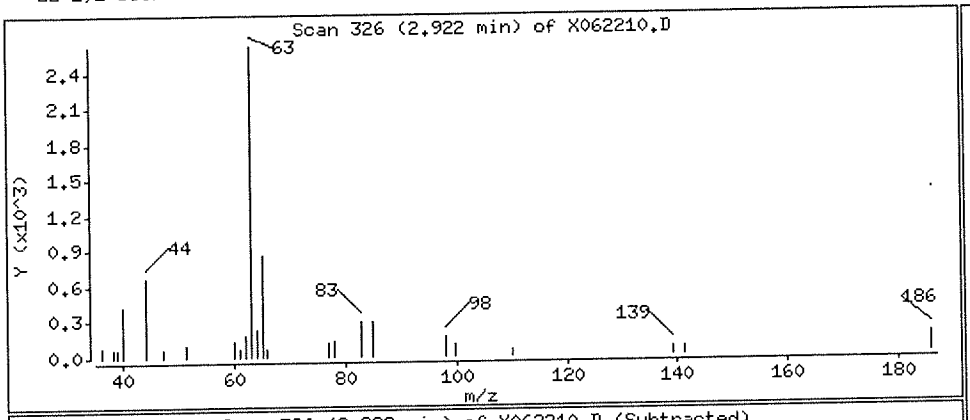
Operator: PC

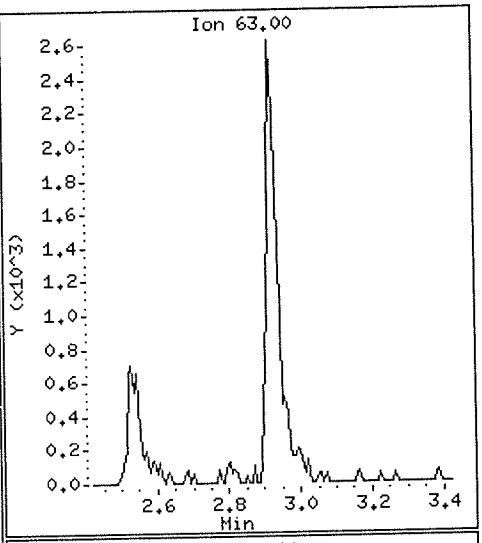
Column phase: DB624

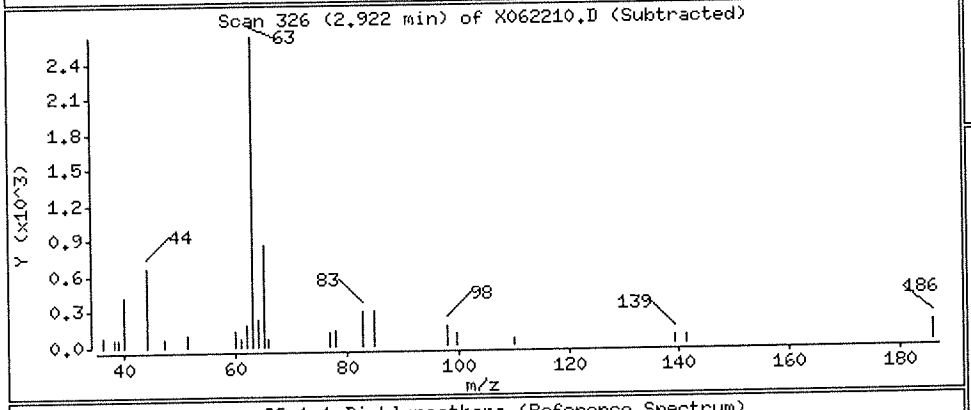
Column diameter: 0.18

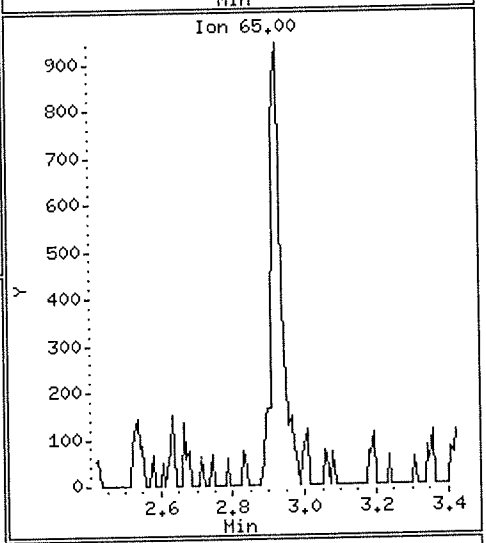
22 1,1-Dichloroethane

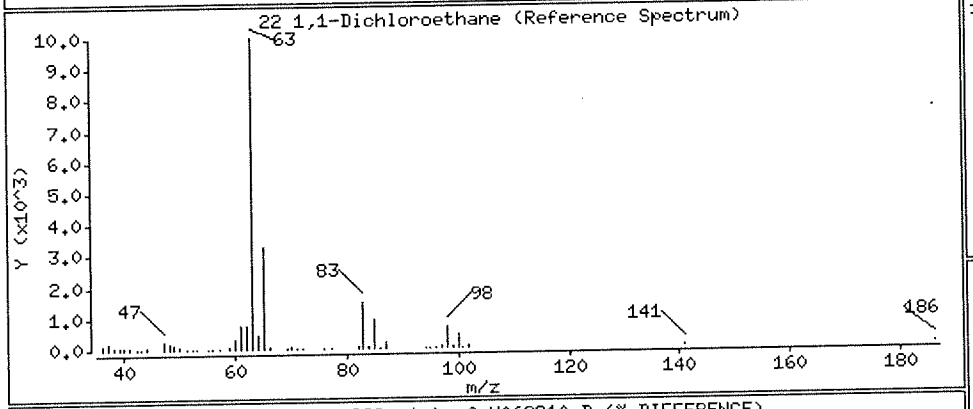
Concentration: 0.74 ug/l

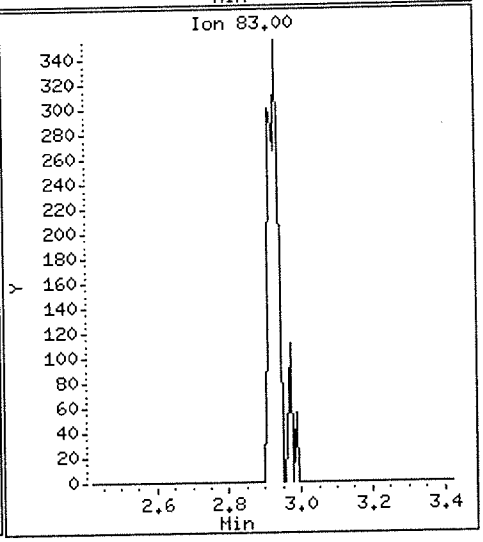


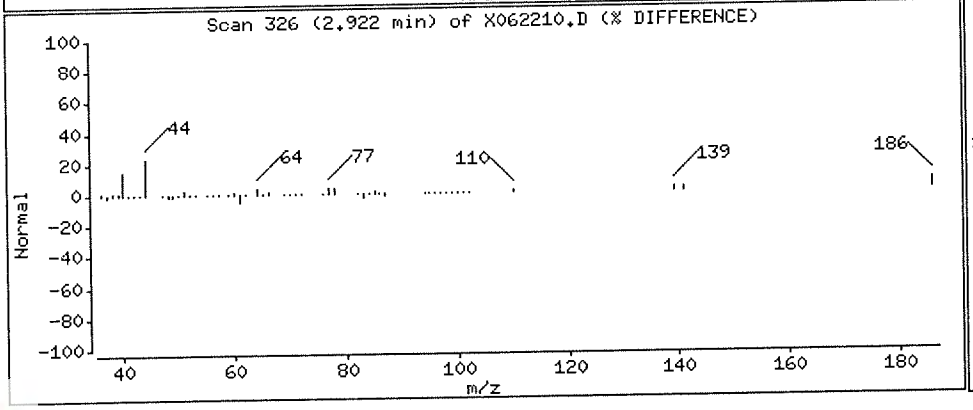












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D

Date : 22-JUN-2021 13:56

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

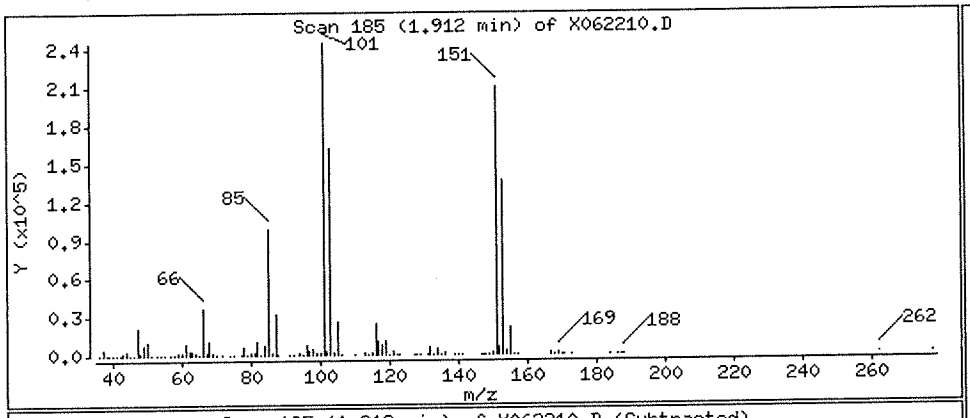
Operator: PC

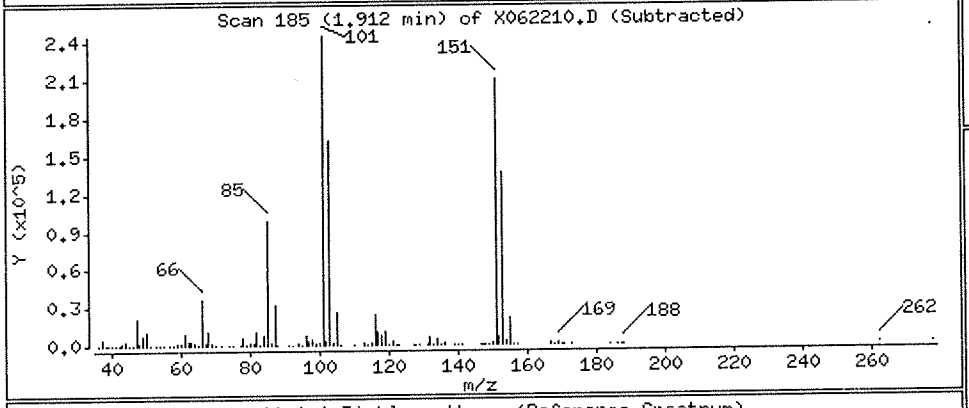
Column phase: DB624

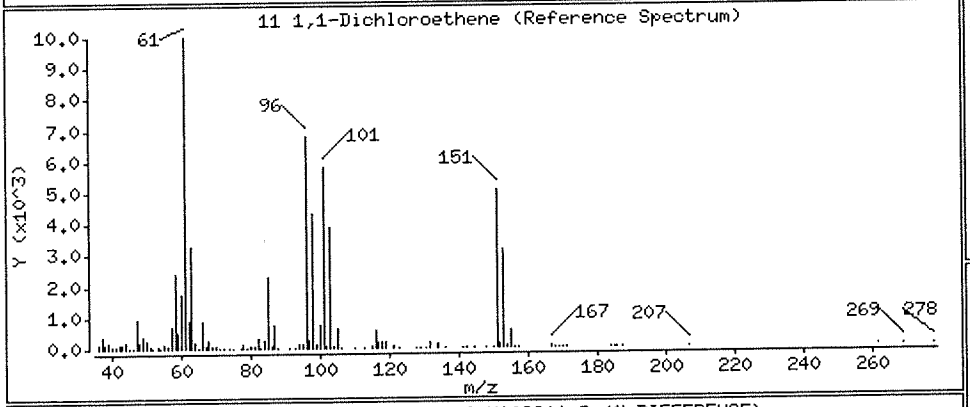
Column diameter: 0.18

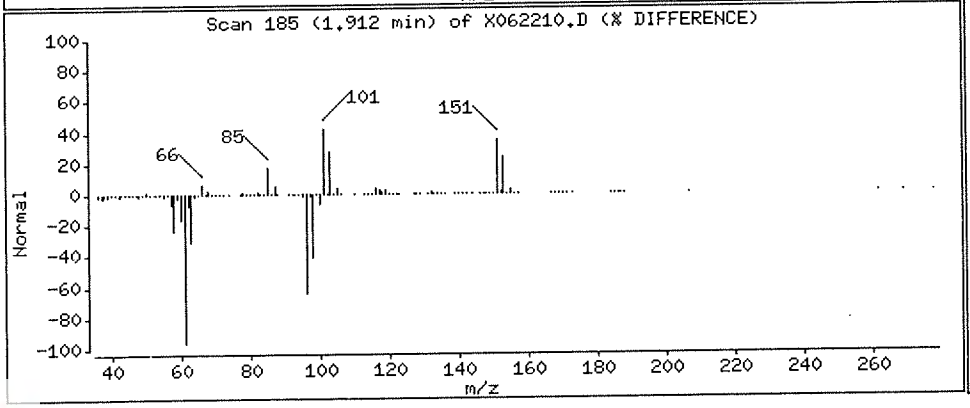
11 1,1-Dichloroethene

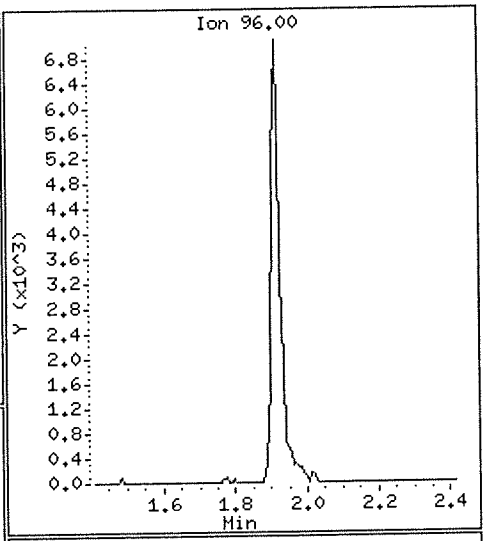
Concentration: 2.41 ug/l

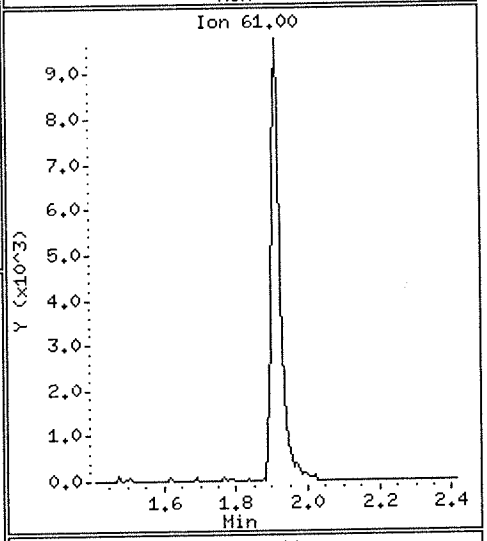


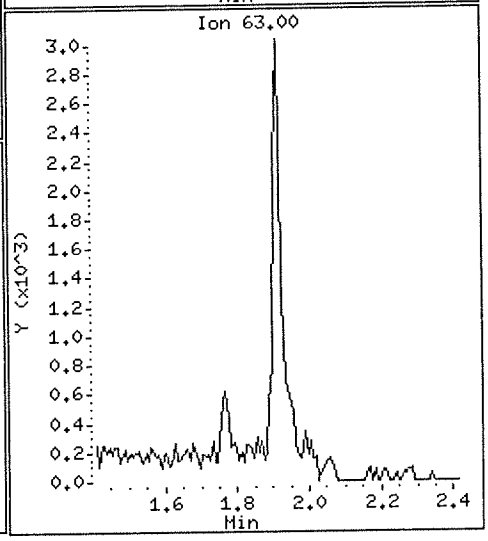












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D

Date : 22-JUN-2021 13:56

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

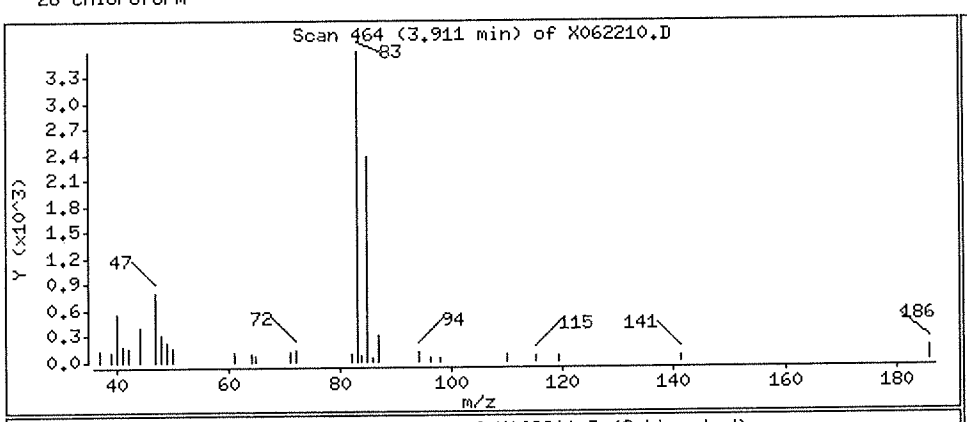
Operator: PC

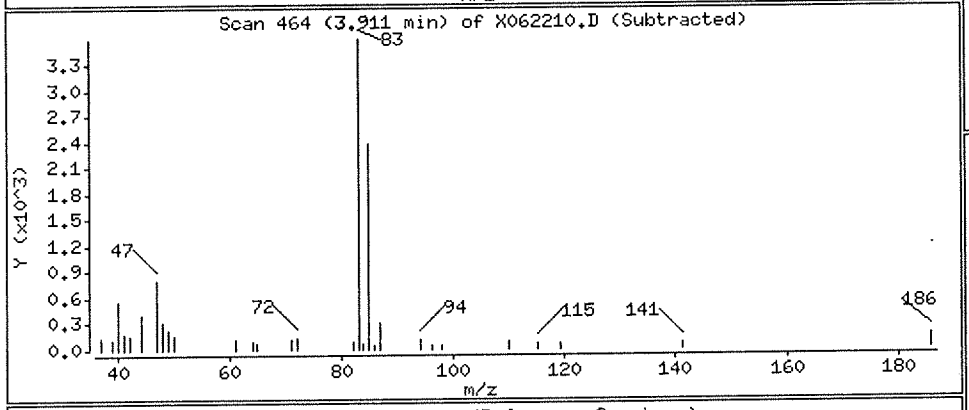
Column phase: DB624

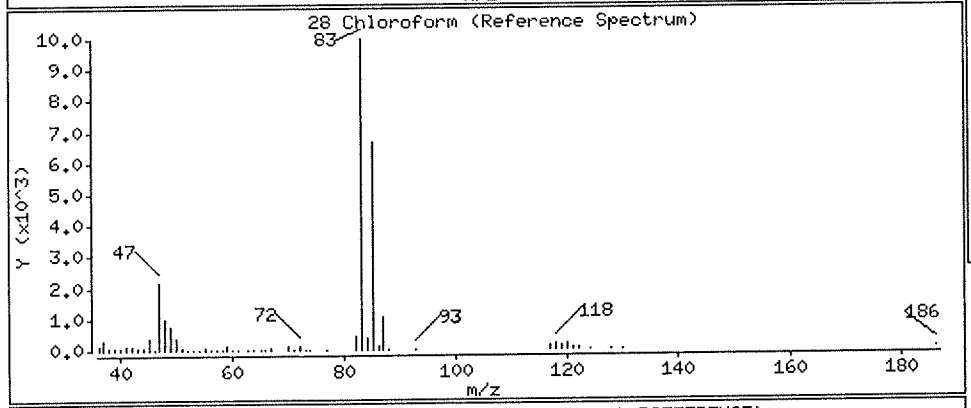
Column diameter: 0.18

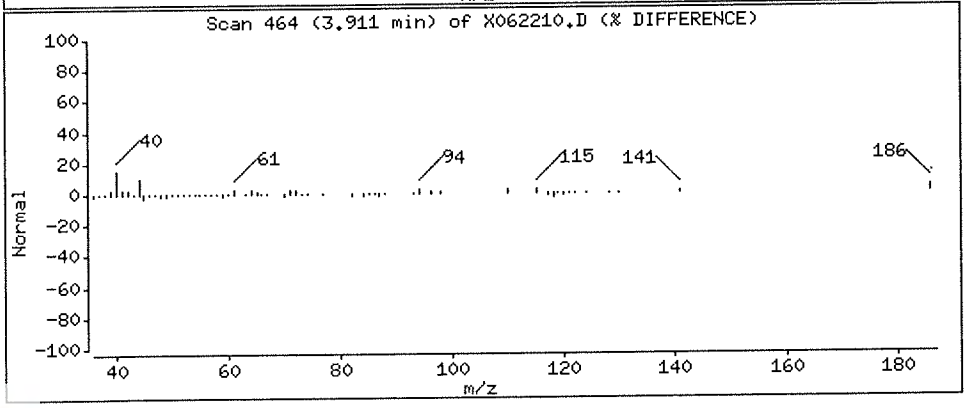
28 Chloroform

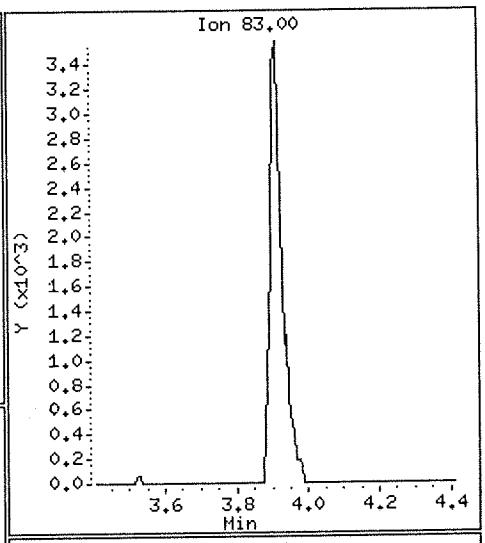
Concentration: 0.97 ug/l

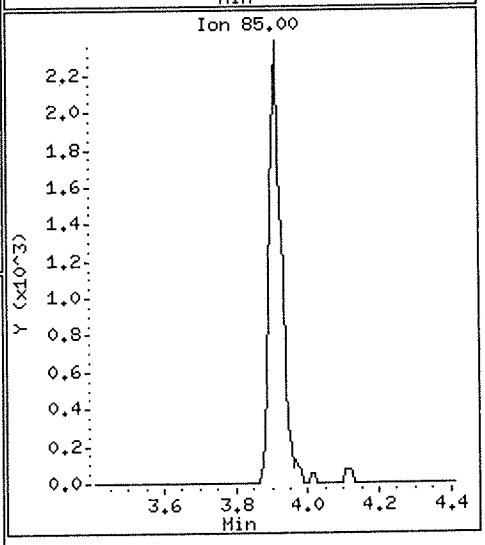












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D

Date : 22-JUN-2021 13:56

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

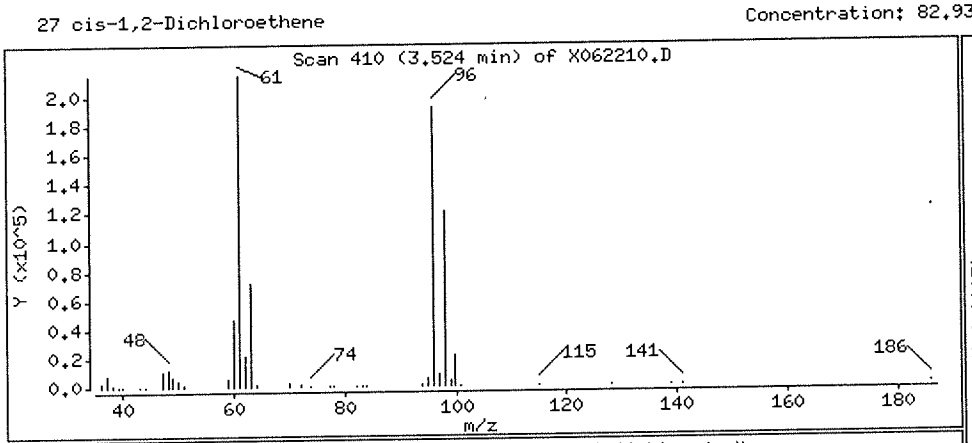
Operator: PC

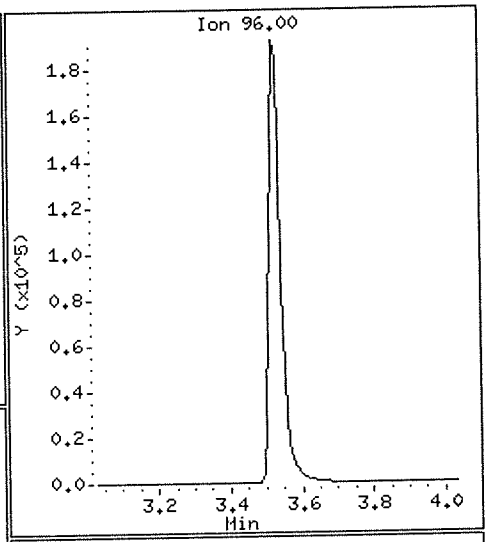
Column phase: DB624

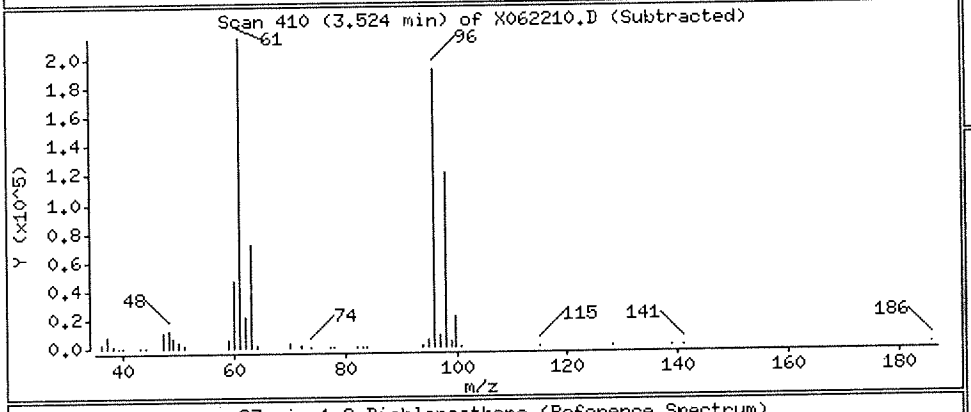
Column diameter: 0.18

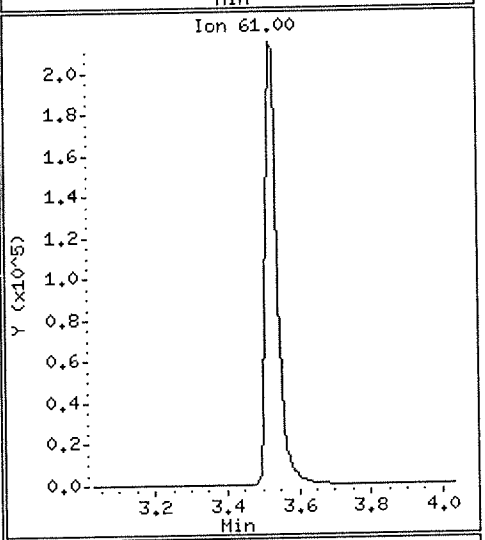
27 cis-1,2-Dichloroethene

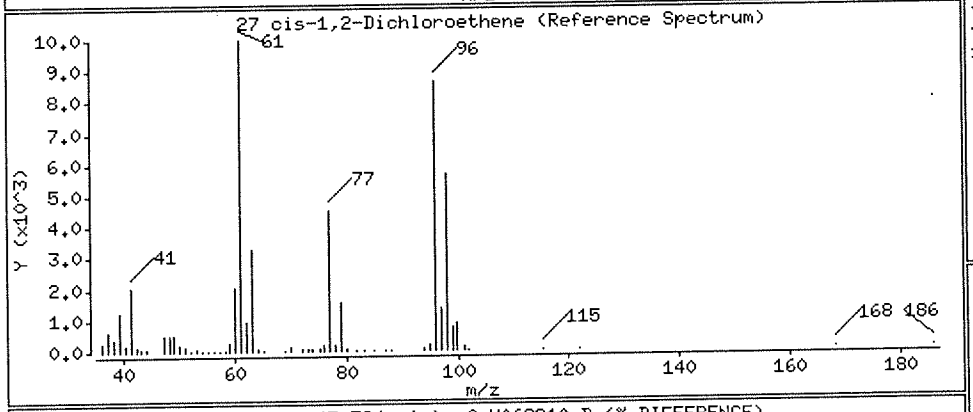
Concentration: 82.93 ug/l

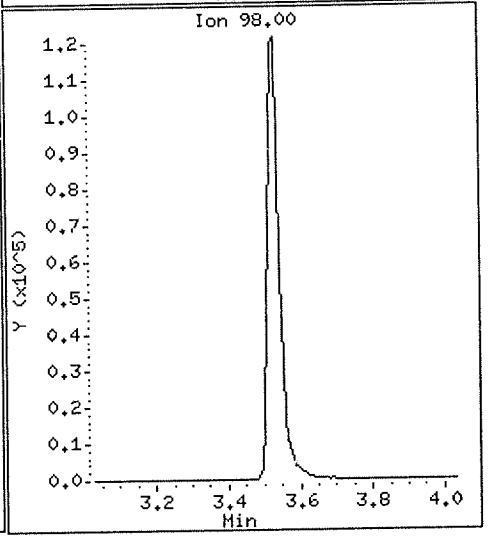


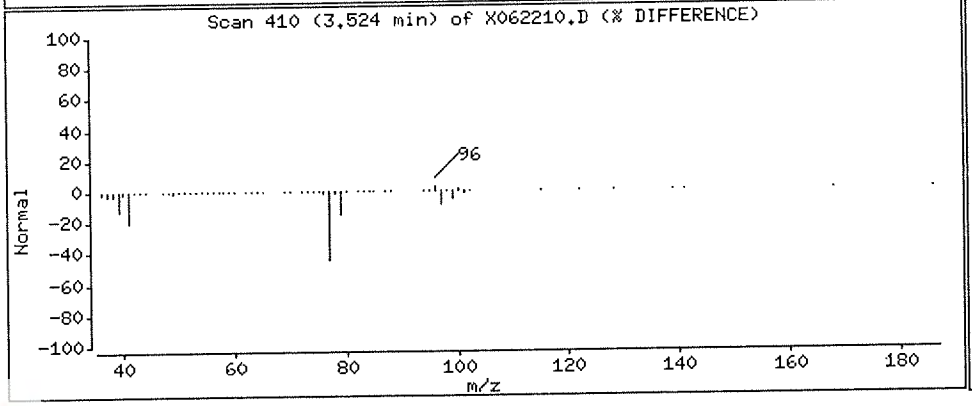












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D

Date : 22-JUN-2021 13:56

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

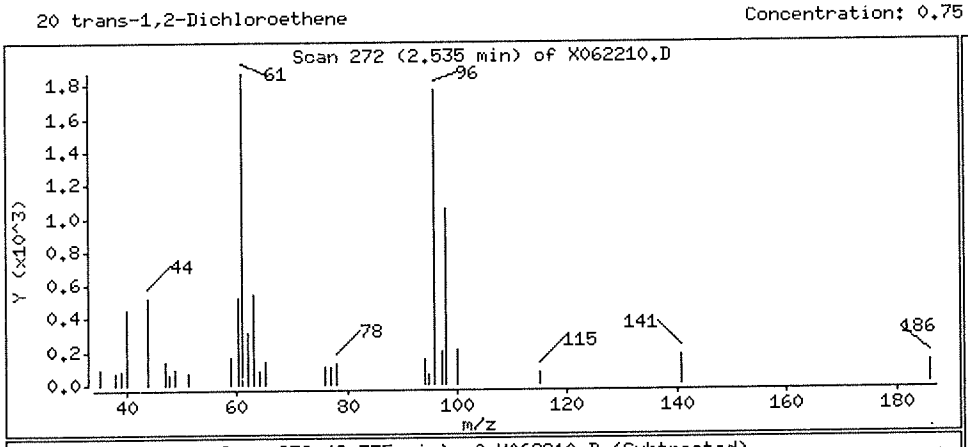
Operator: PC

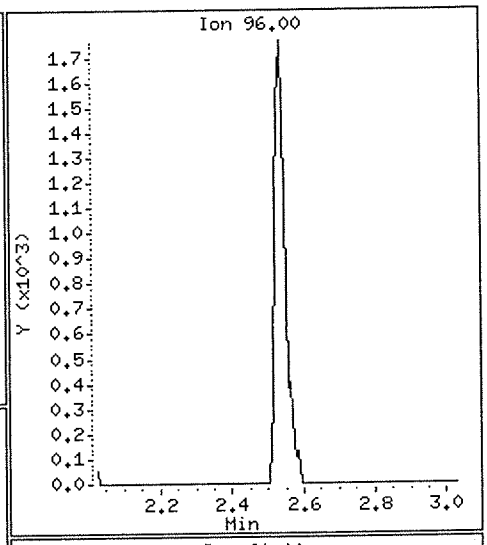
Column phase: DB624

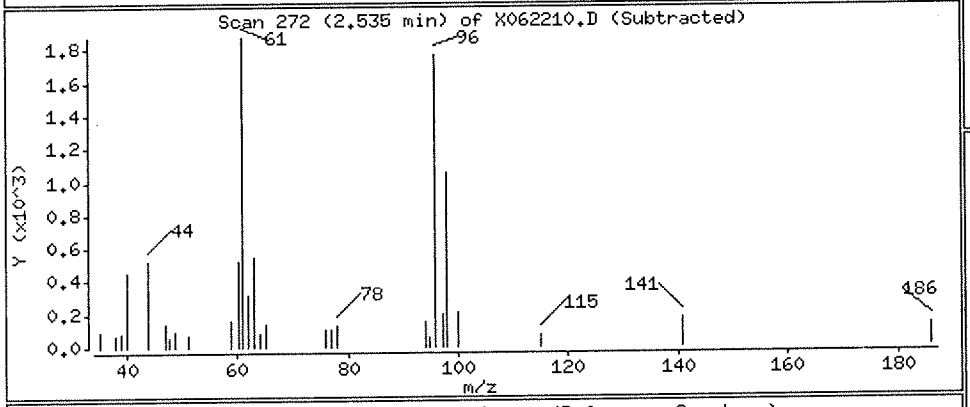
Column diameter: 0.18

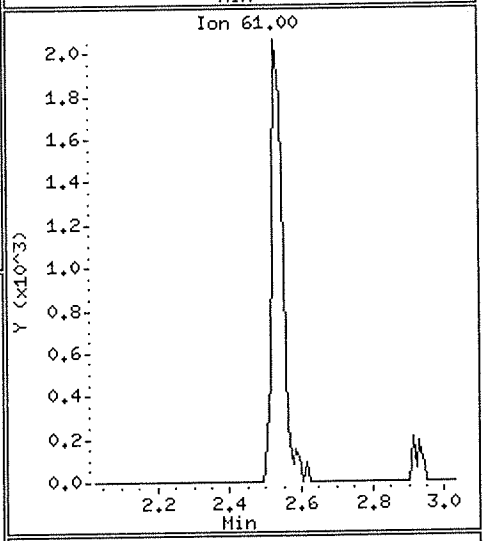
20 trans-1,2-Dichloroethene

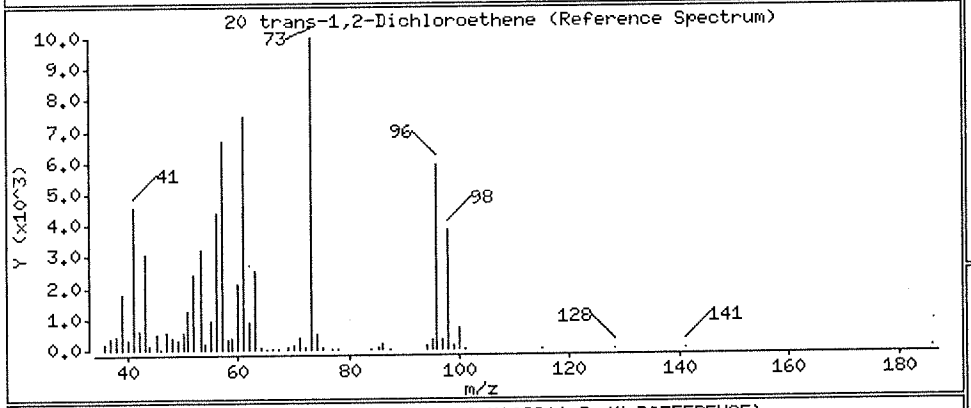
Concentration: 0.75 ug/l

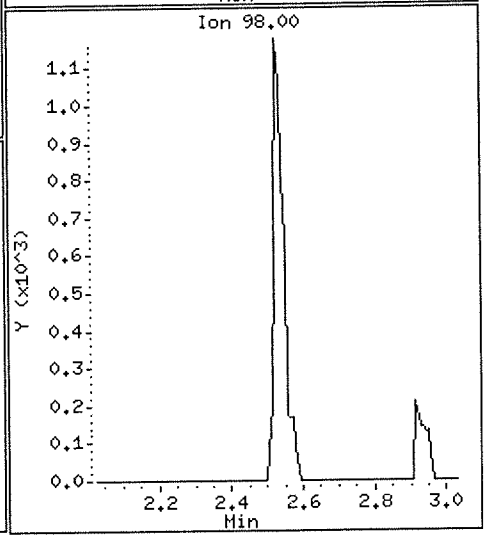


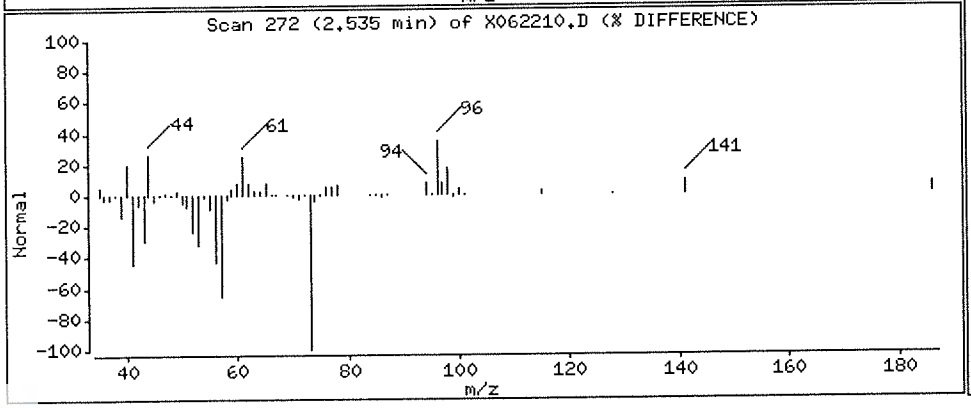












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D

Date : 22-JUN-2021 13:56

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

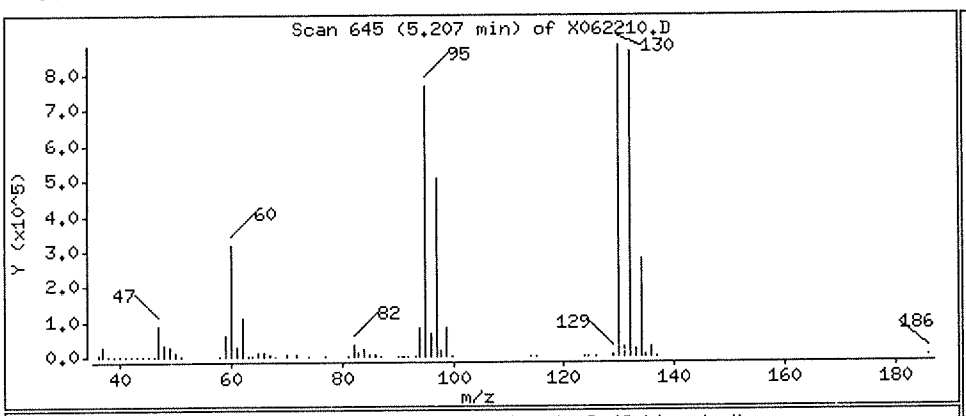
Operator: PC

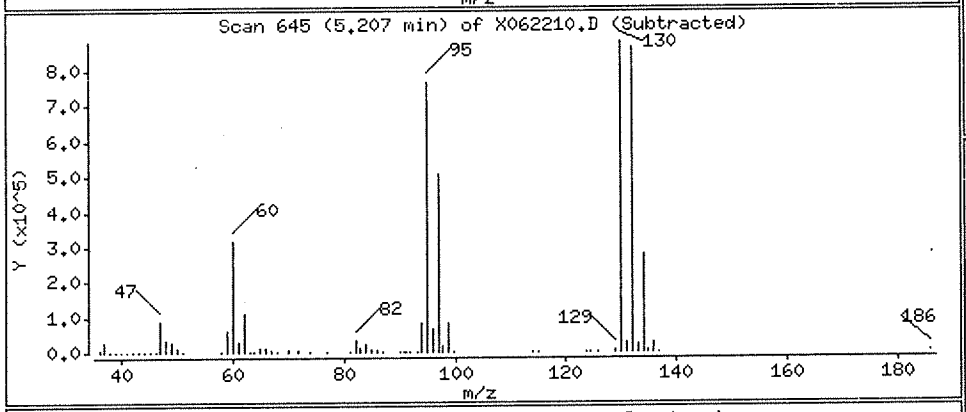
Column phase: DB624

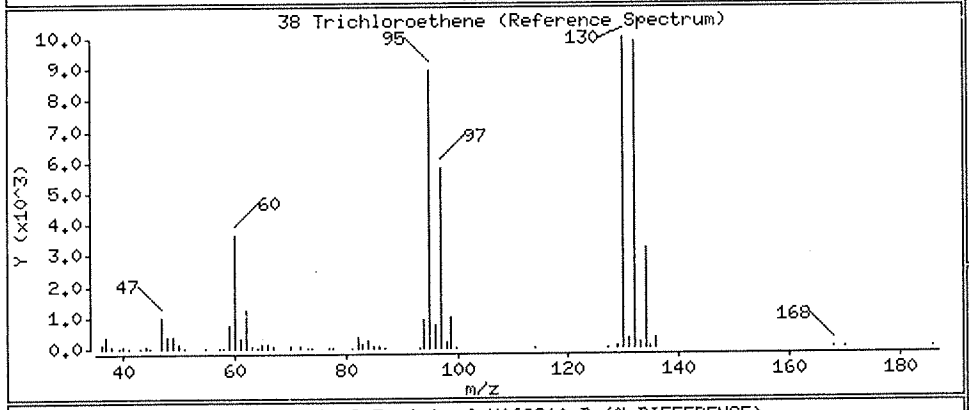
Column diameter: 0.18

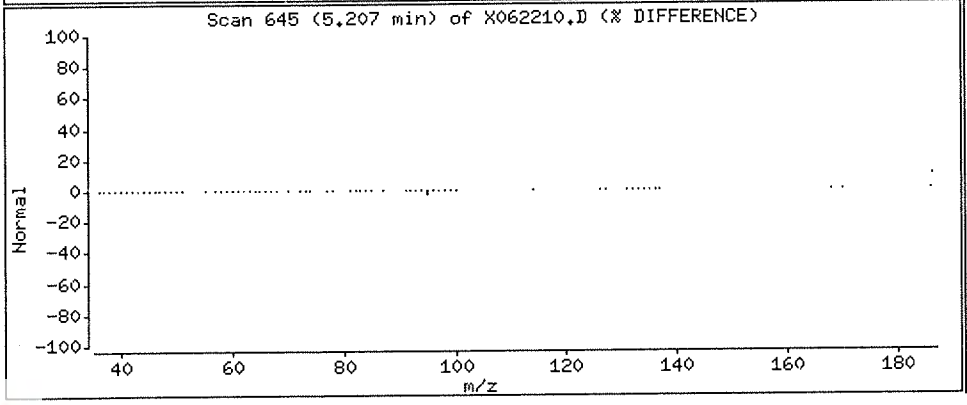
38 Trichloroethene

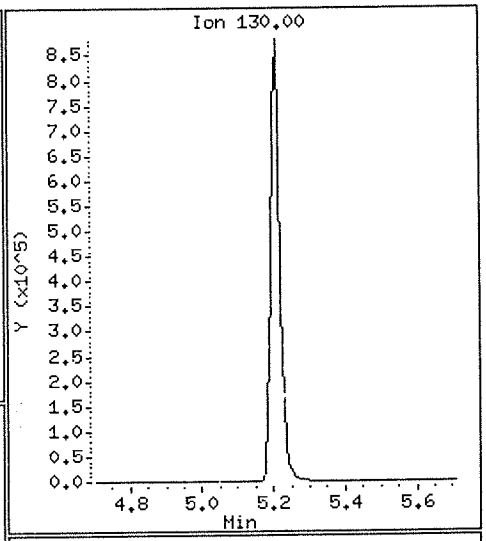
Concentration: 328.80 ug/l

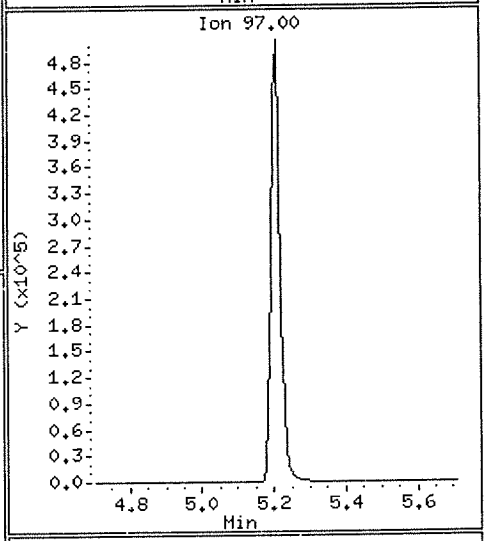


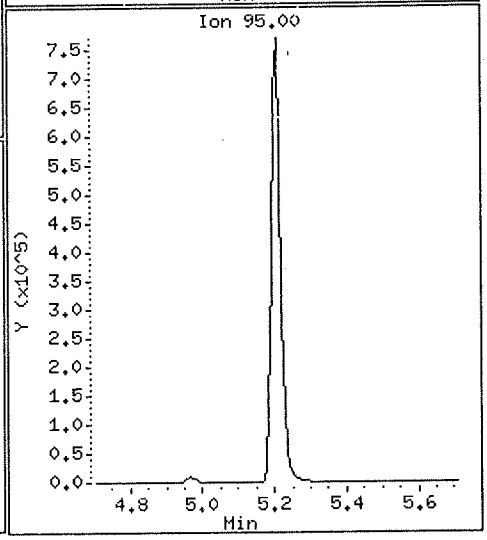












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062210.D

Date : 22-JUN-2021 13:56

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

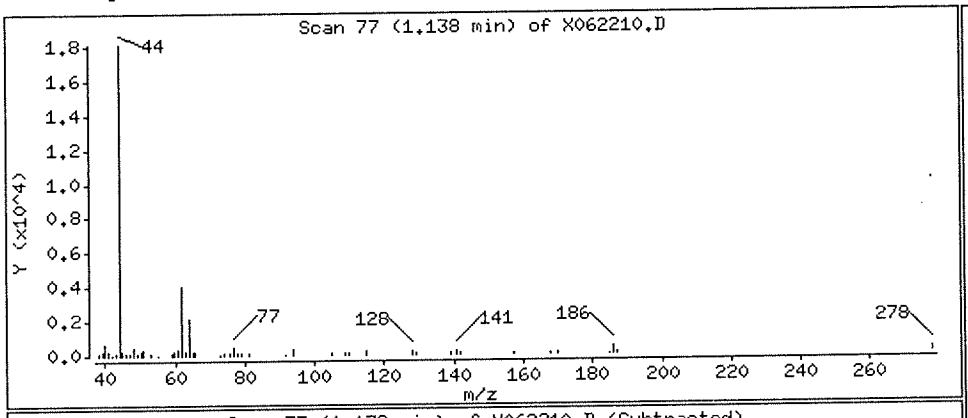
Operator: PC

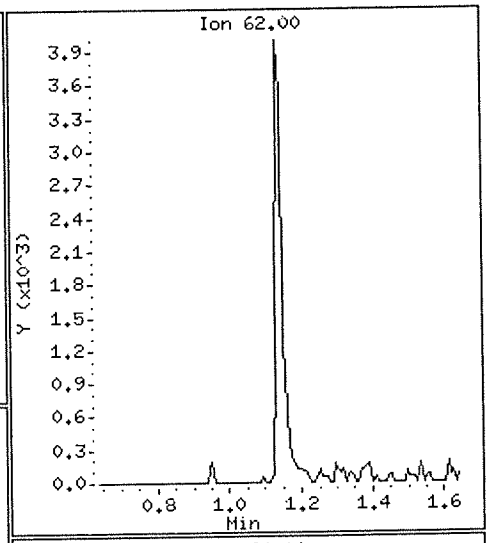
Column phase: DB624

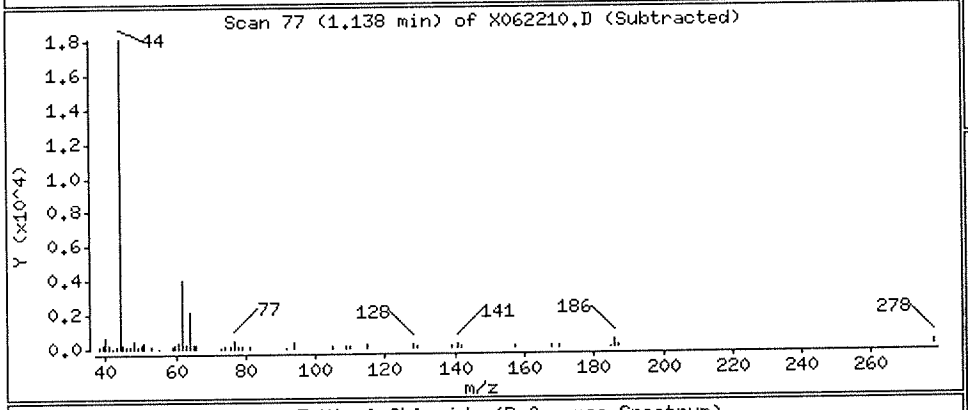
Column diameter: 0.18

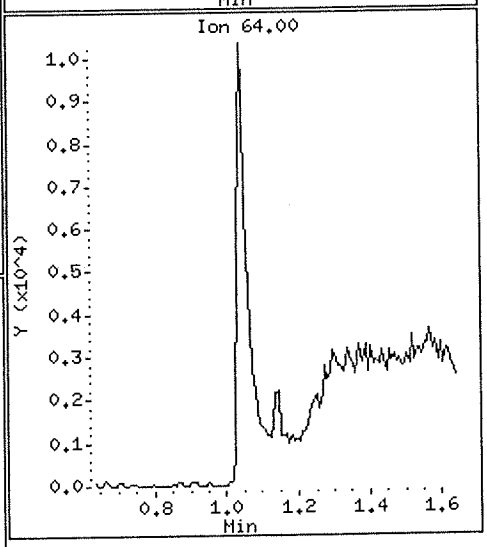
5 Vinyl Chloride

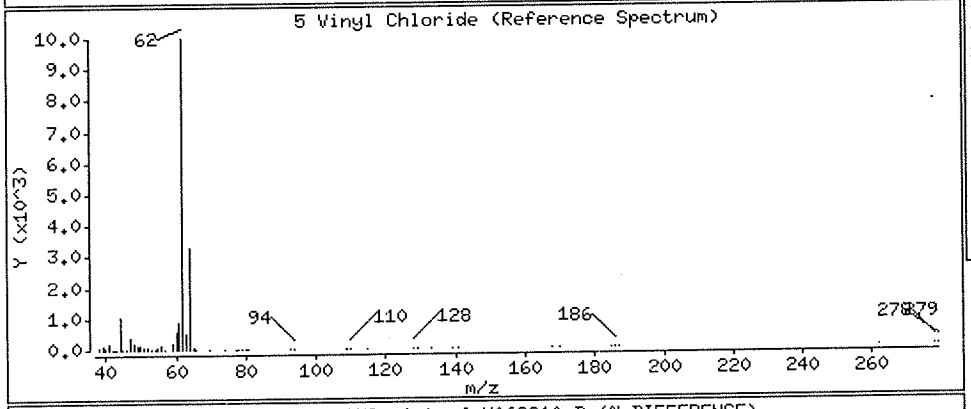
Concentration: 0.87 ug/l

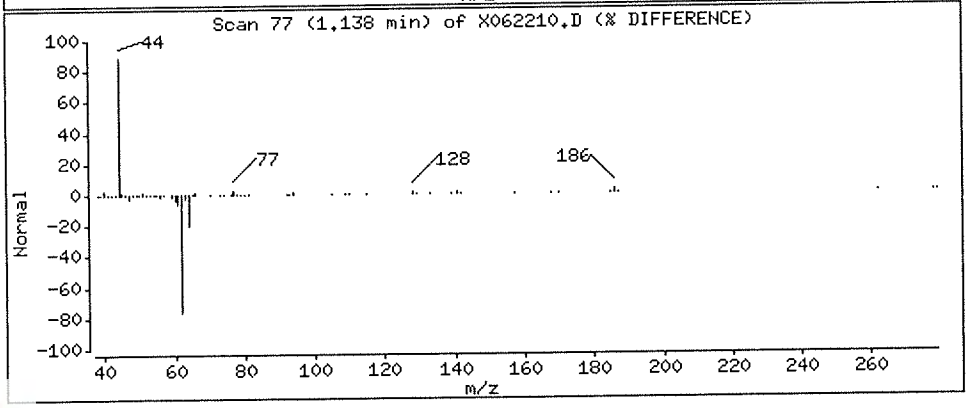












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062211.D Page 1
Report Date: 27-Aug-2021 08:56

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062211.D
Lab Smp Id: HS21060908-01 Client Smp ID: HS21060908-01
Inj Date : 22-JUN-2021 14:17
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-01;HS21060908-01;;;
Misc Info : HS18090001;WATER;0;250;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 11
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

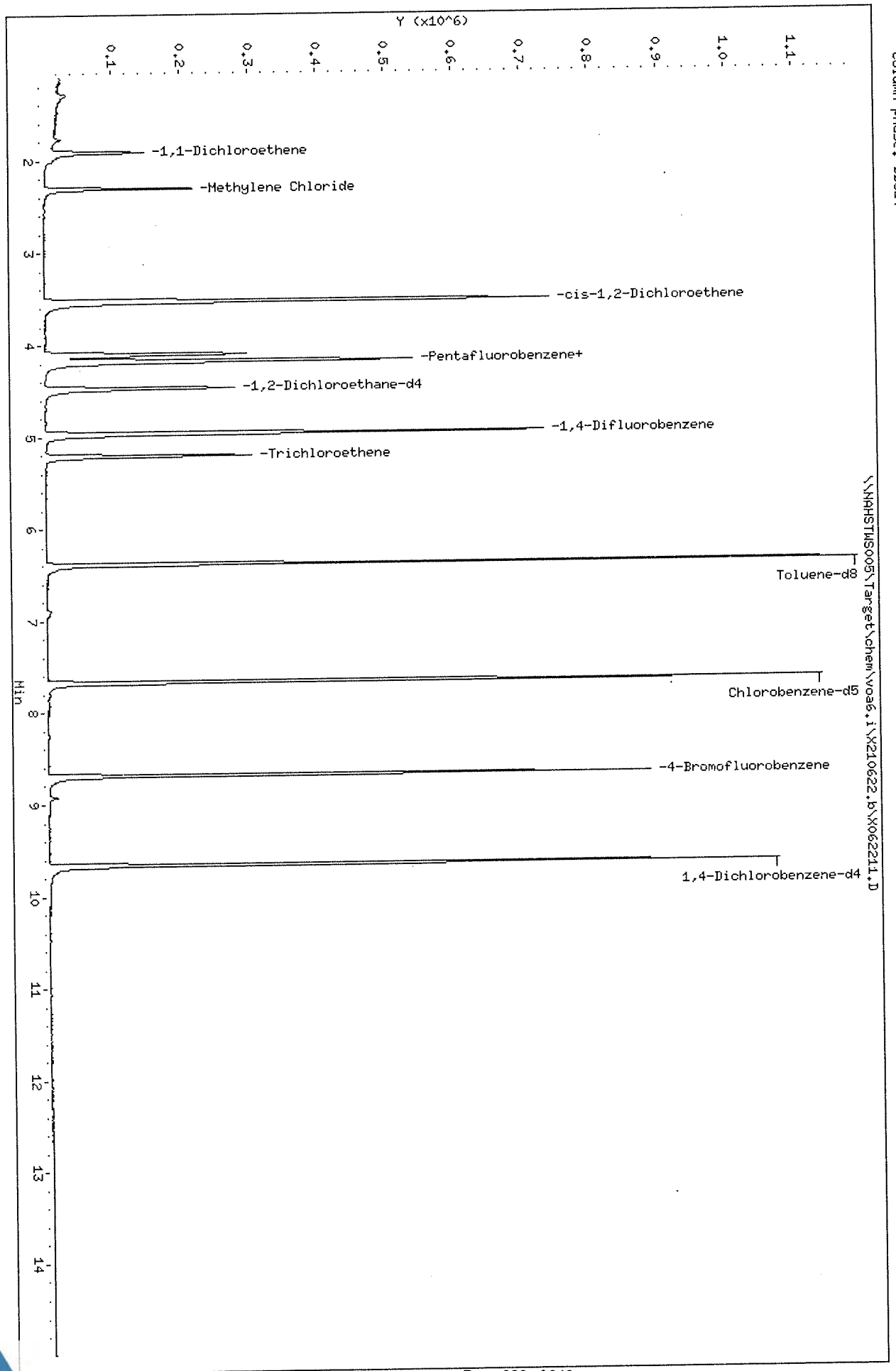
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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 Pentaflucrobenzene	168	4.182	4.182	(1.000)	491784	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	654204	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	571481	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	283888	50.0000	
$ 30 Dibromofluoromethane	113	4.104	4.096	(0.981)	210009	43.3620	43.36
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	213242	45.3284	45.32
$ 48 Toluene-d8	98	6.389	6.388	(0.833)	737514	51.8092	51.80
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	238679	47.5936	47.59
11 1,1-Dichloroethene	96	1.912	1.911	(0.457)	4194	0.82792	206.98(a)
27 cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	409744	79.4915	19872.87
17 Methylene Chloride	84	2.306	2.305	(0.551)	107430	23.4004	5850.08
38 Trichloroethene	130	5.207	5.206	(1.049)	108121	24.0801	6020.01

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062211.D
Date : 22-JUN-2021 14:17
Client ID: HS21060908-01
Sample Info: HS21060908-01;HS21060908-01;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062211.D

Date : 22-JUN-2021 14:17

Client ID: HS21060908-01

Instrument: voa6.i

Sample Info: HS21060908-01;HS21060908-01;;;

Purge Volume: 5.0

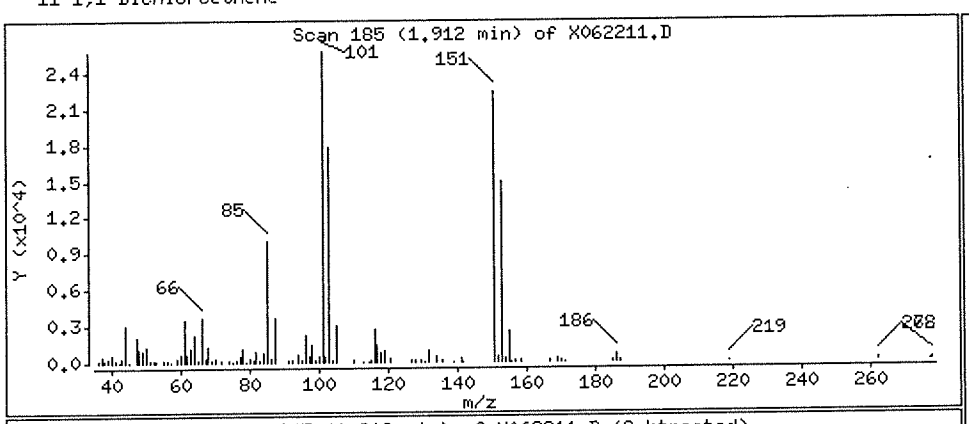
Operator: PC

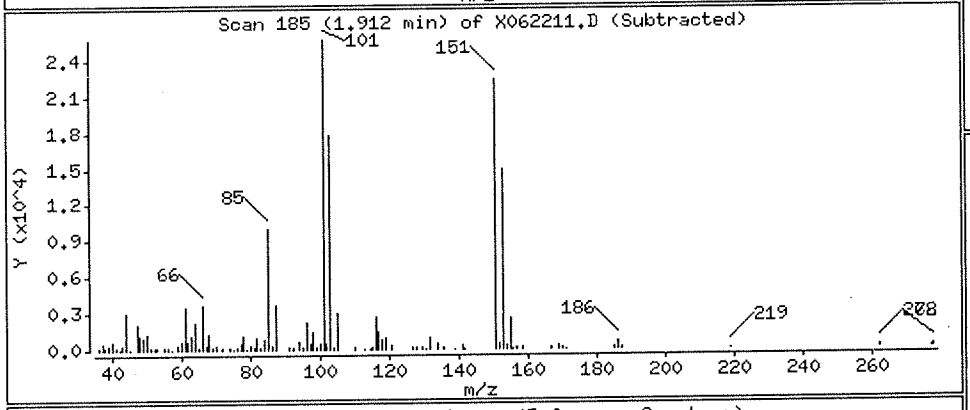
Column phase: DB624

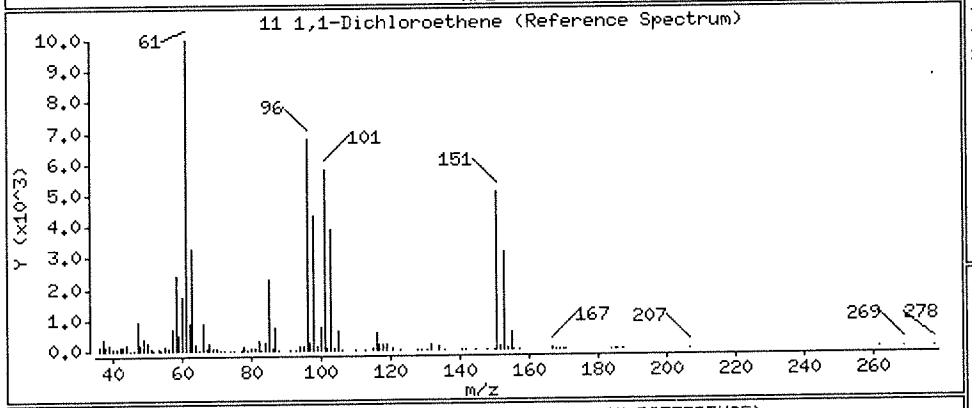
Column diameter: 0.18

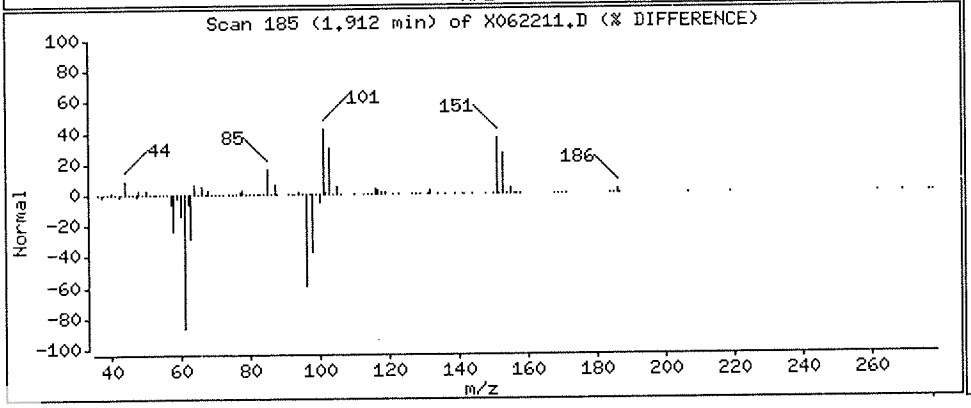
11 1,1-Dichloroethene

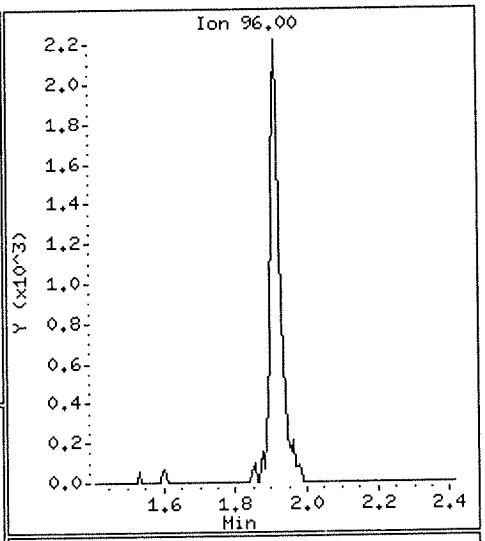
Concentration: 206.98 ug/l

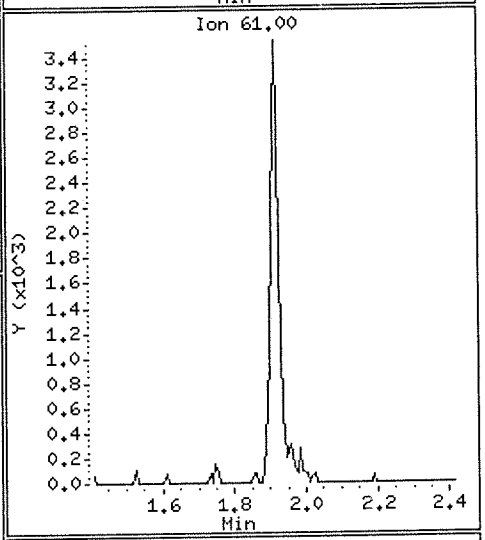


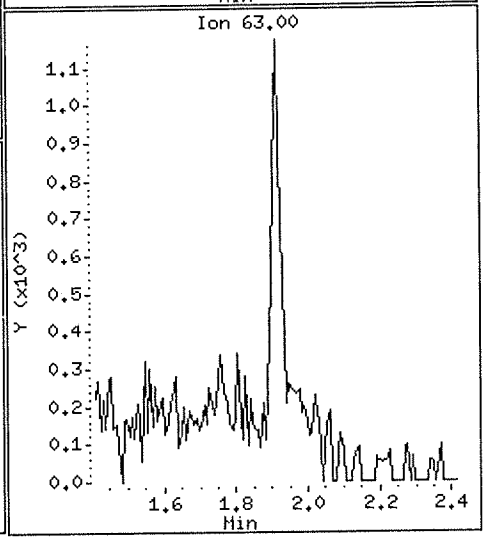












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Date : 22-JUN-2021 14:17

Client ID: HS21060908-01

Instrument: voa6.i

Sample Info: HS21060908-01;HS21060908-01;;;

Purge Volume: 5.0

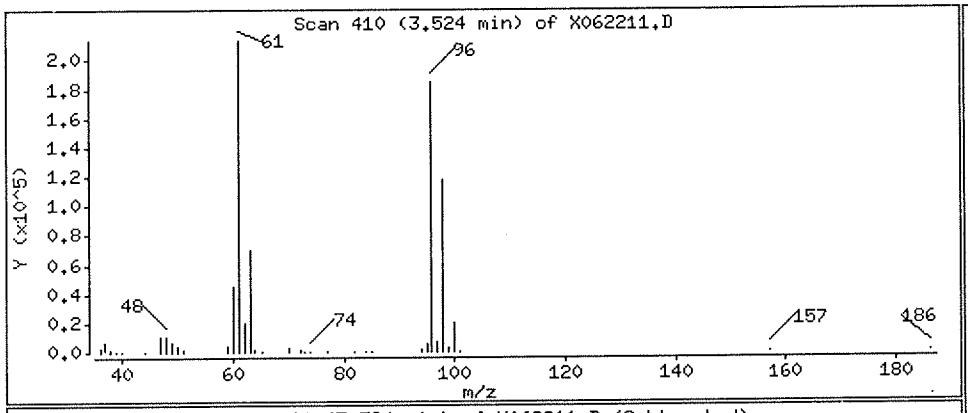
Operator: PC

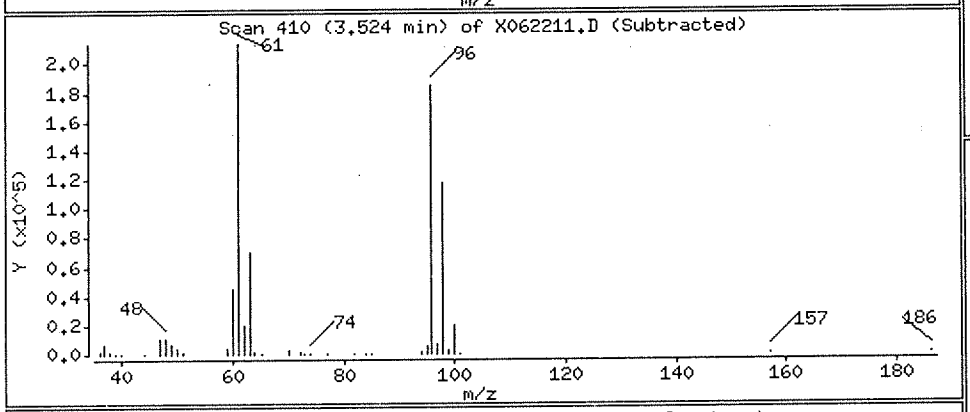
Column phase: DB624

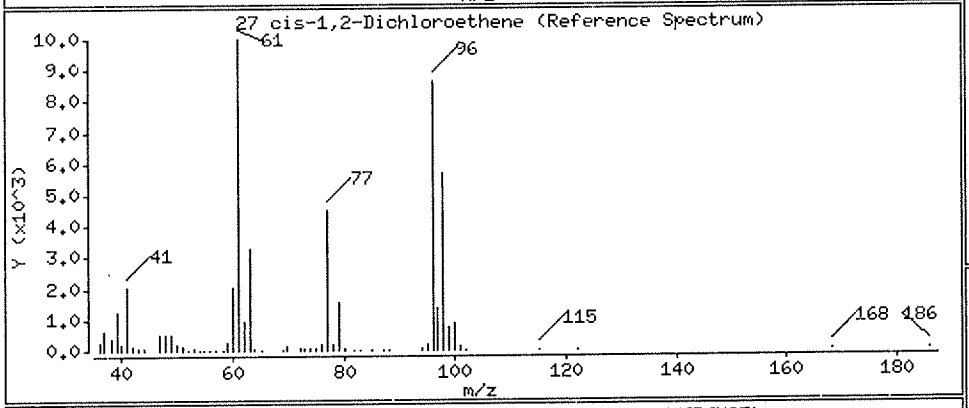
Column diameter: 0.18

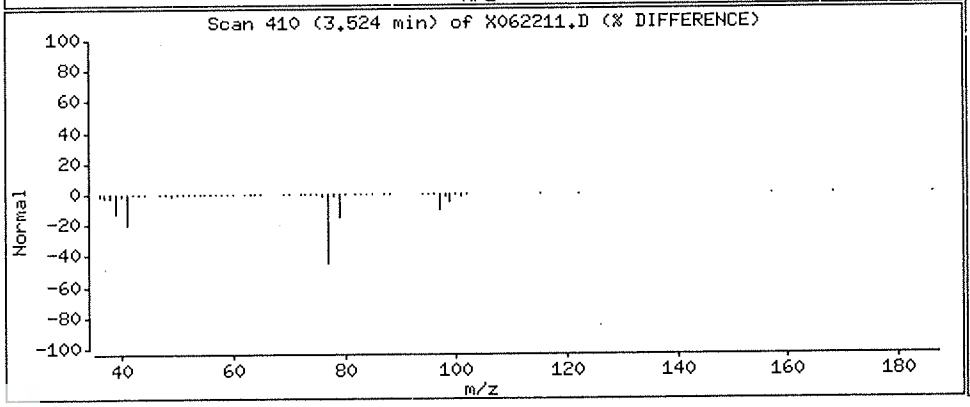
27 cis-1,2-Dichloroethene

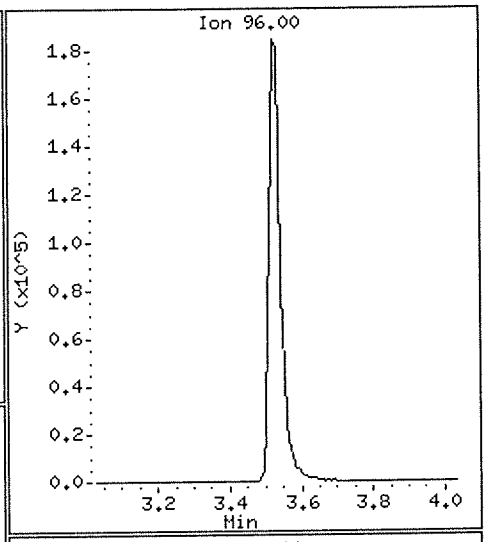
Concentration: 19872.87 ug/l

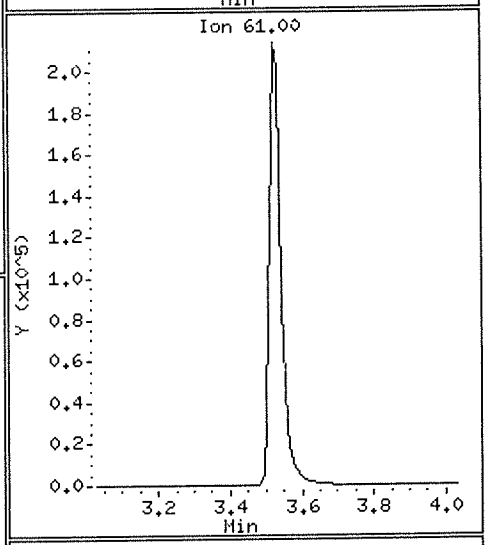


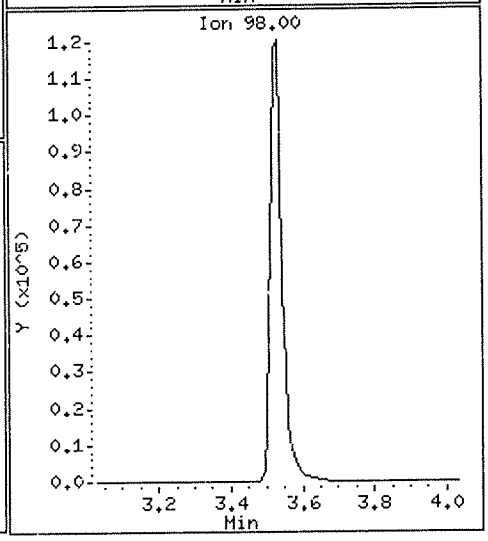












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Date : 22-JUN-2021 14:17

Client ID: HS21060908-01

Instrument: voa6.i

Sample Info: HS21060908-01;HS21060908-01;;;

Purge Volume: 5.0

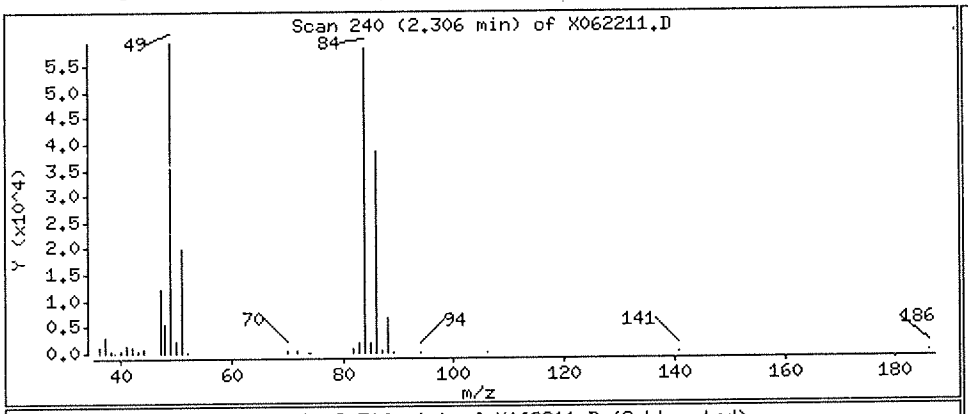
Operator: PC

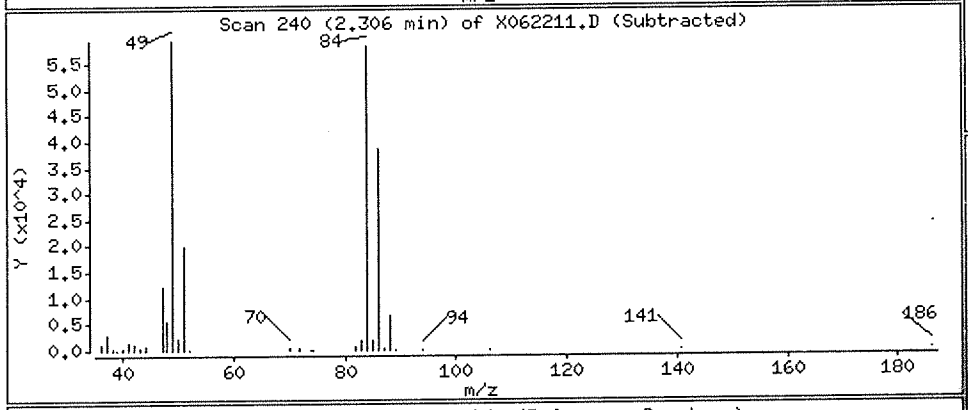
Column phase: DB624

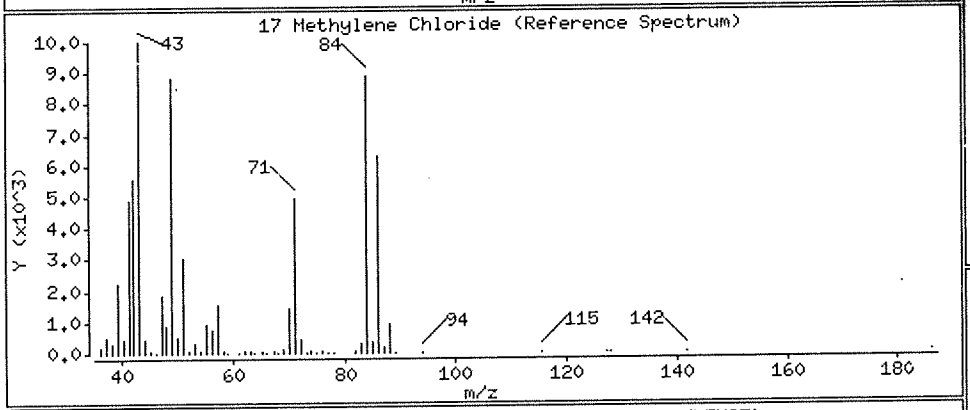
Column diameter: 0.18

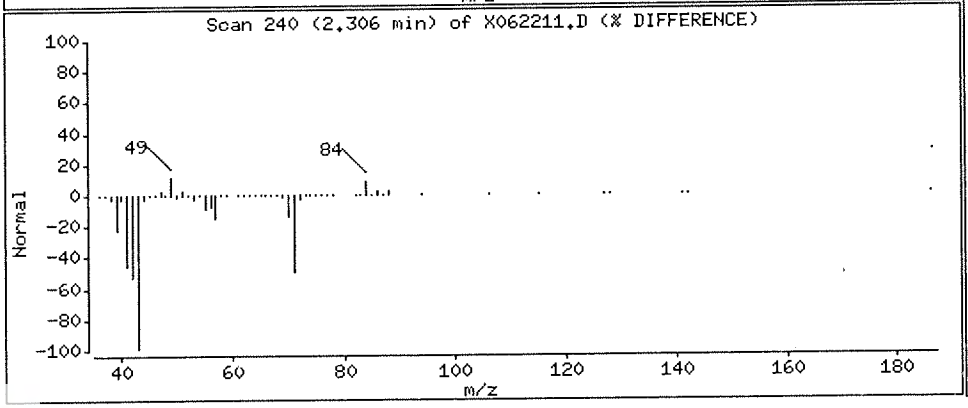
17 Methylene Chloride

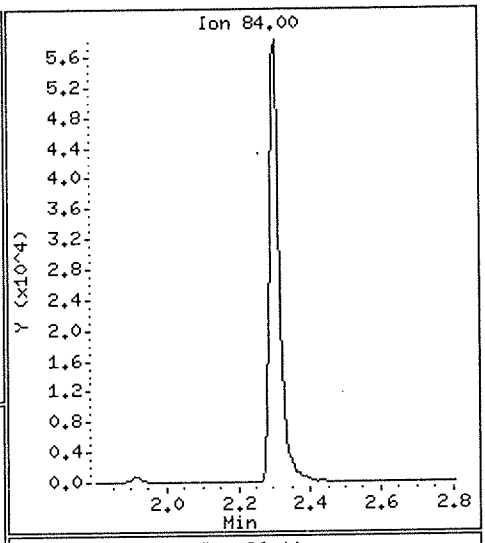
Concentration: 5850.08 ug/l

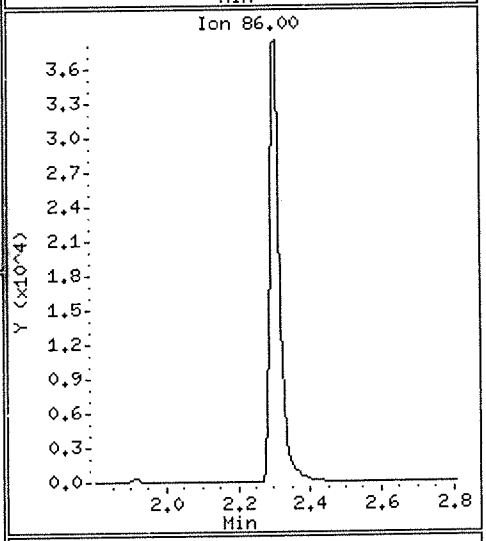


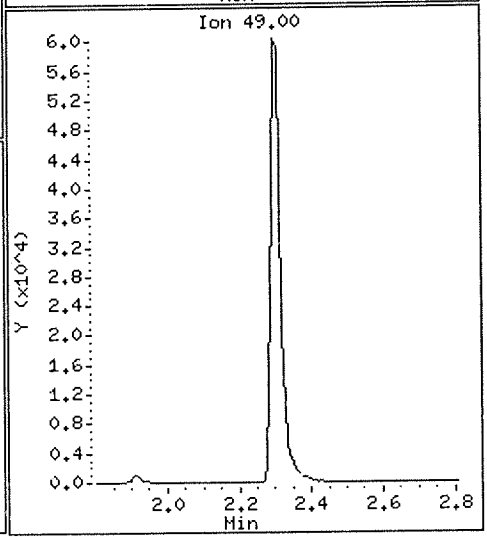












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Date : 22-JUN-2021 14:17

Client ID: HS21060908-01

Instrument: voa6.i

Sample Info: HS21060908-01;HS21060908-01;;;

Purge Volume: 5.0

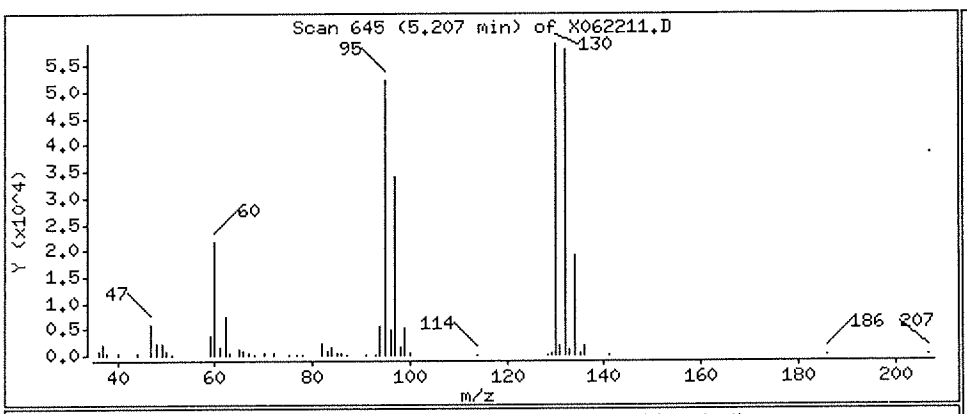
Operator: PC

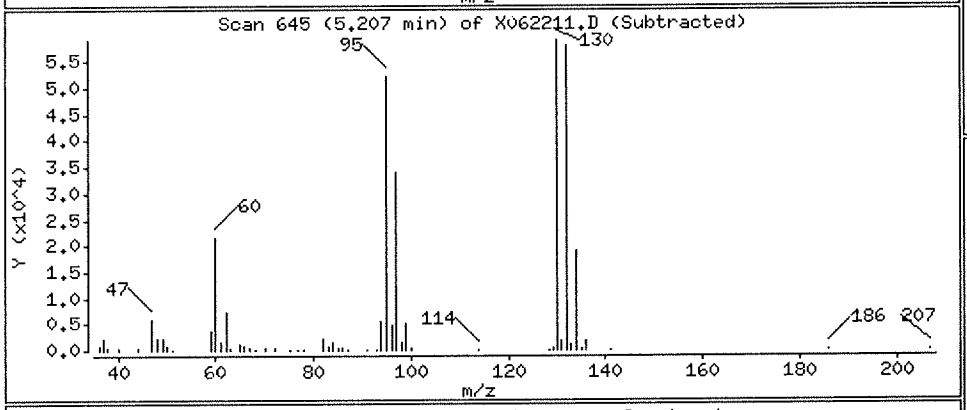
Column phase: DB624

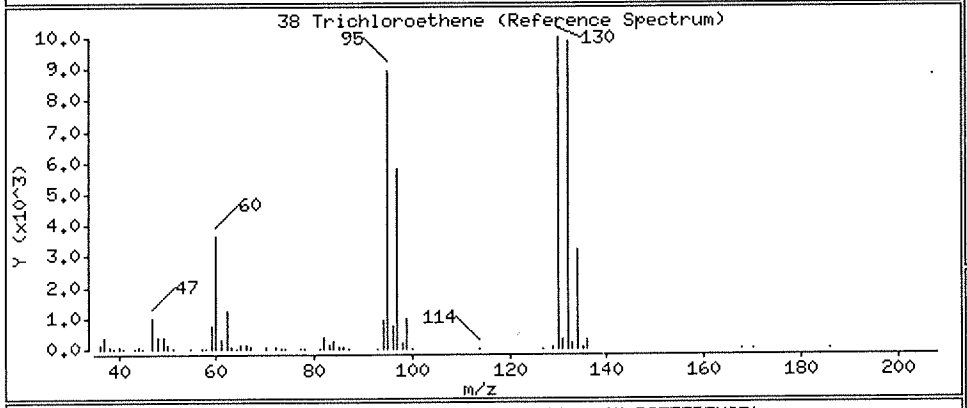
Column diameter: 0.18

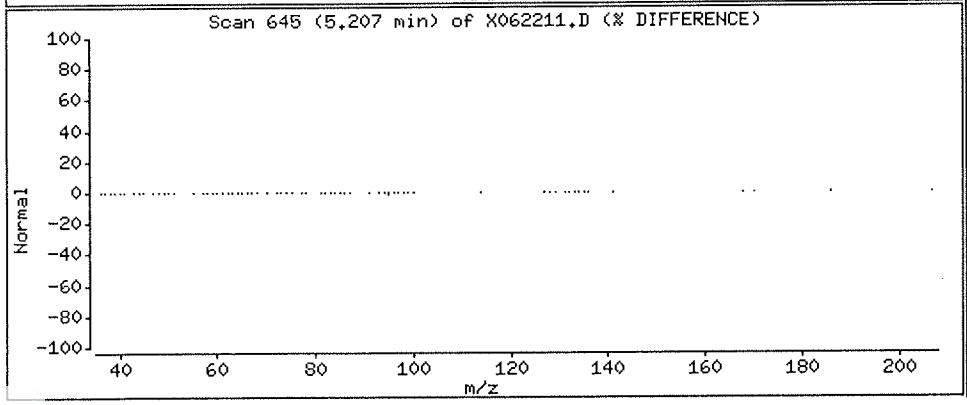
38 Trichloroethene

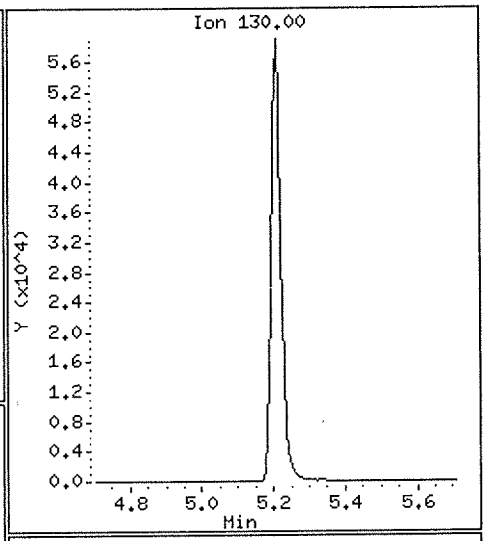
Concentration: 6020.01 ug/l

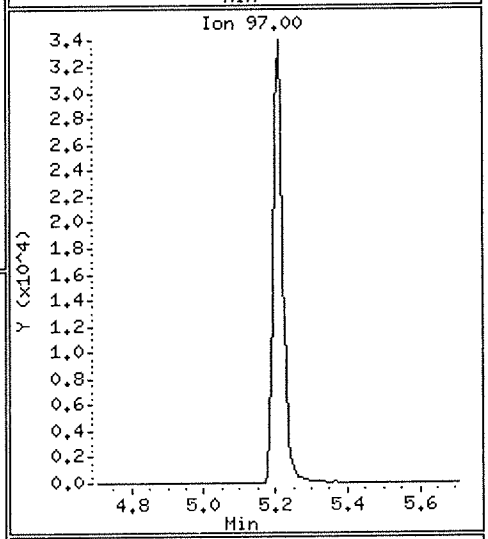


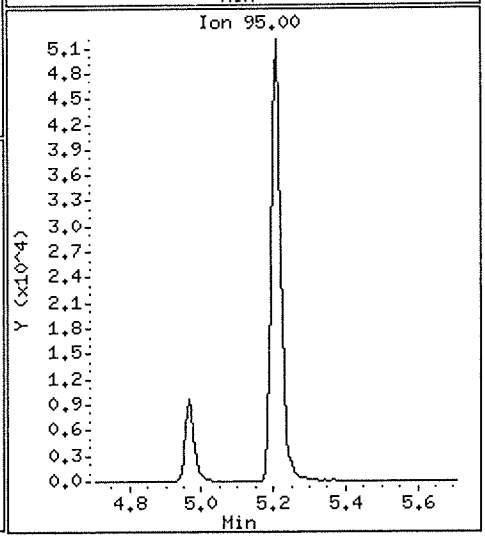












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062212.D Page 1
Report Date: 27-Aug-2021 08:56

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062212.D
Lab Smp Id: HS21060908-03 Client Smp ID: HS21060908-03
Inj Date : 22-JUN-2021 14:38
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-03;HS21060908-03
Misc Info : HS18090001;WATER;0;50;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 12
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

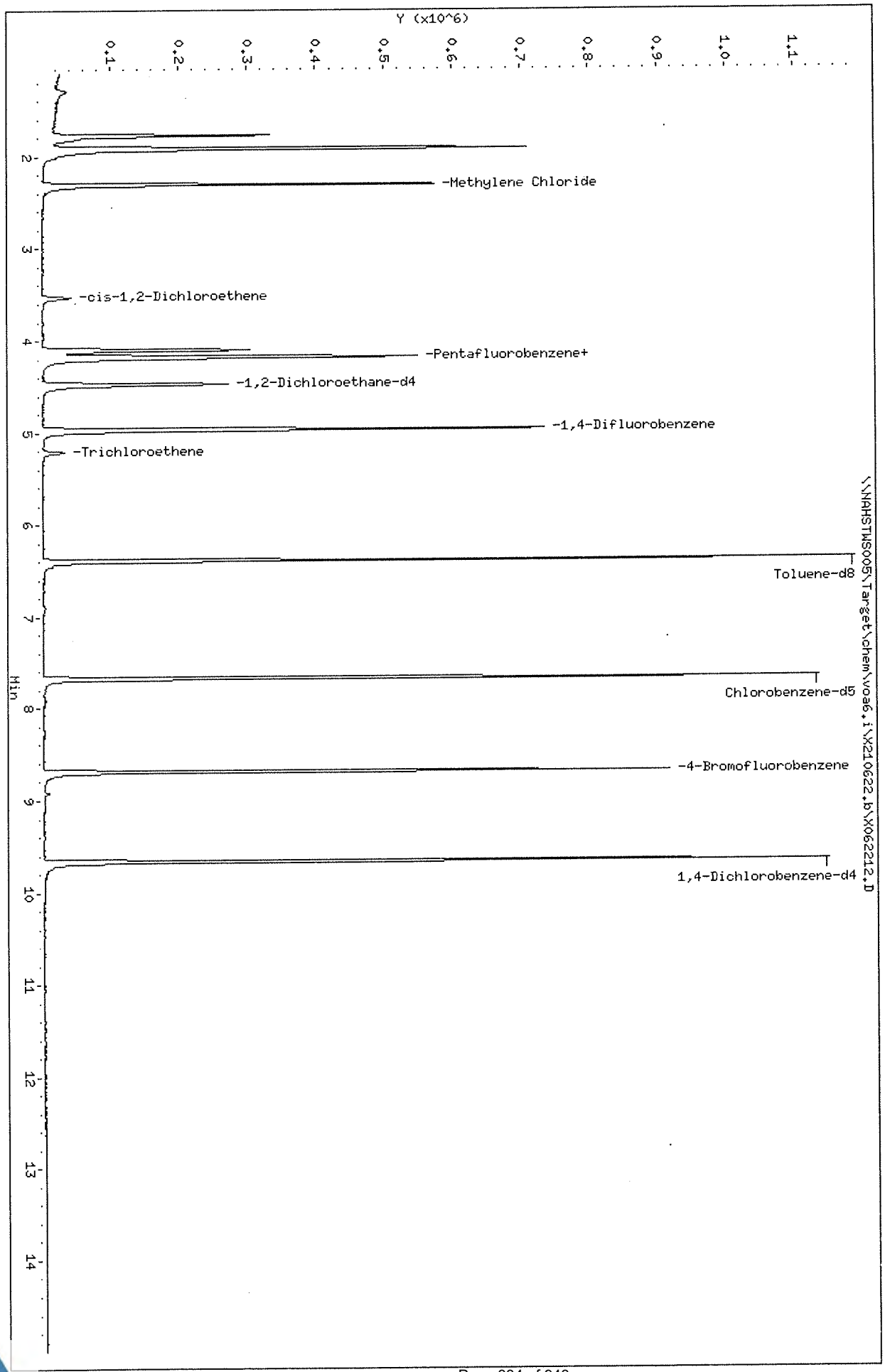
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.182	4.182	(1.000)	487609	50.0000	
*	36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	671117	50.0000	
*	47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	575669	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	293386	50.0000	
$	30 Dibromofluoromethane	113	4.103	4.096	(0.981)	215585	44.9003	44.90
$	35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	214998	46.1047	46.10
$	48 Toluene-d8	98	6.388	6.388	(0.833)	750922	52.3673	52.36
$	69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	243075	48.1092	48.10
	27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	23620	4.62158	231.07(a)
	17 Methylene Chloride	84	2.305	2.305	(0.551)	286253	65.1271	3256.35(H)
	38 Trichloroethene	130	5.214	5.206	(1.051)	11608	2.52011	126.00(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062212.D
Date : 22-JUN-2021 14:38
Client ID: HS21060908-03
Sample Info: HS21060908-03;HS21060908-03
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062212.D

Date : 22-JUN-2021 14:38

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03

Purge Volume: 5.0

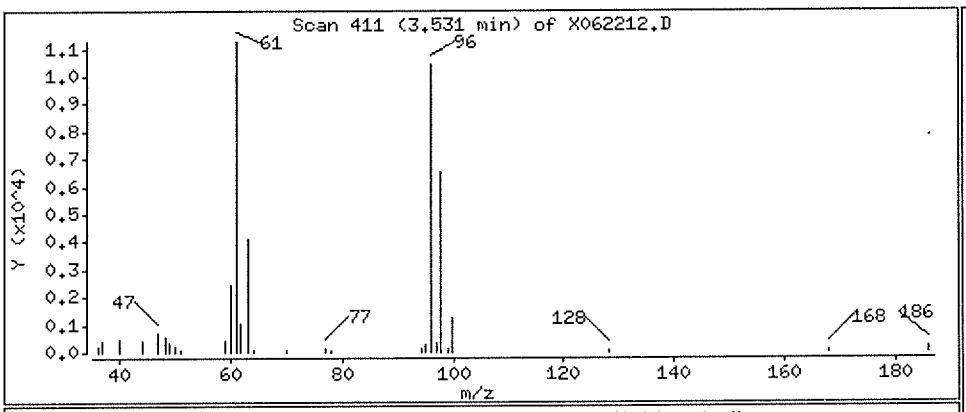
Operator: PC

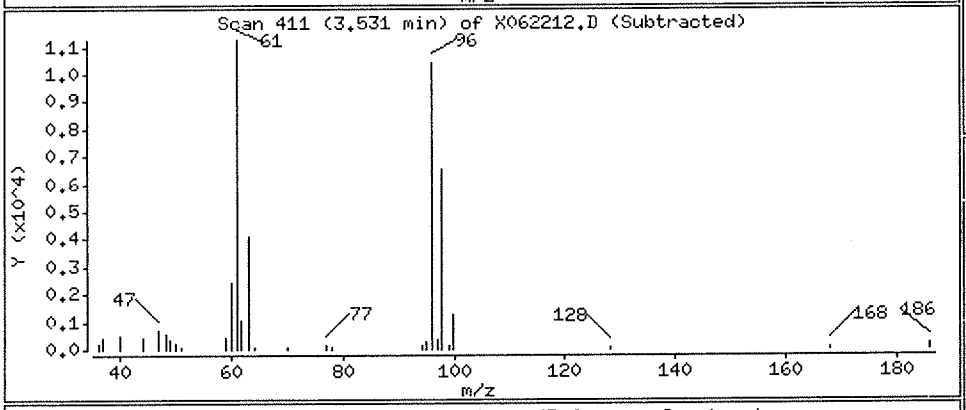
Column phase: DB624

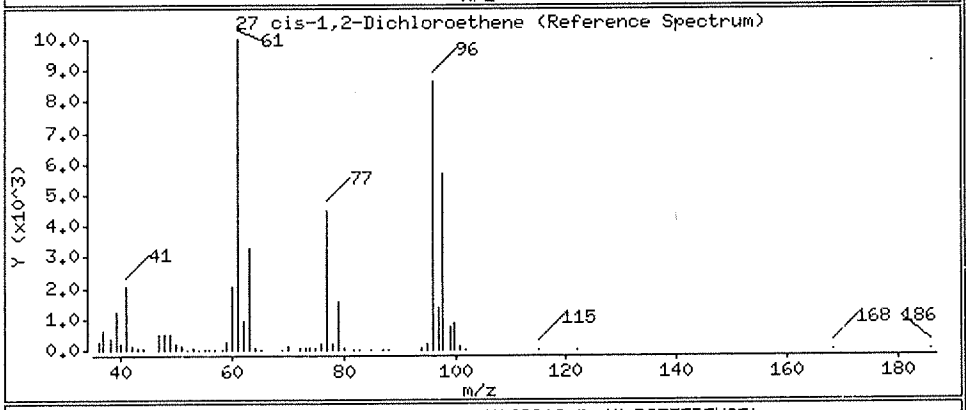
Column diameter: 0.18

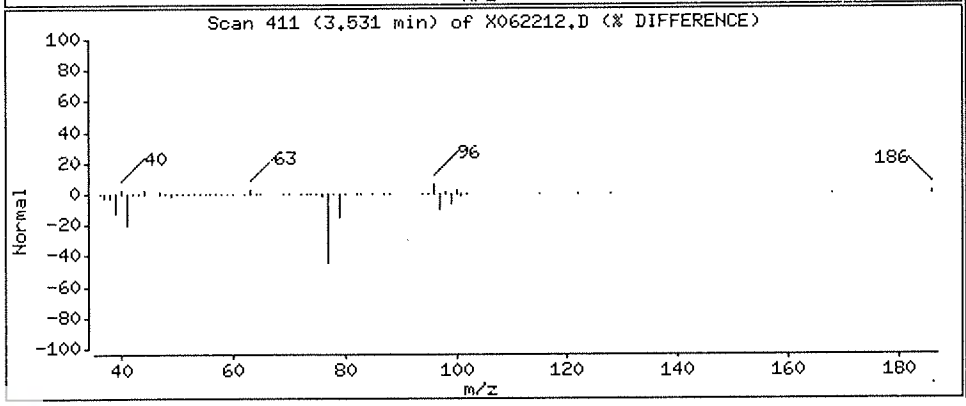
27 cis-1,2-Dichloroethene

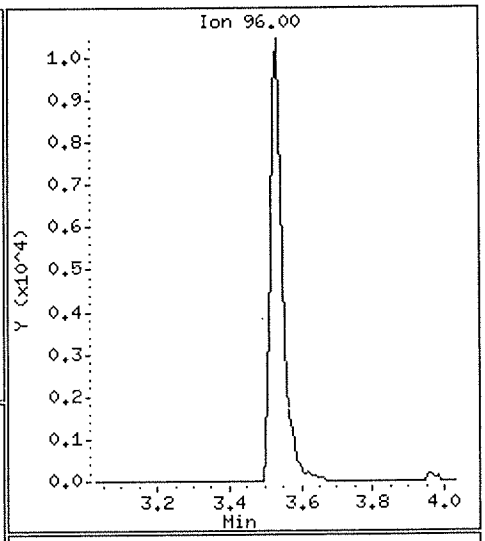
Concentration: 231.07 ug/l

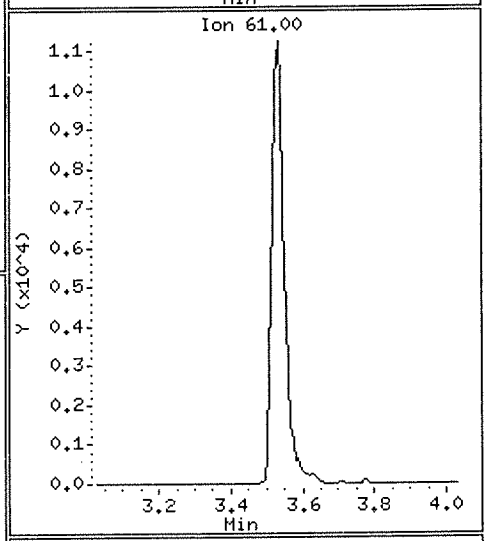


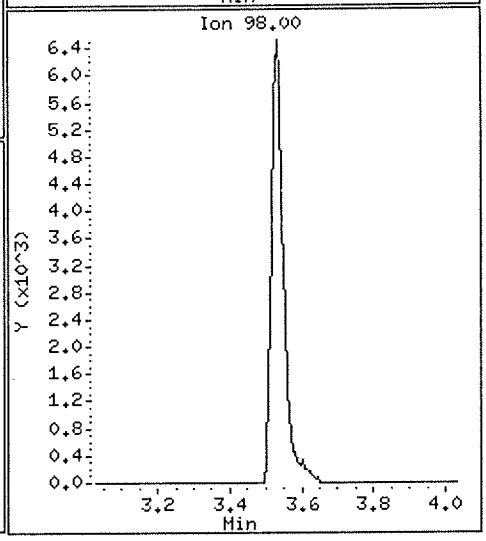












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062212.D

Date : 22-JUN-2021 14:38

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03

Purge Volume: 5.0

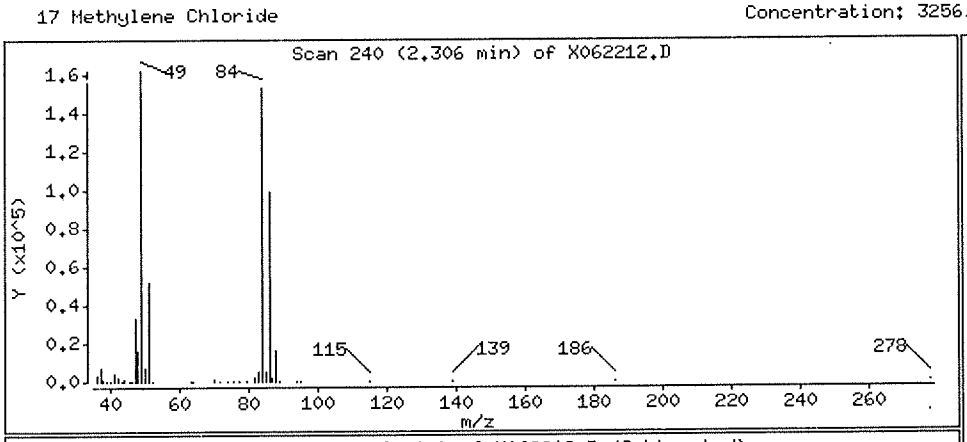
Operator: PC

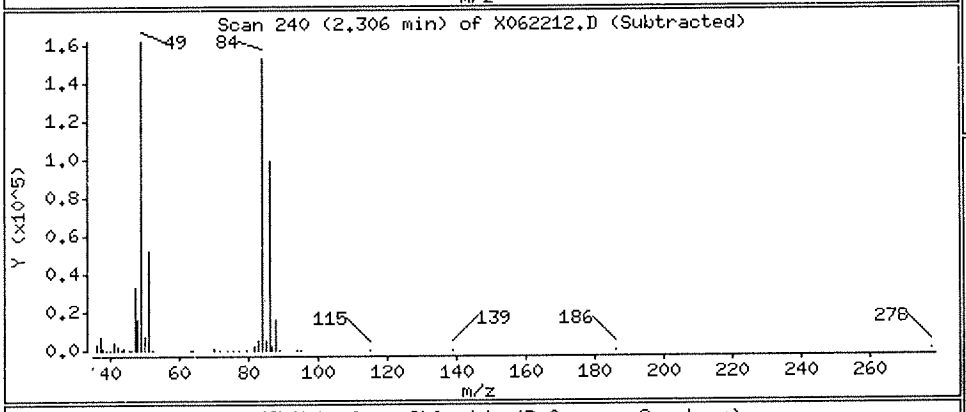
Column phase: DB624

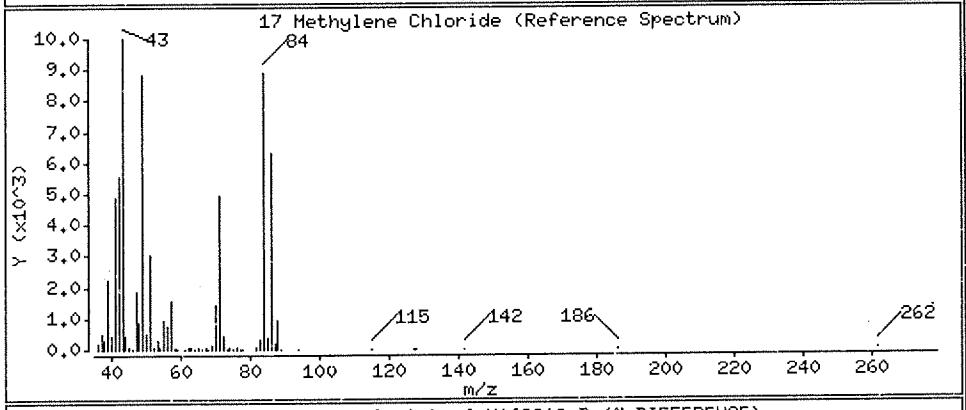
Column diameter: 0.18

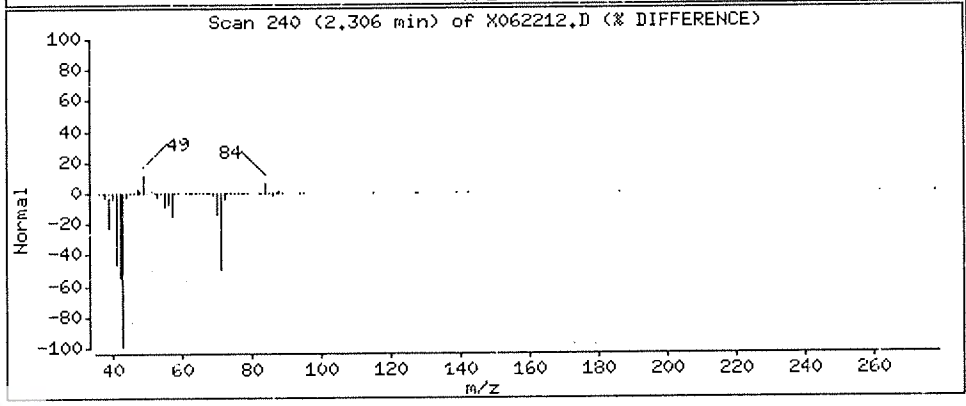
17 Methylene Chloride

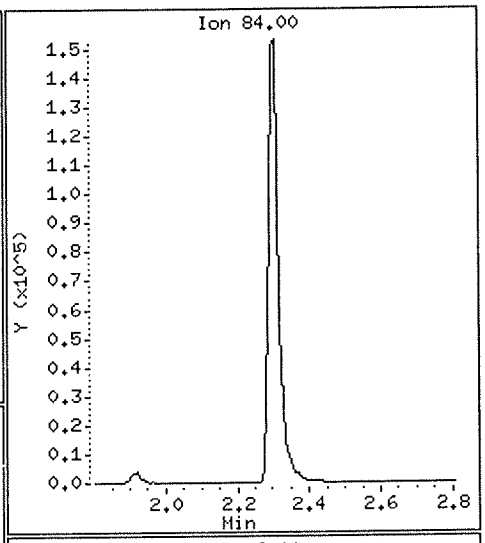
Concentration: 3256.35 ug/l

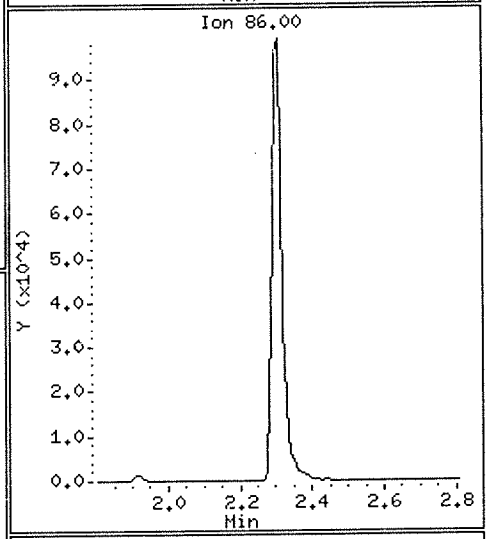


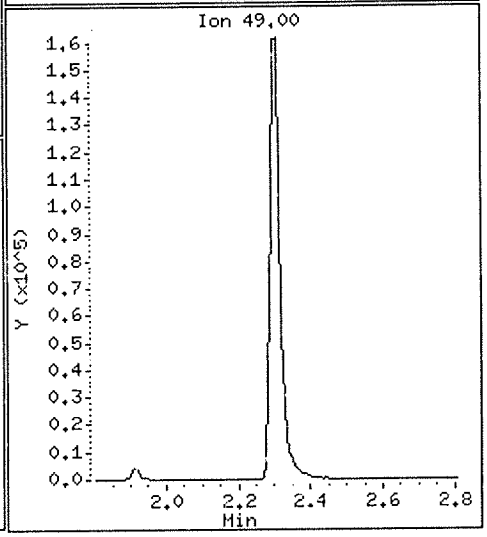












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062212.D

Date : 22-JUN-2021 14:38

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03

Purge Volume: 5.0

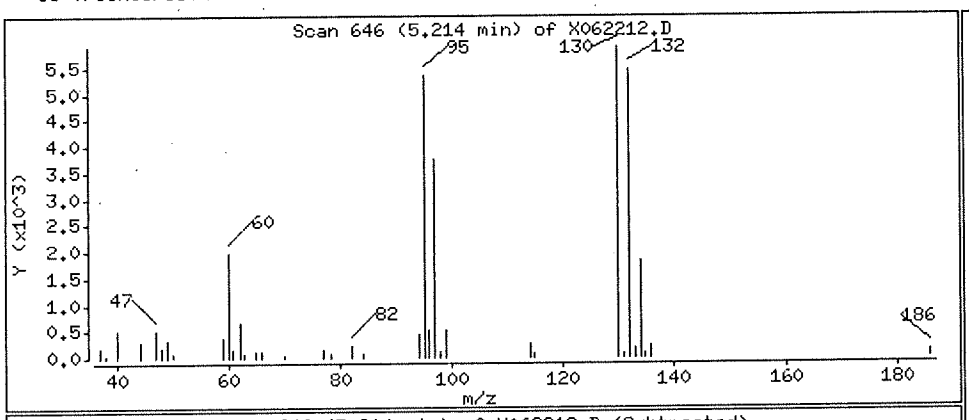
Operator: PC

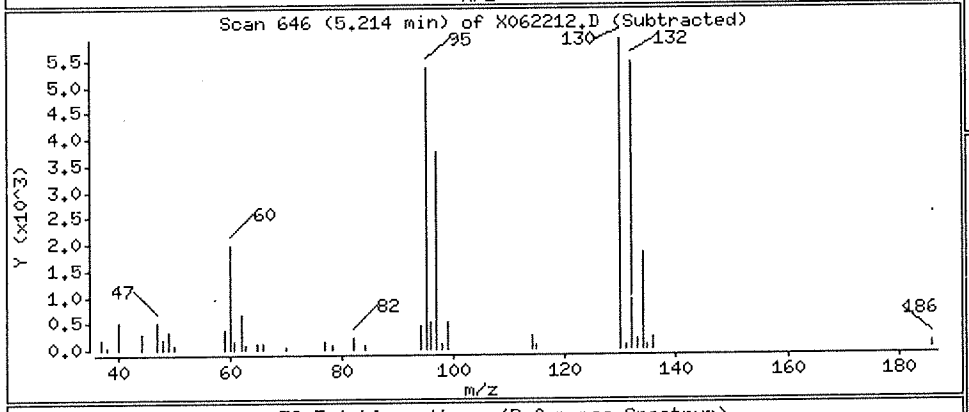
Column phase: DB624

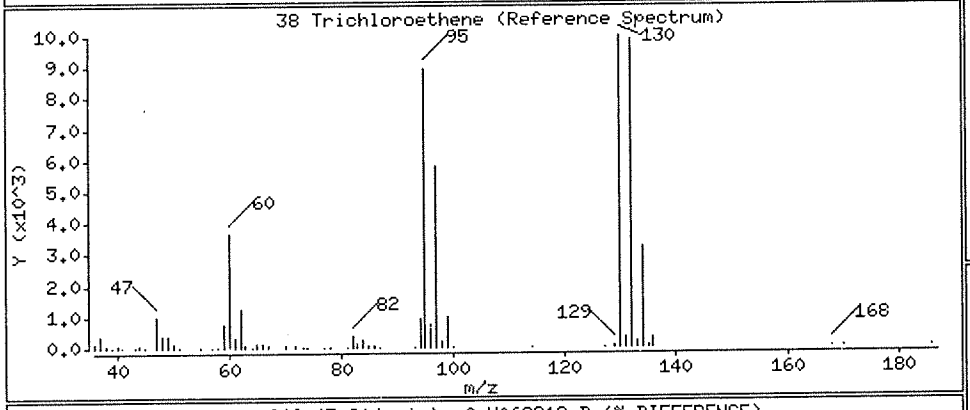
Column diameter: 0.18

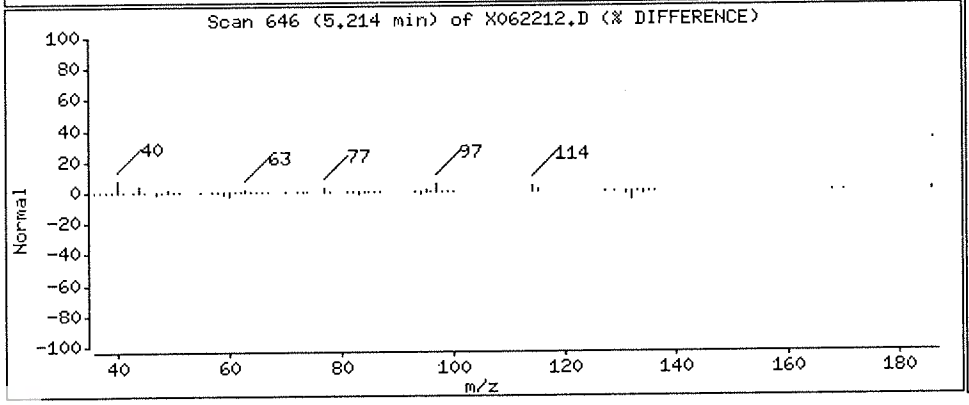
38 Trichloroethene

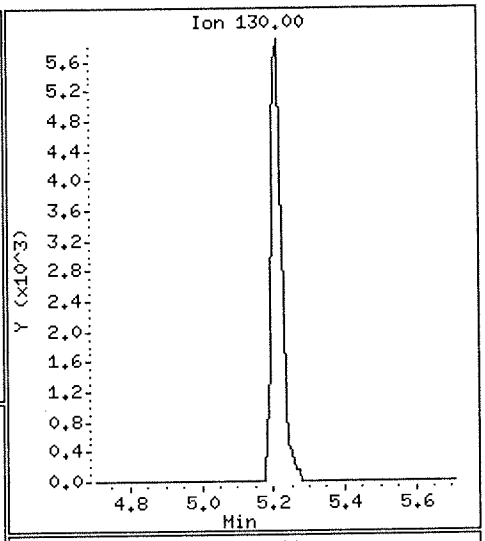
Concentration: 126.00 ug/l

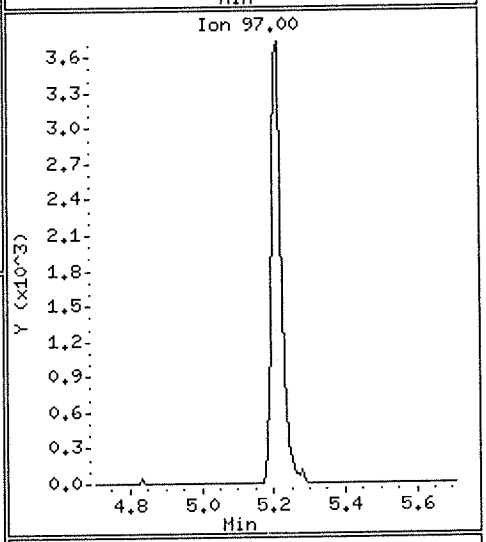


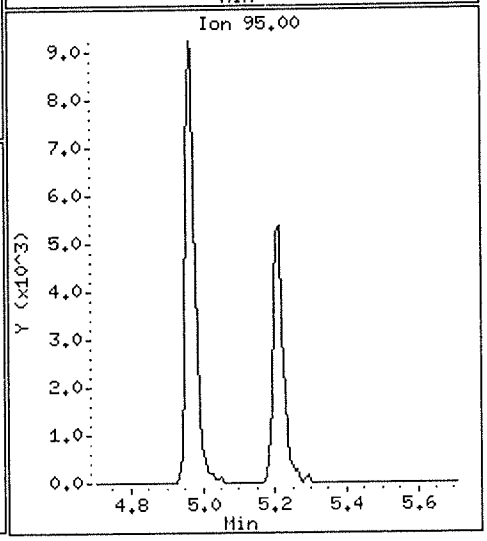












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062213.D Page 1
Report Date: 27-Aug-2021 08:56

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062213.D
Lab Smp Id: HS21060908-07 Client Smp ID: HS21060908-07
Inj Date : 22-JUN-2021 14:59
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-07;HS21060908-07;
Misc Info : HS18090001;WATER;0;5;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 13
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	490321	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	663688	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	593072	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	309761	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	214769	44.4814	44.48
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	218746	46.6572	46.65
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	752884	50.9635	50.96
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	250704	48.1623	48.16
11 1,1-Dichloroethene	96	1.912	1.911	(0.457)	8127	1.60911	8.04(a)
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	61774	11.6817	58.40
37 Benzene	78	4.519	4.512	(0.911)	10582	0.69404	3.47(a)
34 Carbon Tetrachloride	117	4.268	4.261	(0.860)	4942	0.89826	4.49(aH)
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	14218	2.76656	13.83(a)
38 Trichloroethene	130	5.207	5.206	(1.049)	2290585	502.855	2514.27(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.
H - Operator selected an alternate compound hit.

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062213.D

Date : 22-JUN-2021 14:59

Client ID: HS21060908-07

Instrument: voa6.i

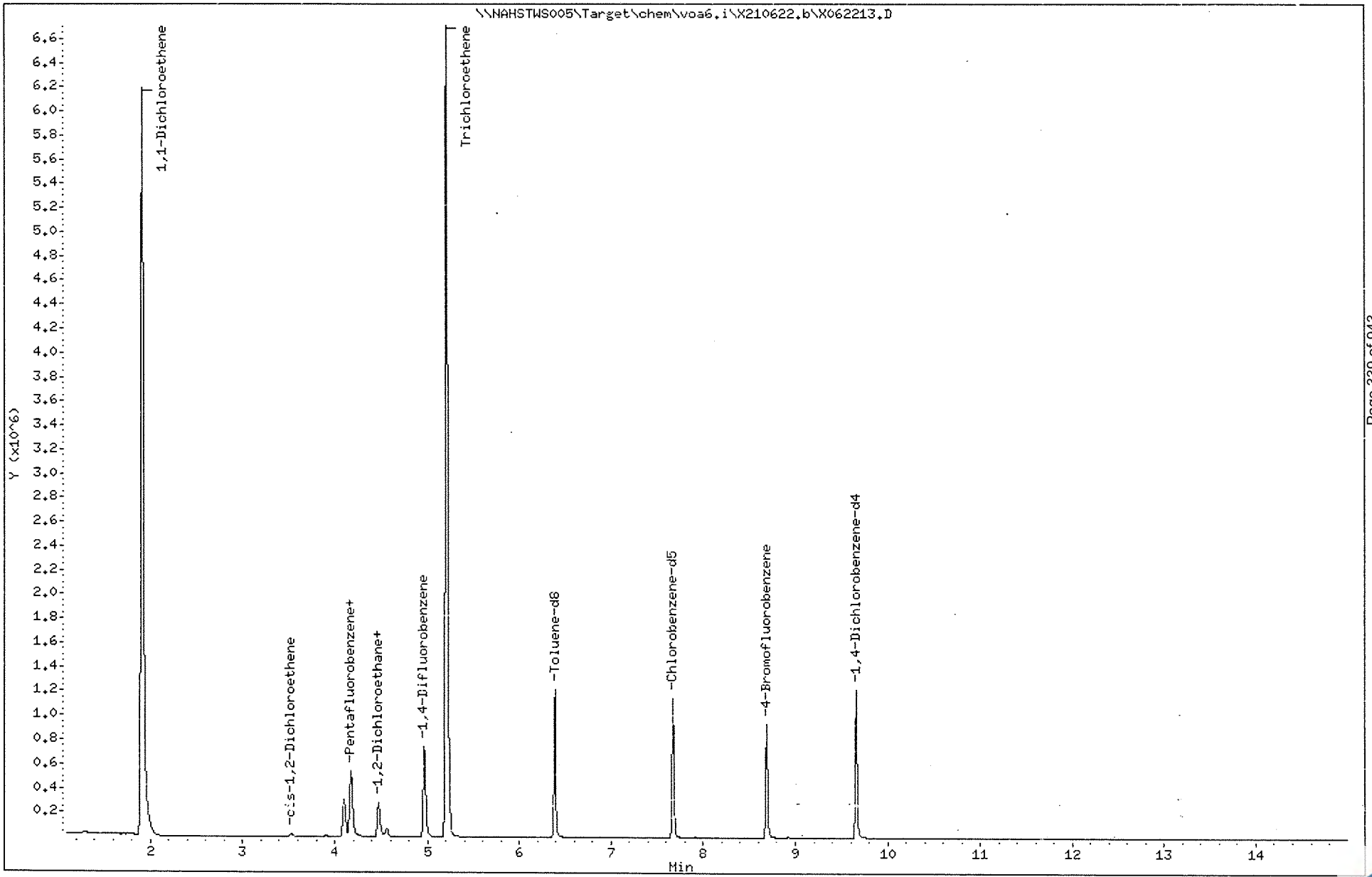
Sample Info: HS21060908-07;HS21060908-07;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062213.D

Date : 22-JUN-2021 14:59

Client ID: HS21060908-07

Instrument: voa6.i

Sample Info: HS21060908-07;HS21060908-07;

Purge Volume: 5.0

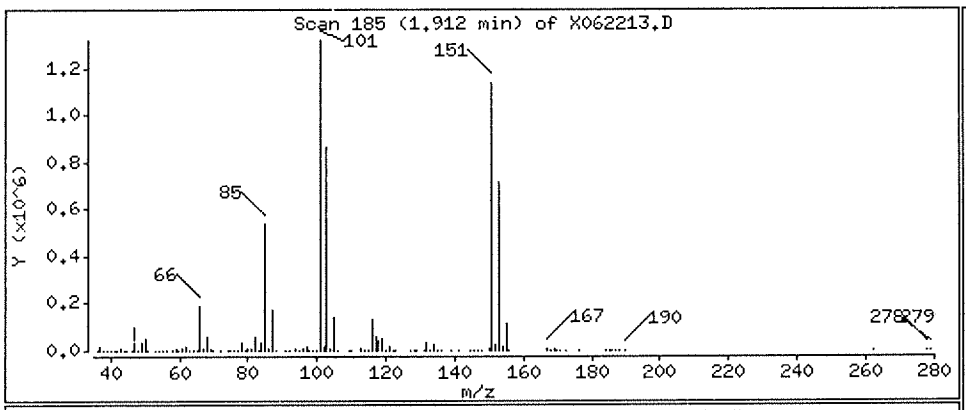
Operator: PC

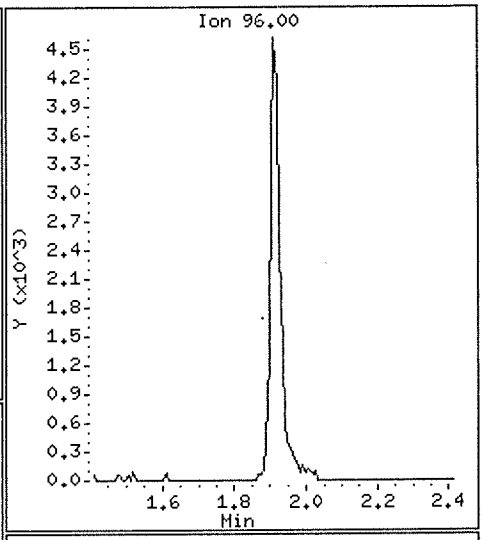
Column phase: DB624

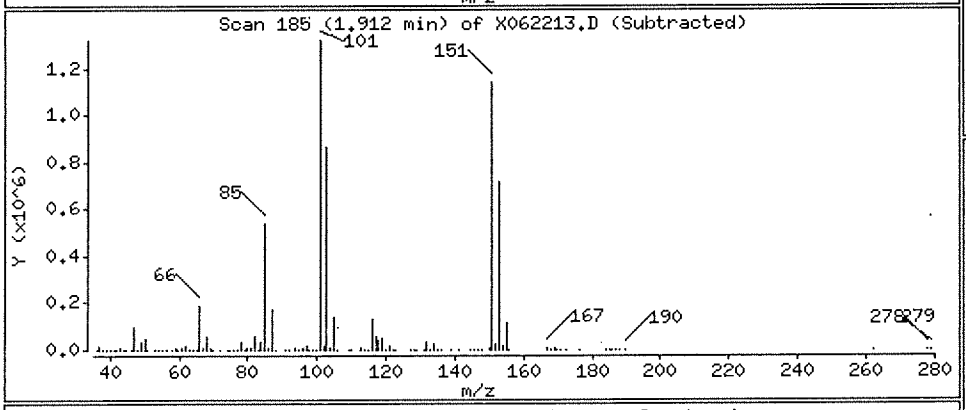
Column diameter: 0.18

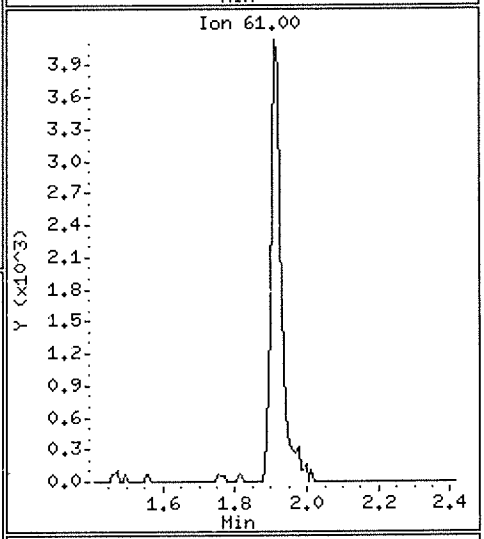
11 1,1-Dichloroethene

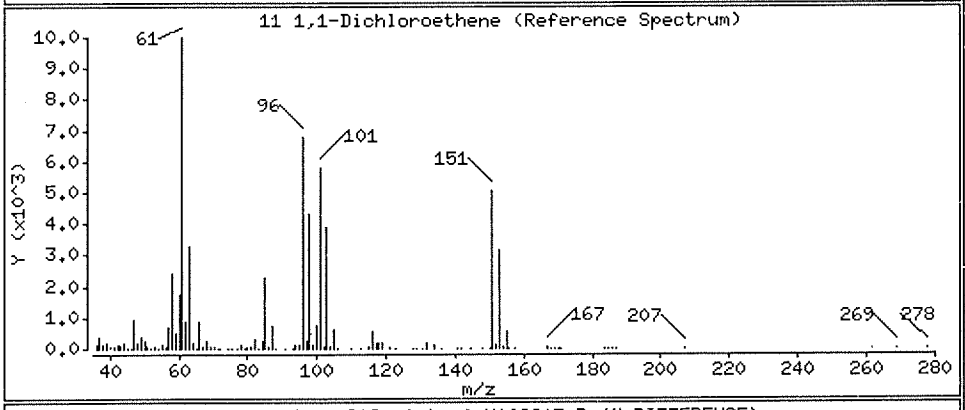
Concentration: 8.04 ug/l

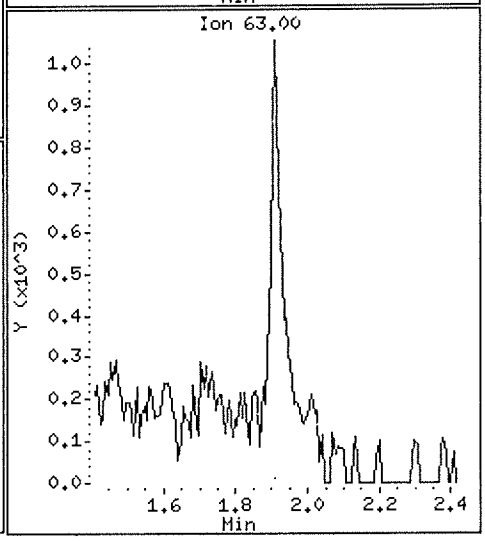


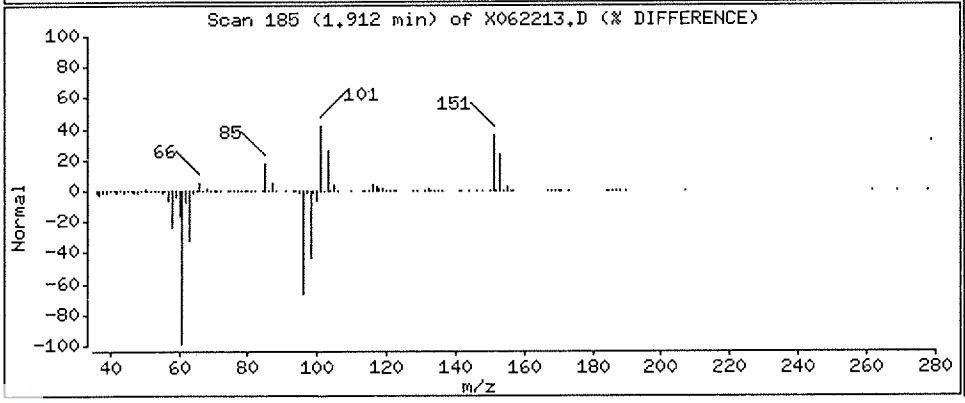












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062213.D

Date : 22-JUN-2021 14:59

Client ID: HS21060908-07

Instrument: voa6.i

Sample Info: HS21060908-07;HS21060908-07;

Purge Volume: 5.0

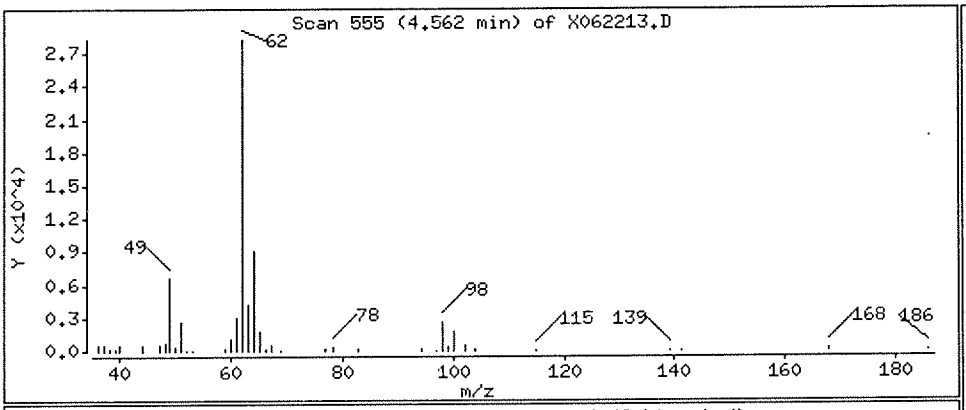
Operator: PC

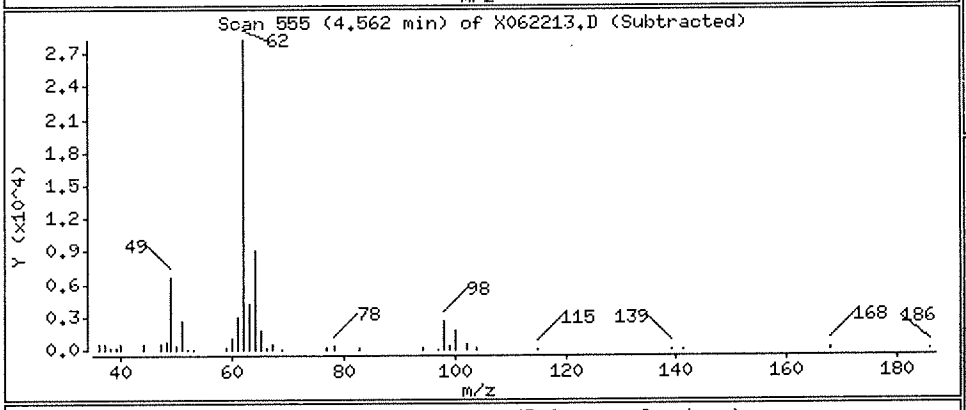
Column phase: DB624

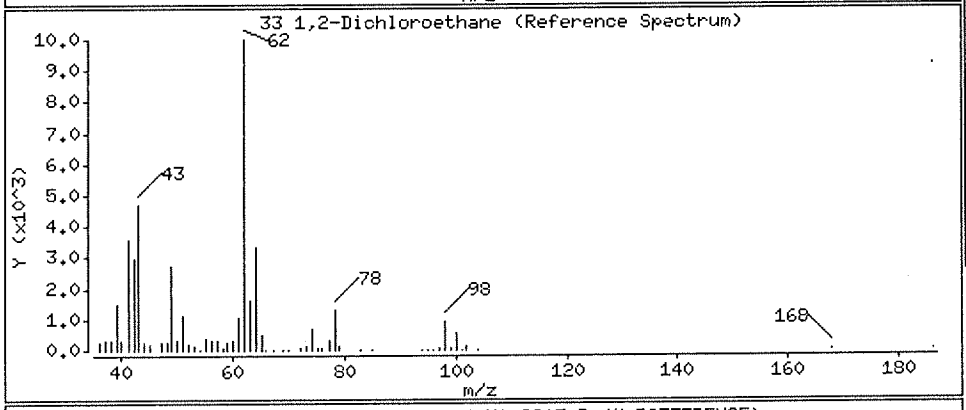
Column diameter: 0.18

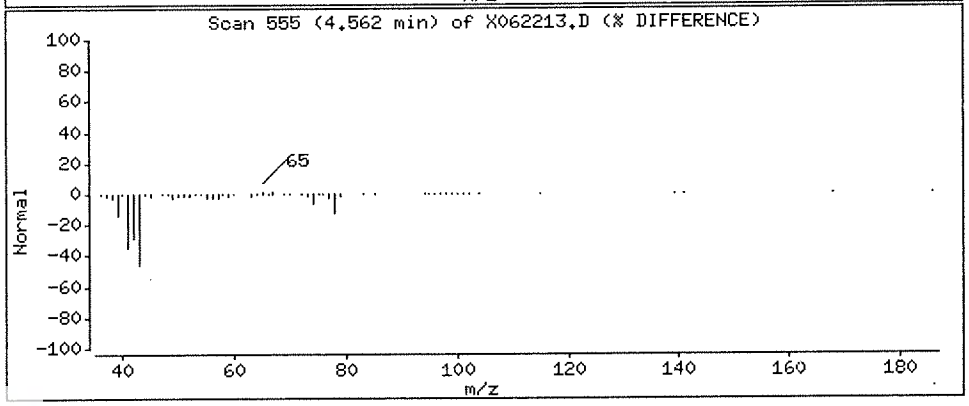
33 1,2-Dichloroethane

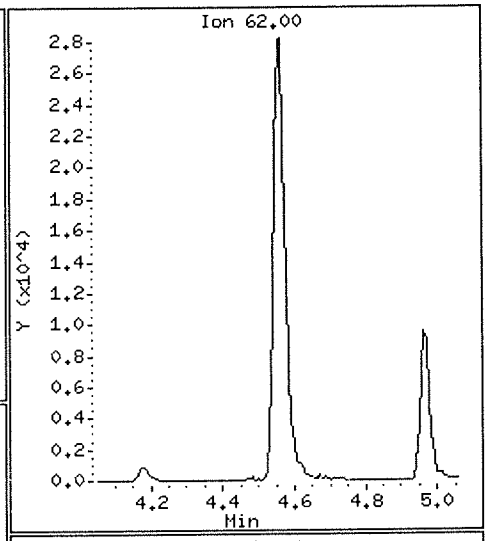
Concentration: 58.40 ug/l

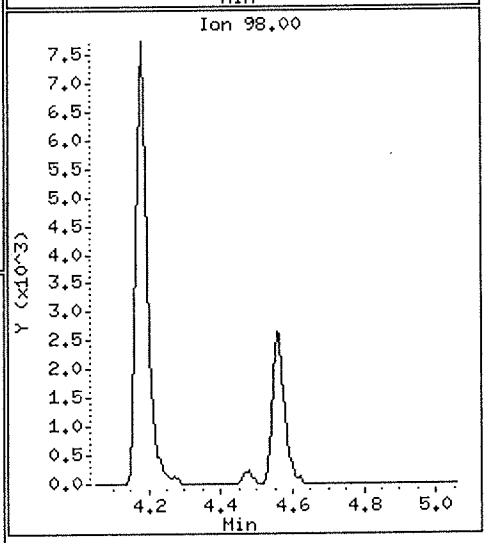












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062213.D

Date : 22-JUN-2021 14:59

Client ID: HS21060908-07

Instrument: voa6.i

Sample Info: HS21060908-07;HS21060908-07;

Purge Volume: 5.0

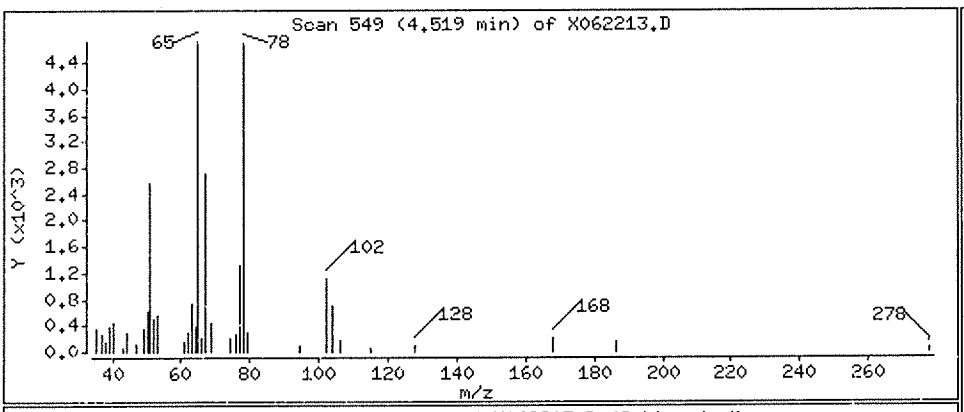
Operator: PC

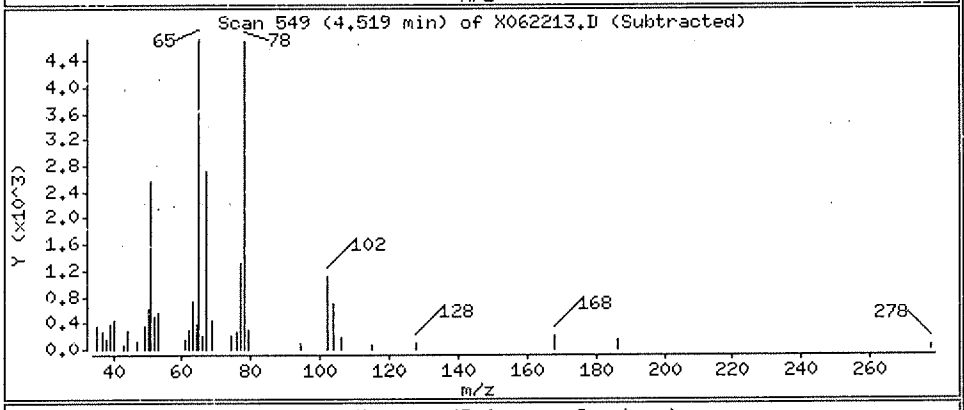
Column phase: DB624

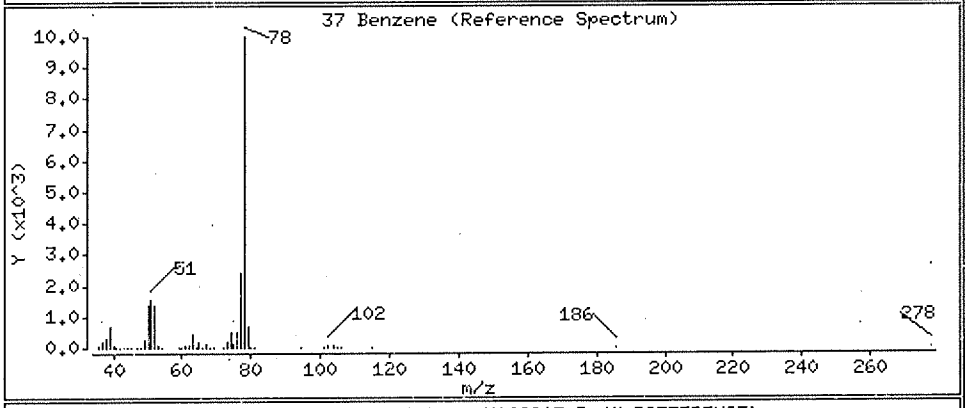
Column diameter: 0.18

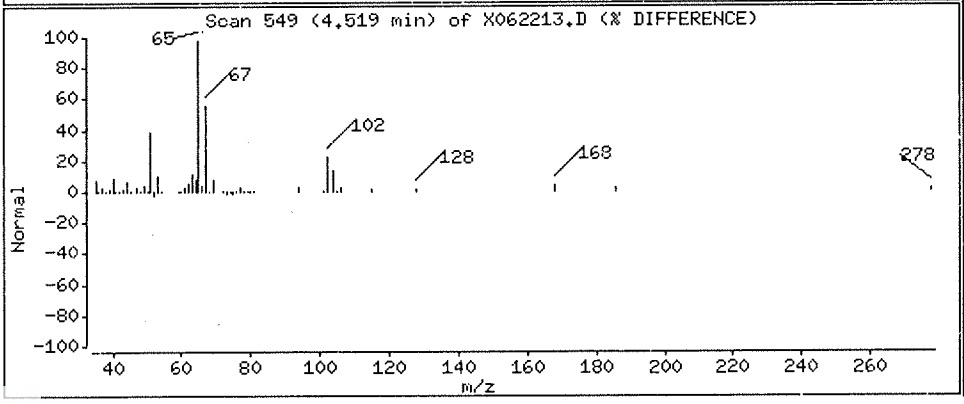
37 Benzene

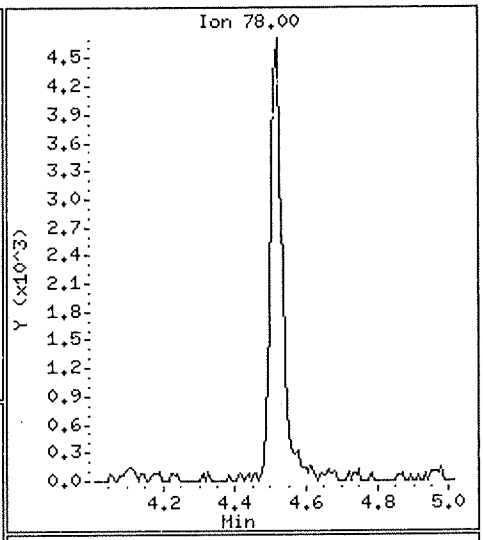
Concentration: 3.47 ug/l

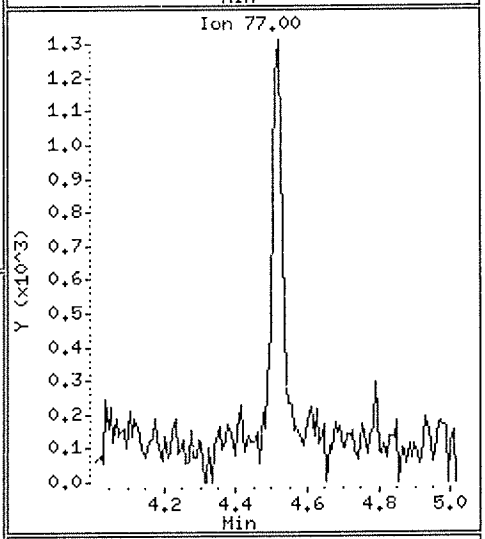


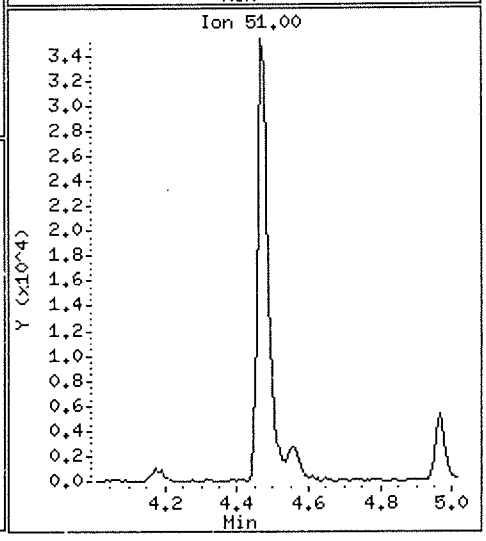












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Date : 22-JUN-2021 14:59

Client ID: HS21060908-07

Instrument: voa6.i

Sample Info: HS21060908-07;HS21060908-07;

Purge Volume: 5.0

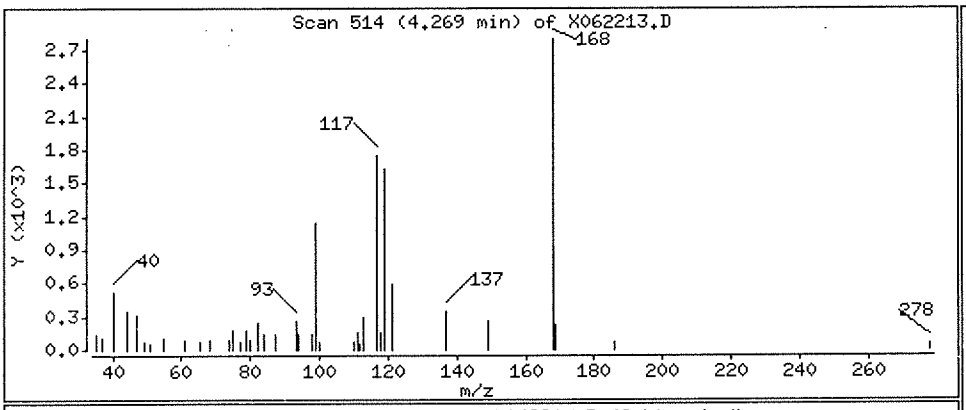
Operator: PC

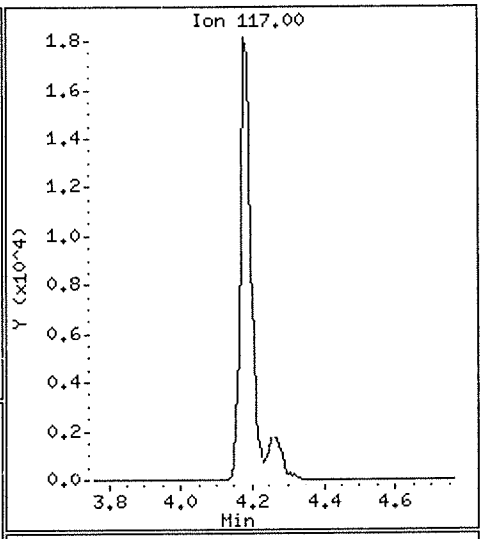
Column phase: DB624

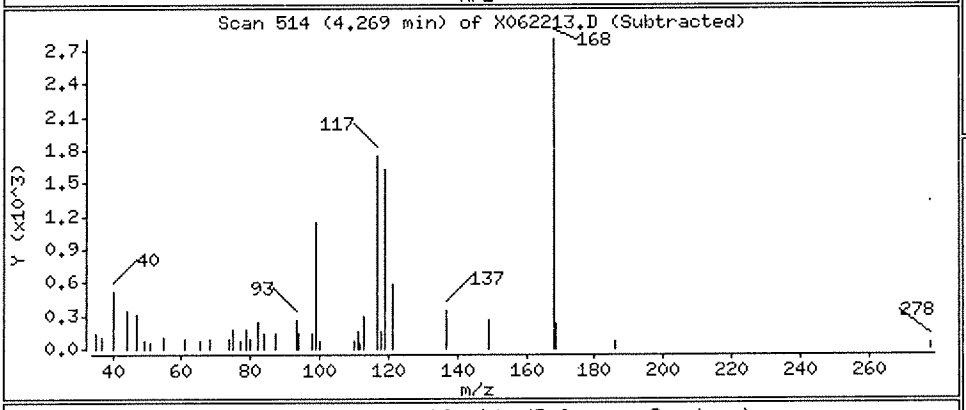
Column diameter: 0.18

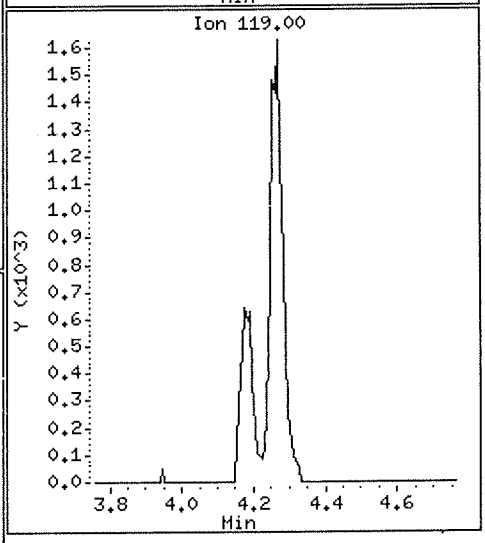
34 Carbon Tetrachloride

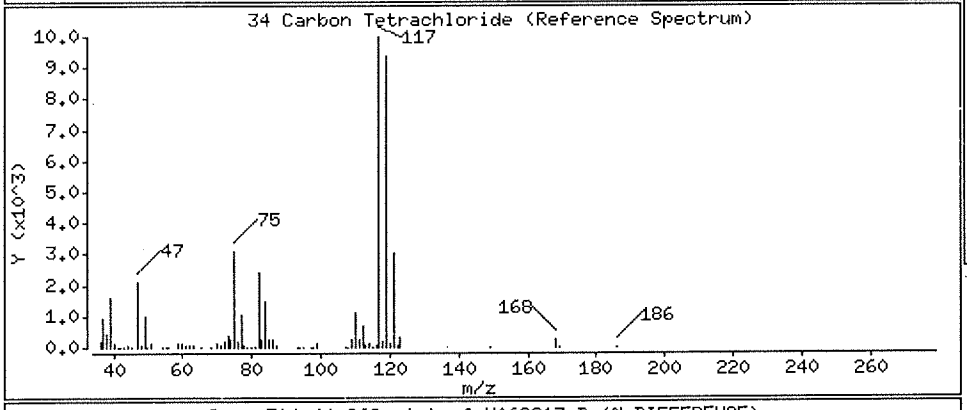
Concentration: 4.49 ug/l

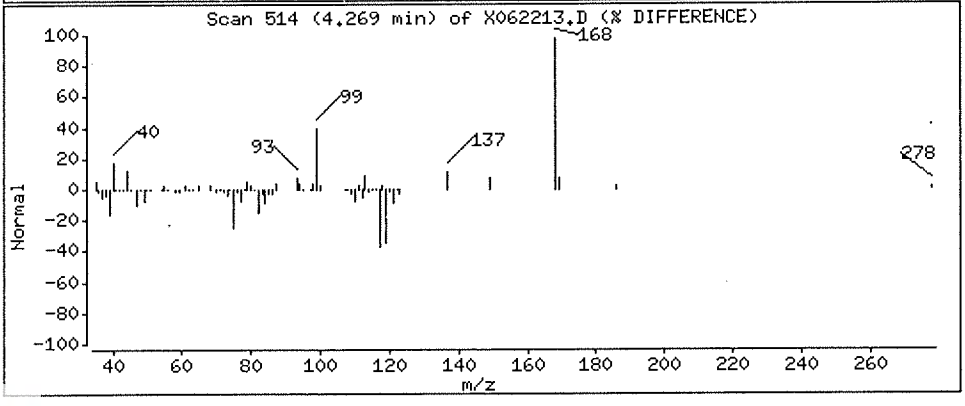












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062213.D

Date : 22-JUN-2021 14:59

Client ID: HS21060908-07

Instrument: voa6.i

Sample Info: HS21060908-07;HS21060908-07;

Purge Volume: 5.0

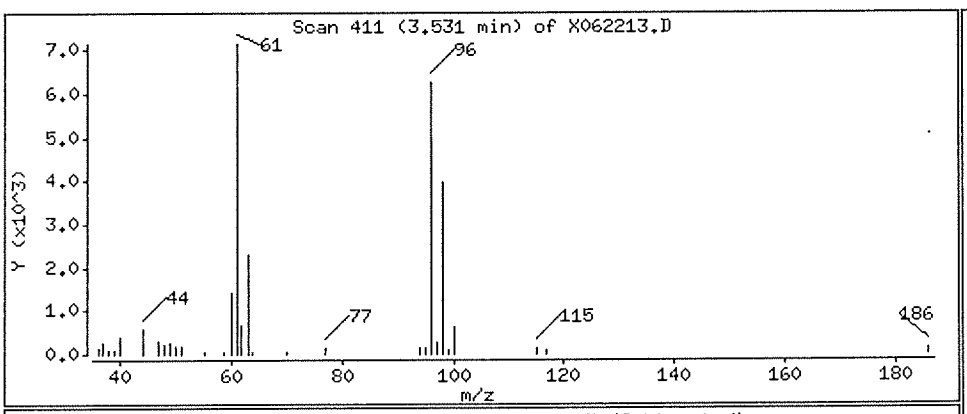
Operator: PC

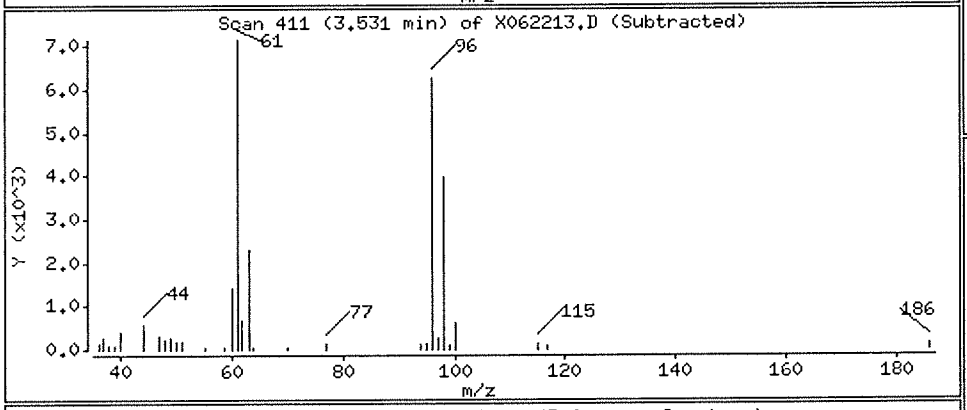
Column phase: DB624

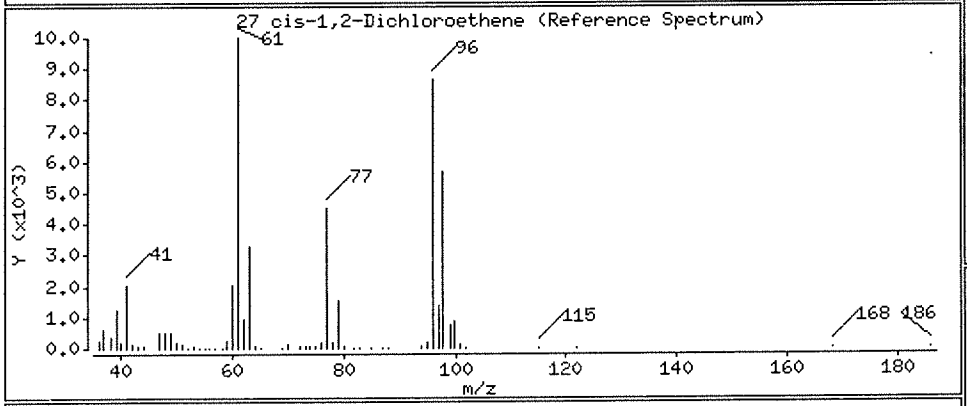
Column diameter: 0.18

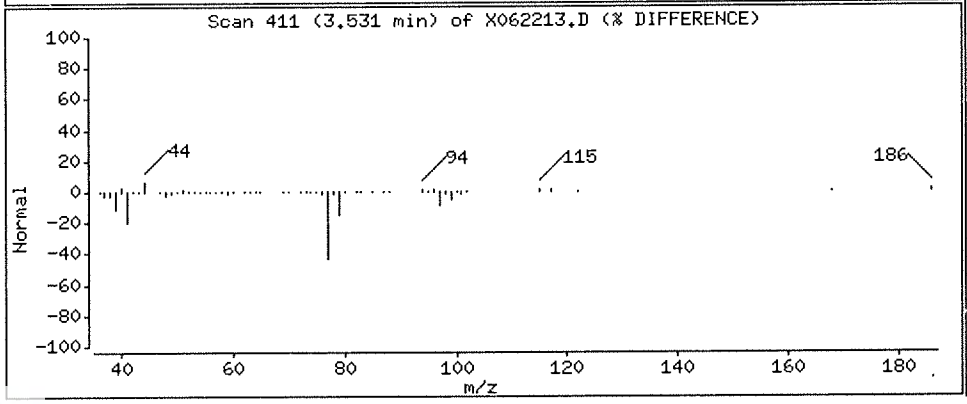
27 cis-1,2-Dichloroethene

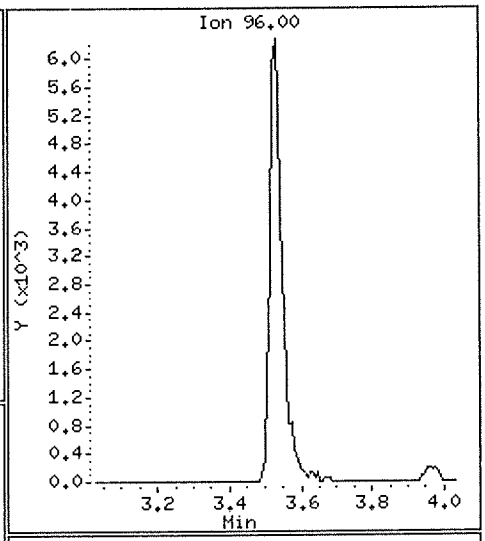
Concentration: 13.83 ug/l

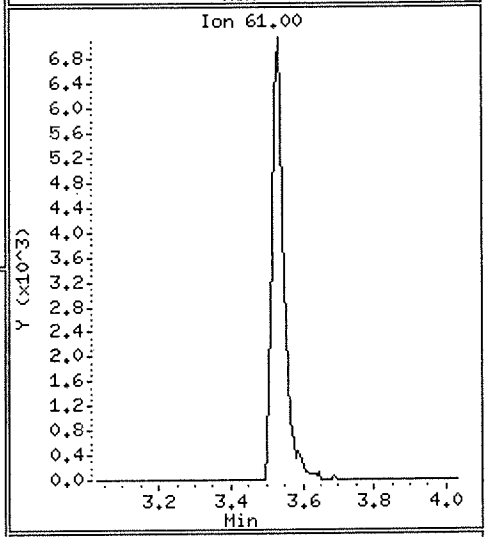


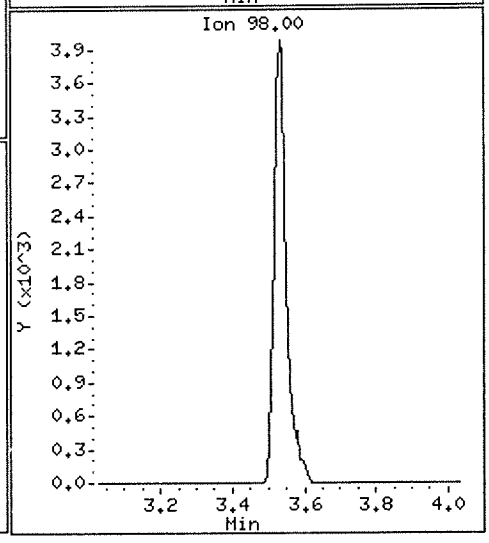












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Date : 22-JUN-2021 14:59

Client ID: HS21060908-07

Instrument: voa6.i

Sample Info: HS21060908-07;HS21060908-07;

Purge Volume: 5.0

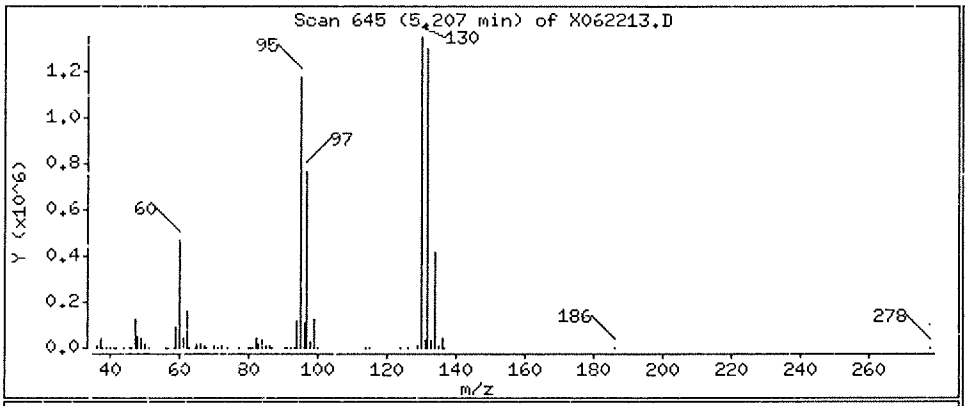
Operator: PC

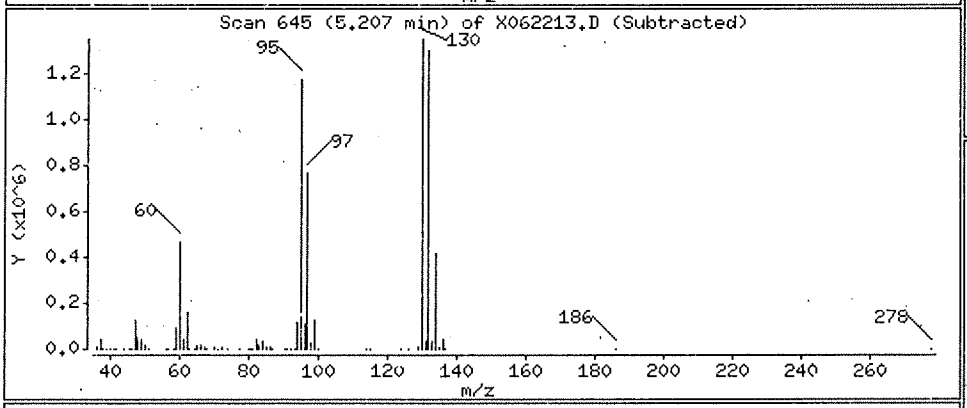
Column phase: DB624

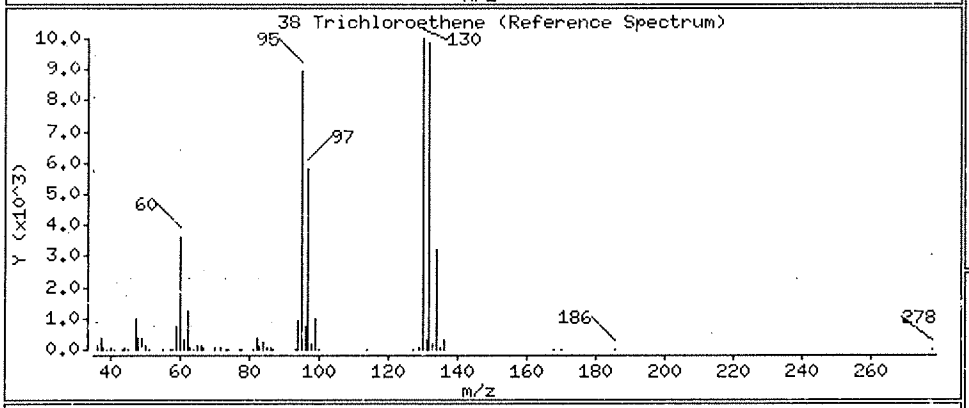
Column diameter: 0.18

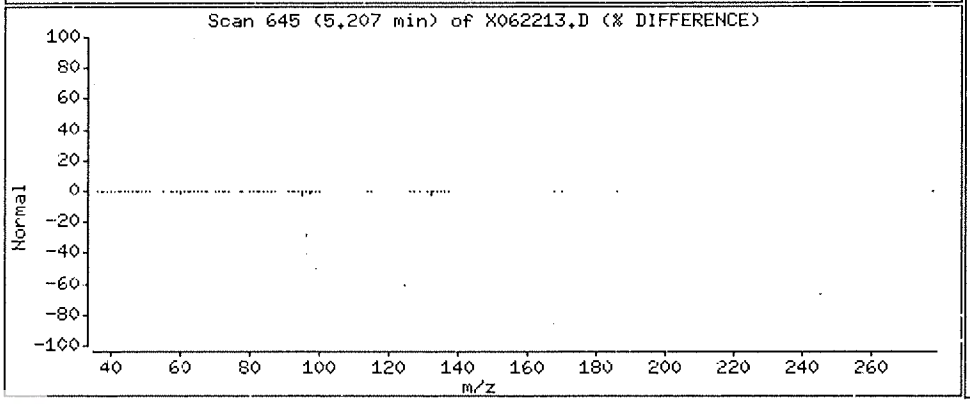
38 Trichloroethene

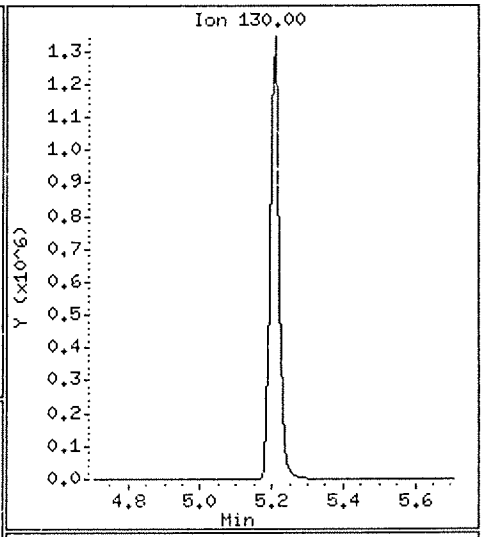
Concentration: 2514.27 ug/l

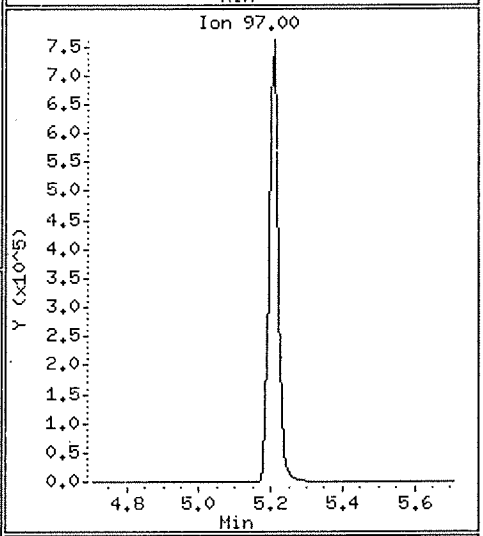


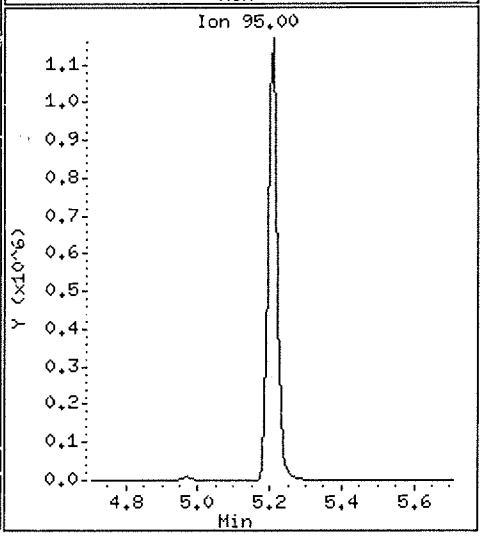












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062214.D Page 1
Report Date: 27-Aug-2021 08:56

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062214.D
Lab Smp Id: HS21060908-07 Client Smp ID: HS21060908-07
Inj Date : 22-JUN-2021 15:20
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-07;HS21060908-07;
Misc Info : HS18090001;WATER;0;50;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 14
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

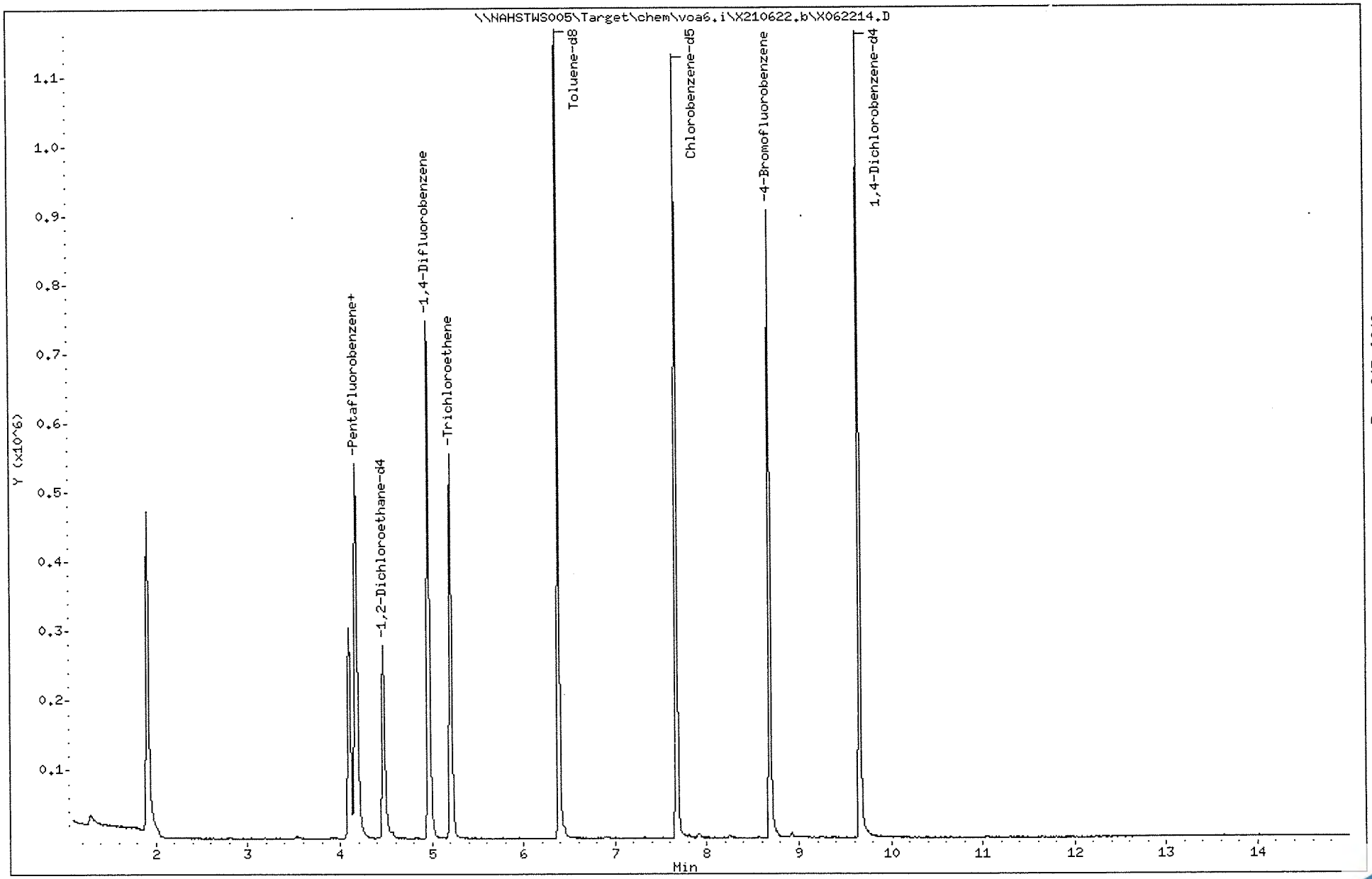
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	CONCENTRATIONS FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	489028	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	663603	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	580732	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	297368	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	216613	44.9838	44.98
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.068)	214987	45.9665	45.96
$ 48 Toluene-d8	98	6.389	6.388	(0.833)	750155	51.8578	51.85
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	245357	48.1371	48.13
38 Trichloroethene	130	5.207	5.206	(1.049)	197573	43.3790	2168.95

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062214.D
Date : 22-JUN-2021 15:20
Client ID: HS21060908-07
Sample Info: HS21060908-07;HS21060908-07;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062214.D

Date : 22-JUN-2021 15:20

Client ID: HS21060908-07

Instrument: voa6.i

Sample Info: HS21060908-07;HS21060908-07;

Purge Volume: 5.0

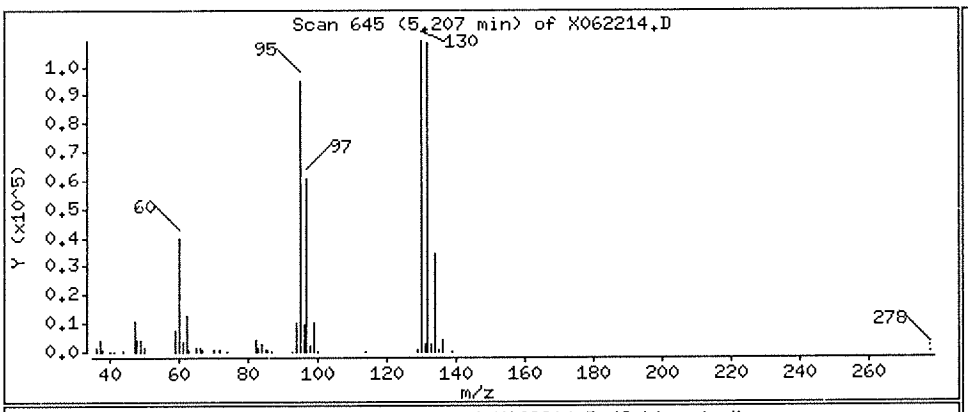
Operator: PC

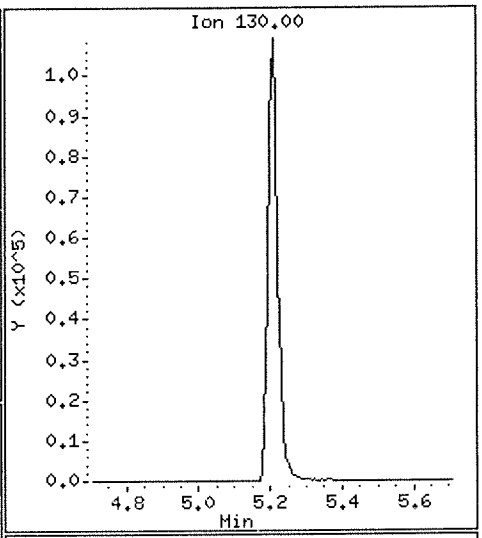
Column phase: DB624

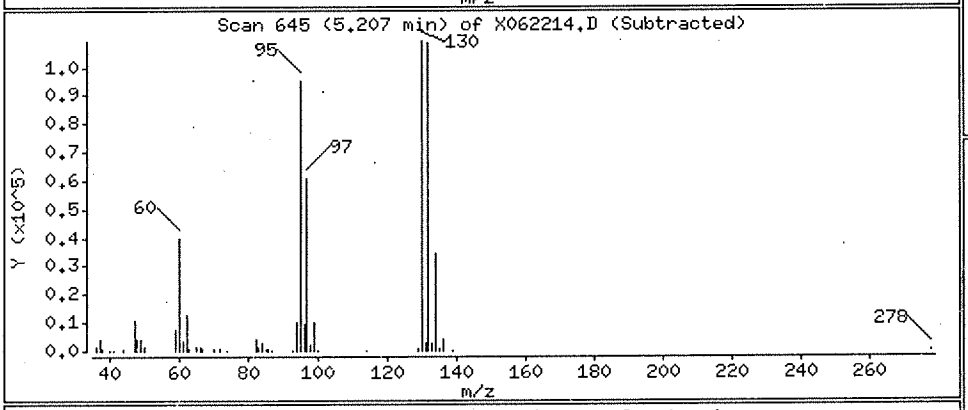
Column diameter: 0.18

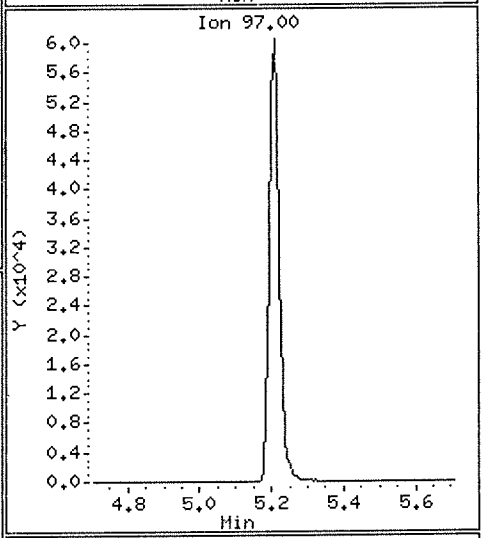
38 Trichloroethene

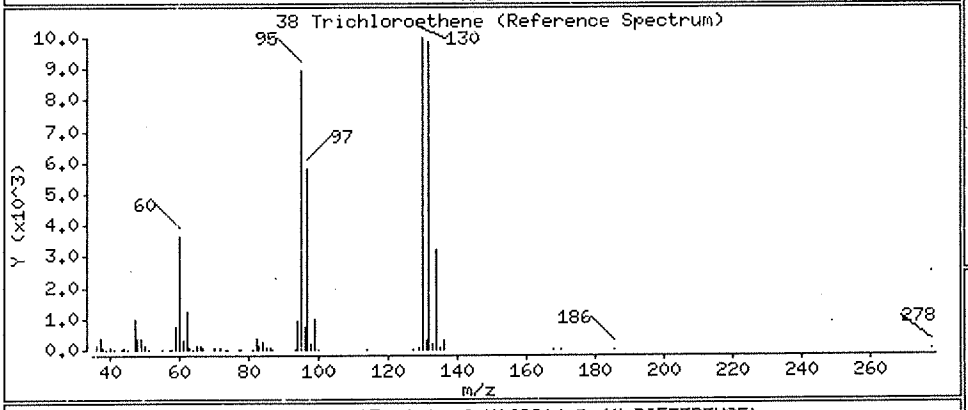
Concentration: 2168.95 ug/l

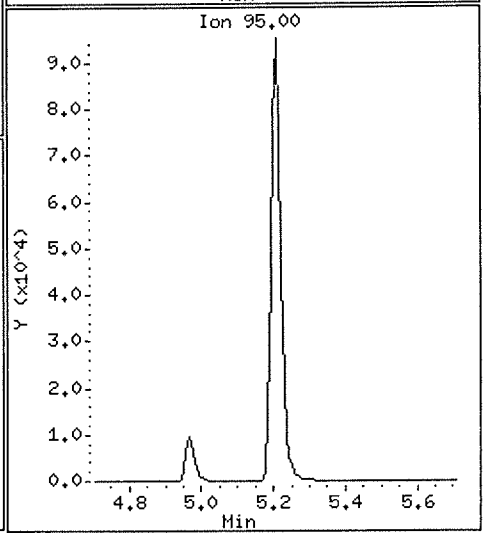


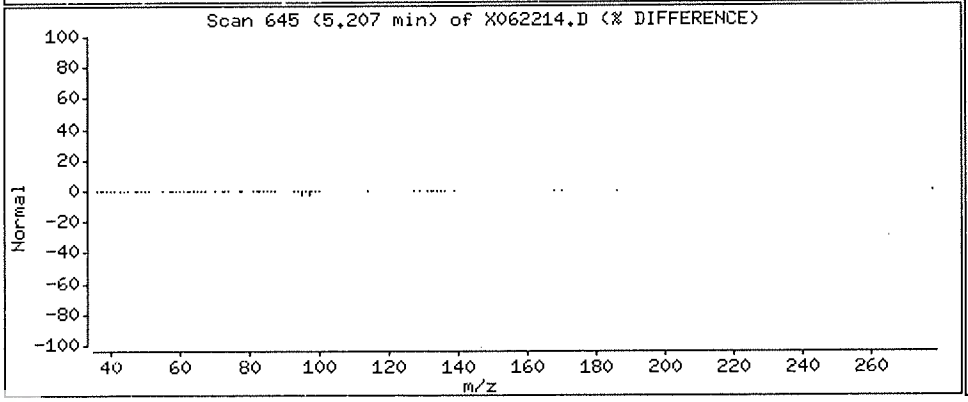












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D Page 1
Report Date: 27-Aug-2021 08:56

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D
Lab Smp Id: HS21060908-08 Client Smp ID: HS21060908-08
Inj Date : 22-JUN-2021 15:41
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-08;HS21060908-08;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

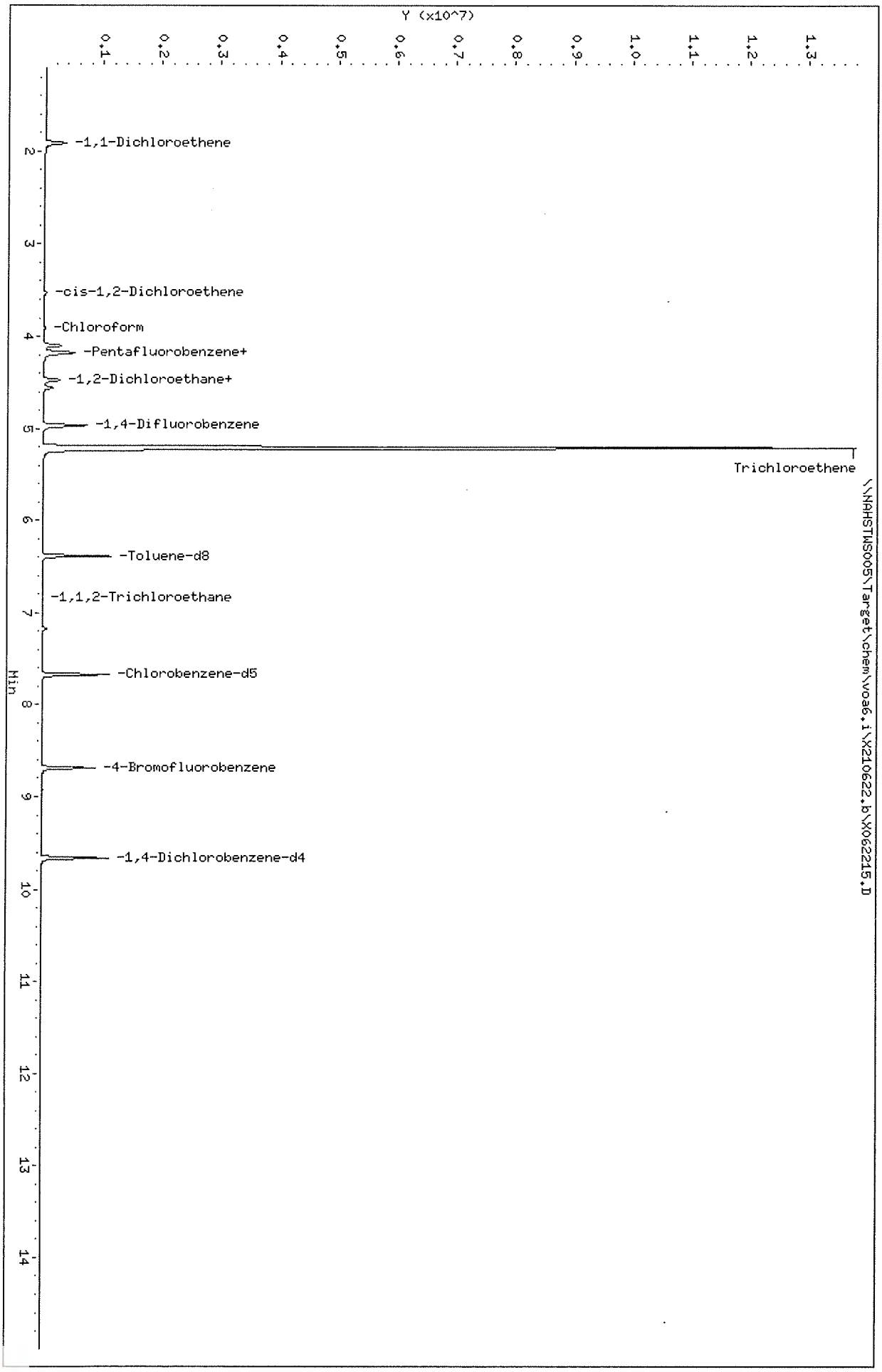
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	482890	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	657913	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	568599	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	283412	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	210543	44.2764	44.27
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	211769	45.8523	45.85
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	733447	51.7847	51.78
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	240555	48.2010	48.20
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	1834	0.59543	0.59(a)
11 1,1-Dichloroethene	96	1.912	1.911	(0.457)	2878	0.57860	0.57(a)
33 1,2-Dichloroethane	62	4.555	4.555	(0.918)	136848	26.1056	26.10
34 Carbon Tetrachloride	117	4.261	4.261	(0.859)	5299	0.97160	0.97(a)
28 Chloroform	83	3.910	3.910	(0.935)	21369	2.51639	2.51(a)
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	23064	4.55689	4.55(a)
38 Trichloroethene	130	5.207	5.206	(1.049)	4703819	1041.70	1041.70(A)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D
Date : 22-JUN-2021 15:41
Client ID: HS21060908-08
Sample Info: HS21060908-08;HS21060908-08;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D

Date : 22-JUN-2021 15:41

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

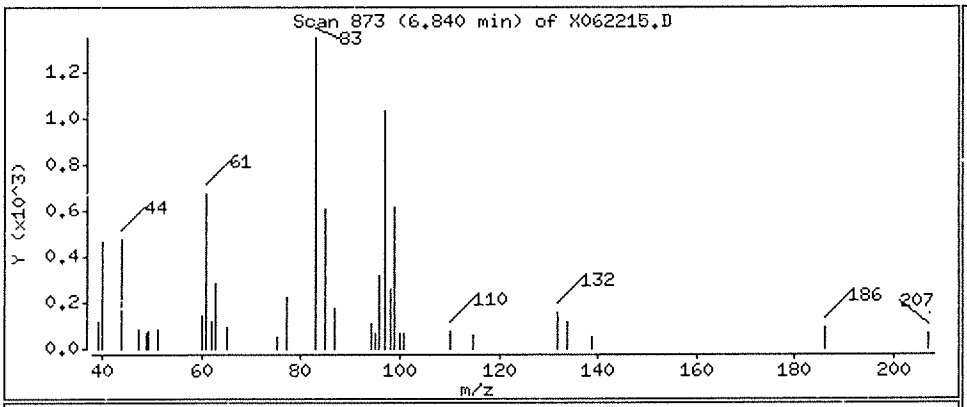
Operator: PC

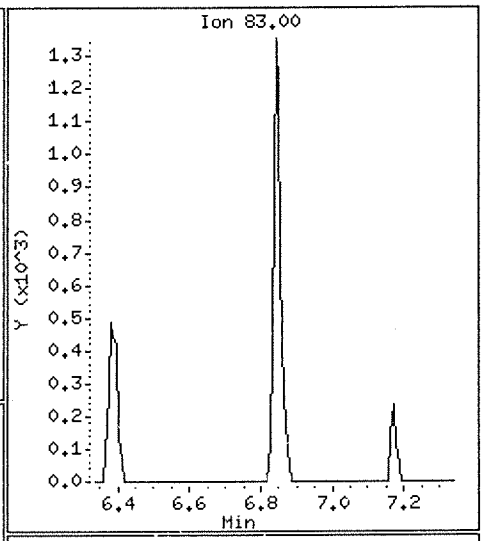
Column phase: DB624

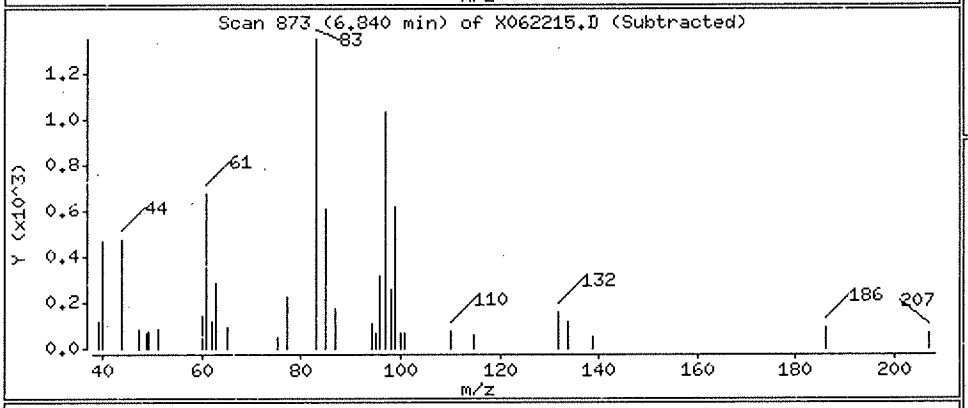
Column diameter: 0.18

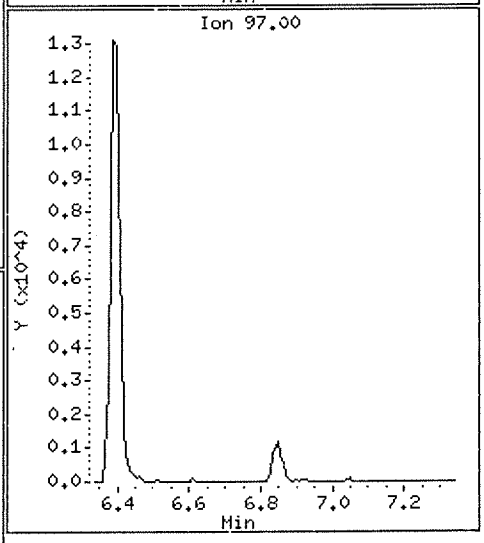
53 1,1,2-Trichloroethane

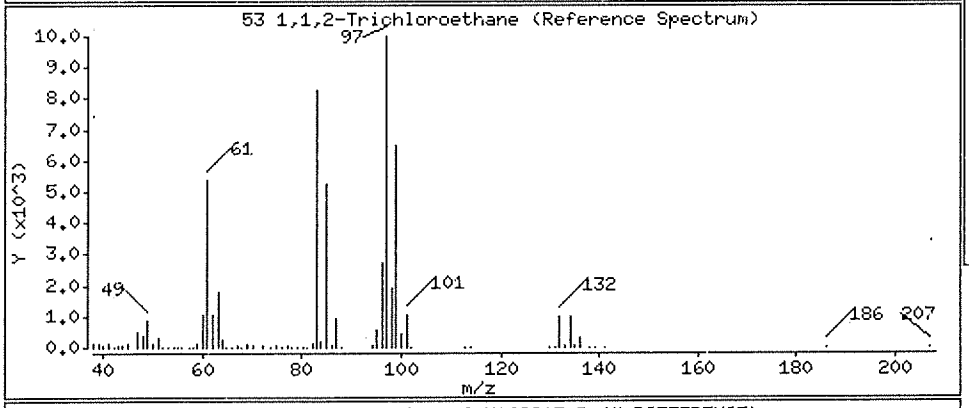
Concentration: 0.59 ug/l

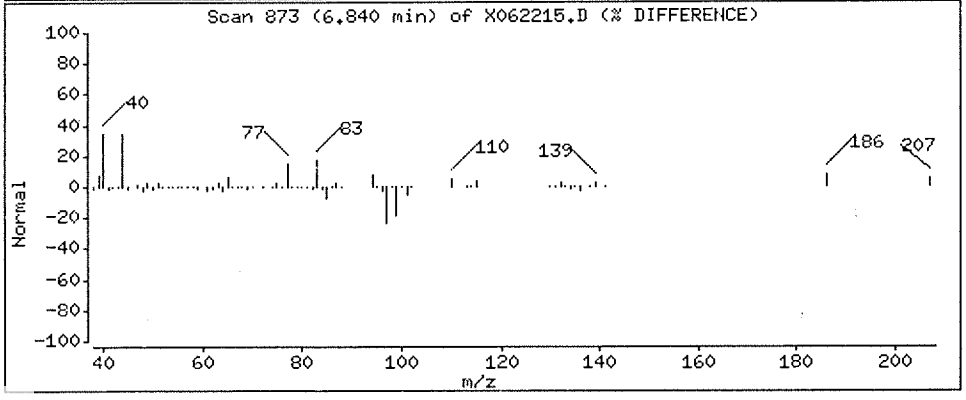












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D

Date : 22-JUN-2021 15:41

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

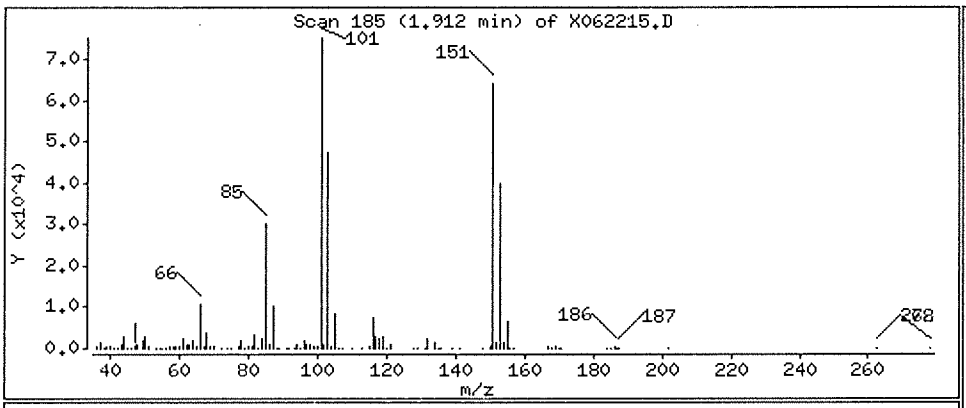
Operator: PC

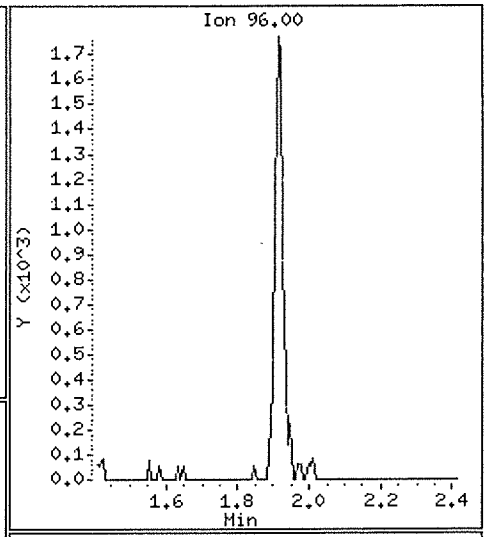
Column phase: DB624

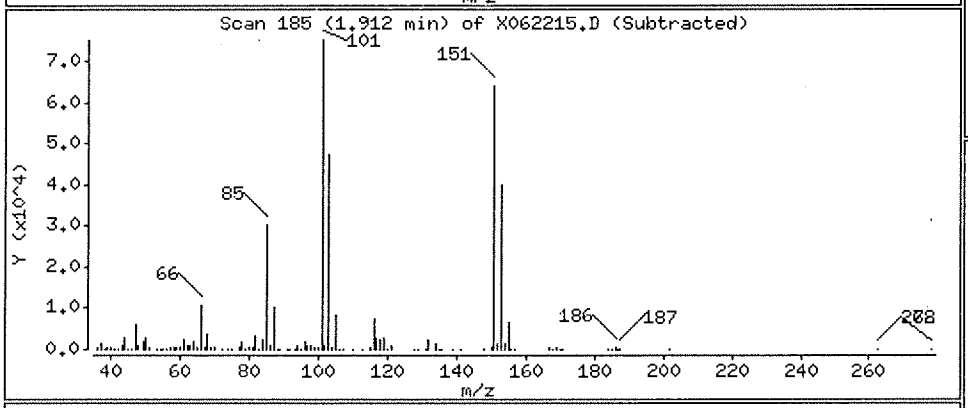
Column diameter: 0.18

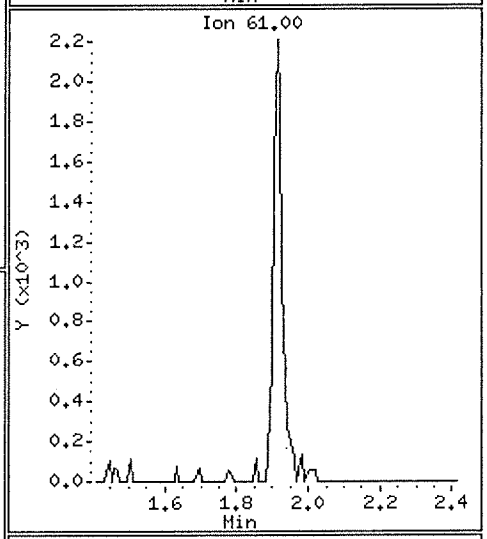
11 1,1-Dichloroethene

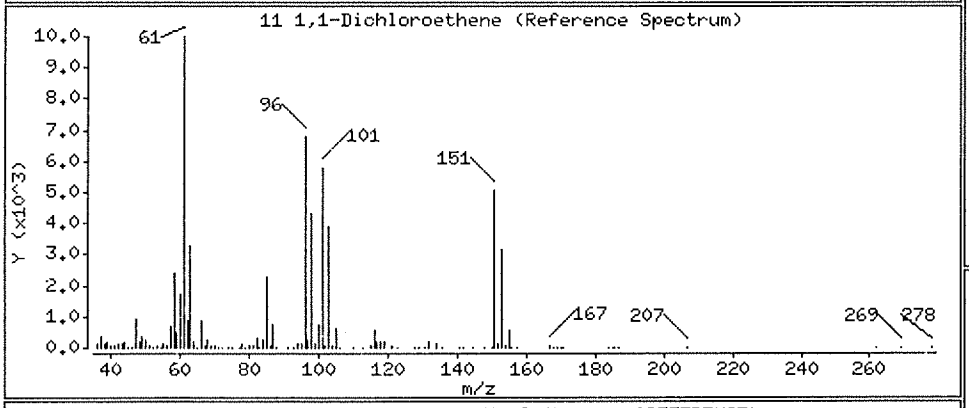
Concentration: 0.57 ug/l

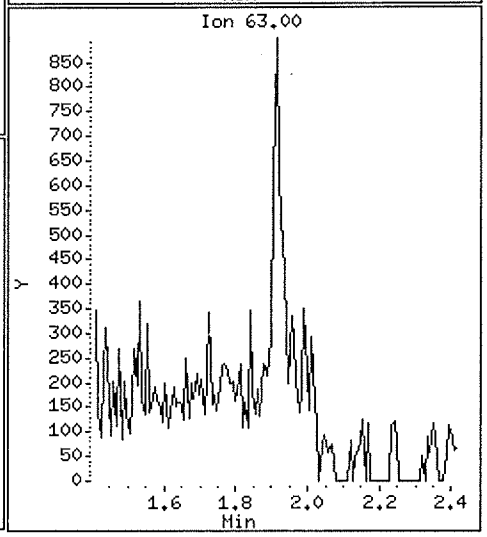


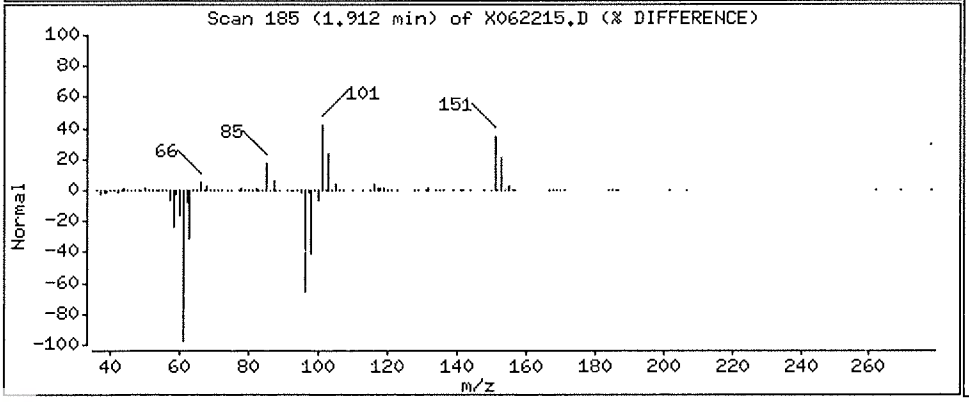












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Date : 22-JUN-2021 15:41

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

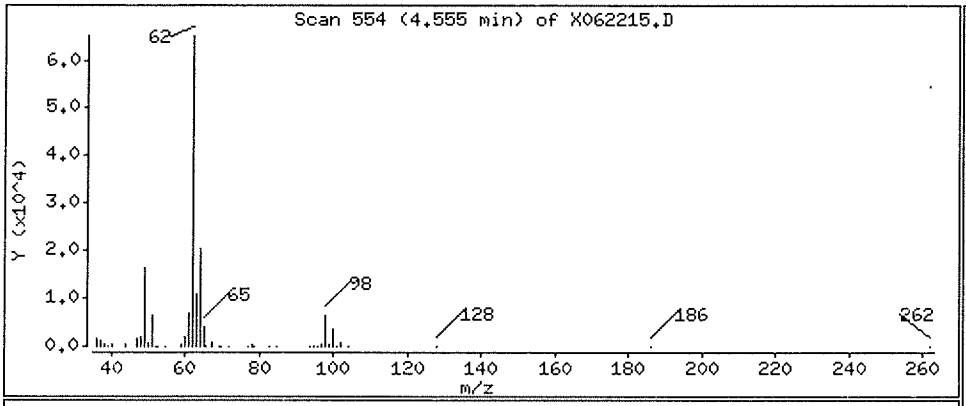
Operator: PC

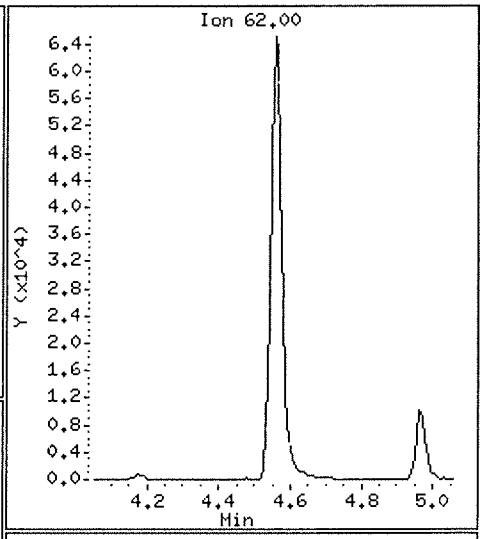
Column phase: DB624

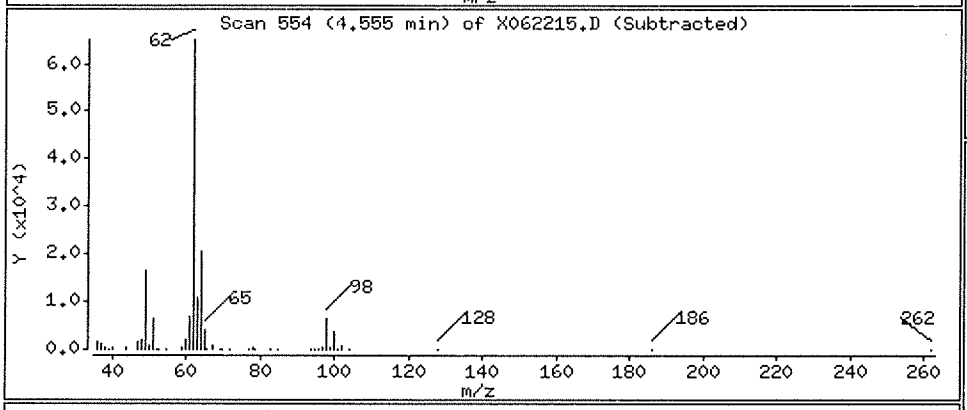
Column diameter: 0.18

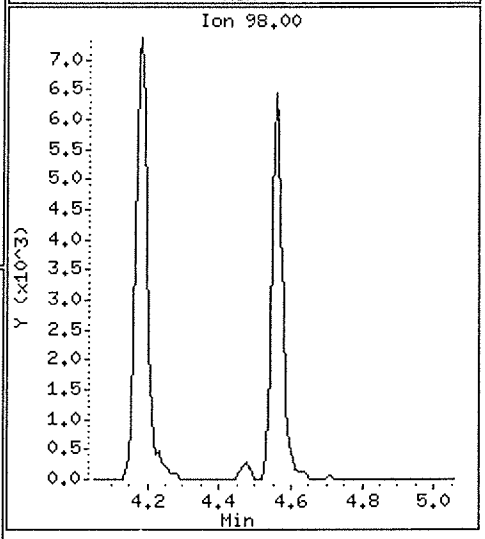
33 1,2-Dichloroethane

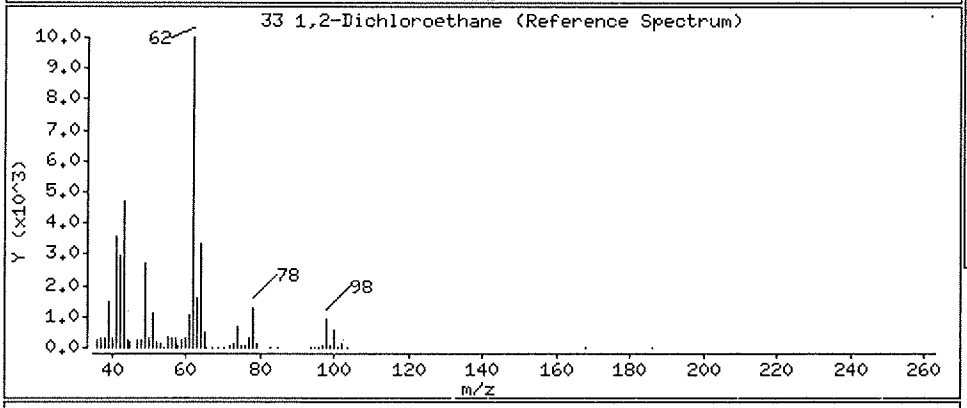
Concentration: 26.10 ug/l

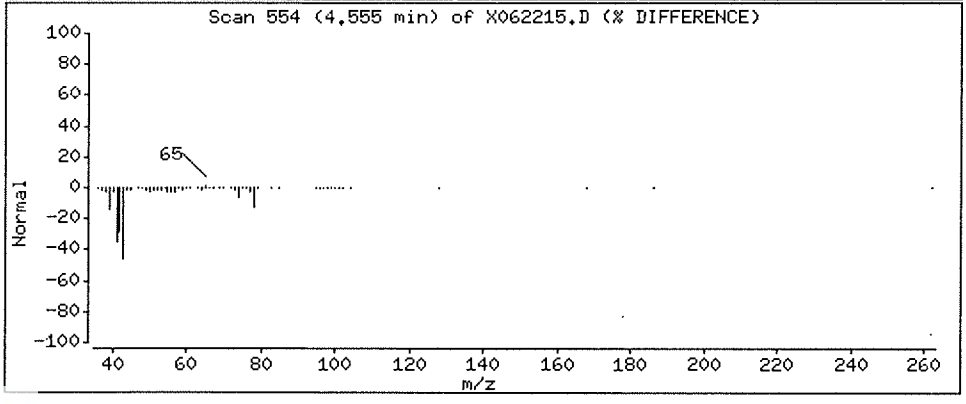












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D

Date : 22-JUN-2021 15:41

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

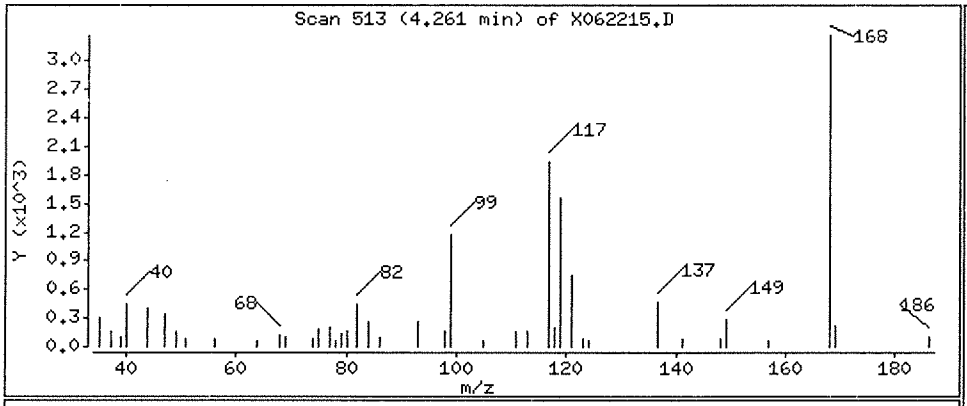
Operator: PC

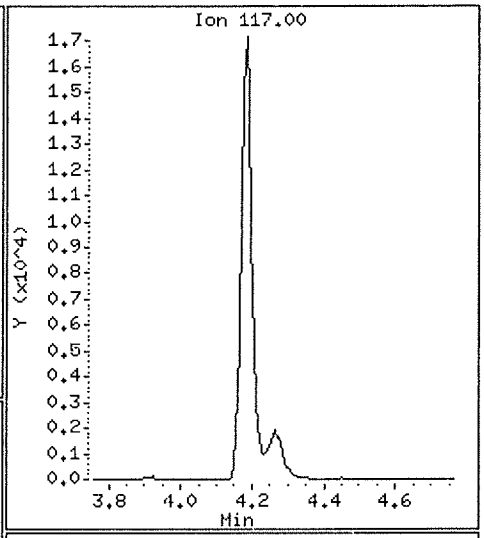
Column phase: DB624

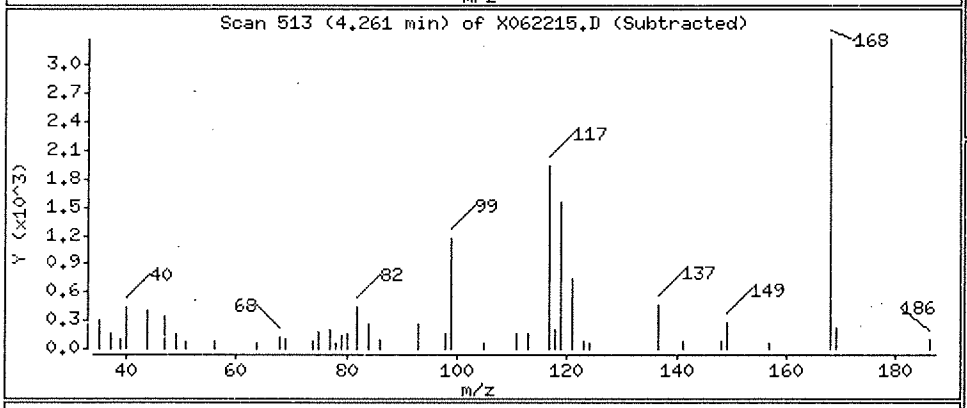
Column diameter: 0.18

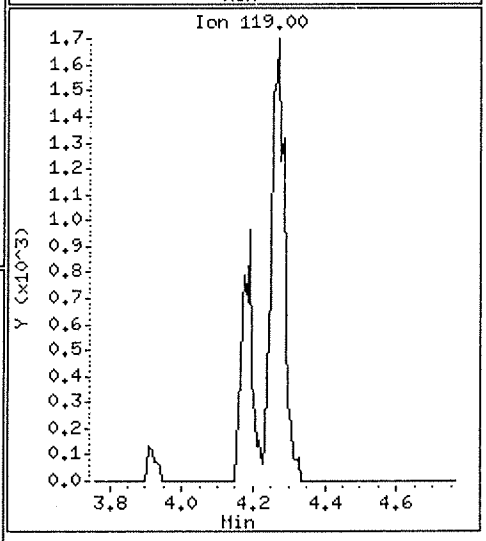
34 Carbon Tetrachloride

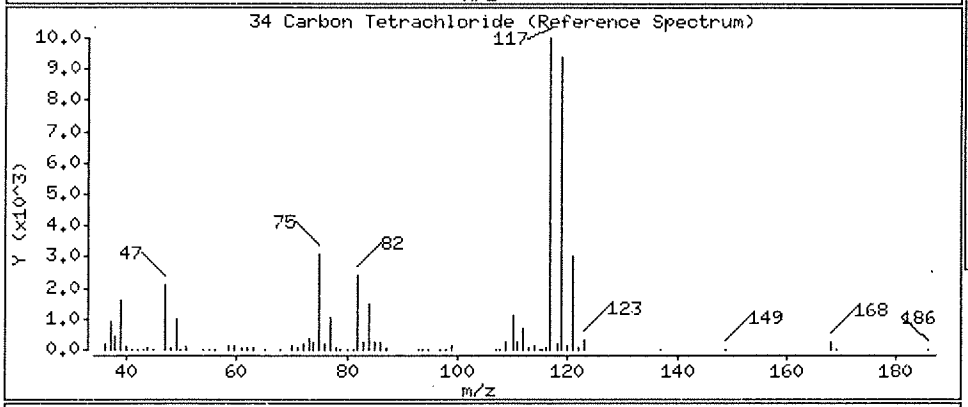
Concentration: 0.97 ug/l

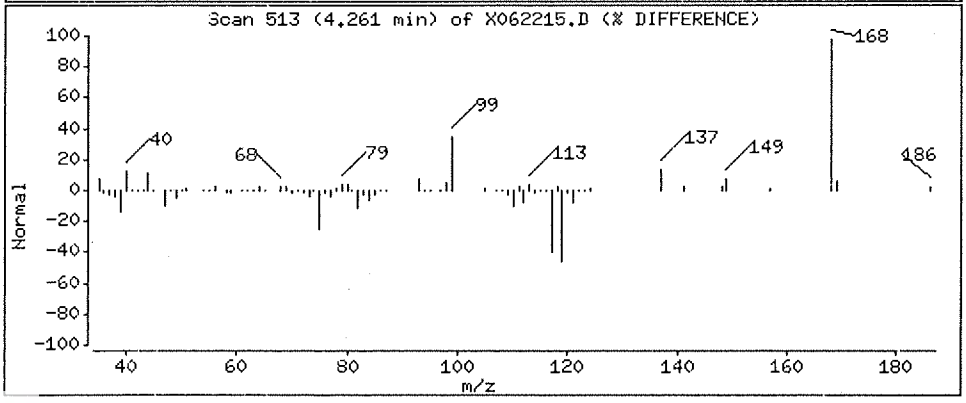












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D

Date : 22-JUN-2021 15:41

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

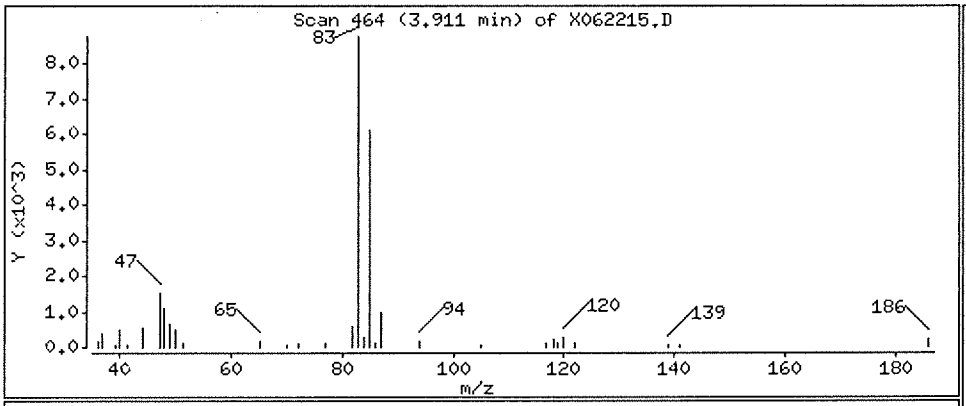
Operator: PC

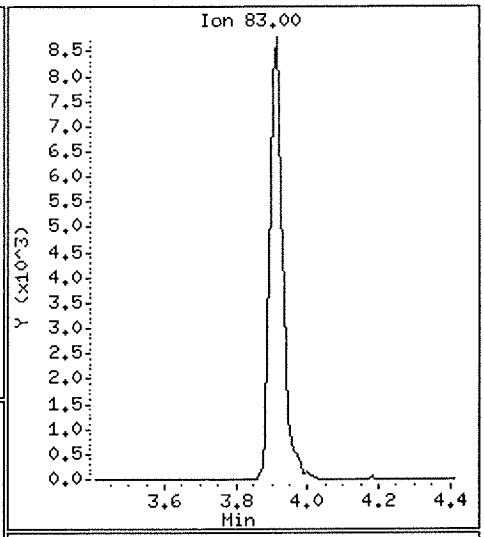
Column phase: DB624

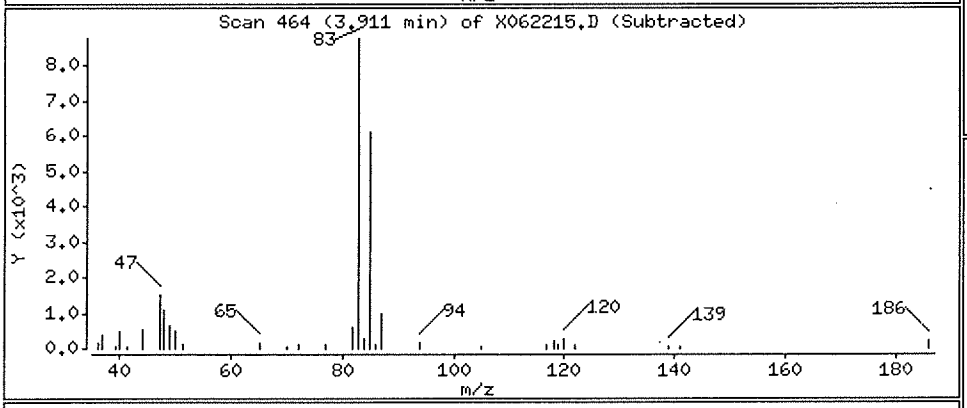
Column diameter: 0.18

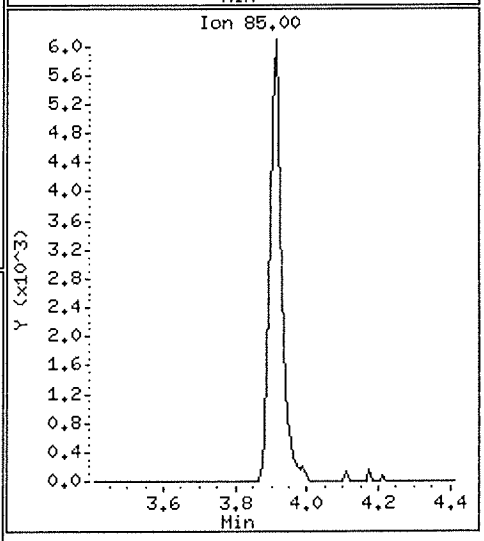
28 Chloroform

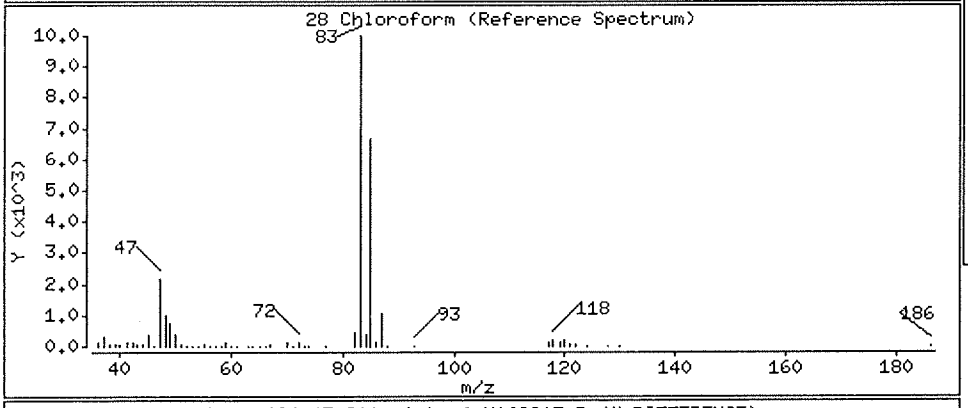
Concentration: 2.51 ug/l

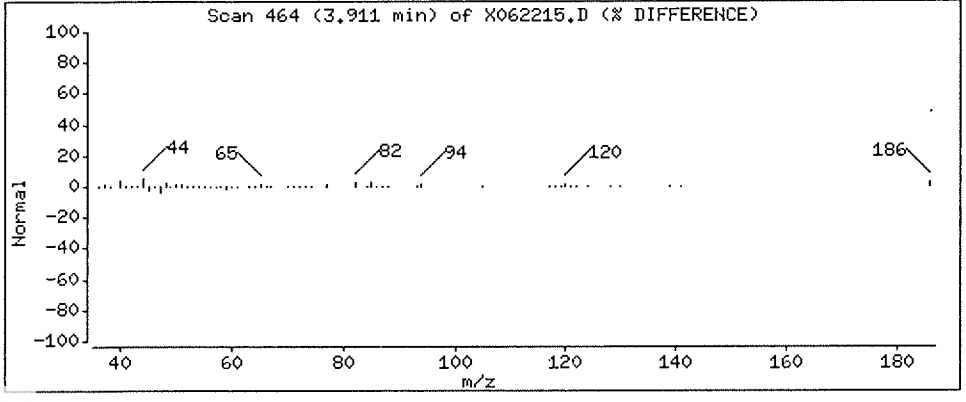












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D

Date : 22-JUN-2021 15:41

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

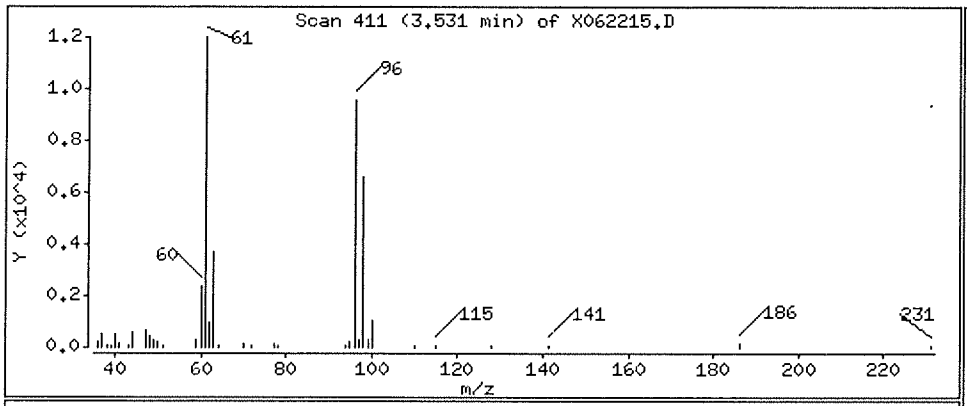
Operator: PC

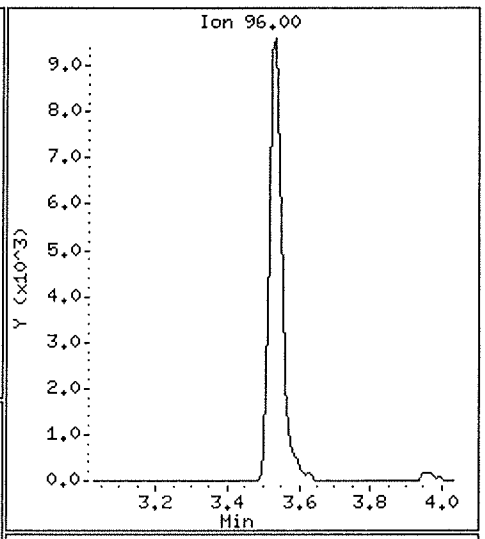
Column phase: DB624

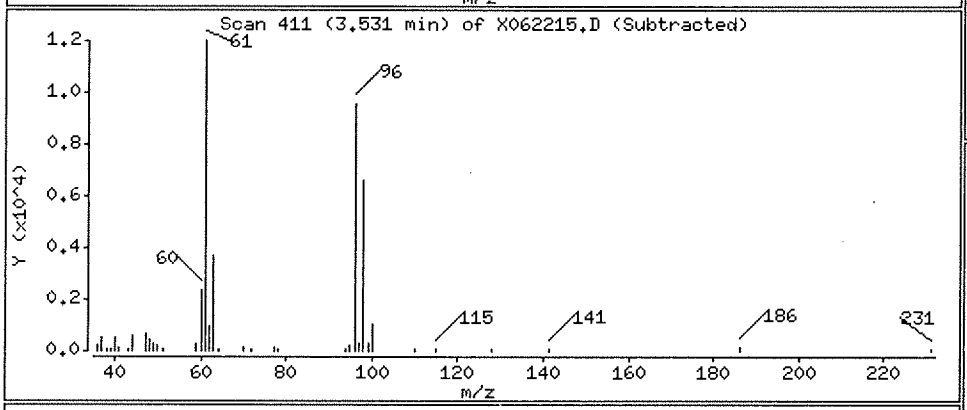
Column diameter: 0.18

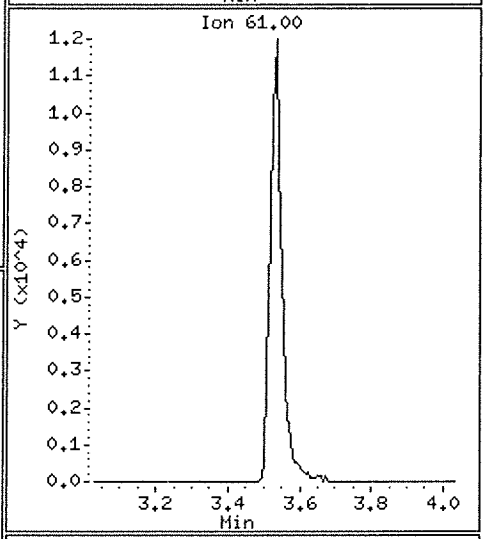
27 cis-1,2-Dichloroethene

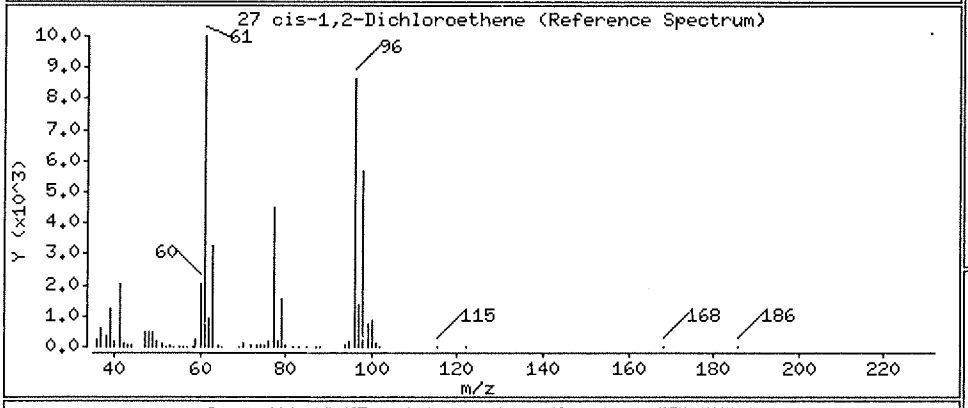
Concentration: 4.55 ug/l

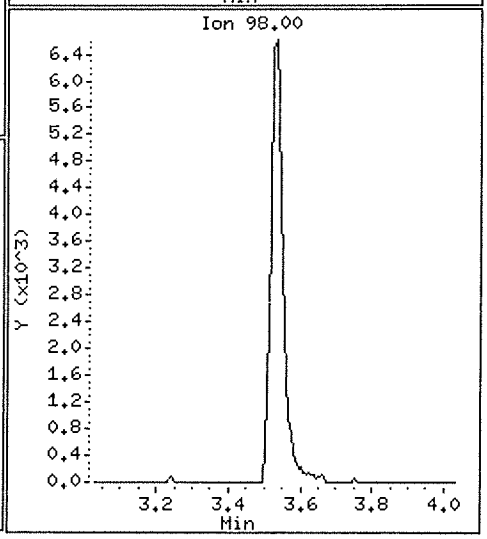


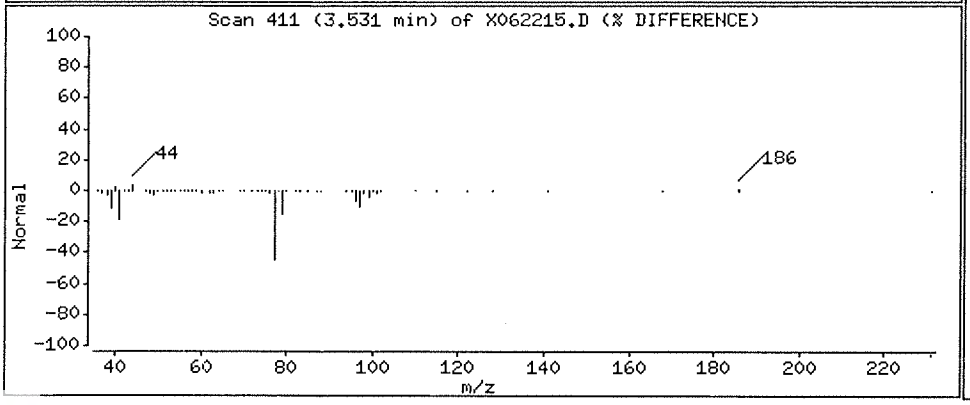












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062215.D

Date : 22-JUN-2021 15:41

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

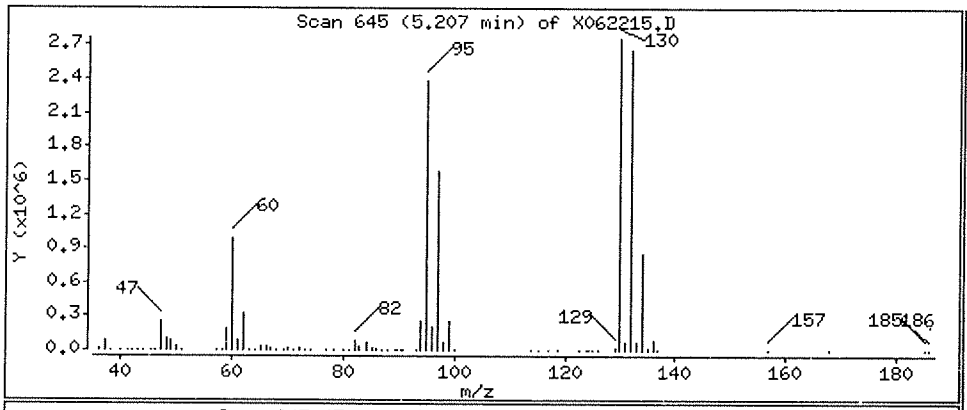
Operator: PC

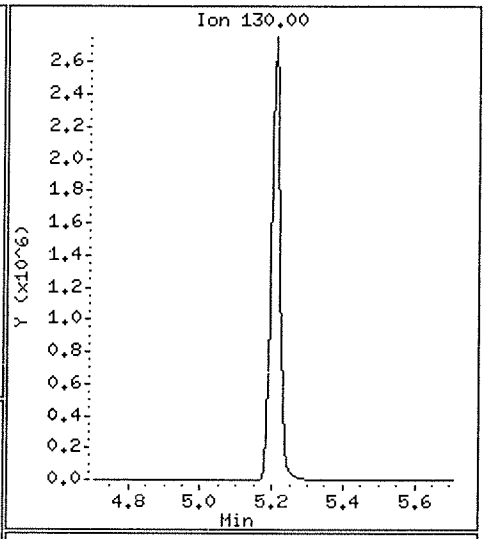
Column phase: DB624

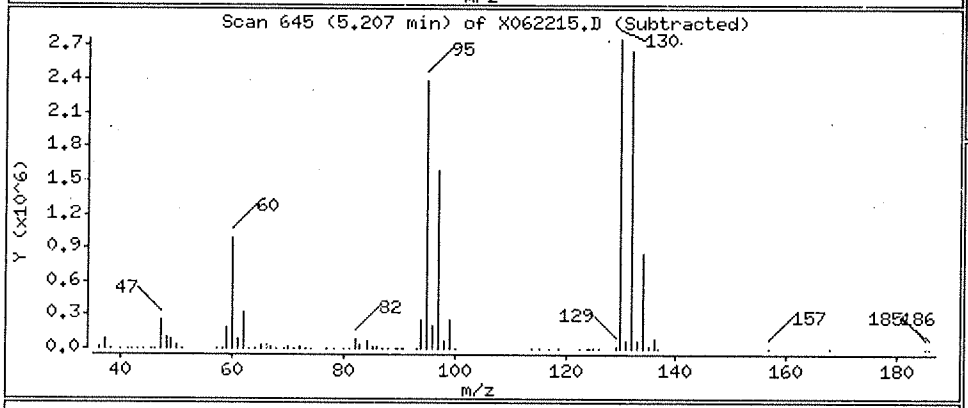
Column diameter: 0.18

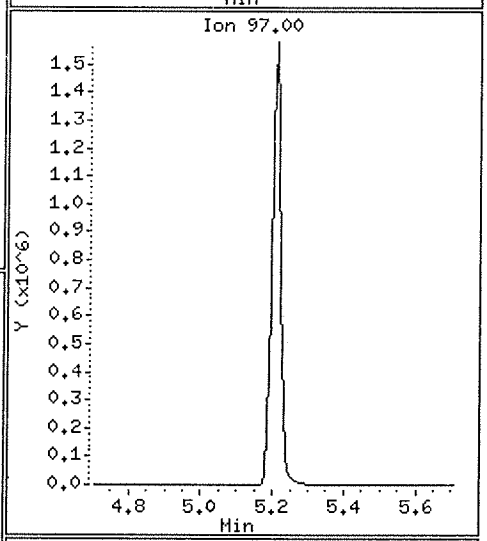
38 Trichloroethene

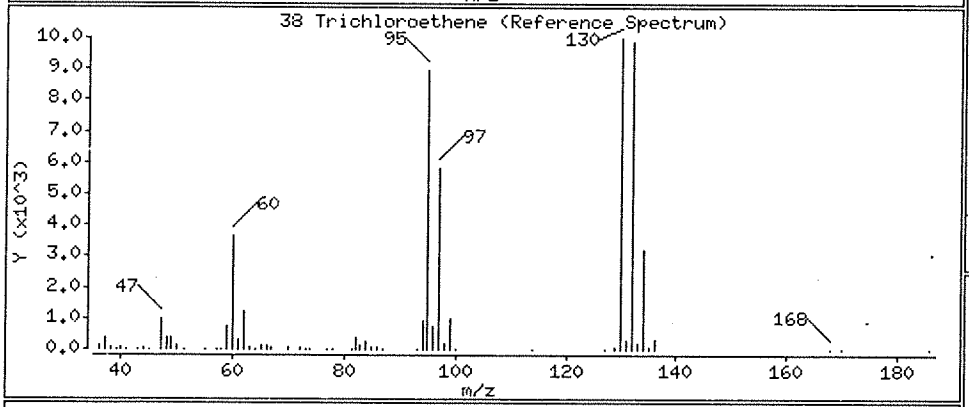
Concentration: 1041.70 ug/l

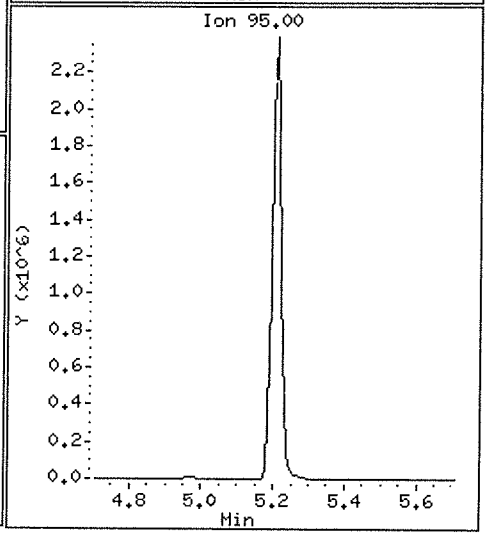


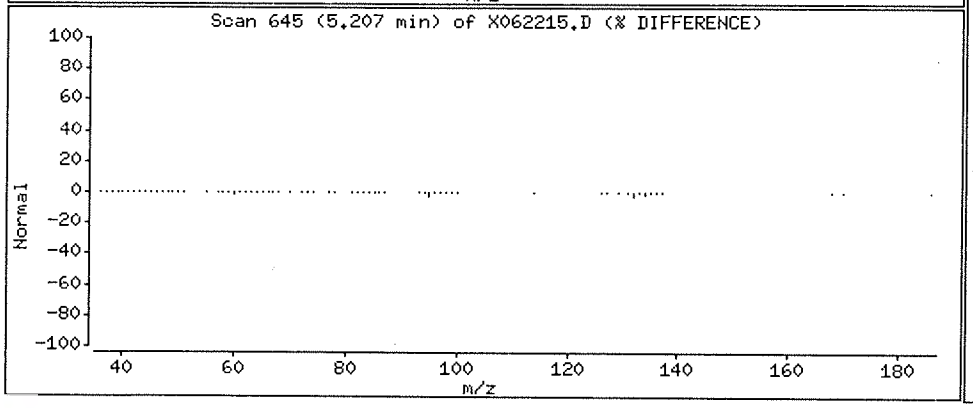












ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062216.D
Lab Smp Id: HS21060908-08 Client Smp ID: HS21060908-08
Inj Date : 22-JUN-2021 16:02
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-08;HS21060908-08;;;
Misc Info : HS18090001;WATER;0;10;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 16
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

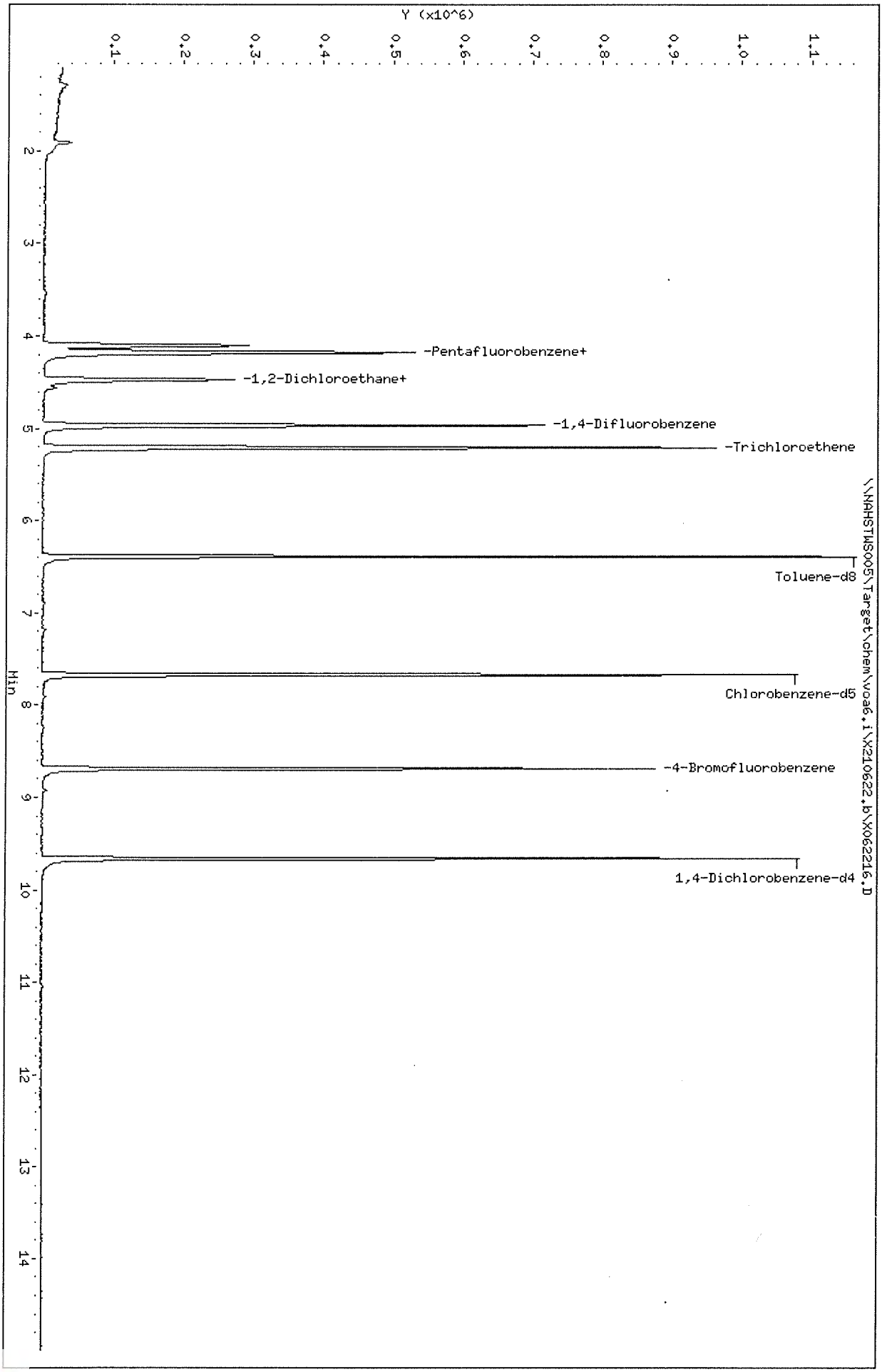
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	480250	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	645995	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	553881	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	277021	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	210280	44.4649	44.46
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	215006	46.8236	46.82
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	724882	52.5399	52.53
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	232135	47.7569	47.75
33 1,2-Dichloroethane	62	4.562	4.555	(0.919)	13534	2.62943	26.29(a)
38 Trichloroethene	130	5.207	5.206	(1.049)	342800	77.3165	773.16

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062216.D
Date : 22-JUN-2021 16:02
Client ID: HS21060908-08
Sample Info: HS21060908-08;HS21060908-08;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062216.D

Date : 22-JUN-2021 16:02

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

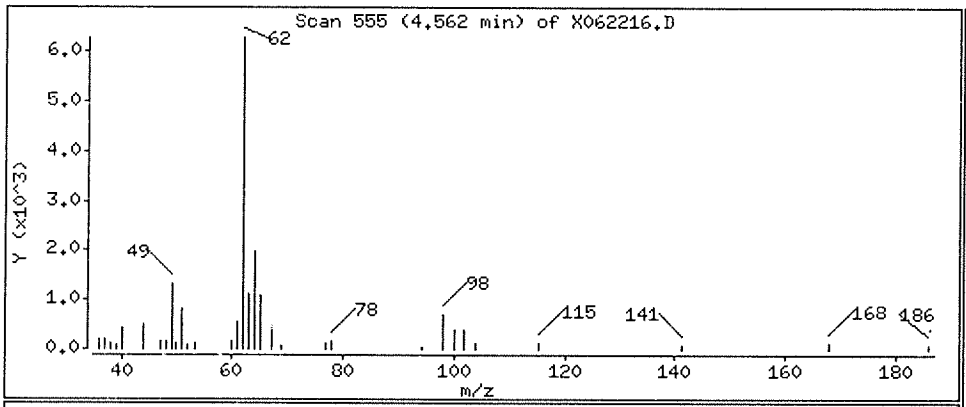
Operator: PC

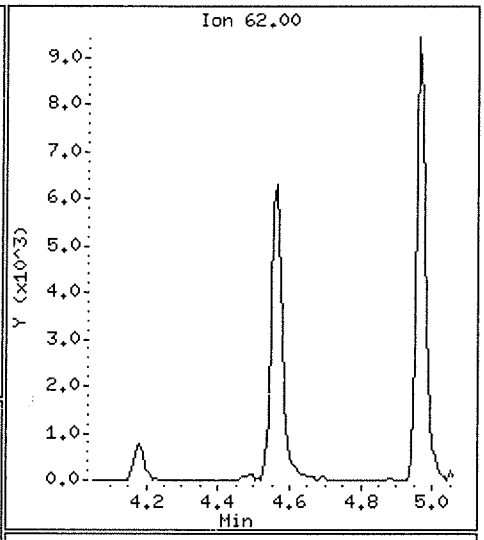
Column phase: DB624

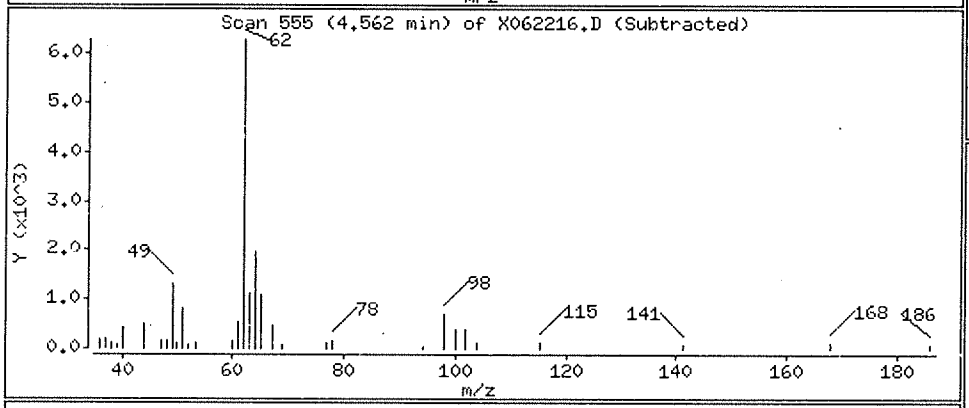
Column diameter: 0.18

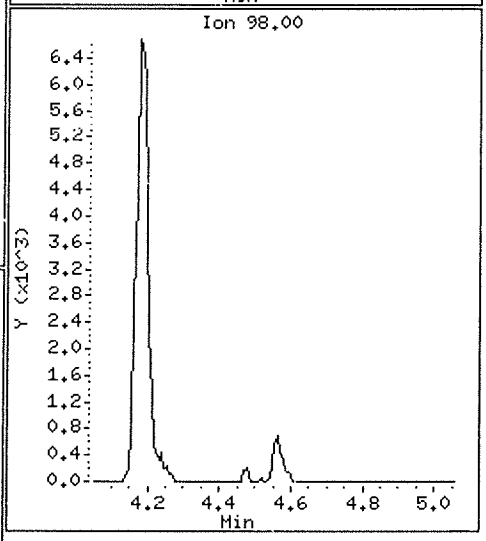
33 1,2-Dichloroethane

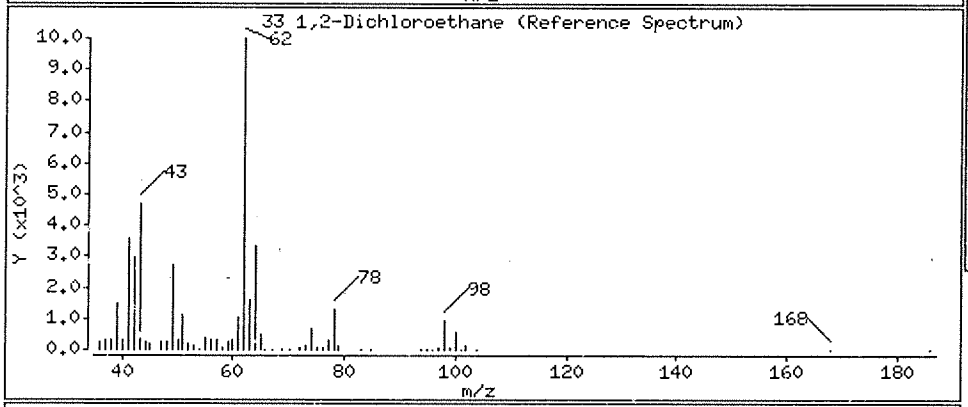
Concentration: 26.29 ug/l

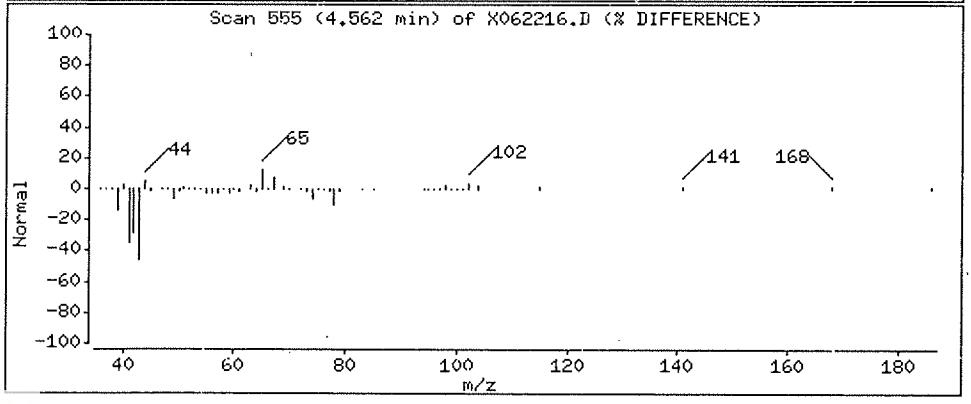












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062216.D

Date : 22-JUN-2021 16:02

Client ID: HS21060908-08

Instrument: voa6.i

Sample Info: HS21060908-08;HS21060908-08;;;

Purge Volume: 5.0

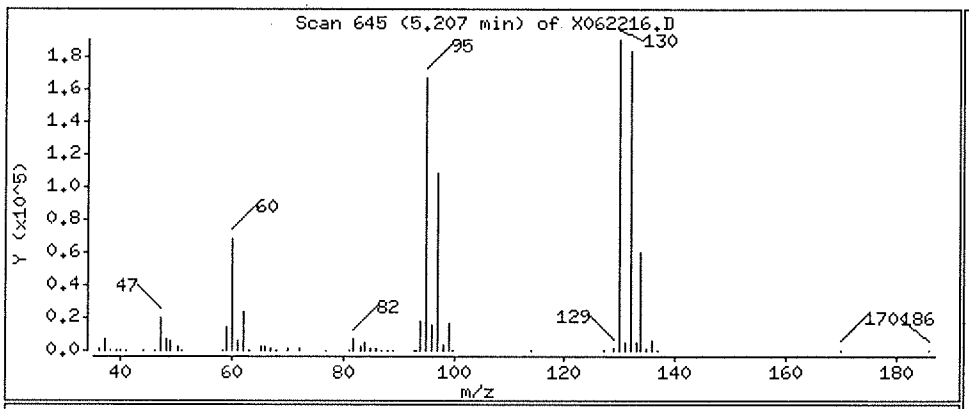
Operator: PC

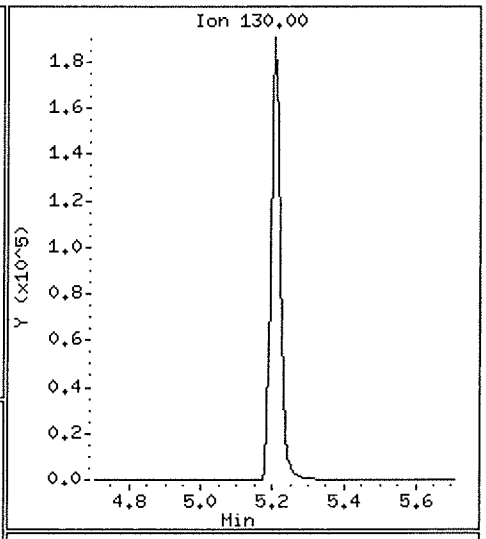
Column phase: DB624

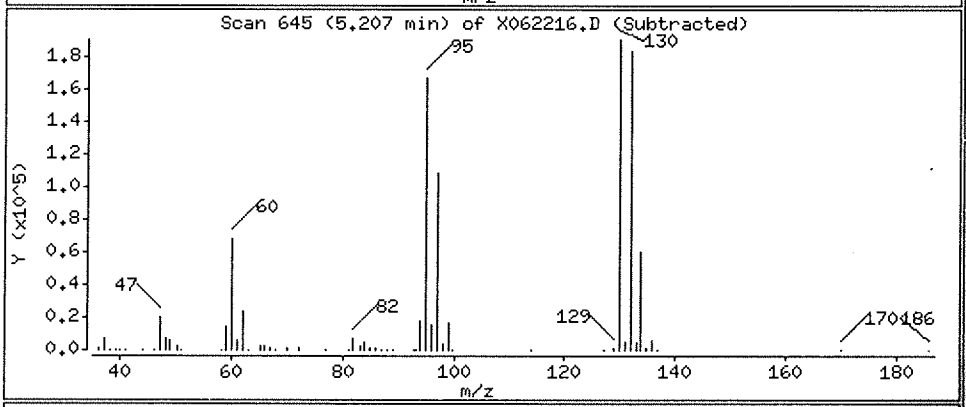
Column diameter: 0.18

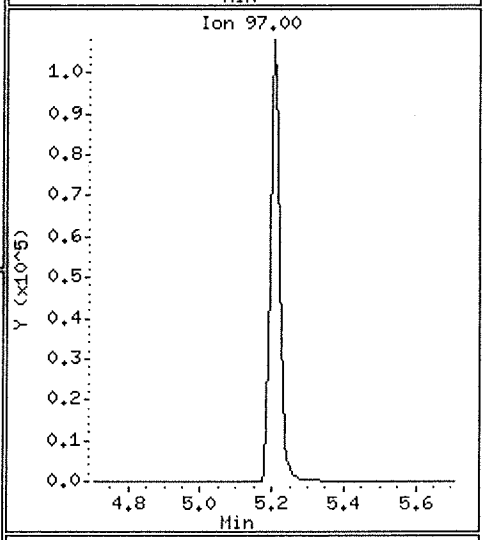
38 Trichloroethene

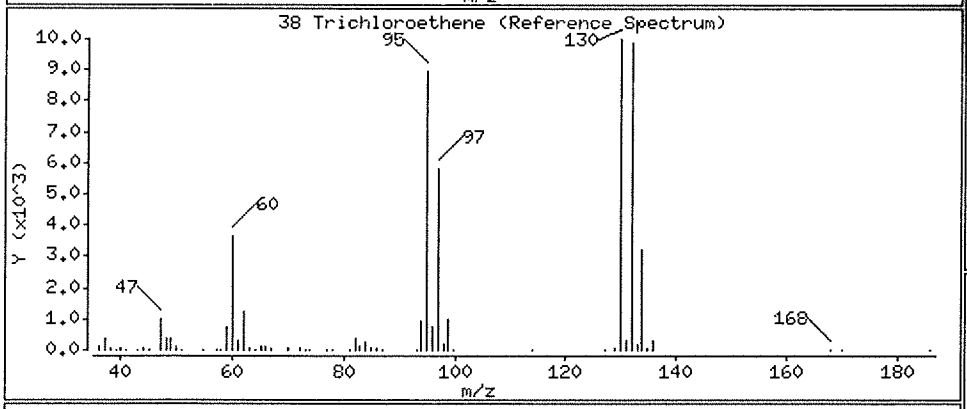
Concentration: 773.16 ug/l

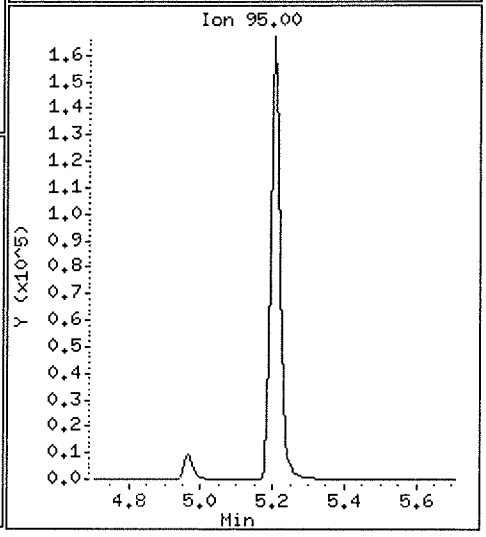


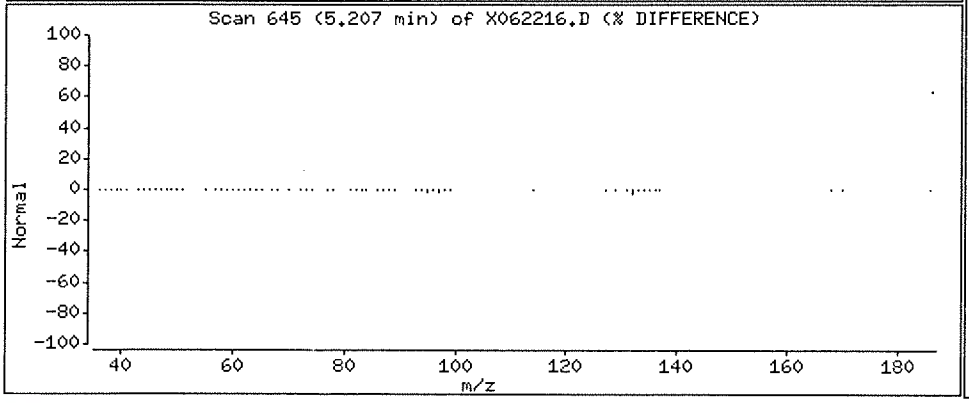












ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D
Lab Smp Id: HS21060908-03 Client Smp ID: HS21060908-03
Inj Date : 22-JUN-2021 16:23
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-03;HS21060908-03;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	489436	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	658136	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	575595	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	292424	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	215653	44.7462	44.74
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	218646	46.7211	46.72
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	748231	52.1864	52.18
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	250243	49.5121	49.51
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	130105	25.8068	25.80
37 Benzene	78	4.512	4.512	(0.909)	45078	2.98149	2.98(a)
29 Bromochloromethane	128	3.810	3.795	(0.911)	24129	8.15325	8.15
28 Chloroform	83	3.910	3.910	(0.935)	12590	1.46276	1.46(a)
27 cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	1497839	291.979	291.97(A)
17 Methylene Chloride	84	2.291	2.305	(0.548)	18505063	4278.71	4278.71(AM)
50 Toluene	91	6.446	6.446	(0.840)	25802	1.53548	1.53(a)
20 trans-1,2-Dichloroethene	96	2.535	2.527	(0.606)	5660	1.23851	1.23(a)
38 Trichloroethene	130	5.206	5.206	(1.049)	799045	176.895	176.89

QC Flag Legend

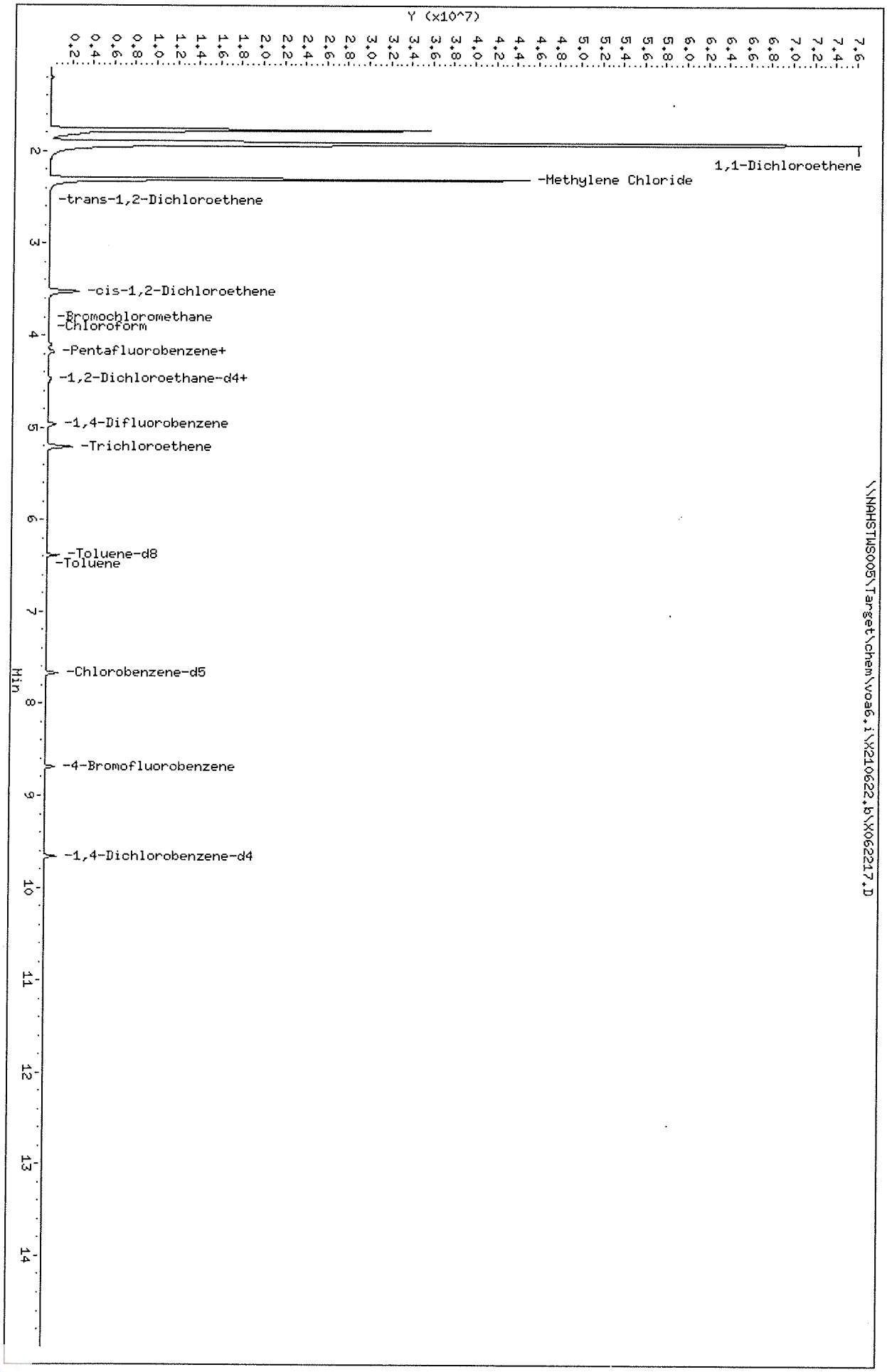
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D
Date : 22-JUN-2021 16:23
Client ID: HS21060908-03
Sample Info: HS21060908-03;HS21060908-03;;;
Purge Volume: 5.0
Column phase: DB624

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

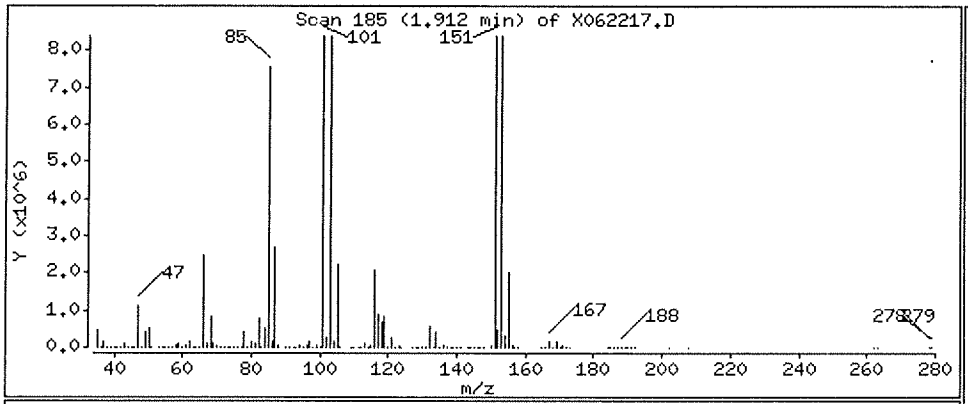
Operator: PC

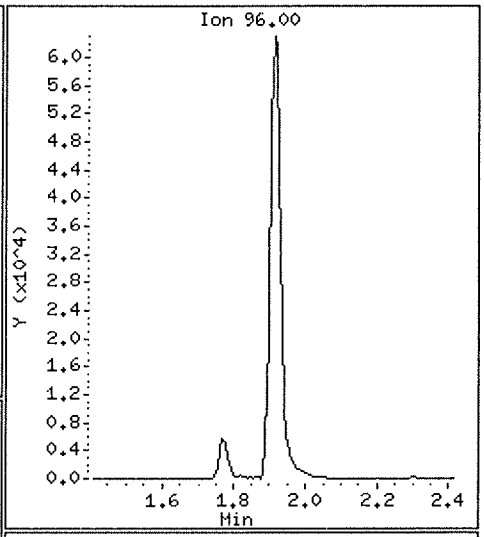
Column phase: DB624

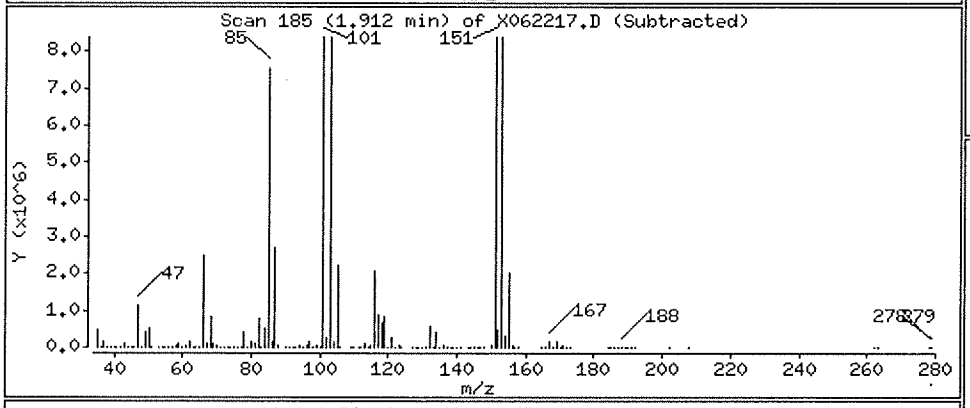
Column diameter: 0.18

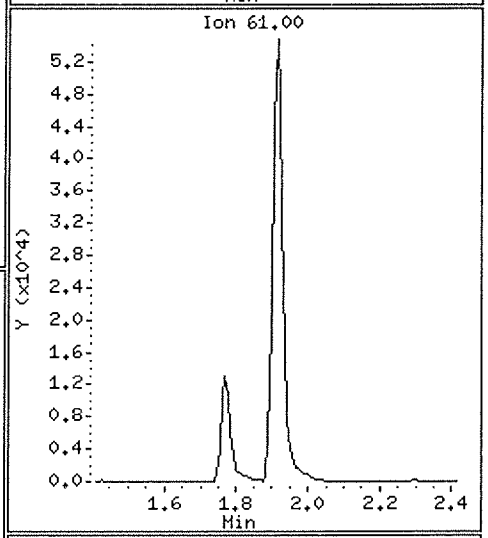
11 1,1-Dichloroethene

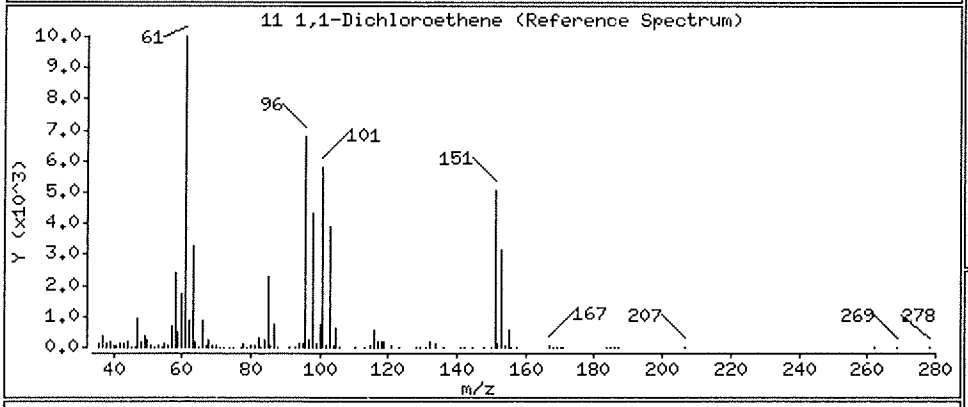
Concentration: 25.80 ug/l

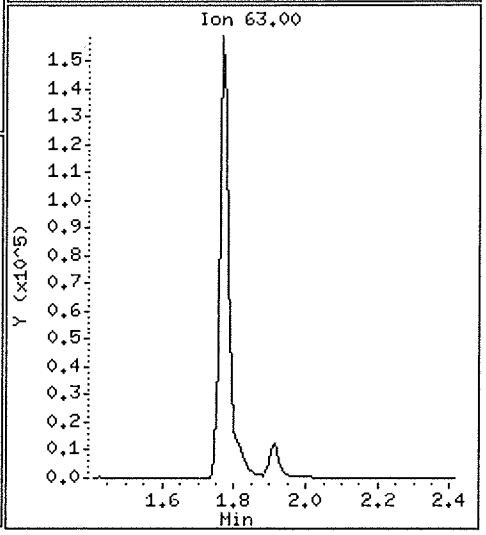


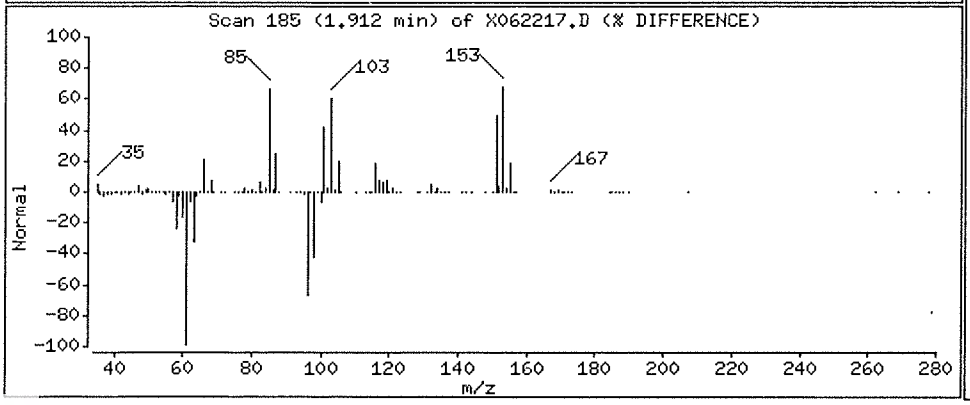












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

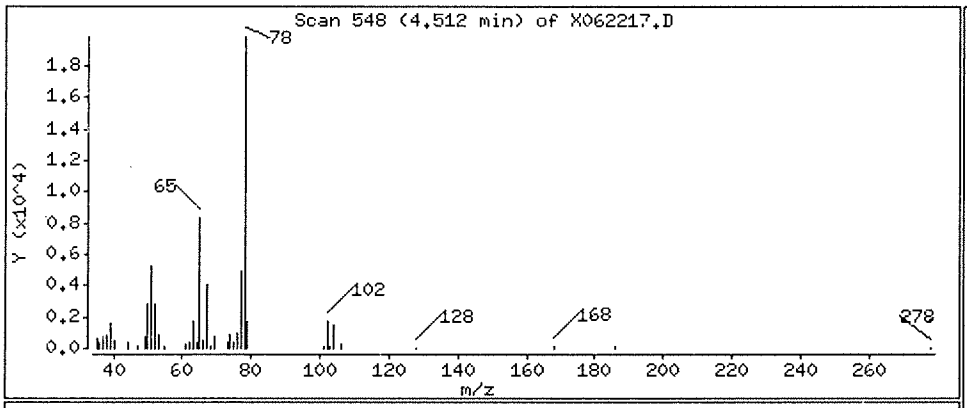
Operator: PC

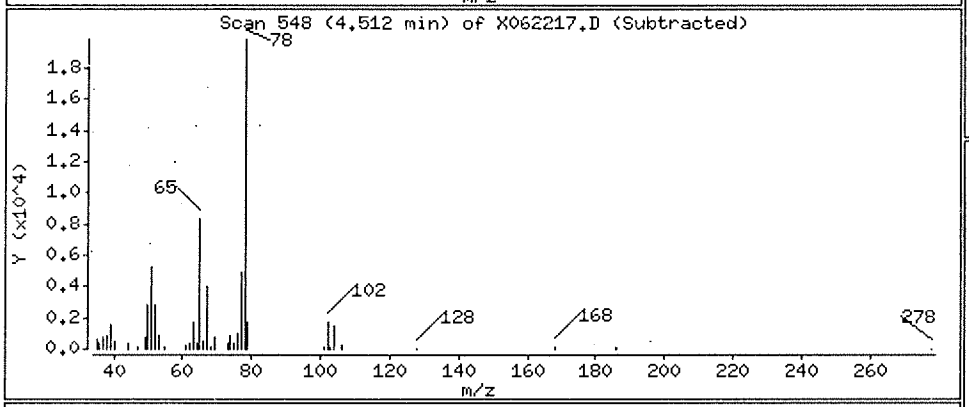
Column phase: DB624

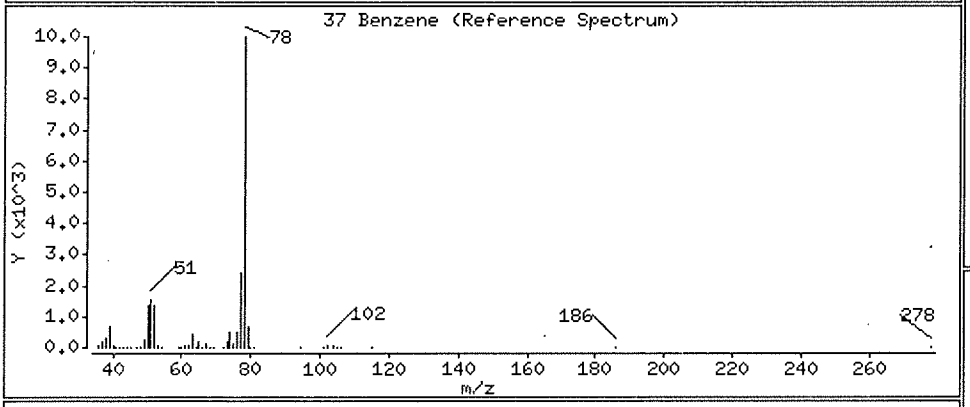
Column diameter: 0.18

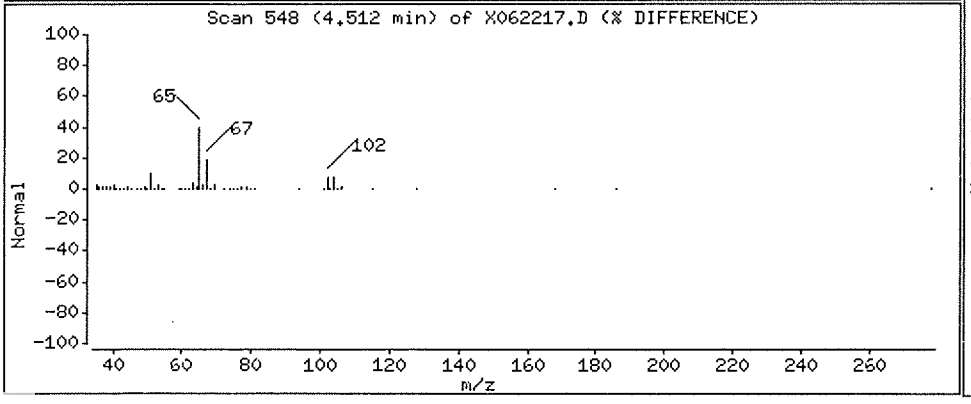
37 Benzene

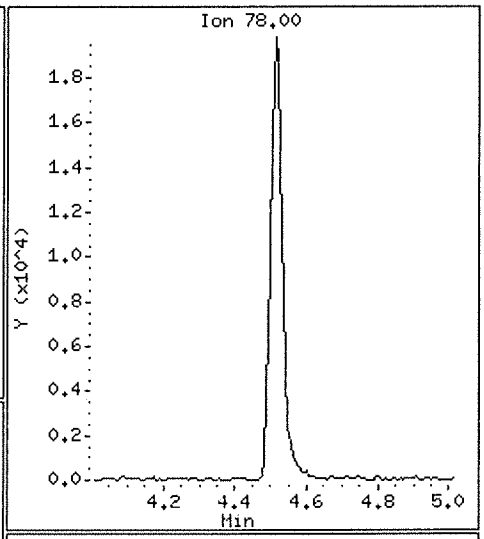
Concentration: 2.98 ug/l

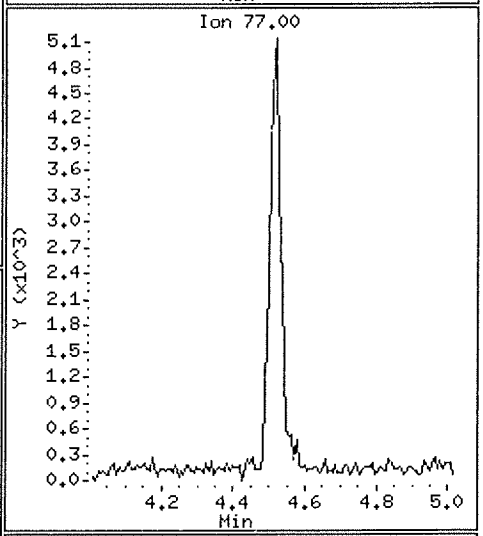


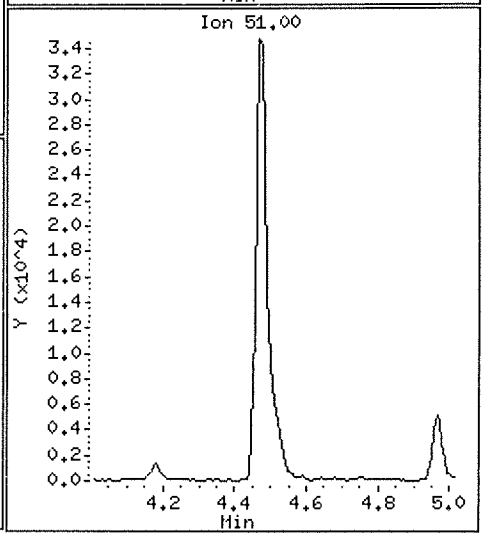












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

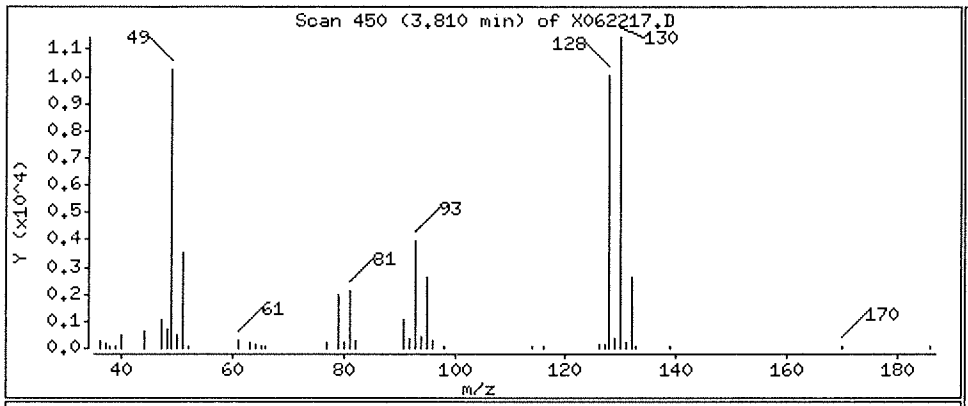
Operator: PC

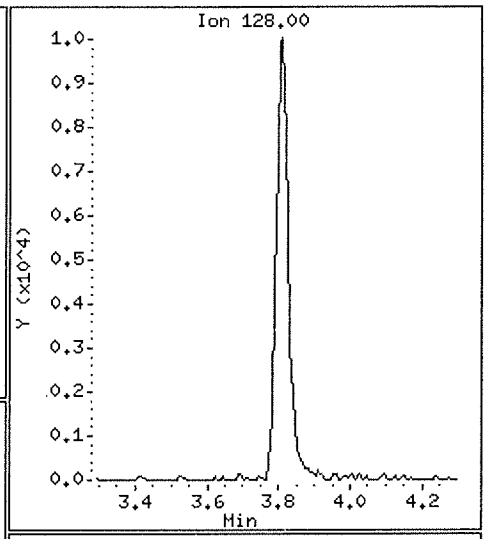
Column phase: DB624

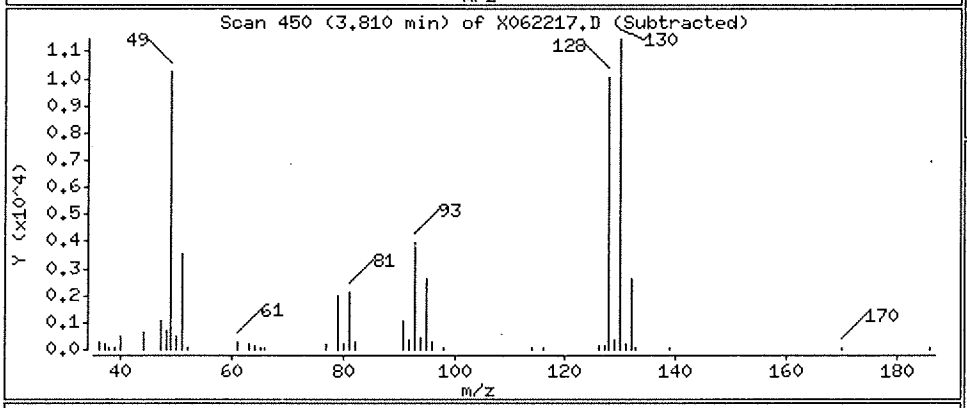
Column diameter: 0.18

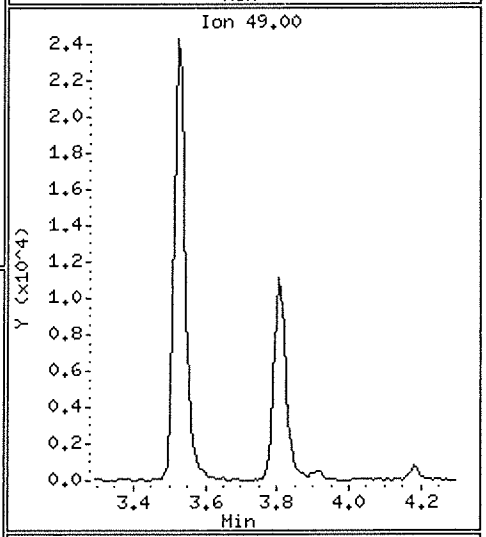
29 Bromochloromethane

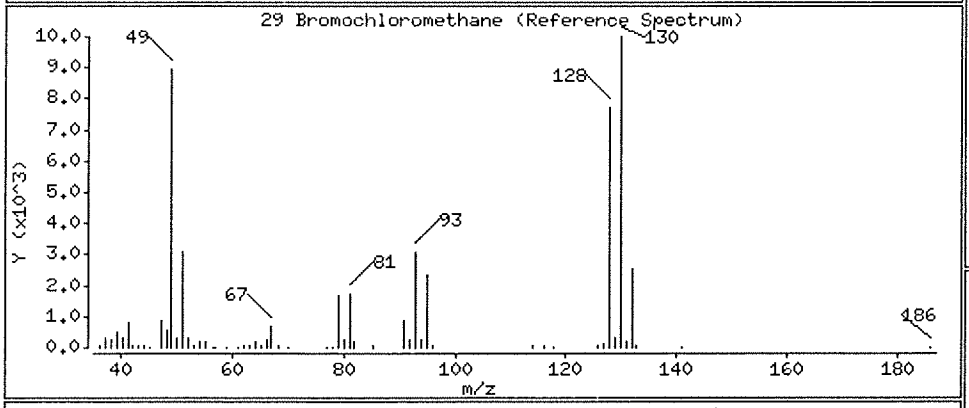
Concentration: 8.15 ug/l

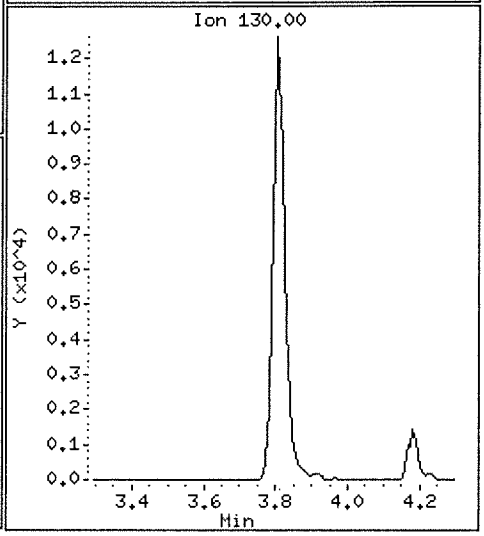


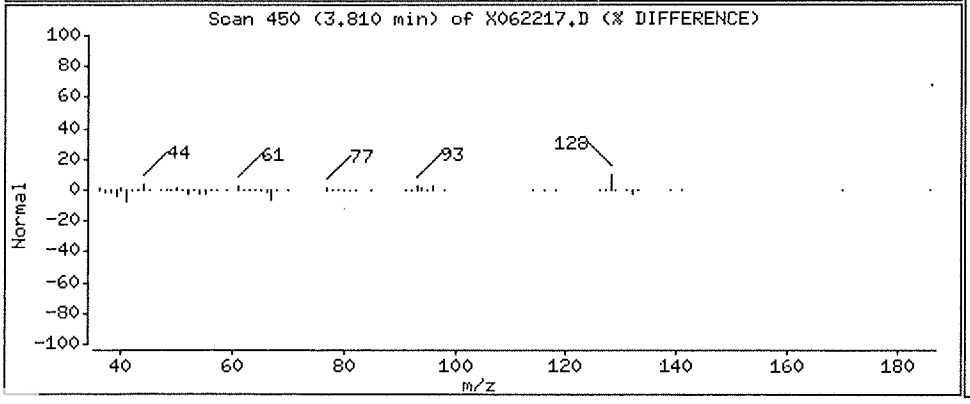












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

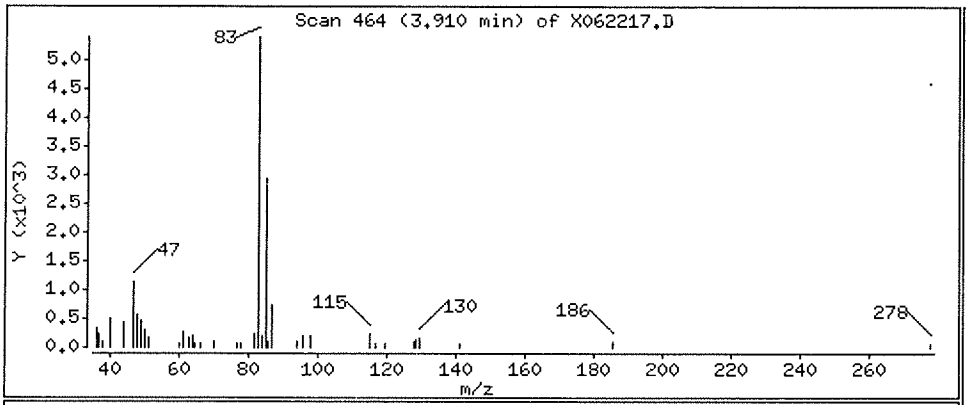
Operator: PC

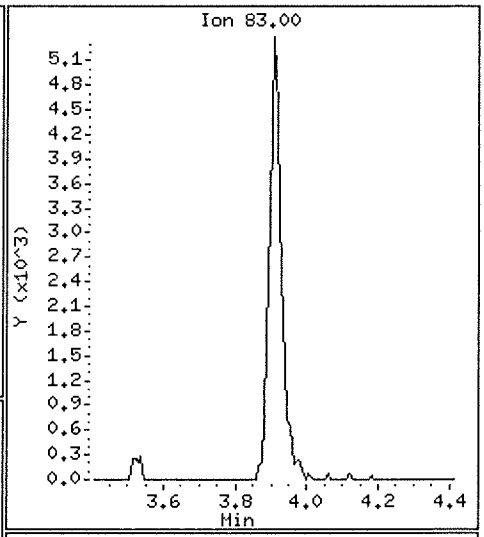
Column phase: DB624

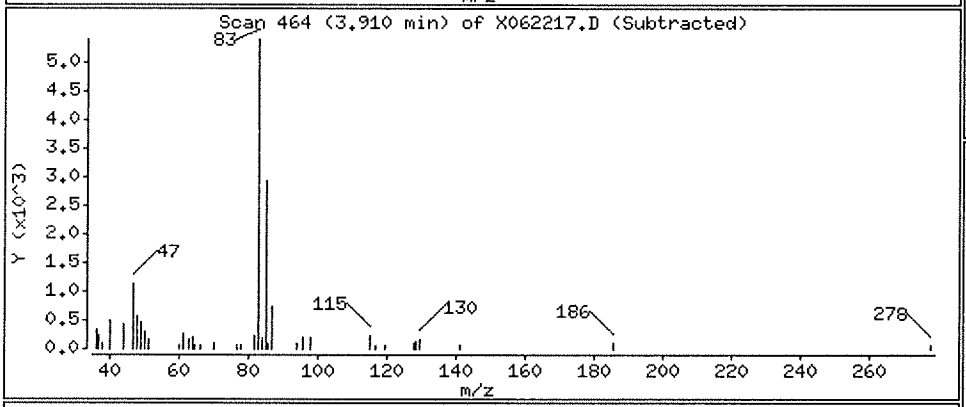
Column diameter: 0.18

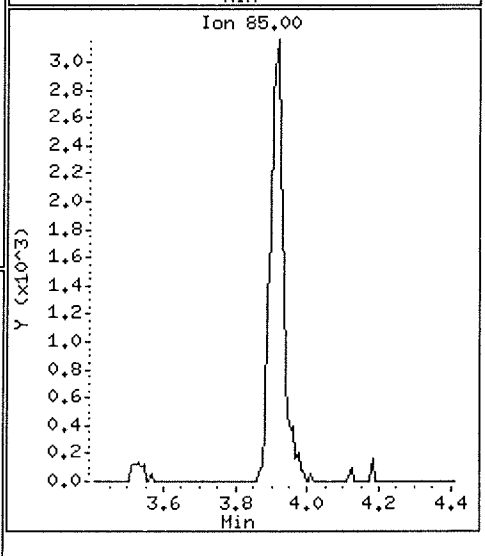
28 Chloroform

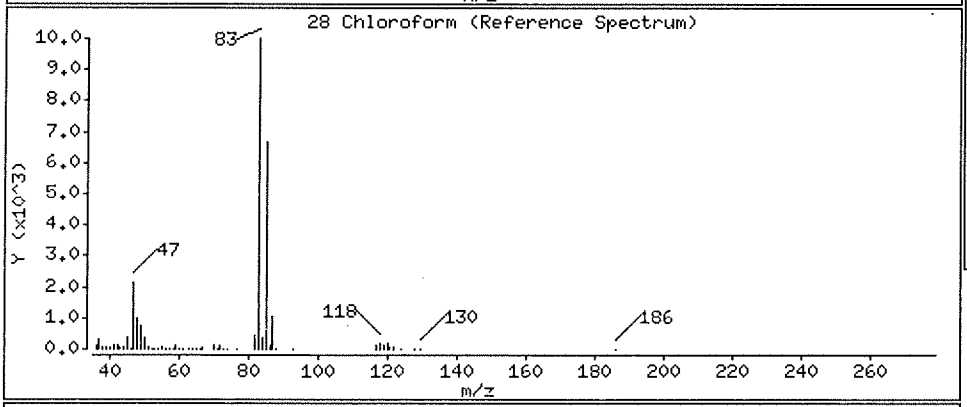
Concentration: 1.46 ug/l

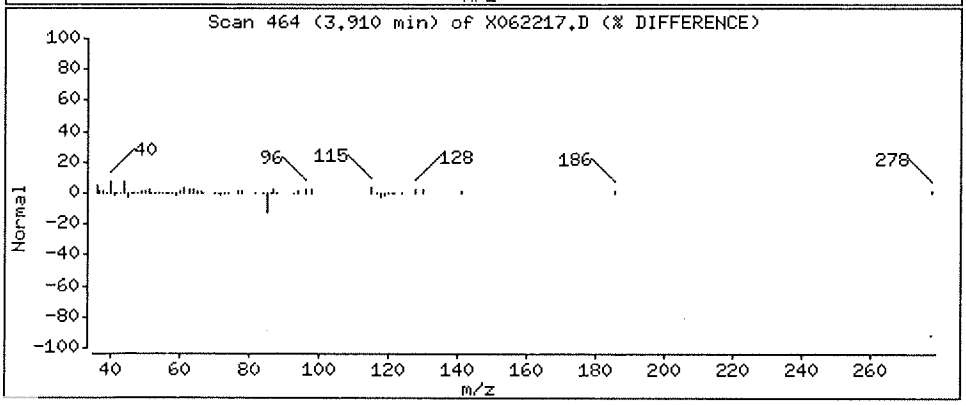












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

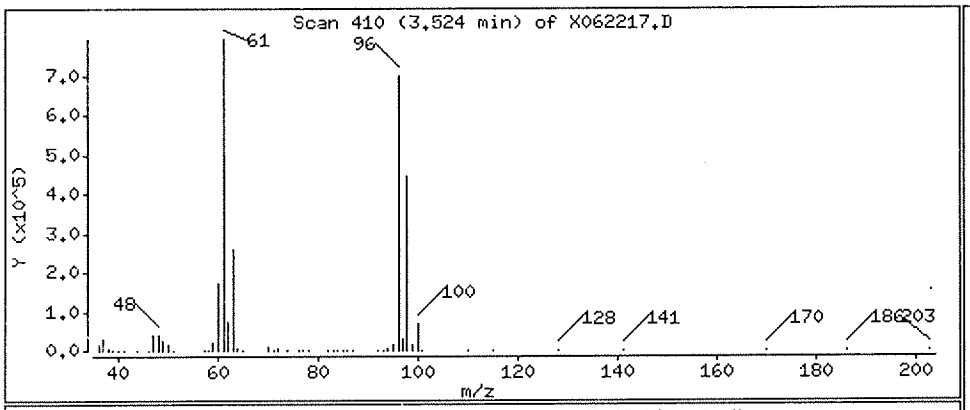
Operator: PC

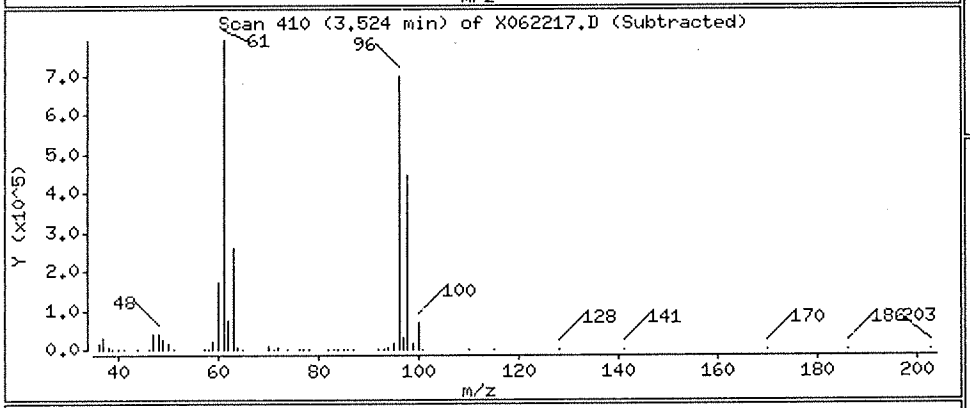
Column phase: DB624

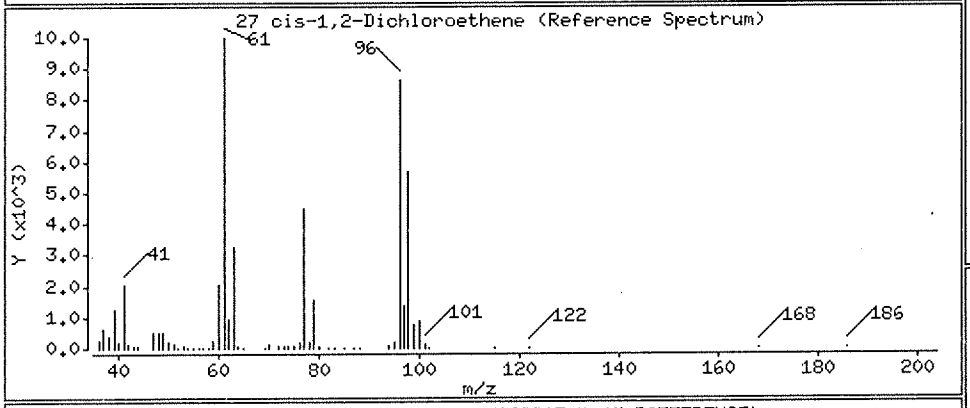
Column diameter: 0.18

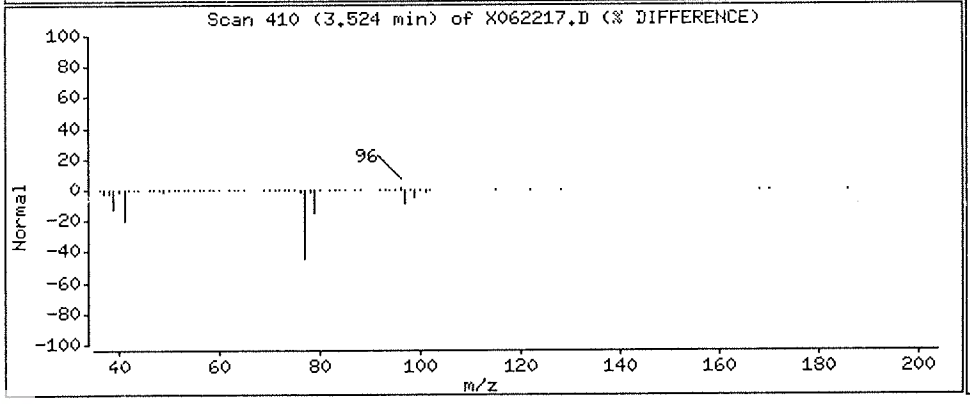
27 cis-1,2-Dichloroethene

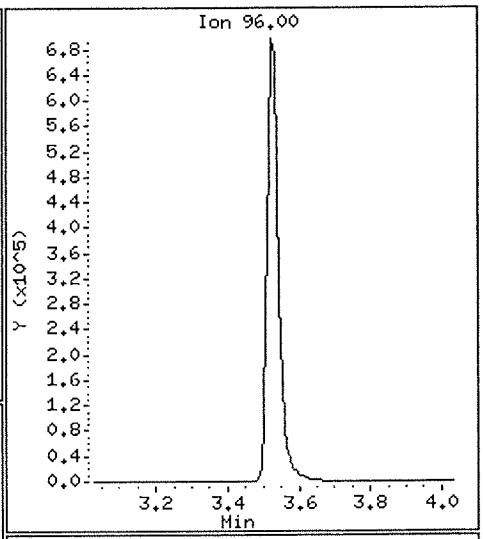
Concentration: 291.97 ug/l

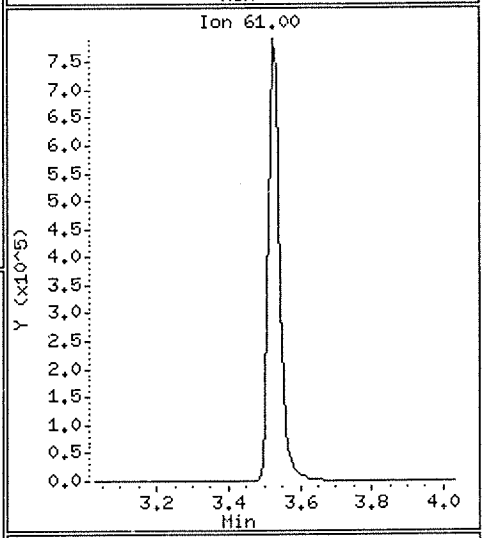


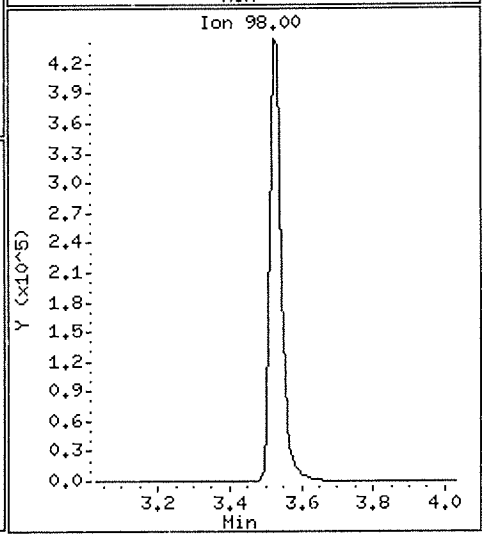












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

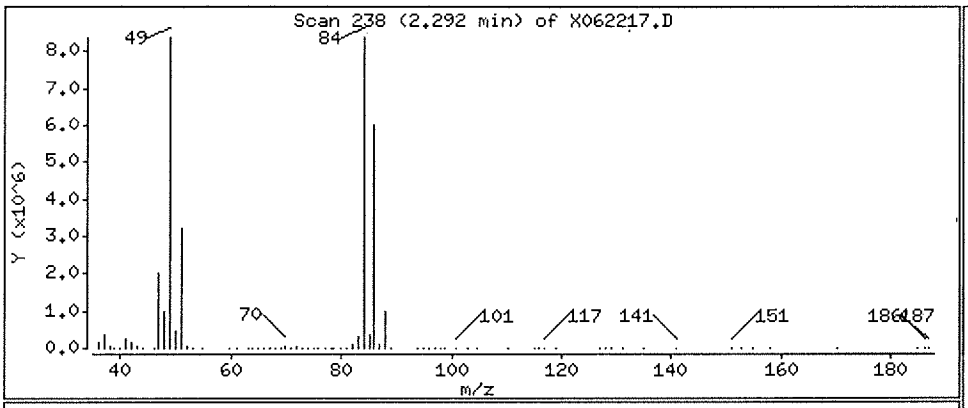
Operator: PC

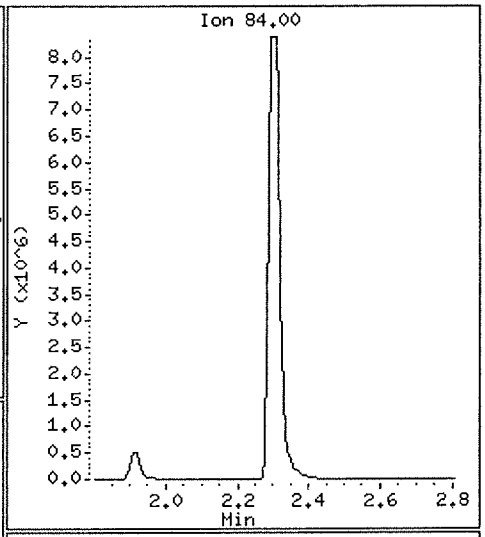
Column phase: DB624

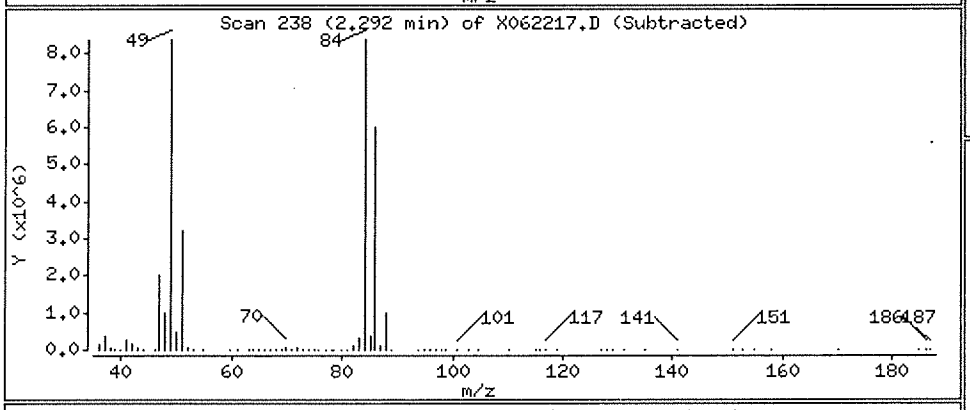
Column diameter: 0.18

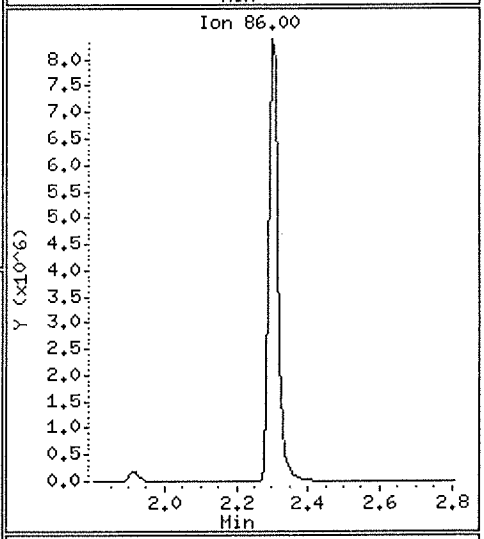
17 Methylene Chloride

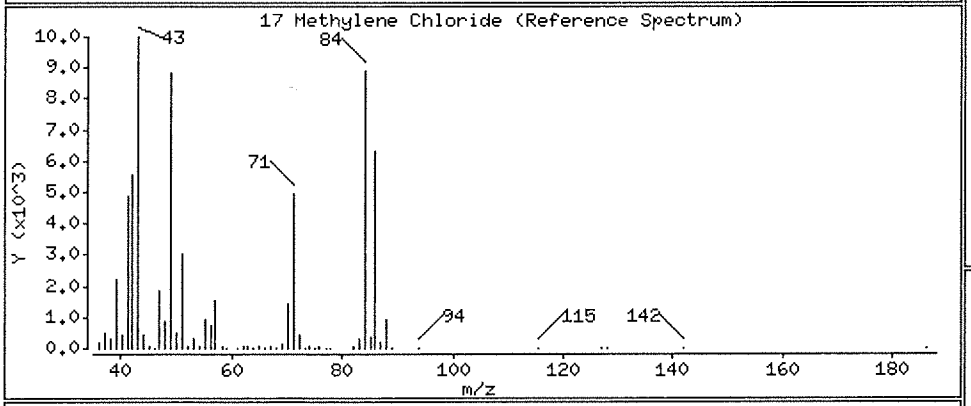
Concentration: 4278.71 ug/l

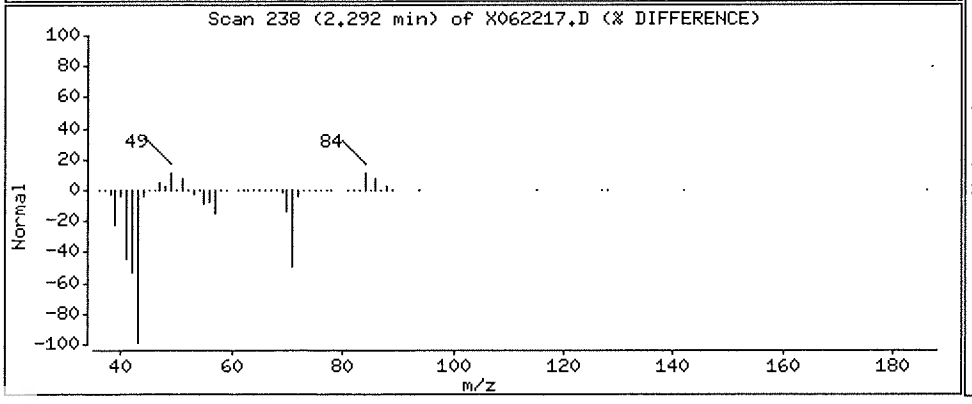


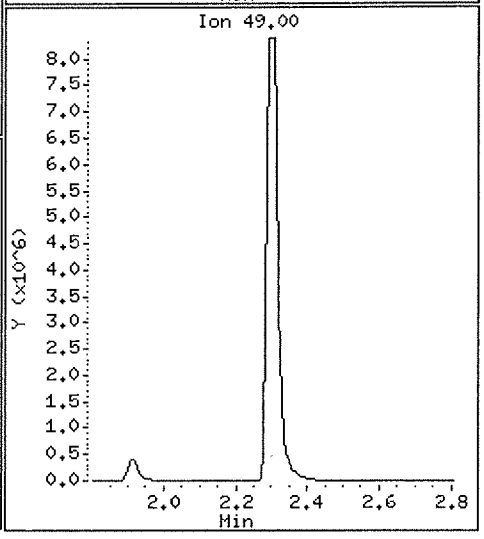












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

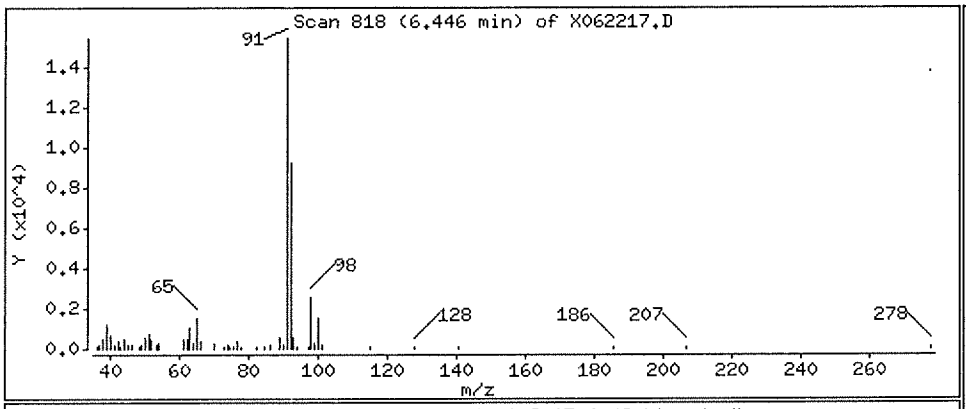
Operator: PC

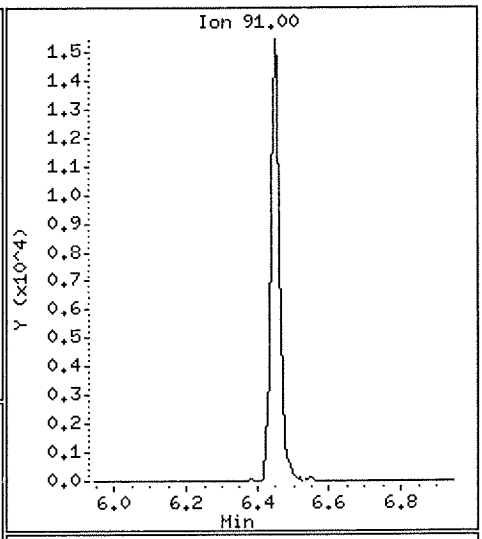
Column phase: DB624

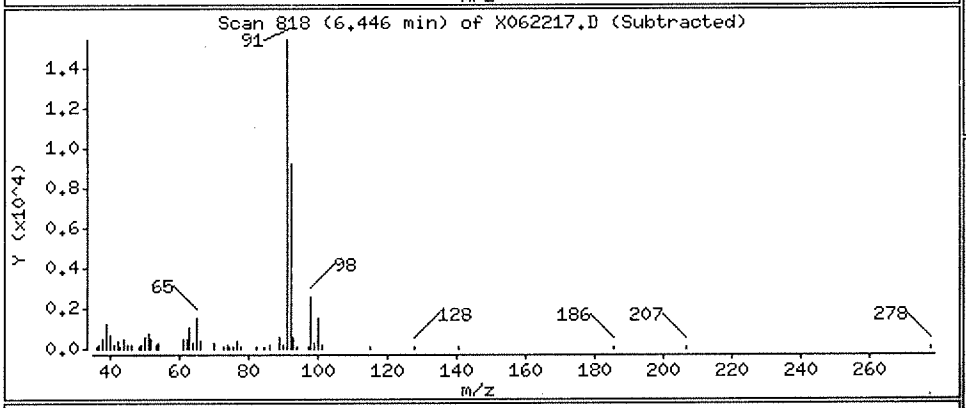
Column diameter: 0.18

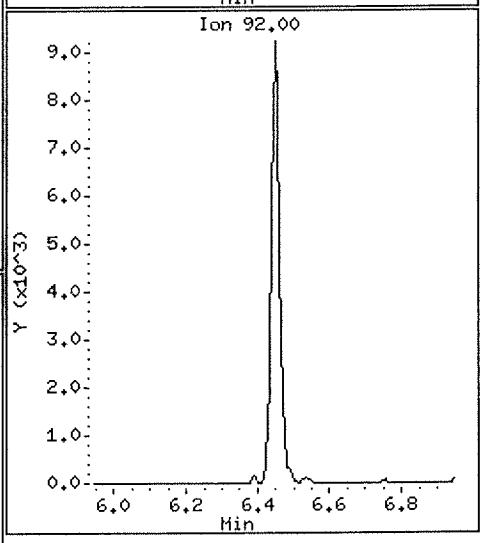
50 Toluene

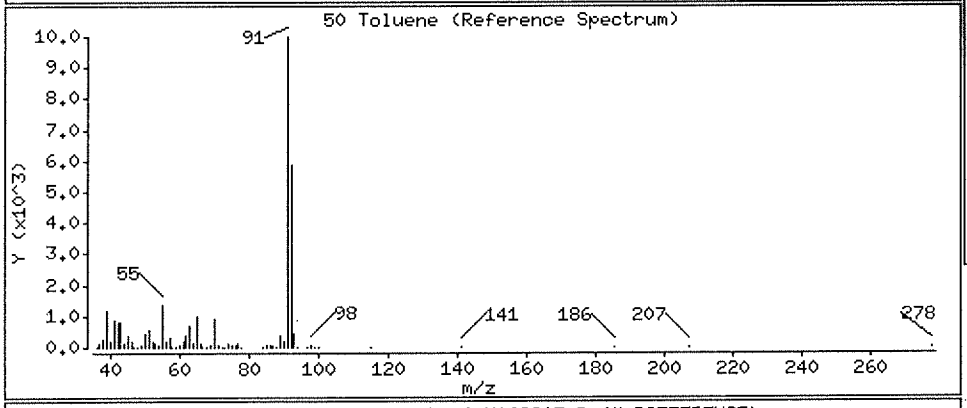
Concentration: 1.53 ug/l

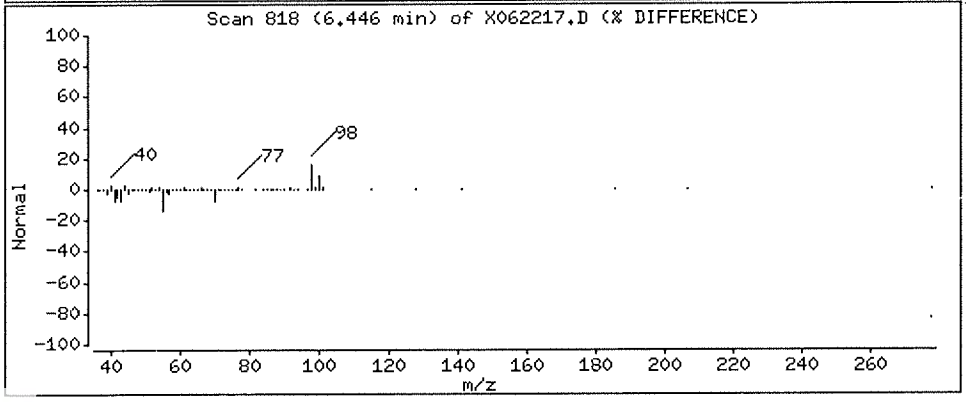












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

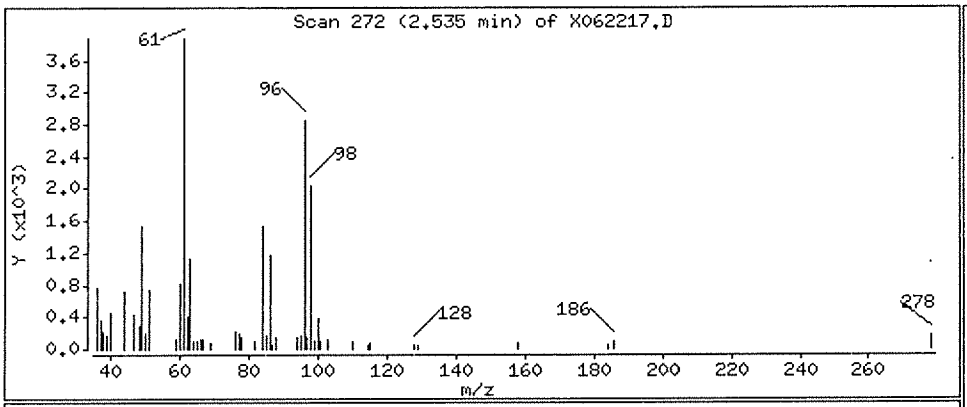
Operator: PC

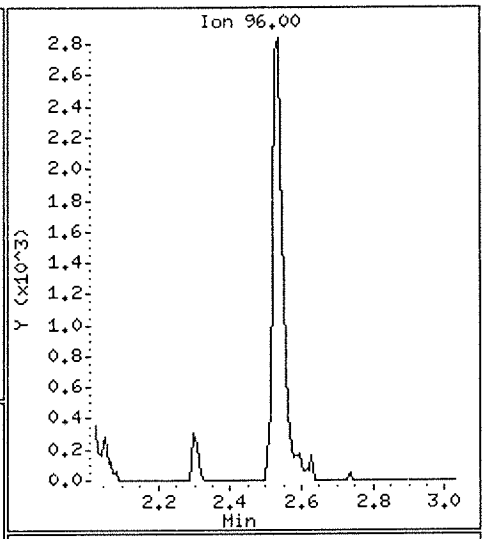
Column phase: DB624

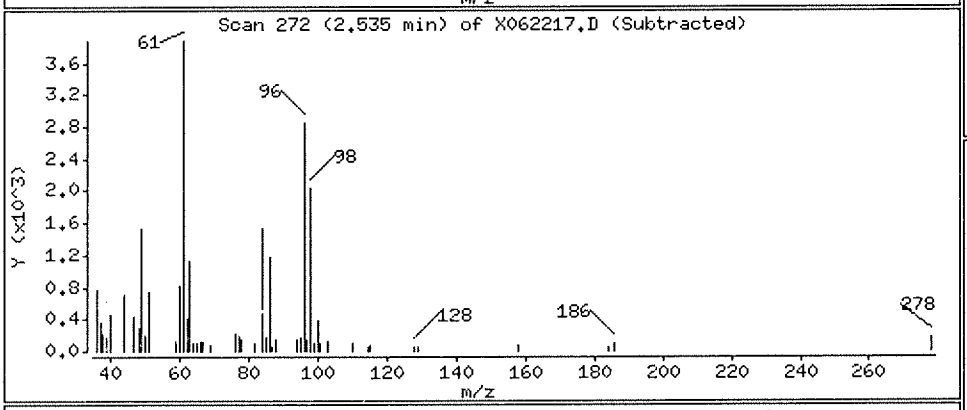
Column diameter: 0.18

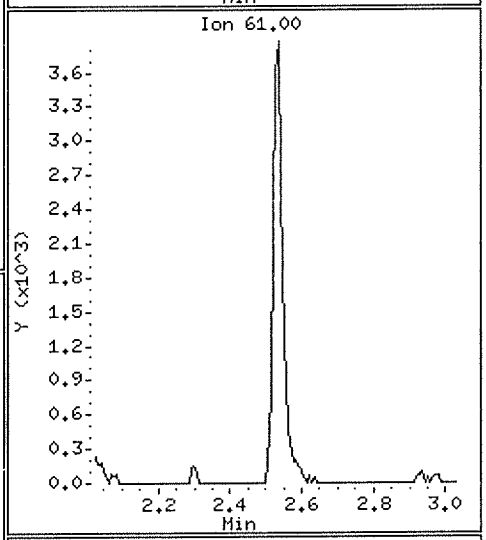
20 trans-1,2-Dichloroethene

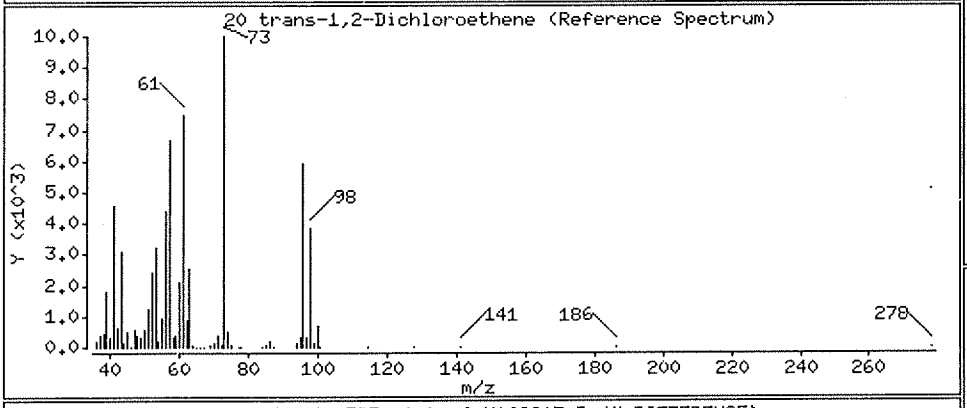
Concentration: 1.23 ug/l

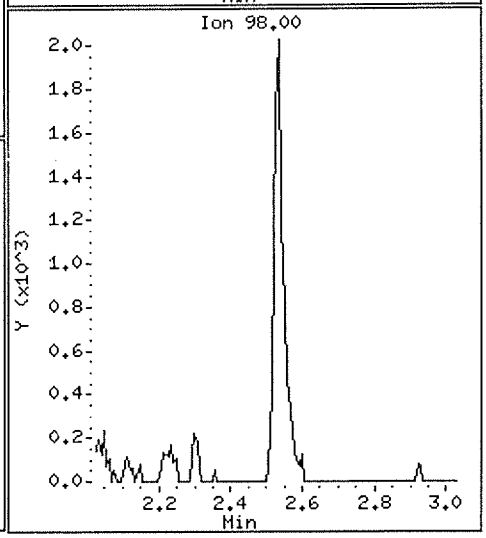


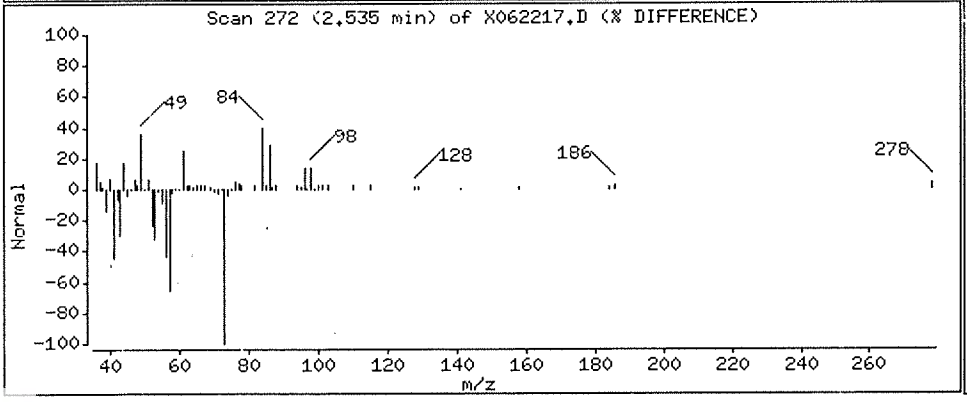












Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062217.D

Date : 22-JUN-2021 16:23

Client ID: HS21060908-03

Instrument: voa6.i

Sample Info: HS21060908-03;HS21060908-03;;;

Purge Volume: 5.0

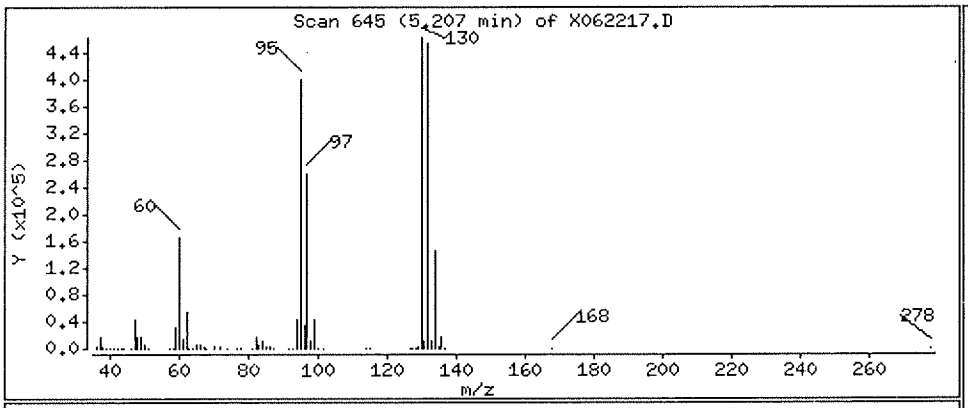
Operator: PC

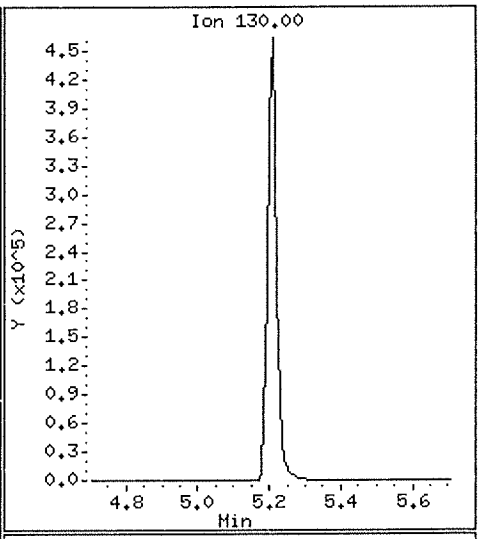
Column phase: DB624

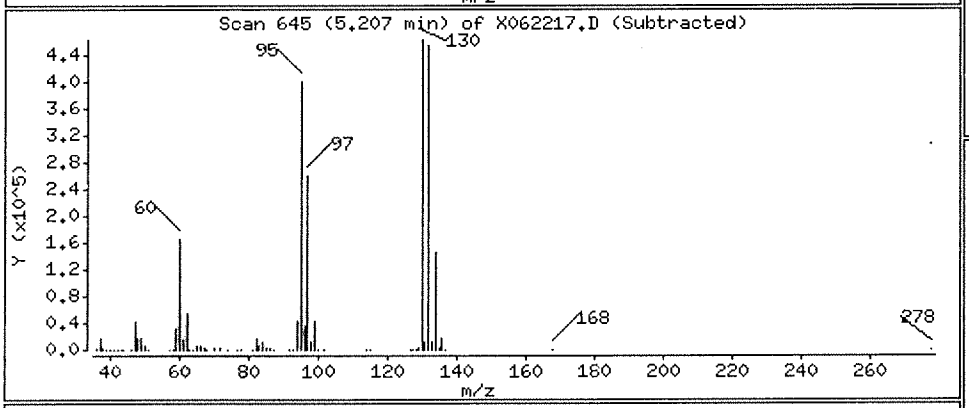
Column diameter: 0.18

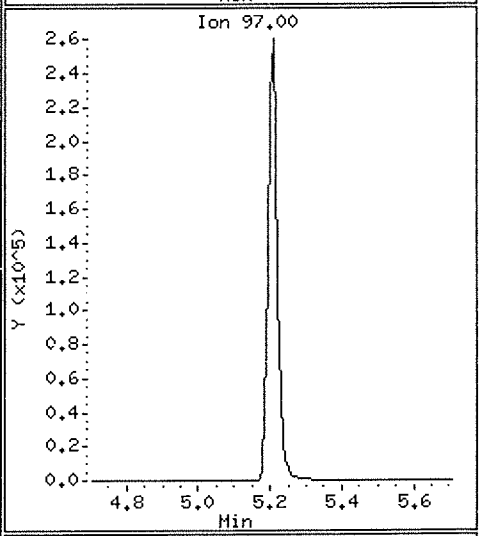
38 Trichloroethene

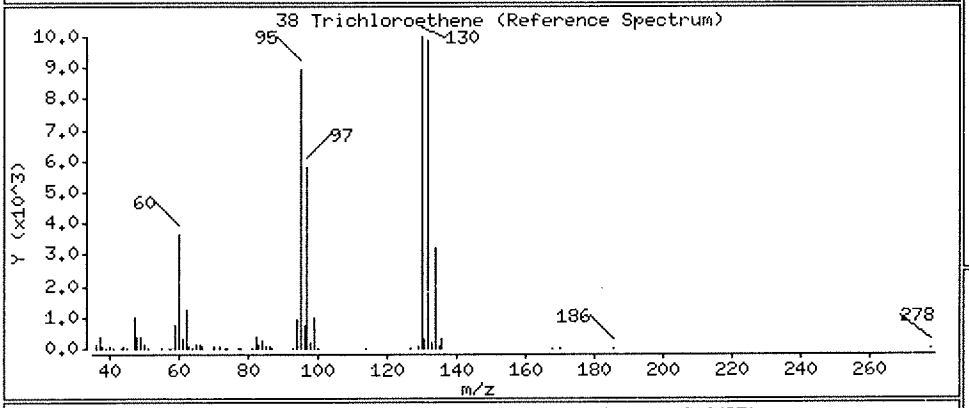
Concentration: 176.89 ug/l

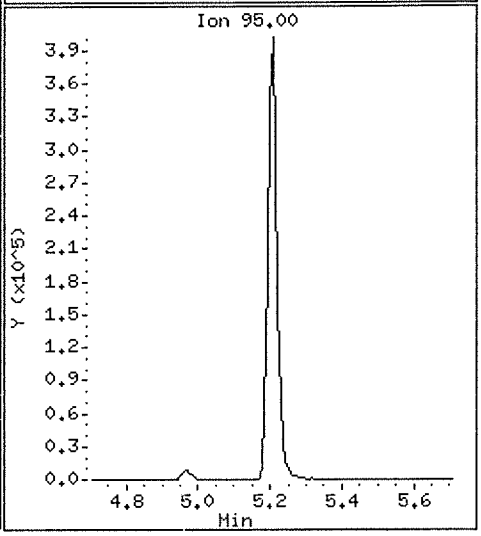


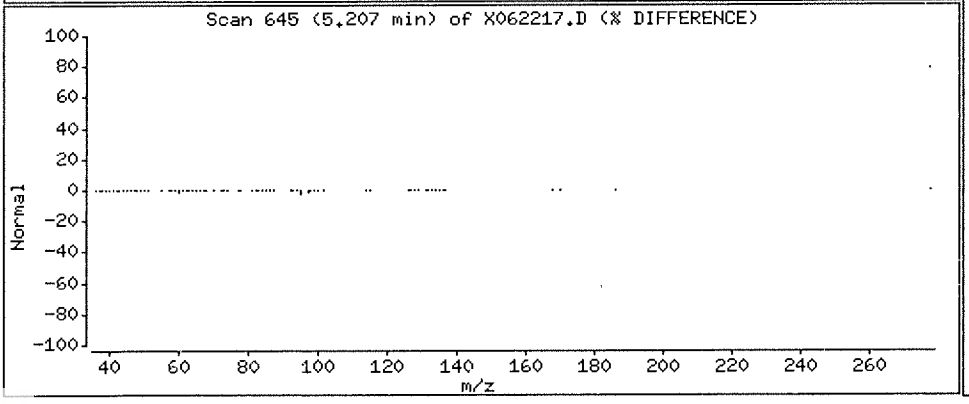












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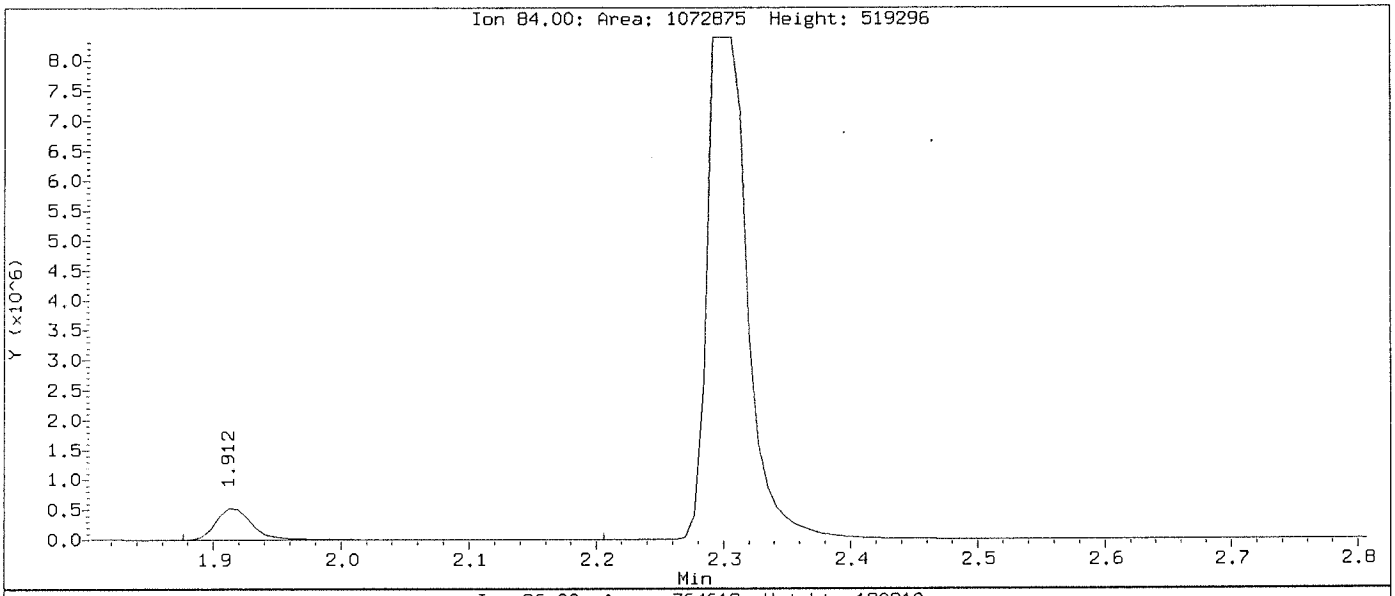
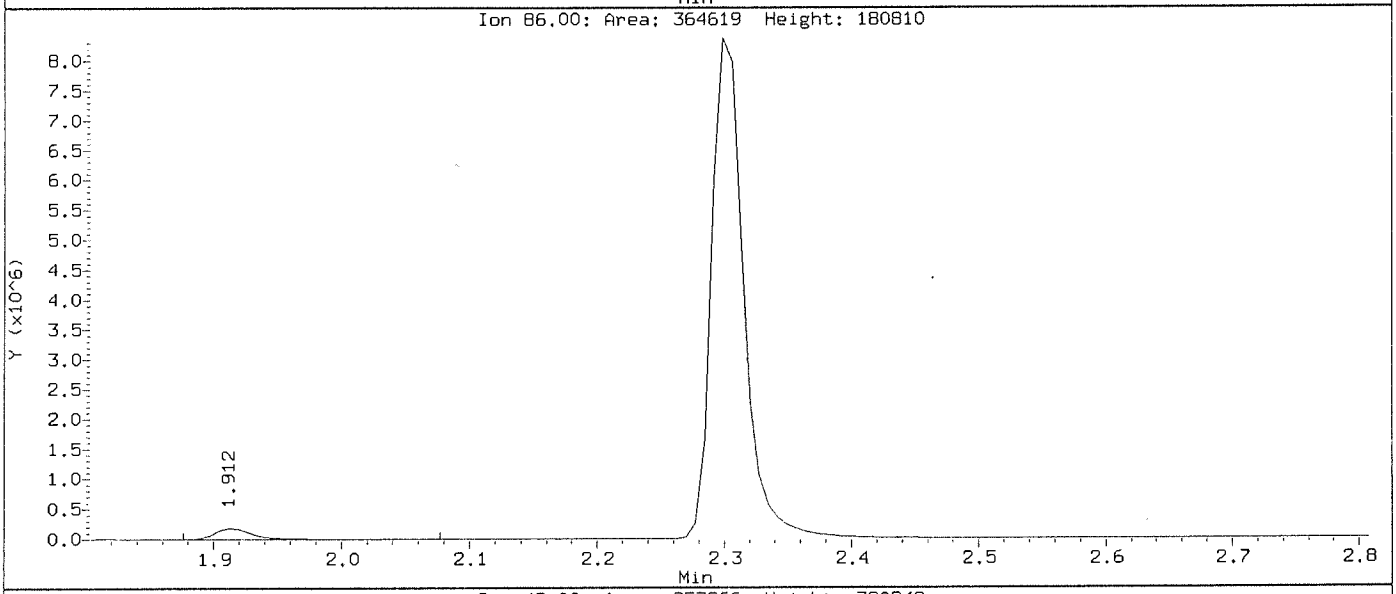
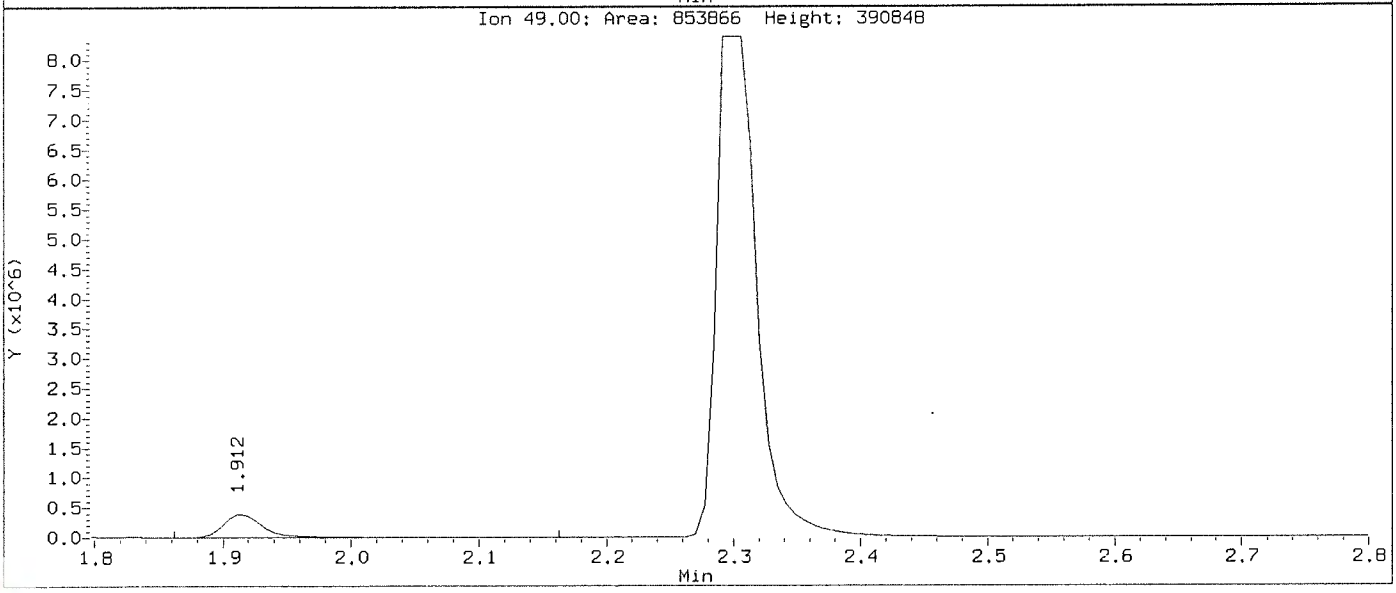
Injection Date: 22-JUN-2021 16:23
Instrument: voa6.i
Client Sample ID: HS21060908-03

Compound: Methylene Chloride
CAS Number: 75-09-2







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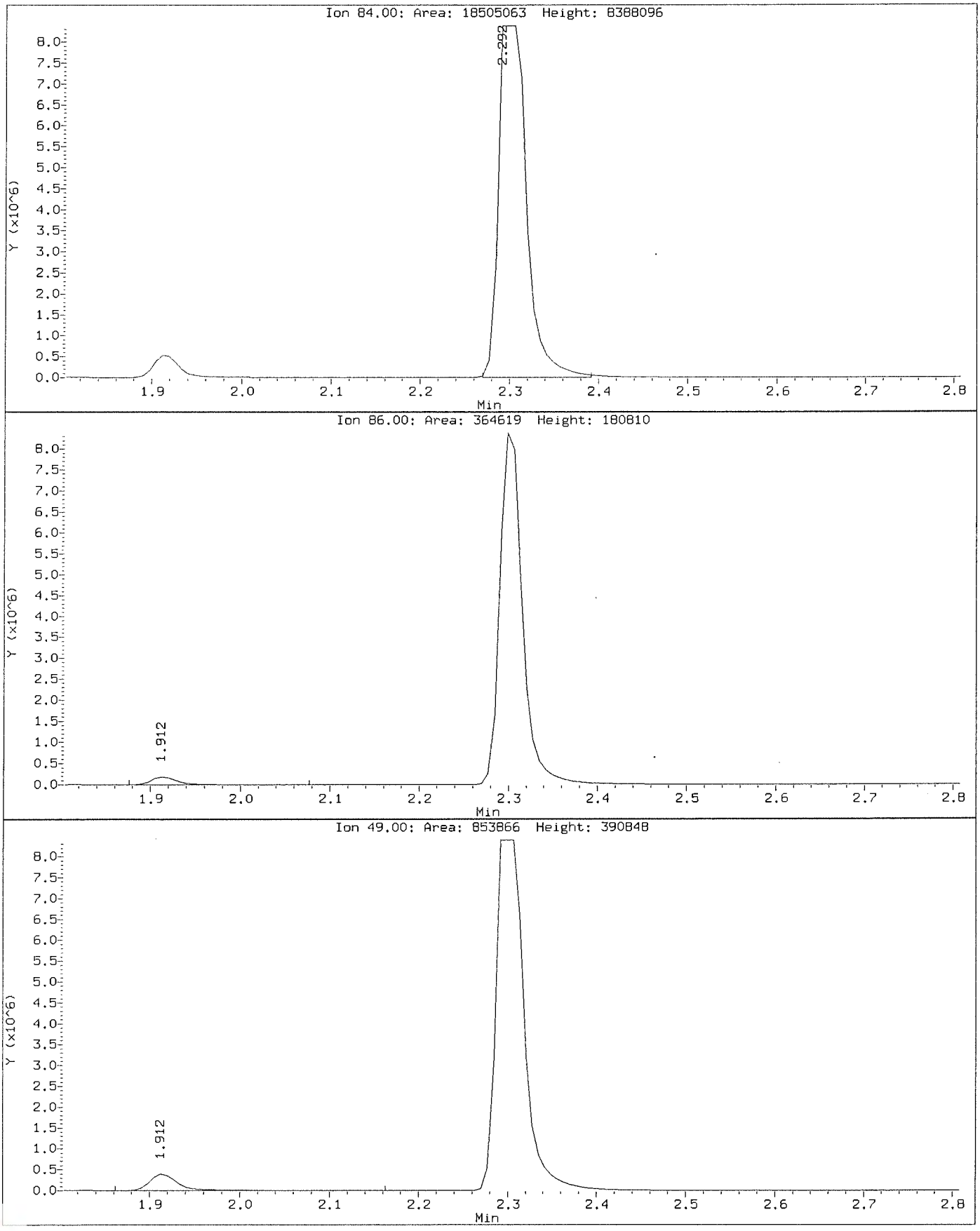
Injection Date: 22-JUN-2021 16:23
Instrument: voa6.i
Client Sample ID: HS21060908-03

Compound: Methylene Chloride
CAS Number: 75-09-2



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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062218.D
Lab Smp Id: HS21060908-01MS Client Smp ID: HS21060908-01MS
Inj Date : 22-JUN-2021 16:44
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-01MS;HS21060908-01MS;3;;MS;;;
Misc Info : HS18090001;WATER;0;250;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:59 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 18 QC Sample: MS
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

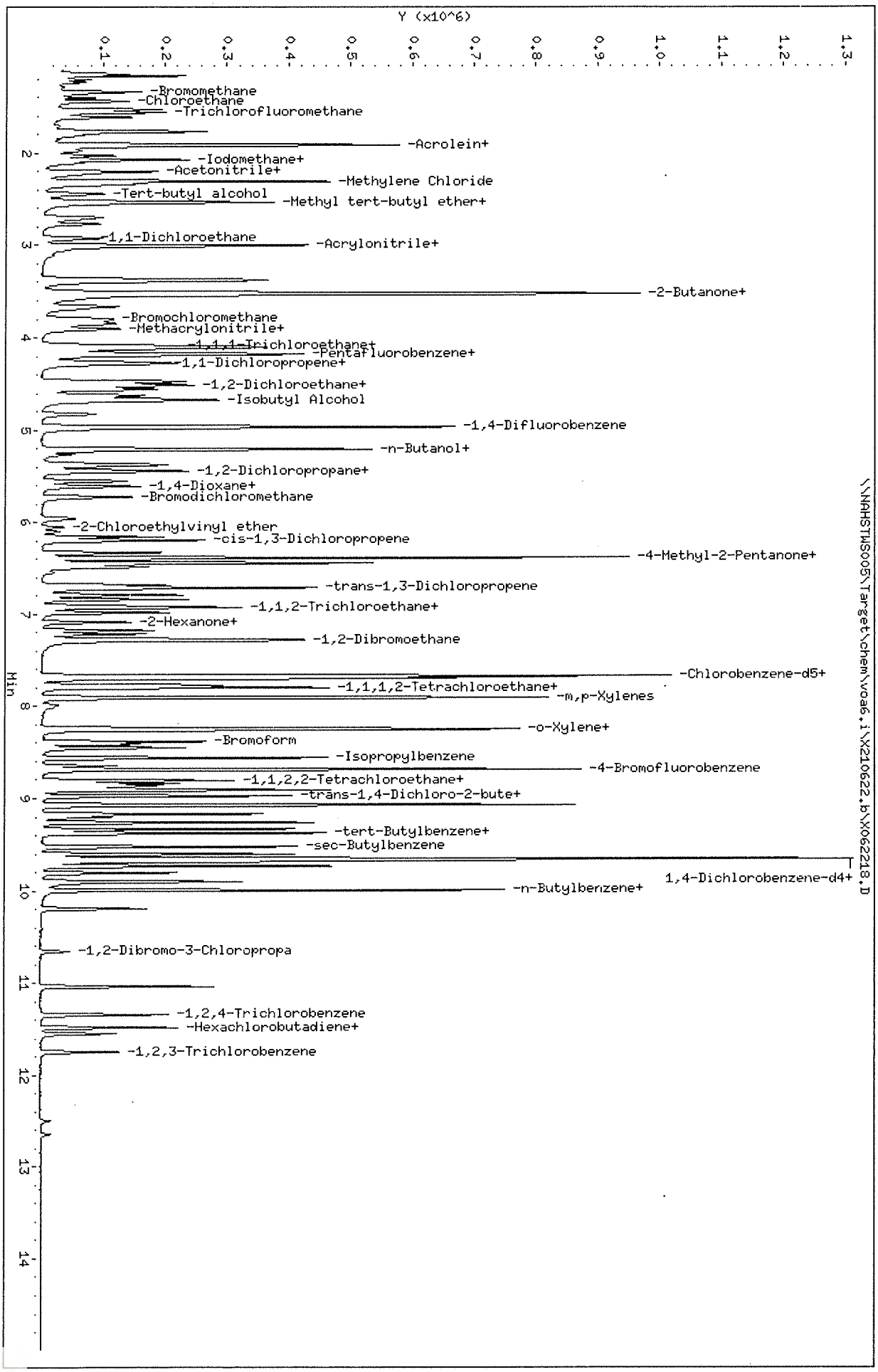
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	376592	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	525742	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	503030	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	271534	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	175278	47.2758	47.27
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	181613	50.4915	50.49
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	586353	46.7955	46.79
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	219306	49.6483	49.64
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	70588	18.9749	4743.73
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	97294	17.4822	4370.54
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	85859	22.2393	5559.81
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	53769	19.7322	4933.04
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	101005	16.9654	4241.33
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	71587	18.4544	4613.59
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	77186	19.1690	4792.25
93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	41675	25.3527	6338.17
71 1,2,3-Trichloropropane	75	8.867	8.860	(0.918)	67041	19.8032	4950.79(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	62315	23.2119	5802.97
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	217340	17.5489	4387.23
89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	10831	25.3988	6349.70
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	70078	18.9219	4730.48
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	138407	18.7925	4698.13

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062218.D Page 2
Report Date: 27-Aug-2021 08:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	83121	19.8428	4960.69	
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	57614	18.6170	4654.26	
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	216998	17.6058	4401.45	
83	1,3-Dichlorobenzene	146	9.605	9.604	(0.994)	143891	18.7875	4696.86	
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	102837	18.9791	4744.78	
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	147022	18.3959	4598.98	
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	92461	17.9458	4486.45	
24	2-Butanone	43	3.588	3.580	(0.858)	41855	36.5302	9132.54	
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	184935	18.1962	4549.04	
52	2-Hexanone	43	7.090	7.083	(0.924)	78114	41.8034	10450.84	
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	209679	17.3239	4330.97	
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	216424	17.2377	4309.43	
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	111661	38.5473	9636.82	
10	Acetone	43	1.976	1.976	(0.473)	36806	34.5822	8645.55	
37	Benzene	78	4.512	4.512	(0.909)	231575	19.1736	4793.39	
74	Bromobenzene	156	8.802	8.802	(0.911)	86449	19.1891	4797.28	
29	Bromochloromethane	128	3.795	3.795	(0.908)	39961	17.5490	4387.25	
39	Bromodichloromethane	83	5.722	5.722	(1.153)	87172	19.2869	4821.73	
66	Bromoform	173	8.408	8.408	(1.096)	56946	20.3016	5075.38	
6	Bromomethane	94	1.338	1.338	(0.320)	63951	16.5433	4135.82	
19	Carbon Disulfide	76	2.069	2.069	(0.495)	291693	31.7087	7927.18	
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	85110	19.5285	4882.13	
59	Chlorobenzene	112	7.692	7.692	(1.003)	184879	17.6551	4413.76	
7	Chloroethane	64	1.403	1.403	(0.336)	51939	18.8077	4701.93	(M)
28	Chloroform	83	3.910	3.910	(0.935)	112690	17.0160	4253.99	
3	Chloromethane	50	1.073	1.073	(0.257)	72471	19.7215	4930.38	
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	494751	125.342	31335.60	
46	cis-1,3-Dichloropropene	75	6.159	6.152	(1.241)	104296	19.5830	4895.73	
55	Dibromochloromethane	129	7.176	7.176	(0.936)	80859	19.5300	4882.50	
44	Dibromomethane	93	5.550	5.550	(1.118)	45288	19.4730	4868.26	
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	66709	19.1544	4788.60	
61	Ethylbenzene	106	7.799	7.799	(1.017)	90399	18.7121	4678.03	
91	Hexachlorobutadiene	225	11.481	11.481	(1.108)	39870	24.8071	6201.78	
67	Isopropylbenzene	105	8.559	8.559	(1.116)	258225	17.4939	4373.47	
62	m,p-Xylenes	106	7.907	7.907	(1.031)	226936	36.0343	9008.57	
17	Methylene Chloride	84	2.305	2.305	(0.551)	184343	54.0841	13521.02	
87	n-Butylbenzene	91	9.991	9.991	(1.034)	177786	16.8304	4207.59	
73	n-Propylbenzene	91	8.910	8.910	(0.922)	290096	17.1271	4281.77	
92	Naphthalene	128	11.546	11.546	(1.195)	96025	24.7467	6186.66	
63	o-Xylene	106	8.244	8.243	(1.075)	110100	17.9288	4482.18	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	244205	17.1272	4281.80	
64	Styrene	104	8.258	8.258	(1.077)	181758	17.7124	4428.09	
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	180299	17.0629	4265.71	
56	Tetrachloroethene	164	6.926	6.925	(0.903)	60791	19.6310	4907.75	
50	Toluene	91	6.446	6.446	(0.840)	261254	17.7900	4447.50	
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	60361	17.1658	4291.46	
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	90739	19.7497	4937.42	
38	Trichloroethene	130	5.206	5.206	(1.049)	184551	51.1452	12786.28	
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	122890	18.0780	4519.48	
5	Vinyl Chloride	62	1.138	1.138	(0.272)	78828	17.6833	4420.81	

QC Flag Legend

M - Compound response manually integrated.



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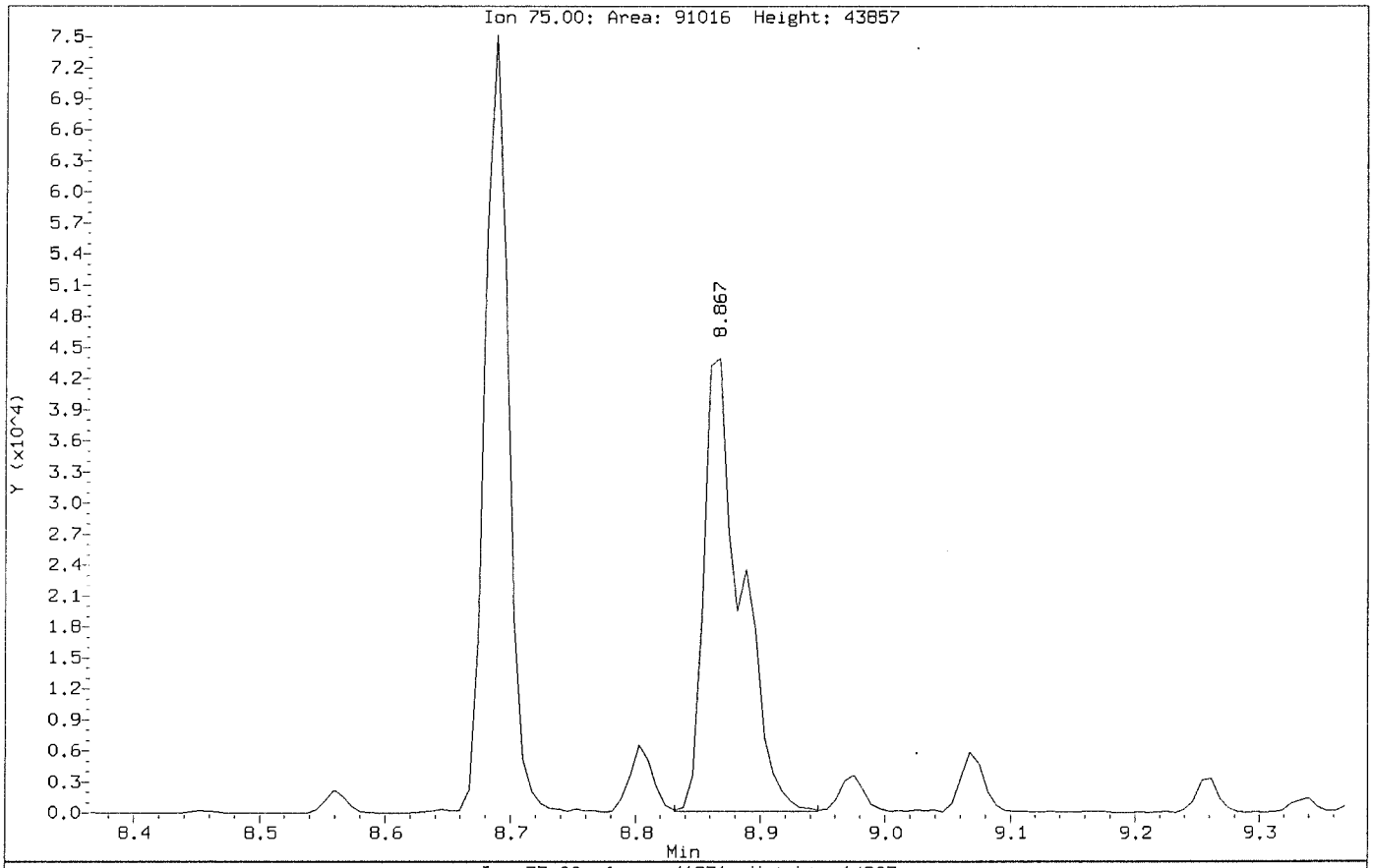
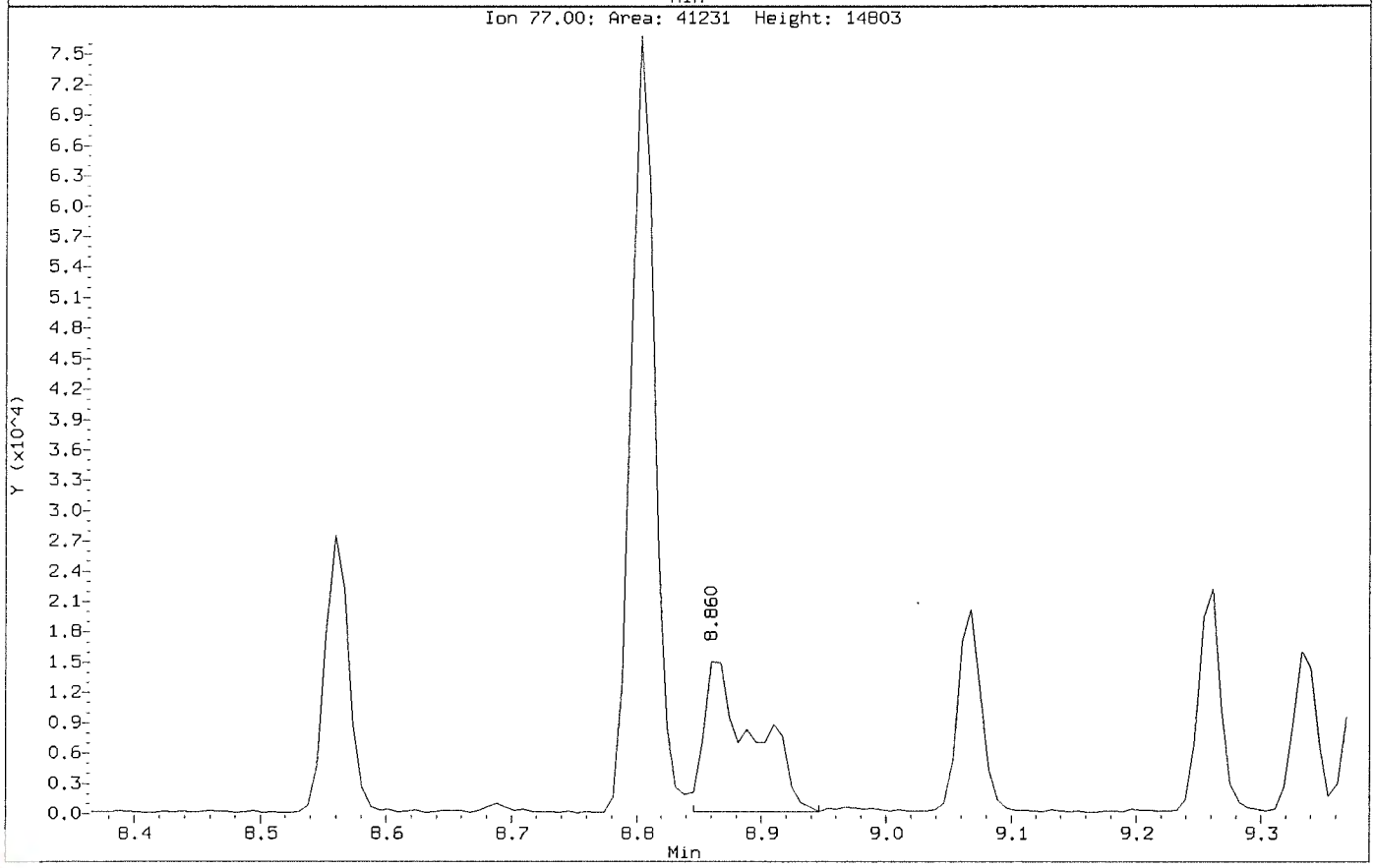
Sample Info: HS21060908-01MS;HS21060908-01MS;3;;MS;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\Before\X062218.D
Injection Date: 22-JUN-2021 16:44
Instrument: voa6.i
Client Sample ID: HS21060908-01MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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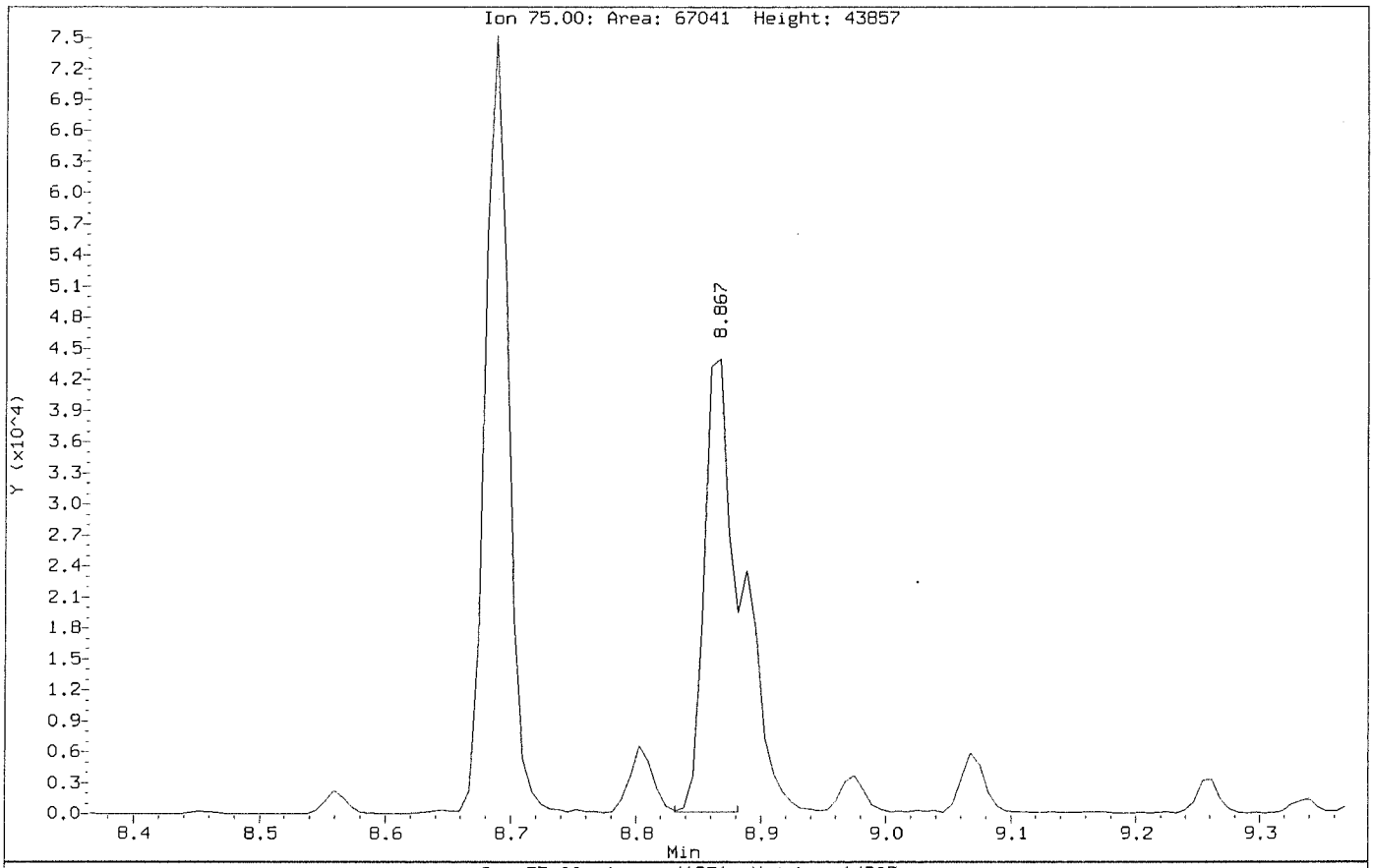
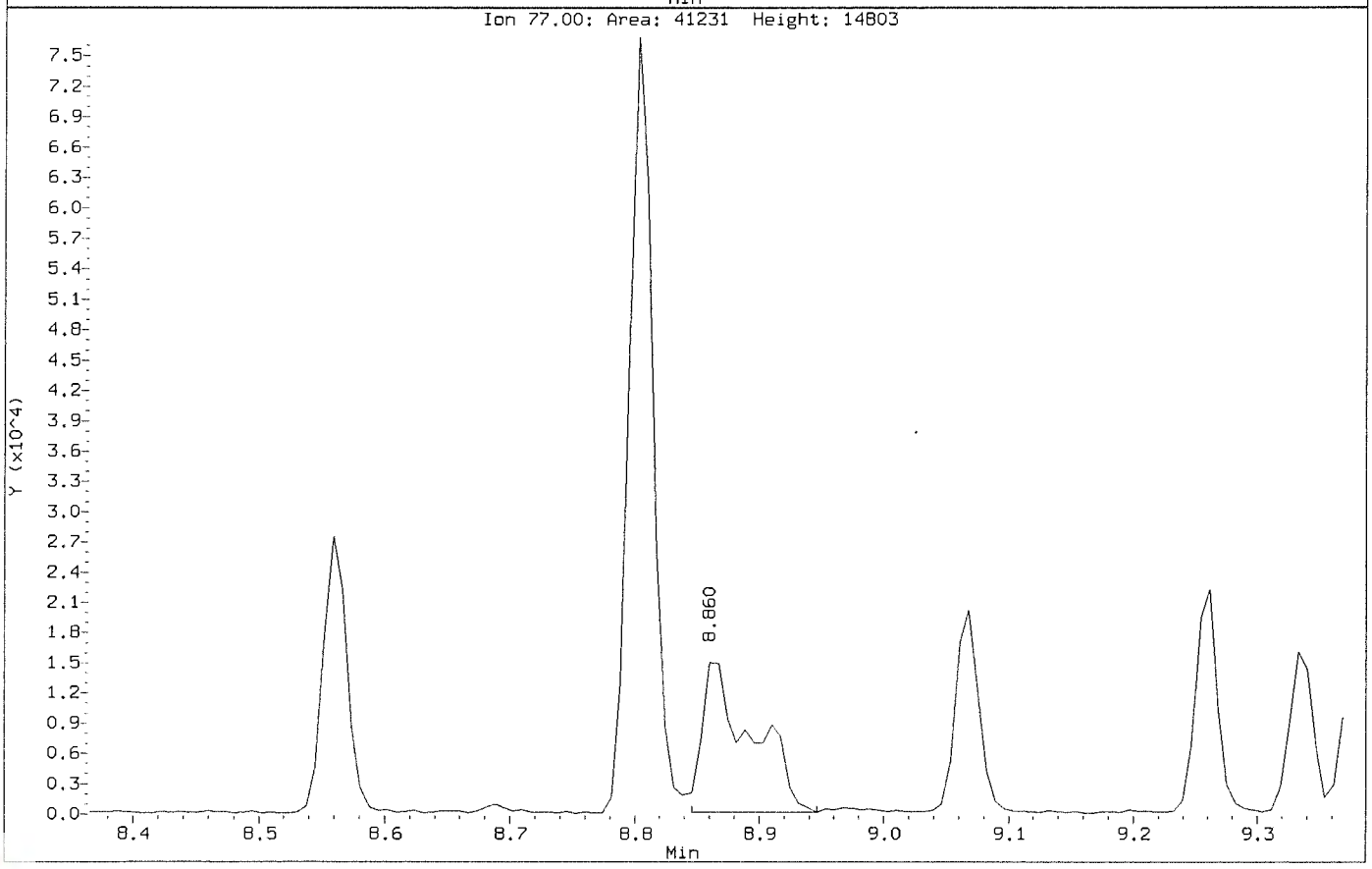
Injection Date: 22-JUN-2021 16:44
Instrument: voa6.i
Client Sample ID: HS21060908-01MS

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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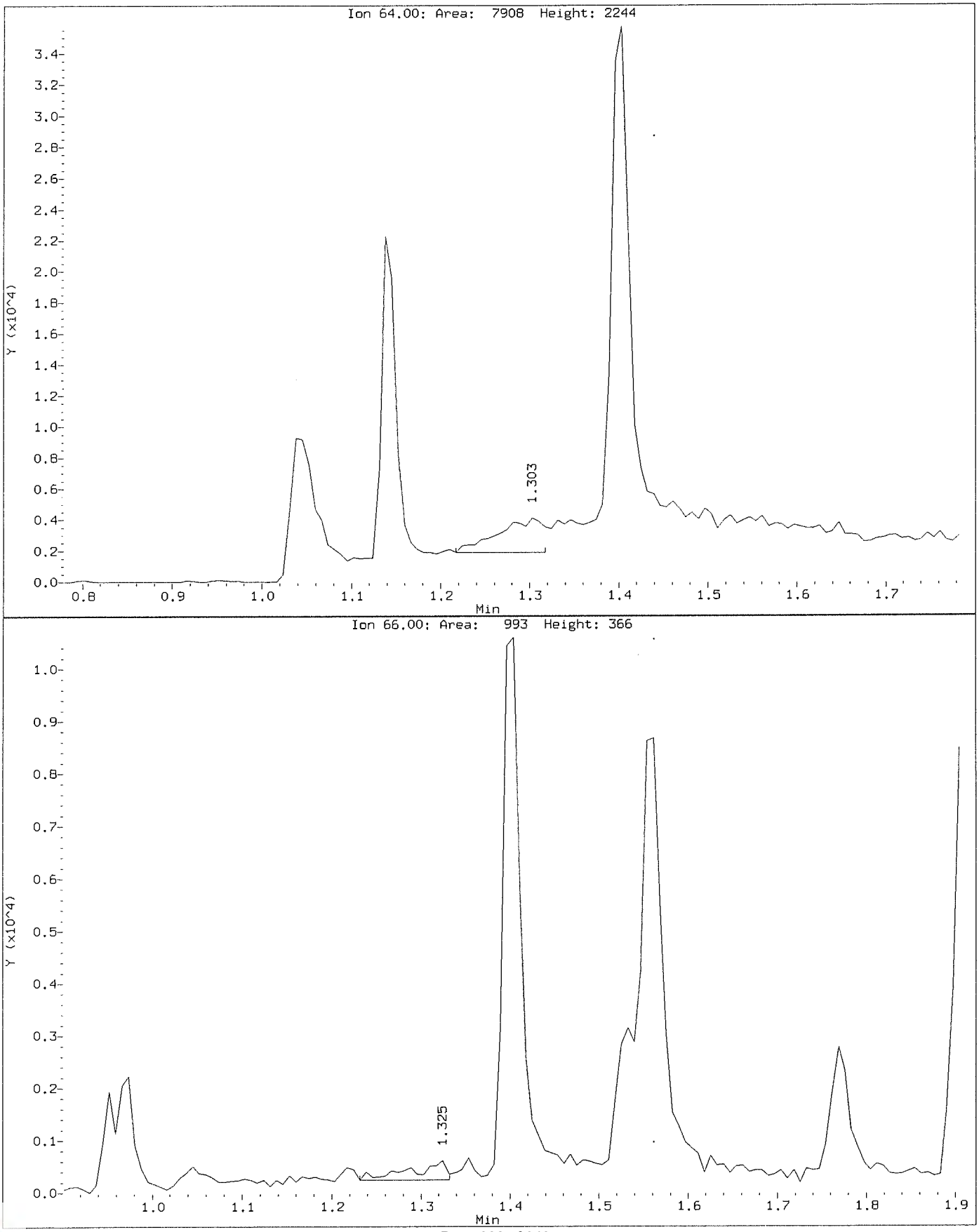
Injection Date: 22-JUN-2021 16:44
Instrument: voa6.i
Client Sample ID: HS21060908-01MS

Compound: Chloroethane
CAS Number: 75-00-3



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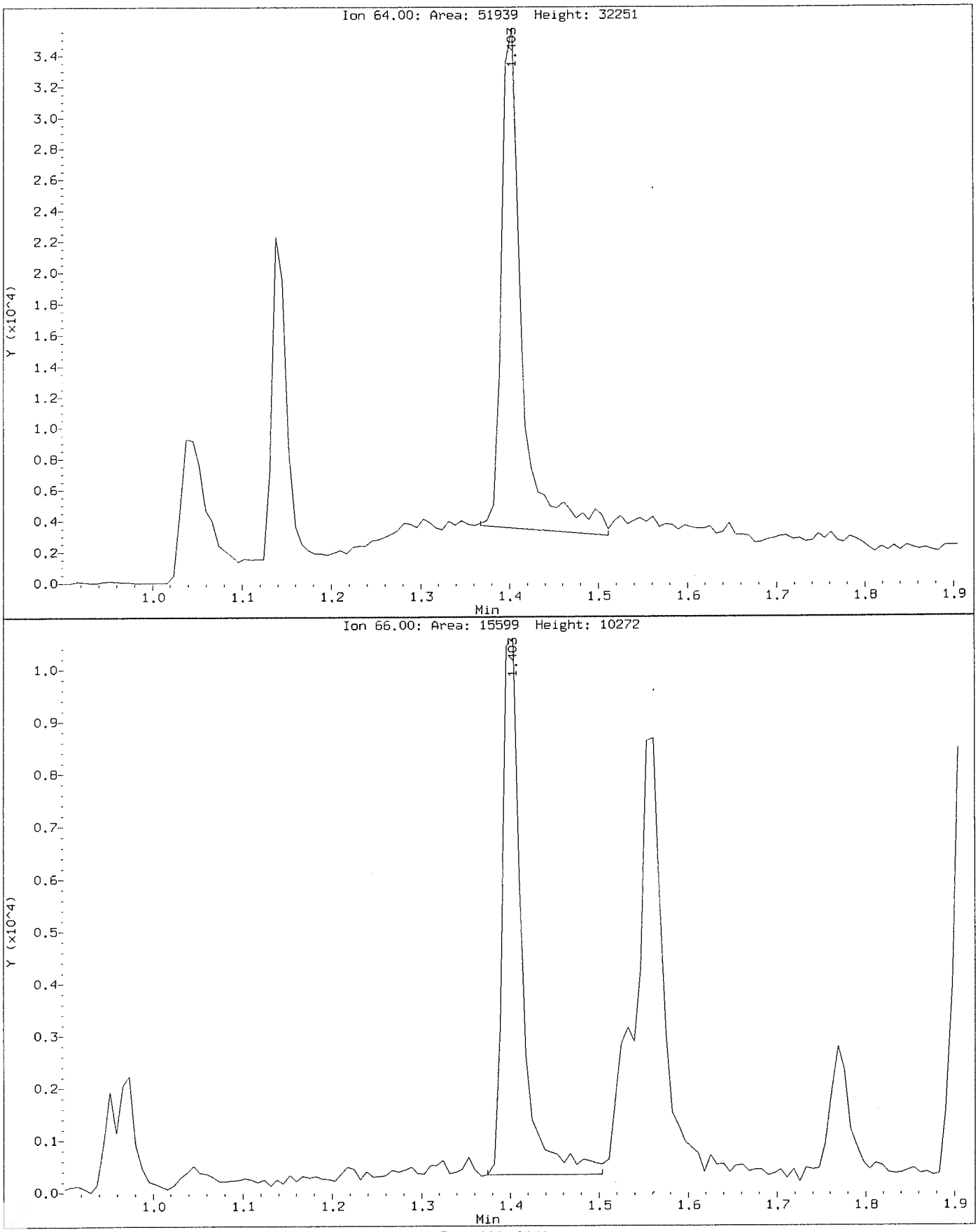
Injection Date: 22-JUN-2021 16:44
Instrument: voa6.i
Client Sample ID: HS21060908-01MS

Compound: Chloroethane
CAS Number: 75-00-3



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Report Date: 27-Aug-2021 08:59

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062219.D
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Inj Date : 22-JUN-2021 17:05
Operator : PC Inst ID: voa6.i
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Misc Info : HS18090001;WATER;0;250;
Comment :
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Meth Date : 27-Aug-2021 08:59 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 18 QC Sample: MSD
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

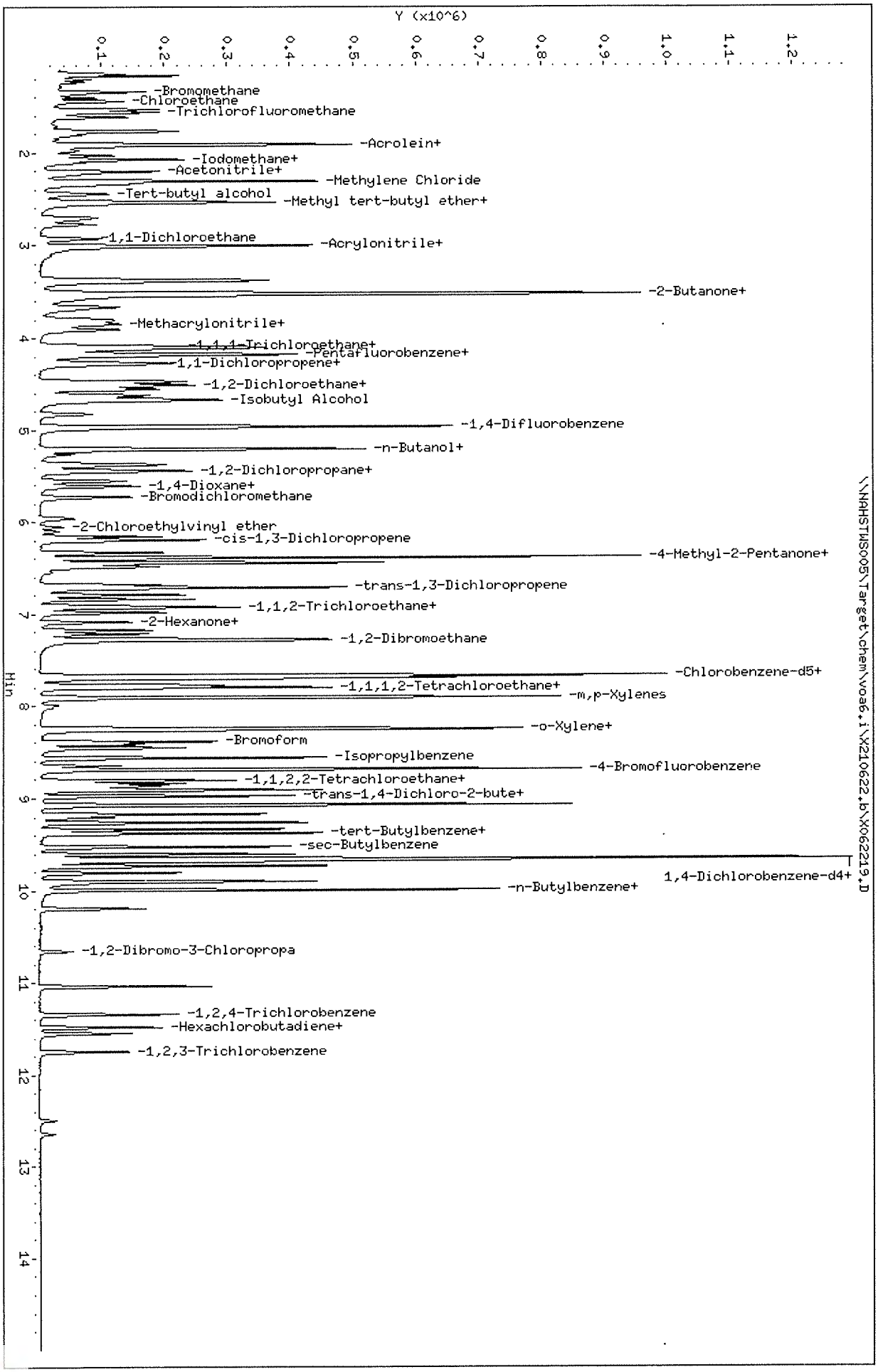
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	369506	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	521111	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.670	(1.000)	491934	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	270747	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	173405	47.6689	47.66
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	183668	52.0633	52.06
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	580316	47.3583	47.35
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	216574	50.1284	50.12
60 1,1,1,2-Tetrachloroethane	131	7.778	7.771	(1.014)	70667	19.4246	4856.16
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	94920	17.3827	4345.67
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	89927	23.4210	5855.25
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	53629	20.1247	5031.17
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	100080	17.1323	4283.08
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	67442	17.7192	4429.81
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	76399	19.1422	4785.54
93 1,2,3-Trichlorobenzene	180	11.746	11.739	(1.216)	47805	29.1664	7291.59
71 1,2,3-Trichloropropane	75	8.867	8.860	(0.918)	70330	20.8351	5208.77(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	67728	25.3015	6325.38
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	213790	17.3125	4328.12
89 1,2-Dibromo-3-Chloropropane	155	10.658	10.657	(1.103)	12195	28.6143	7153.57
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	73203	20.2116	5052.89
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	140346	19.1112	4777.79

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062219.D Page 2
Report Date: 27-Aug-2021 08:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	83604	20.1354	5033.85
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	59368	19.3543	4838.57
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	207871	16.9143	4228.58
83	1,3-Dichlorobenzene	146	9.605	9.604	(0.994)	143402	18.7780	4694.51
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	101735	19.1993	4799.81
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	145358	18.2406	4560.14
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	88303	17.4675	4366.86
24	2-Butanone	43	3.588	3.580	(0.858)	45547	40.5148	10128.70
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	180246	17.7864	4446.59
52	2-Hexanone	43	7.090	7.083	(0.924)	81393	44.5407	11135.16
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	206557	17.1156	4278.89
82	p-Isopropyltoluene	119	9.648	9.647	(0.999)	206975	16.5331	4133.26
45	4-Methyl-2-Pentanone	43	6.331	6.324	(0.825)	116642	41.1751	10293.76
10	Acetone	43	1.976	1.976	(0.473)	38048	36.7542	9188.53
37	Benzene	78	4.512	4.512	(0.909)	226691	18.9360	4733.99
74	Bromobenzene	156	8.802	8.802	(0.911)	86027	19.1510	4787.73
29	Bromochloromethane	128	3.795	3.795	(0.908)	41829	18.7216	4680.40
39	Bromodichloromethane	83	5.729	5.722	(1.154)	85873	19.1684	4792.09
66	Bromoform	173	8.408	8.408	(1.096)	58409	21.2928	5323.20
6	Bromomethane	94	1.338	1.338	(0.320)	65613	17.2917	4322.93
19	Carbon Disulfide	76	2.069	2.069	(0.495)	286501	31.7416	7935.39
34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	82064	18.9970	4749.24
59	Chlorobenzene	112	7.692	7.692	(1.003)	183395	17.9084	4477.09
7	Chloroethane	64	1.403	1.403	(0.336)	48341	17.7677	4441.92
28	Chloroform	83	3.910	3.910	(0.935)	111701	17.1901	4297.52
3	Chloromethane	50	1.073	1.073	(0.257)	69209	19.1218	4780.43
27	cis-1,2-Dichloroethene	96	3.523	3.530	(0.842)	487816	125.955	31488.86
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	104368	19.7706	4942.65
55	Dibromochloromethane	129	7.176	7.176	(0.936)	81403	20.1049	5026.22
44	Dibromomethane	93	5.550	5.550	(1.118)	47140	20.4495	5112.37
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	62235	18.2021	4550.53
61	Ethylbenzene	106	7.799	7.799	(1.017)	90390	19.1323	4783.07
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	34954	21.9786	5494.66
67	Isopropylbenzene	105	8.559	8.559	(1.116)	255643	17.7096	4427.40
62	m,p-Xylenes	106	7.900	7.907	(1.030)	221147	35.9071	8976.78
17	Methylene Chloride	84	2.305	2.305	(0.551)	174264	52.0590	13014.73
87	n-Butylbenzene	91	9.991	9.991	(1.034)	171959	16.3261	4081.51
73	n-Propylbenzene	91	8.910	8.910	(0.922)	285064	16.8789	4219.73
92	Naphthalene	128	11.546	11.546	(1.195)	111788	28.8927	7223.17
63	o-Xylene	106	8.244	8.243	(1.075)	108387	18.0479	4511.97
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	231598	16.2903	4072.56
64	Styrene	104	8.258	8.258	(1.077)	181635	18.0996	4524.90
78	tert-Butylbenzene	119	9.340	9.332	(0.967)	177754	16.8709	4217.73
56	Tetrachloroethene	164	6.926	6.925	(0.903)	60317	19.9173	4979.32
50	Toluene	91	6.446	6.446	(0.840)	259145	18.0444	4511.10
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	59757	17.3200	4329.99
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	90272	19.8227	4955.67
38	Trichloroethene	130	5.206	5.206	(1.049)	180494	50.4653	12616.33
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	116191	17.4203	4355.06
5	Vinyl Chloride	62	1.138	1.138	(0.272)	76816	17.5624	4390.59

QC Flag Legend

M - Compound response manually integrated.



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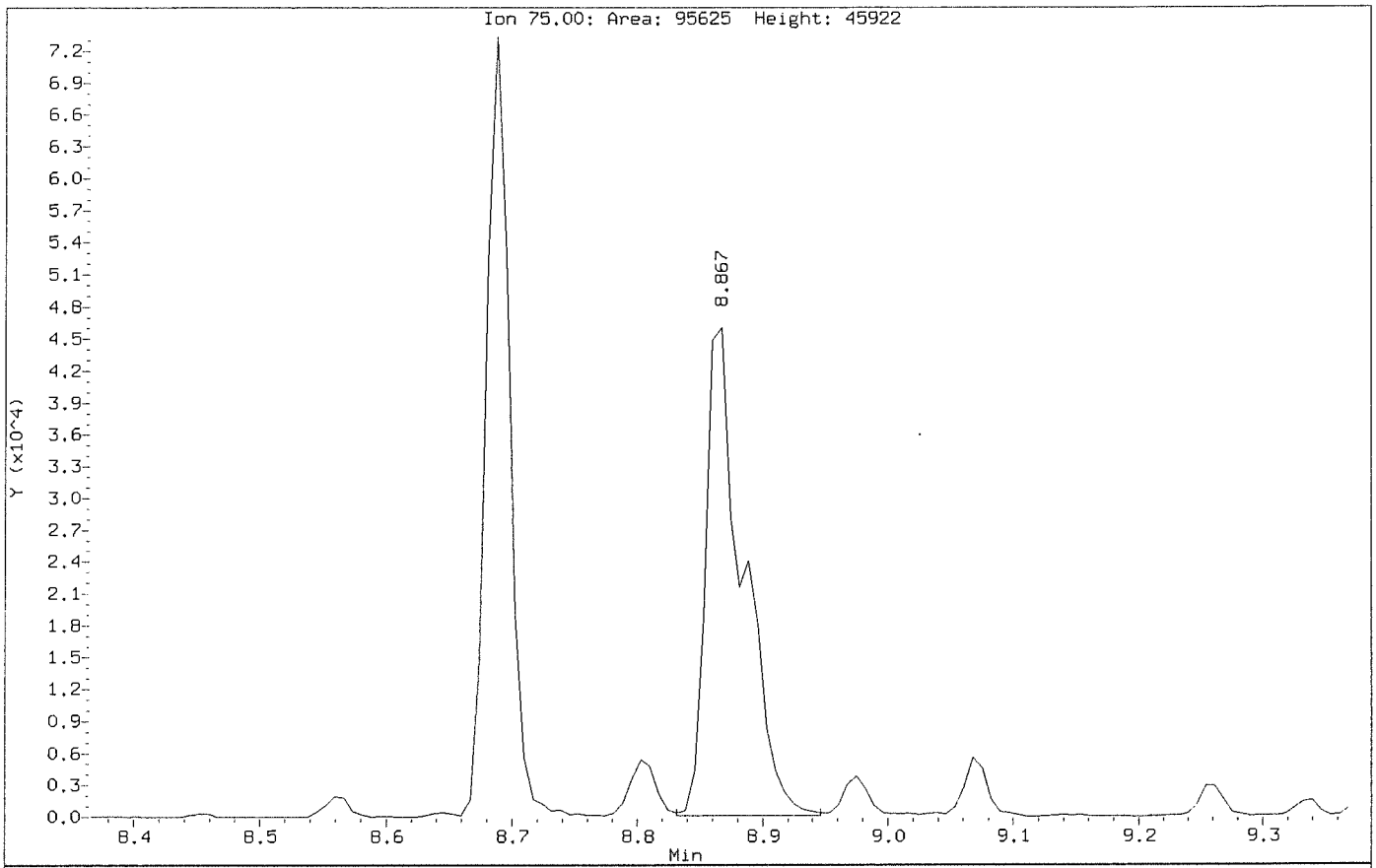
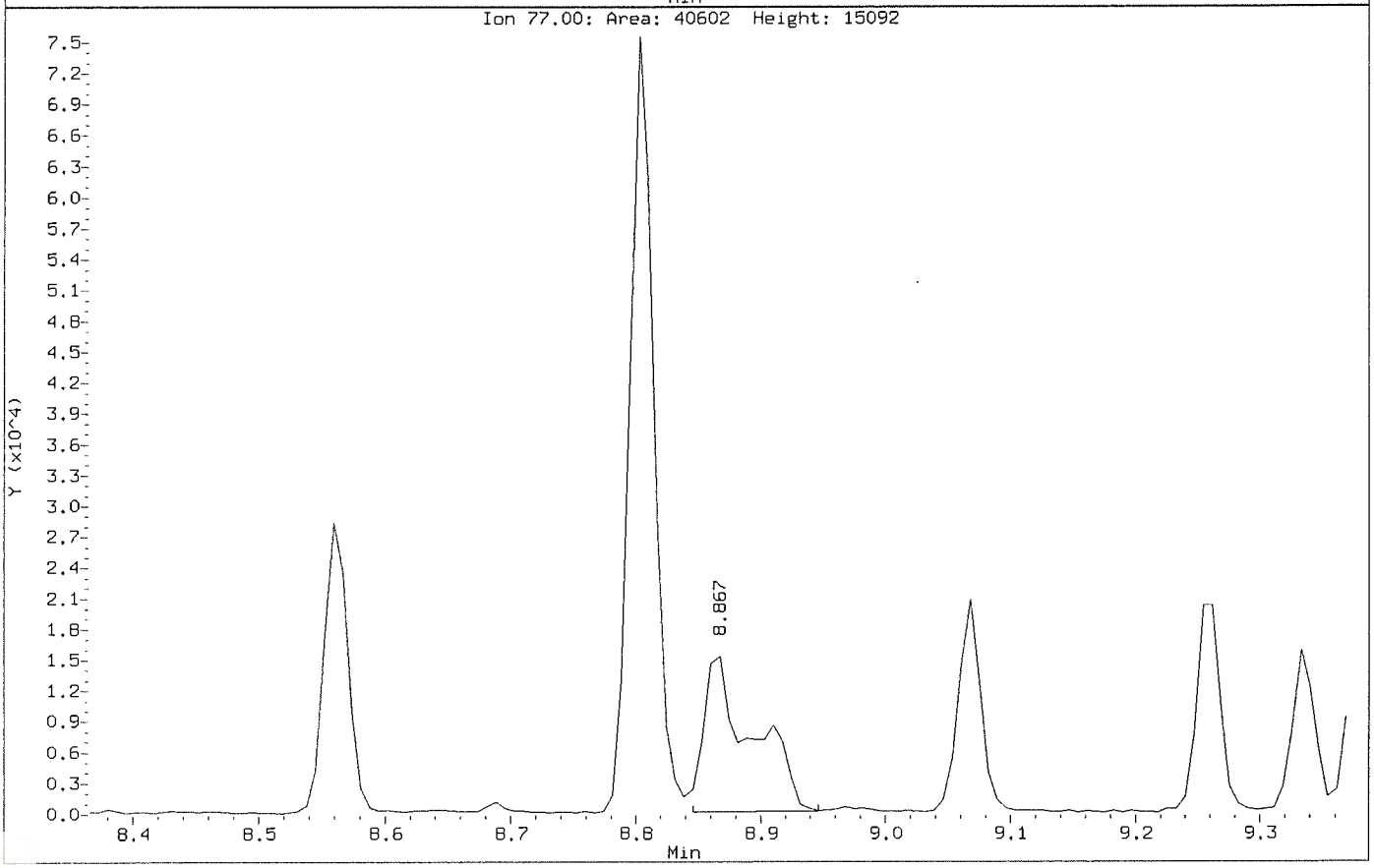
Sample Info: HS21060908-01HSD;HS21060908-01HSD;3;;HSD;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\Before\X062219.D
Injection Date: 22-JUN-2021 17:05
Instrument: voa6.i
Client Sample ID: HS21060908-01MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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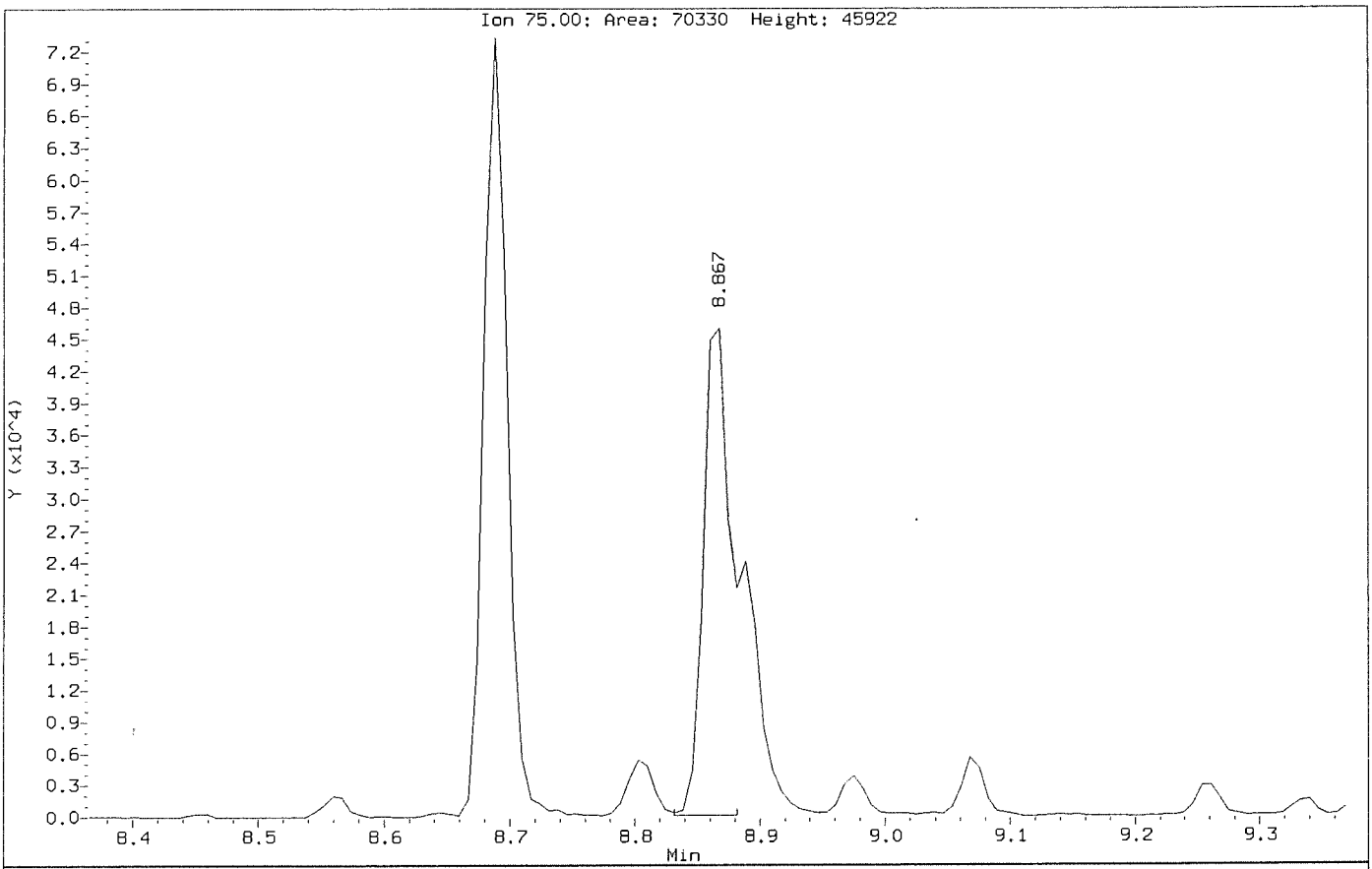
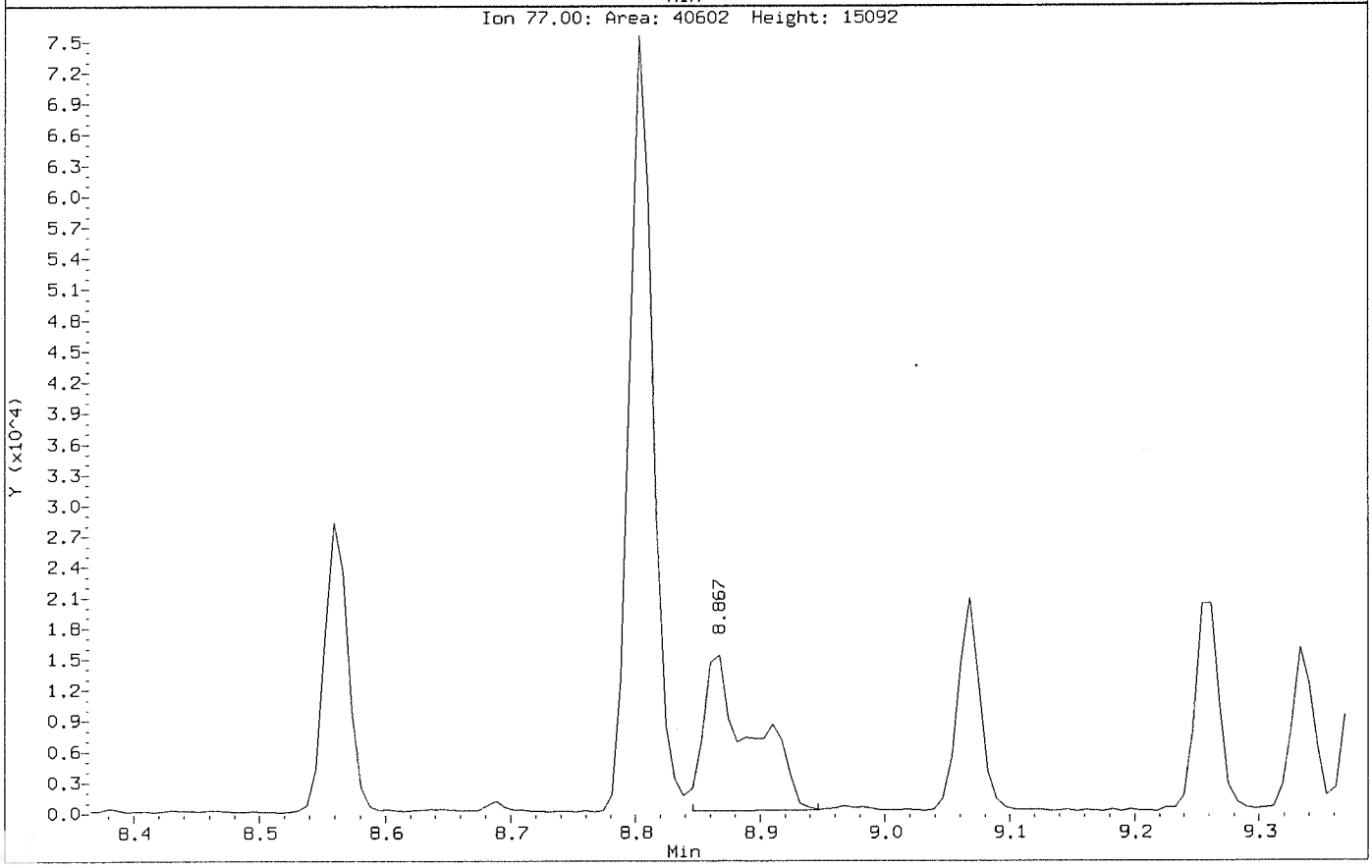
Injection Date: 22-JUN-2021 17:05
Instrument: voa6.i
Client Sample ID: HS21060908-01MSD

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062220.D
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Inj Date : 22-JUN-2021 17:26
Operator : PC Inst ID: voa6.i
Smp Info : HS21060908-05;HS21060908-05;;;
Misc Info : HS18090001;WATER;0;5;
Comment :
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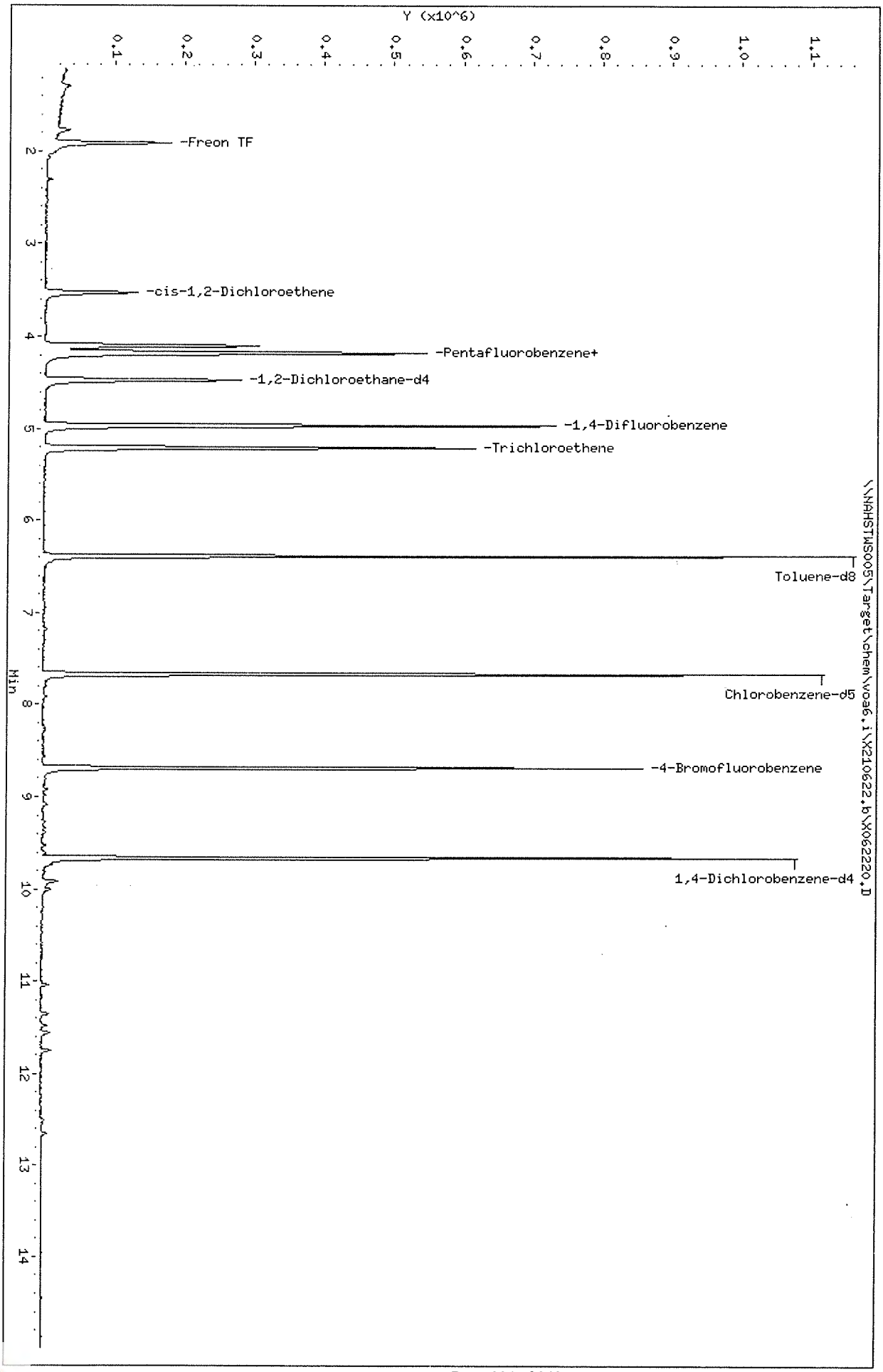
Meth Date : 27-Aug-2021 08:52 Genoveva.R Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 19
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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	4.182	4.182	(1.000)	493136	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	667384	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	560138	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	274735	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.096	(0.981)	216107	44.5031	44.50
$ 35 1,2-Dichloroethane-d4	65	4.476	4.469	(1.070)	217513	46.1215	46.12
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	734398	52.6350	52.63
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	226602	46.1239	46.12
27 cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	71417	13.8171	69.08
38 Trichloroethene	130	5.206	5.206	(1.049)	216948	47.3632	236.81



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Sample Info: HS21060908-05;HS21060908-05;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062220.D

Date : 22-JUN-2021 17:26

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

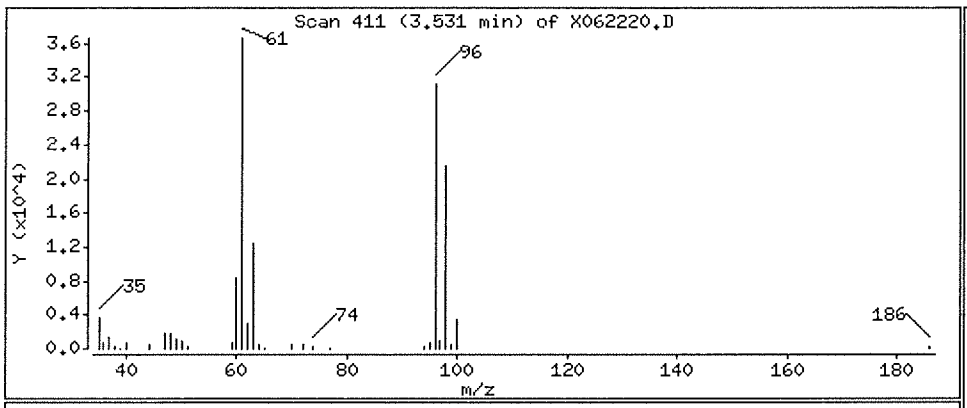
Operator: PC

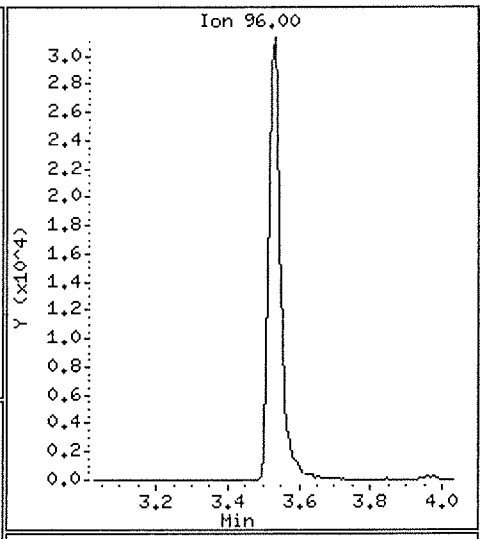
Column phase: DB624

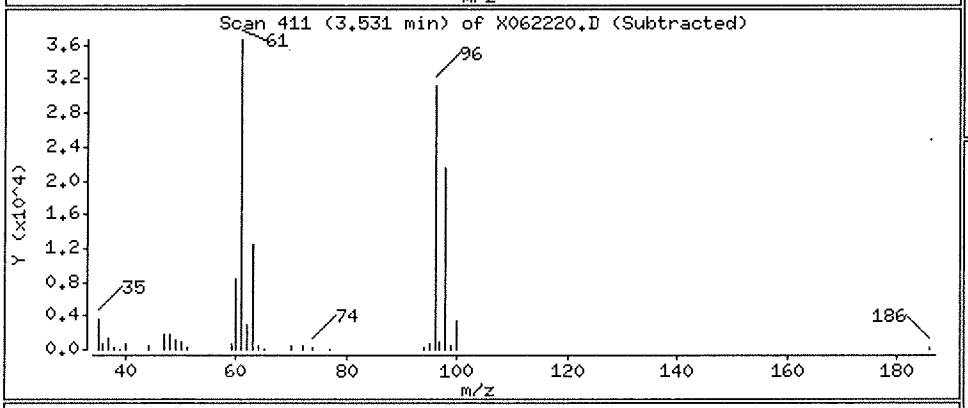
Column diameter: 0.18

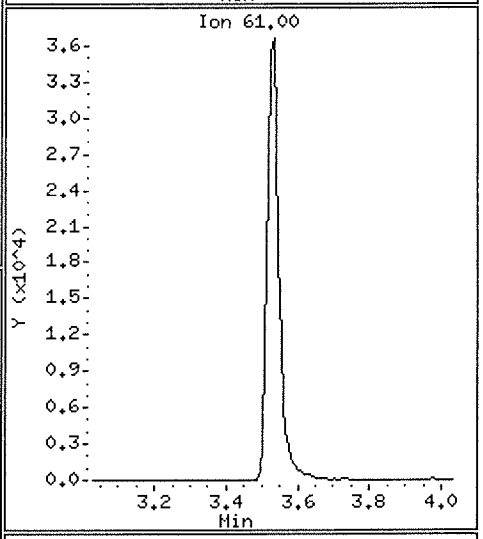
27 cis-1,2-Dichloroethene

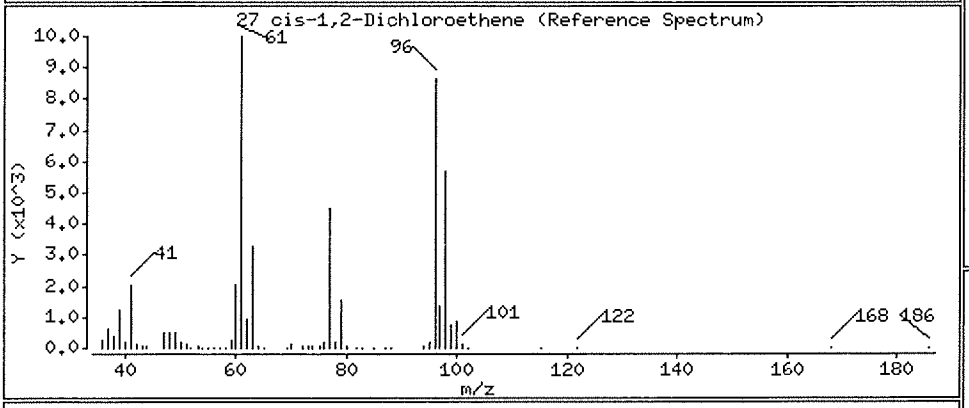
Concentration: 69.08 ug/l

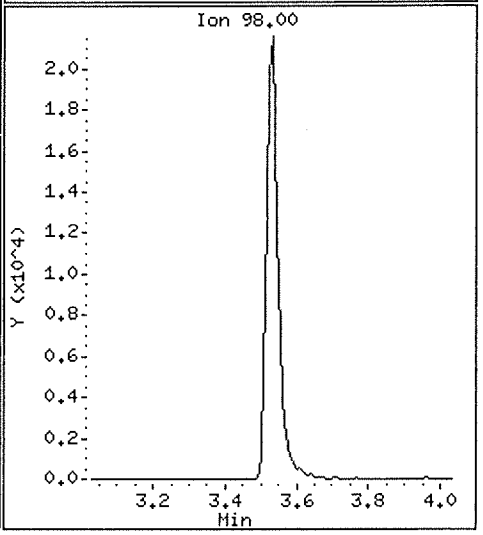


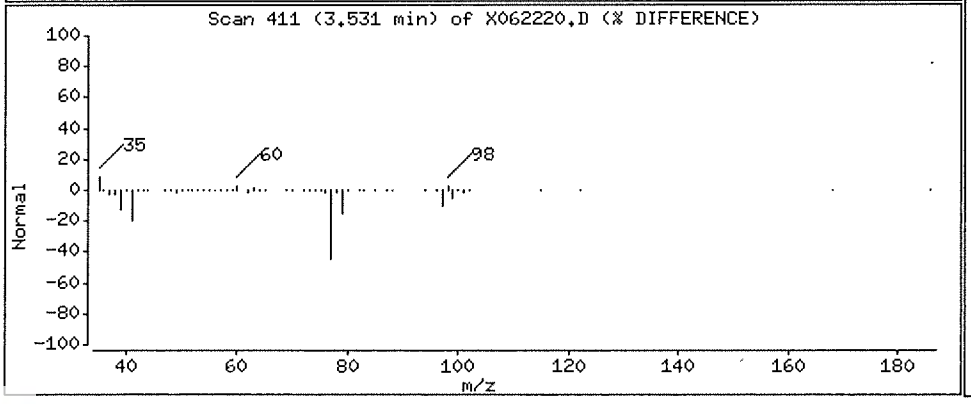












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Date : 22-JUN-2021 17:26

Client ID: HS21060908-05

Instrument: voa6.i

Sample Info: HS21060908-05;HS21060908-05;;;

Purge Volume: 5.0

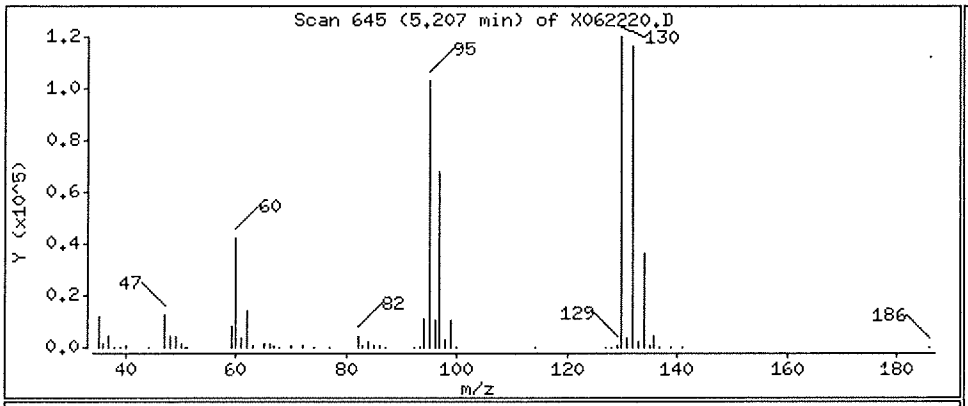
Operator: PC

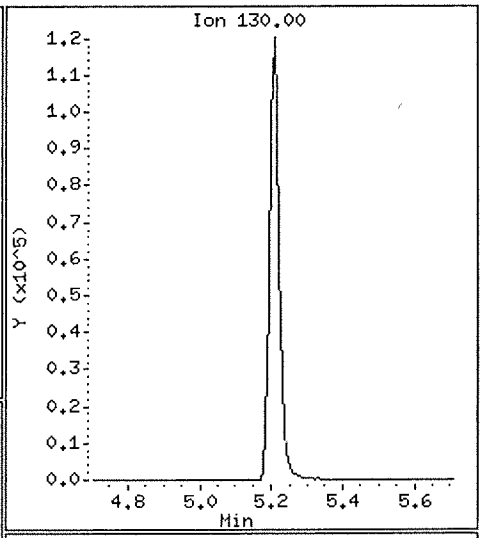
Column phase: DB624

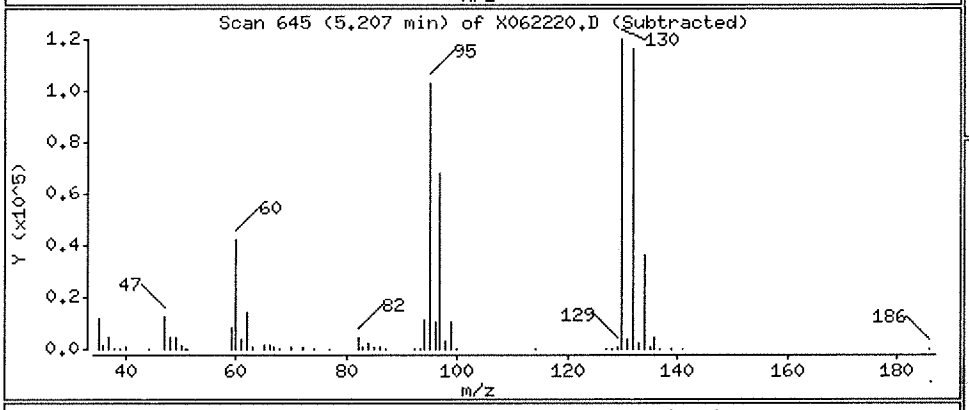
Column diameter: 0.18

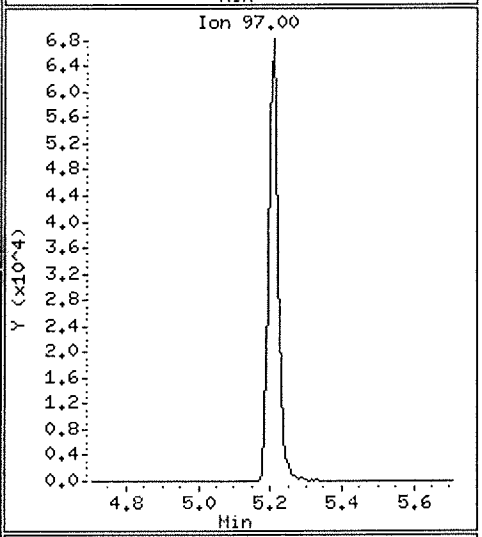
38 Trichloroethene

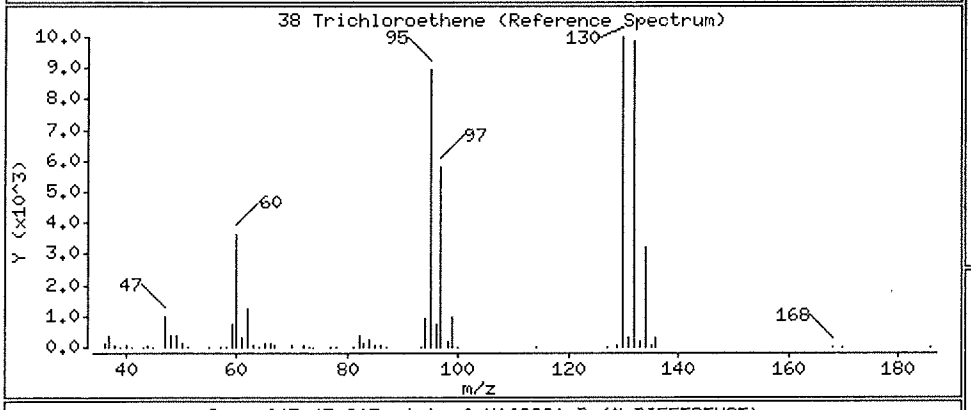
Concentration: 236.81 ug/l

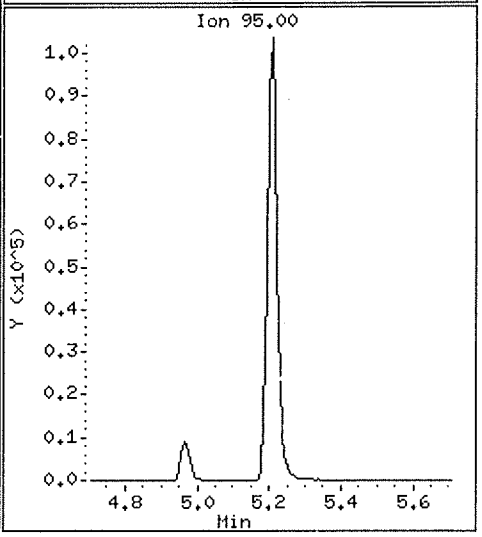


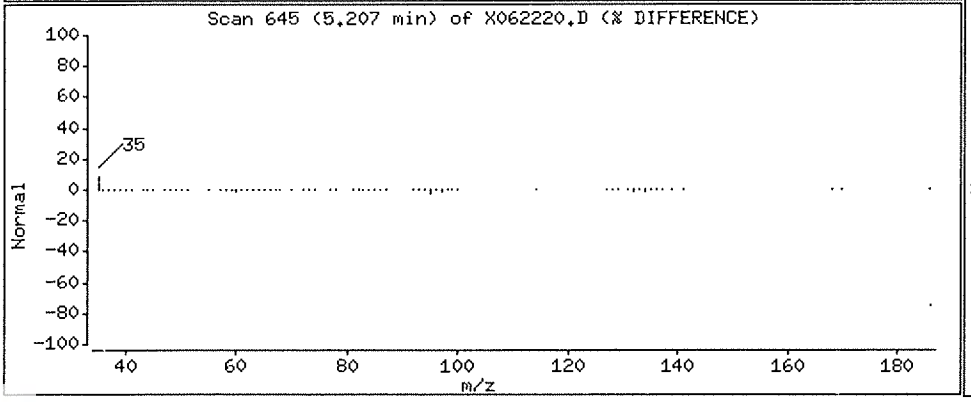












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Report Date: 27-Aug-2021 08:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062232.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 22-JUN-2021 21:38
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : HS18090001;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X210622.b\8260W.m
Meth Date : 27-Aug-2021 08:59 voa6.i Quant Type: ISTD
Cal Date : 26-MAY-2021 15:01 Cal File: X052608.D
Als bottle: 31 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: bhate.sub
Target Version: 4.14
Processing Host: ALSHSW7104

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

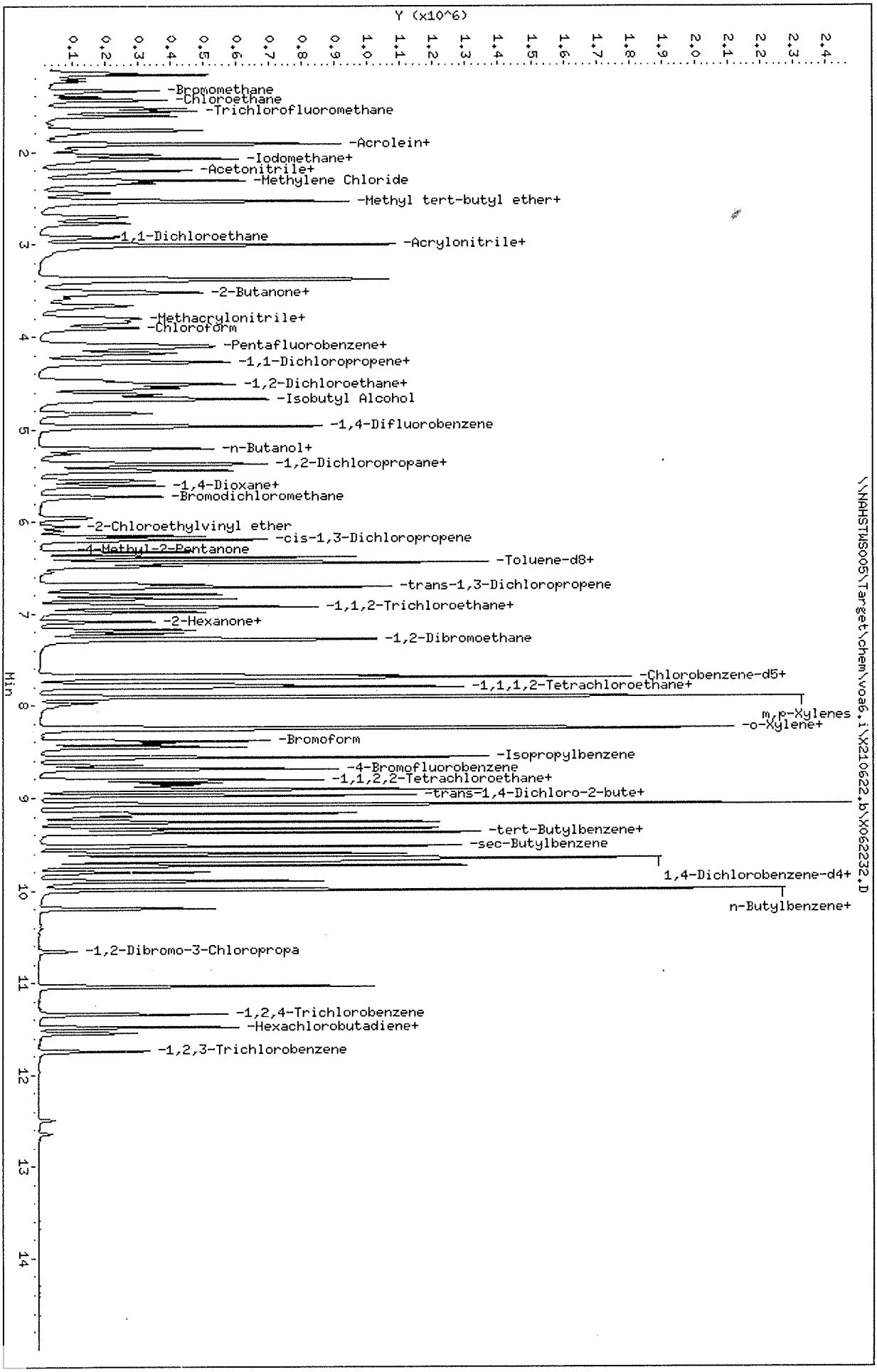
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.182	4.182	(1.000)	365118	50.0000	
* 36 1,4-Difluorobenzene	114	4.963	4.963	(1.000)	521271	50.0000	
* 47 Chlorobenzene-d5	117	7.670	7.670	(1.000)	503846	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	288146	50.0000	
$ 30 Dibromofluoromethane	113	4.096	4.096	(0.979)	170666	50.0000	47.47
$ 35 1,2-Dichloroethane-d4	65	4.469	4.469	(1.069)	172844	50.0000	49.55
$ 48 Toluene-d8	98	6.388	6.388	(0.833)	583723	50.0000	46.51
$ 69 4-Bromofluorobenzene	95	8.688	8.688	(1.133)	228507	50.0000	51.61
60 1,1,1,2-Tetrachloroethane	131	7.771	7.771	(1.013)	189897	50.0000	50.96
31 1,1,1-Trichloroethane	97	4.082	4.082	(0.976)	250760	50.0000	46.47
68 1,1,2,2-Tetrachloroethane	83	8.838	8.838	(0.915)	215930	50.0000	54.34
53 1,1,2-Trichloroethane	83	6.840	6.840	(0.892)	130225	50.0000	47.71
22 1,1-Dichloroethane	63	2.921	2.921	(0.699)	246370	50.0000	42.68
11 1,1-Dichloroethene	96	1.911	1.911	(0.457)	166984	50.0000	44.39
32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	204603	50.0000	51.24
93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	101547	50.0000	58.21(M)
71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	177216	50.0000	49.32(M)
90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.173)	165912	50.0000	58.23
79 1,2,4-Trimethylbenzene	105	9.375	9.375	(0.970)	632083	50.0000	48.09
89 1,2-Dibromo-3-Chloropropane	155	10.657	10.657	(1.103)	25925	50.0000	56.64
57 1,2-Dibromoethane	107	7.262	7.262	(0.947)	180329	50.0000	48.61
88 1,2-Dichlorobenzene	146	9.991	9.991	(1.034)	379608	50.0000	48.57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
33	1,2-Dichloroethane	62	4.555	4.555	(0.918)	206705	50.0000	49.76
42	1,2-Dichloropropane	63	5.436	5.436	(1.095)	148712	50.0000	48.46
75	1,3,5-Trimethylbenzene	105	9.067	9.067	(0.938)	624527	50.0000	47.74
83	1,3-Dichlorobenzene	146	9.605	9.605	(0.994)	392410	50.0000	48.28
54	1,3-Dichloropropane	76	6.983	6.983	(0.910)	257332	50.0000	47.41
84	1,4-Dichlorobenzene	146	9.683	9.683	(1.002)	397523	50.0000	46.87
26	2,2-Dichloropropane	77	3.509	3.509	(0.839)	214716	50.0000	42.98
24	2-Butanone	43	3.580	3.580	(0.856)	101654	100.000	91.50
76	2-Chlorotoluene	91	8.974	8.974	(0.929)	507619	50.0000	47.06
52	2-Hexanone	43	7.090	7.090	(0.924)	185688	100.000	99.21
77	4-Chlorotoluene	91	9.067	9.067	(0.938)	588081	50.0000	45.78
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	662525	50.0000	49.72
45	4-Methyl-2-Pentanone	43	6.324	6.324	(0.824)	267487	100.000	92.19
10	Acetone	43	1.976	1.976	(0.473)	83717	100.000	89.15
37	Benzene	78	4.512	4.512	(0.909)	580075	50.0000	48.44
74	Bromobenzene	156	8.802	8.802	(0.911)	235602	50.0000	49.28
29	Bromochloromethane	128	3.795	3.795	(0.908)	100258	50.0000	45.41
39	Bromodichloromethane	83	5.729	5.729	(1.154)	217481	50.0000	48.53
66	Bromoform	173	8.408	8.408	(1.096)	150361	50.0000	53.51
6	Bromomethane	94	1.338	1.338	(0.320)	159204	50.0000	42.23
19	Carbon Disulfide	76	2.069	2.069	(0.495)	726377	100.000	81.44
34	Carbon Tetrachloride	117	4.261	4.261	(0.859)	229263	50.0000	53.05
59	Chlorobenzene	112	7.692	7.692	(1.003)	483617	50.0000	46.10
7	Chloroethane	64	1.403	1.403	(0.336)	126820	50.0000	49.51
28	Chloroform	83	3.910	3.910	(0.935)	280585	50.0000	43.69
3	Chloromethane	50	1.073	1.073	(0.257)	156270	50.0000	47.22
27	cis-1,2-Dichloroethene	96	3.530	3.530	(0.844)	168858	50.0000	44.12
46	cis-1,3-Dichloropropene	75	6.152	6.152	(1.240)	259675	50.0000	49.17
55	Dibromochloromethane	129	7.176	7.176	(0.936)	210931	50.0000	50.86
44	Dibromomethane	93	5.550	5.550	(1.118)	113238	50.0000	49.10
2	Dichlorodifluoromethane	85	0.973	0.973	(0.233)	166929	50.0000	49.76
61	Ethylbenzene	106	7.799	7.799	(1.017)	249961	50.0000	51.65
91	Hexachlorobutadiene	225	11.481	11.481	(1.188)	104684	50.0000	58.28
67	Isopropylbenzene	105	8.559	8.559	(1.116)	759928	50.0000	51.39
62	m,p-Xylenes	106	7.907	7.907	(1.031)	628974	100.000	99.71
17	Methylene Chloride	84	2.305	2.305	(0.551)	150933	50.0000	45.46
87	n-Butylbenzene	91	9.991	9.991	(1.034)	564272	50.0000	50.33
73	n-Propylbenzene	91	8.910	8.910	(0.922)	869511	50.0000	48.37
92	Naphthalene	128	11.546	11.546	(1.195)	234517	50.0000	56.95
63	o-Xylene	106	8.244	8.244	(1.075)	298608	50.0000	48.54
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	762666	50.0000	50.40
64	Styrene	104	8.258	8.258	(1.077)	509579	50.0000	49.57
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	553360	50.0000	49.34
56	Tetrachloroethene	164	6.926	6.926	(0.903)	168874	50.0000	54.44
50	Toluene	91	6.446	6.446	(0.840)	682388	50.0000	46.39
20	trans-1,2-Dichloroethene	96	2.527	2.527	(0.604)	148995	50.0000	43.70
51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	230484	50.0000	50.59
38	Trichloroethene	130	5.206	5.206	(1.049)	189663	50.0000	53.01
8	Trichlorofluoromethane	101	1.560	1.560	(0.373)	308750	50.0000	46.84
5	Vinyl Chloride	62	1.138	1.138	(0.272)	199518	50.0000	46.16

QC Flag Legend

M - Compound response manually integrated.

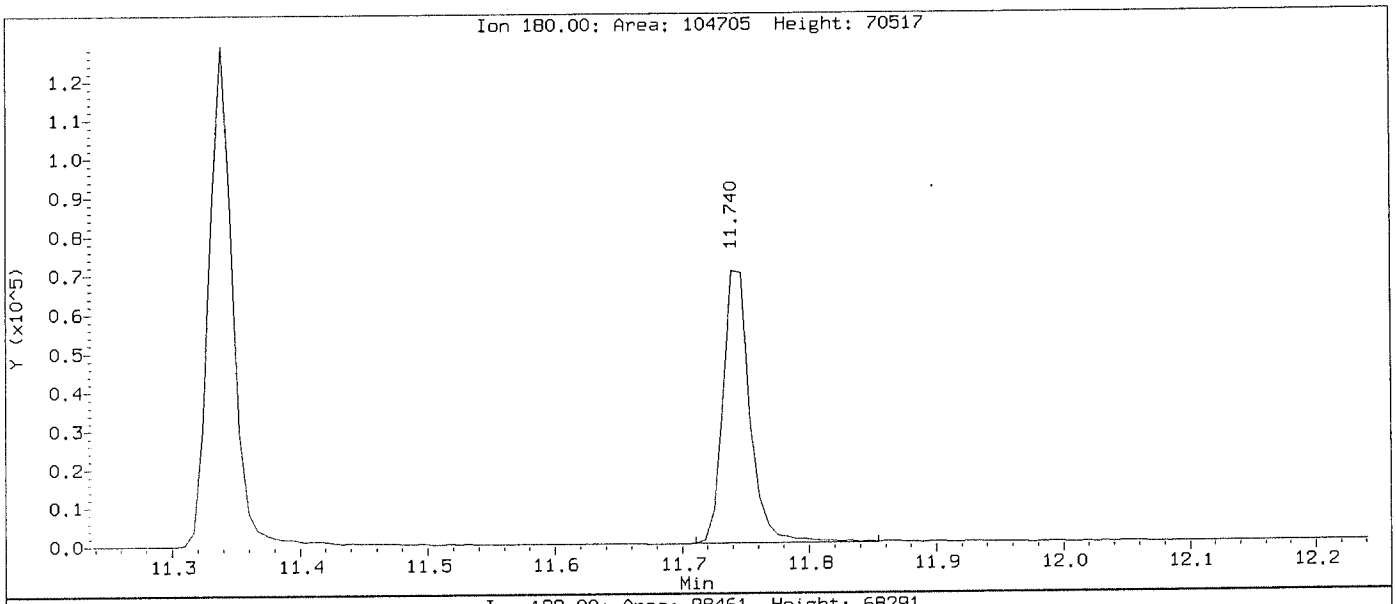


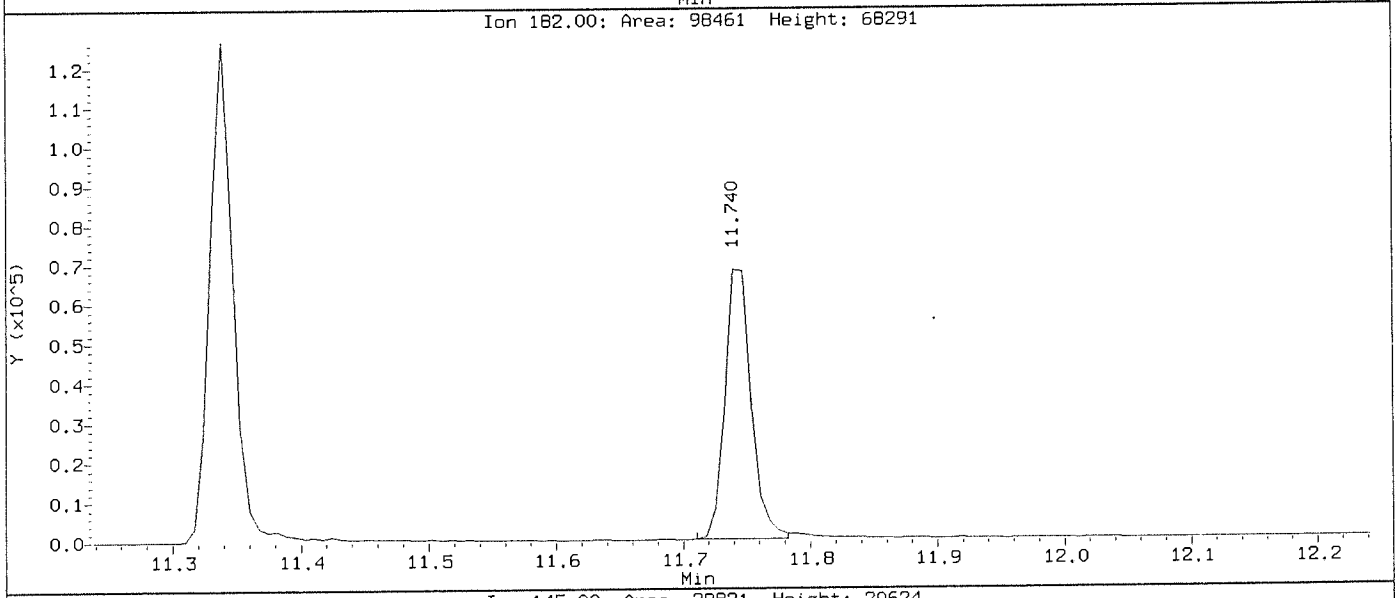
Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\X062232.D
Date : 22-JUN-2021 21:38
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;;
Purge Volume: 5.0
Column phase: DB624

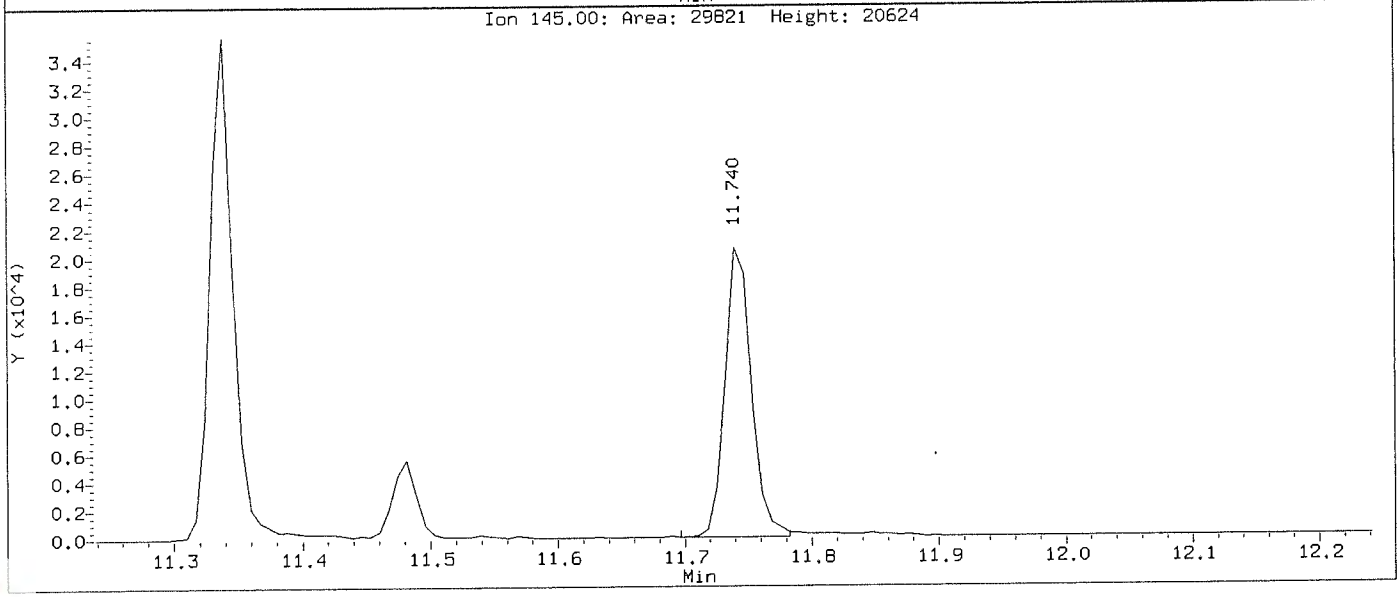
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa6.i\X210622.b\Before\X062232.D
Injection Date: 22-JUN-2021 21:38
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichlorobenzene
CAS Number: 87-61-6







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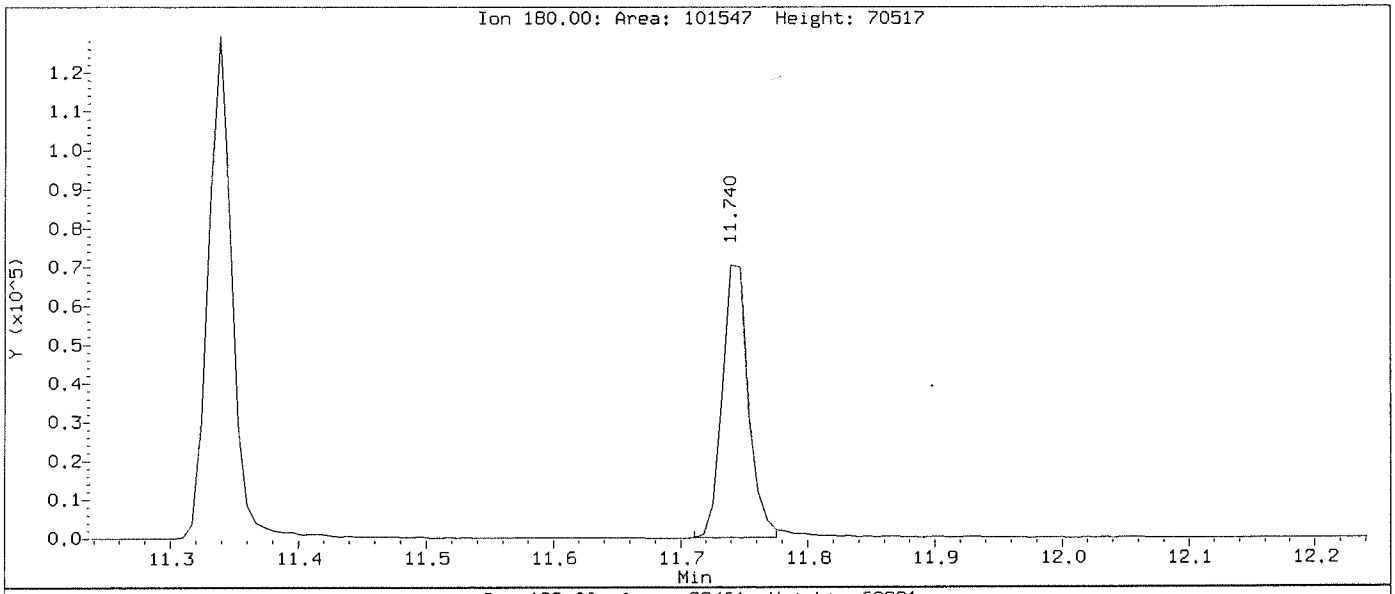
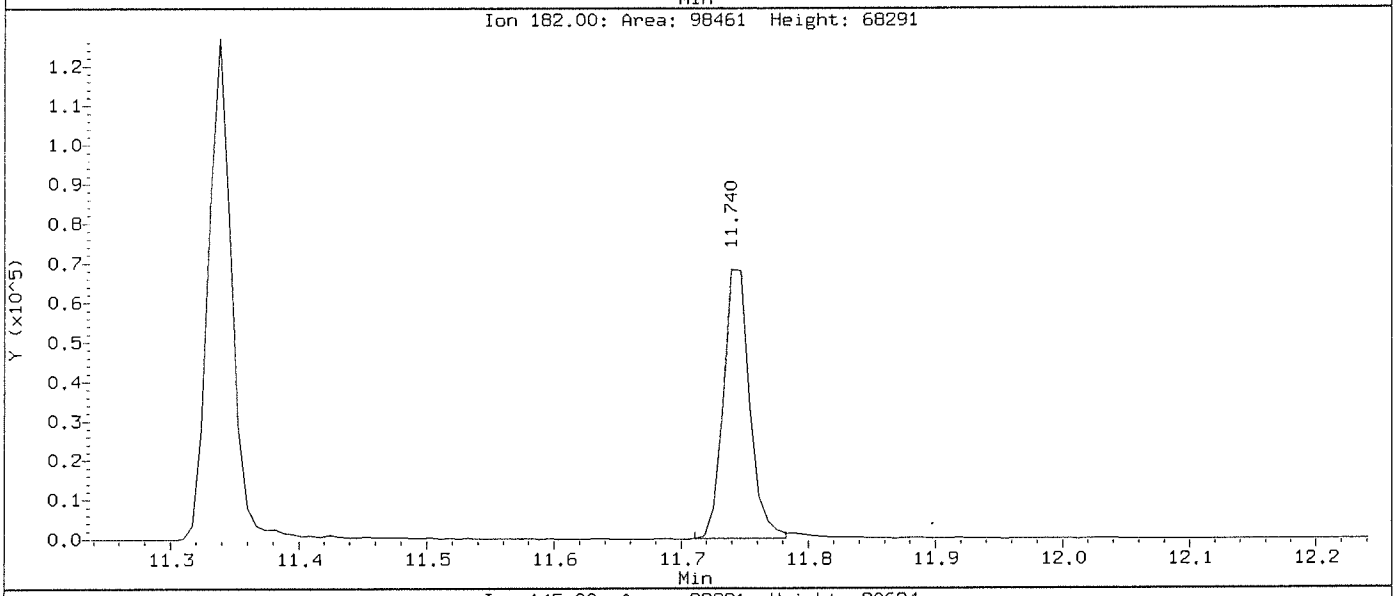
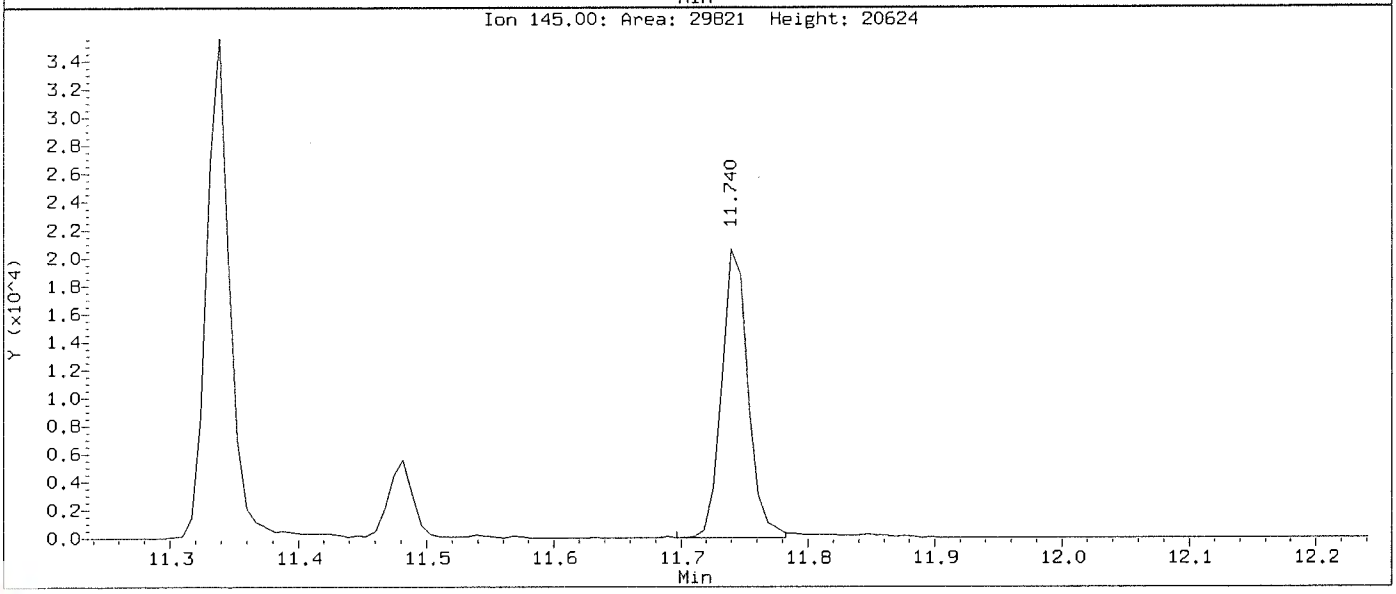
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichlorobenzene
CAS Number: 87-61-6







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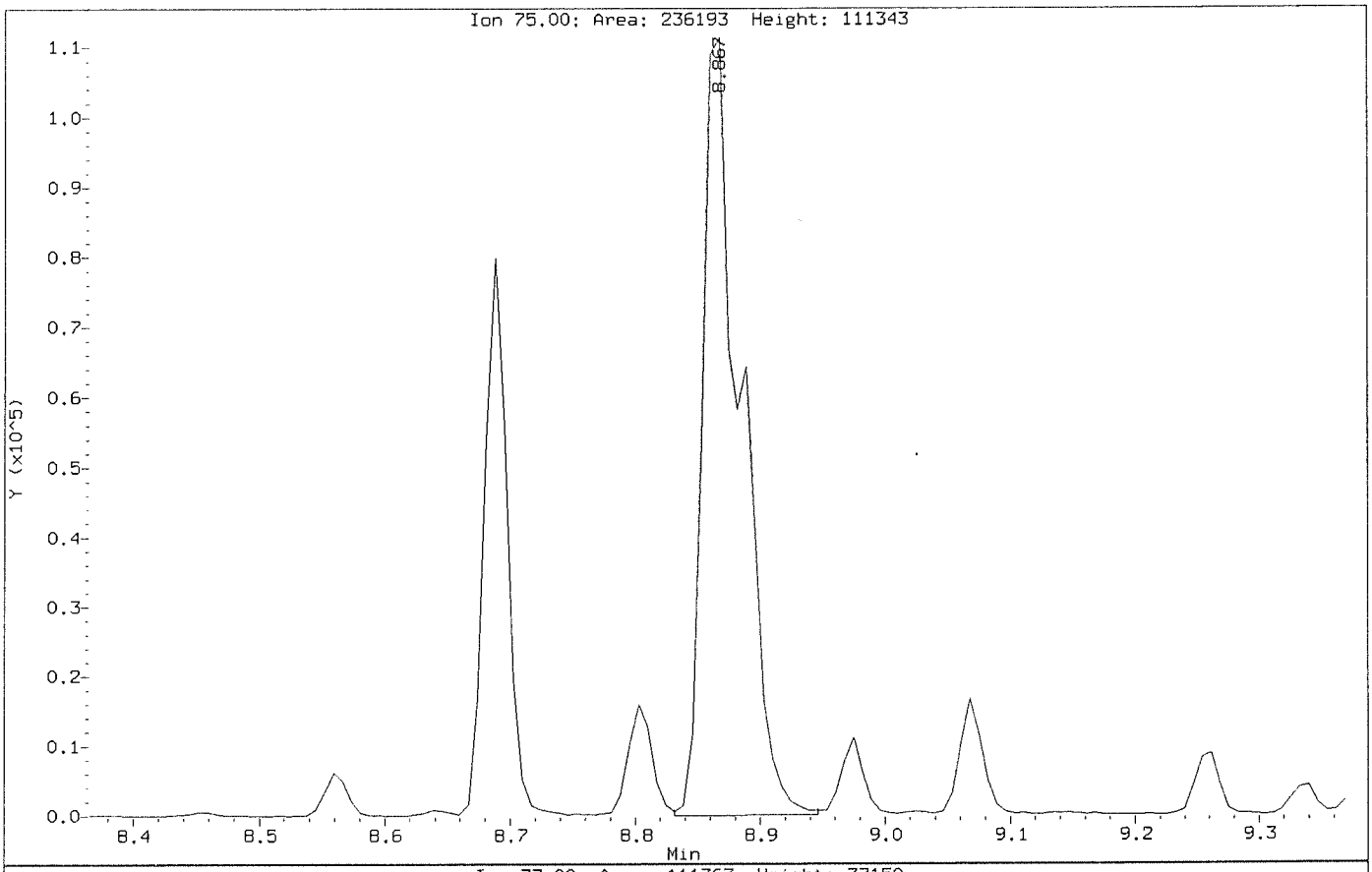
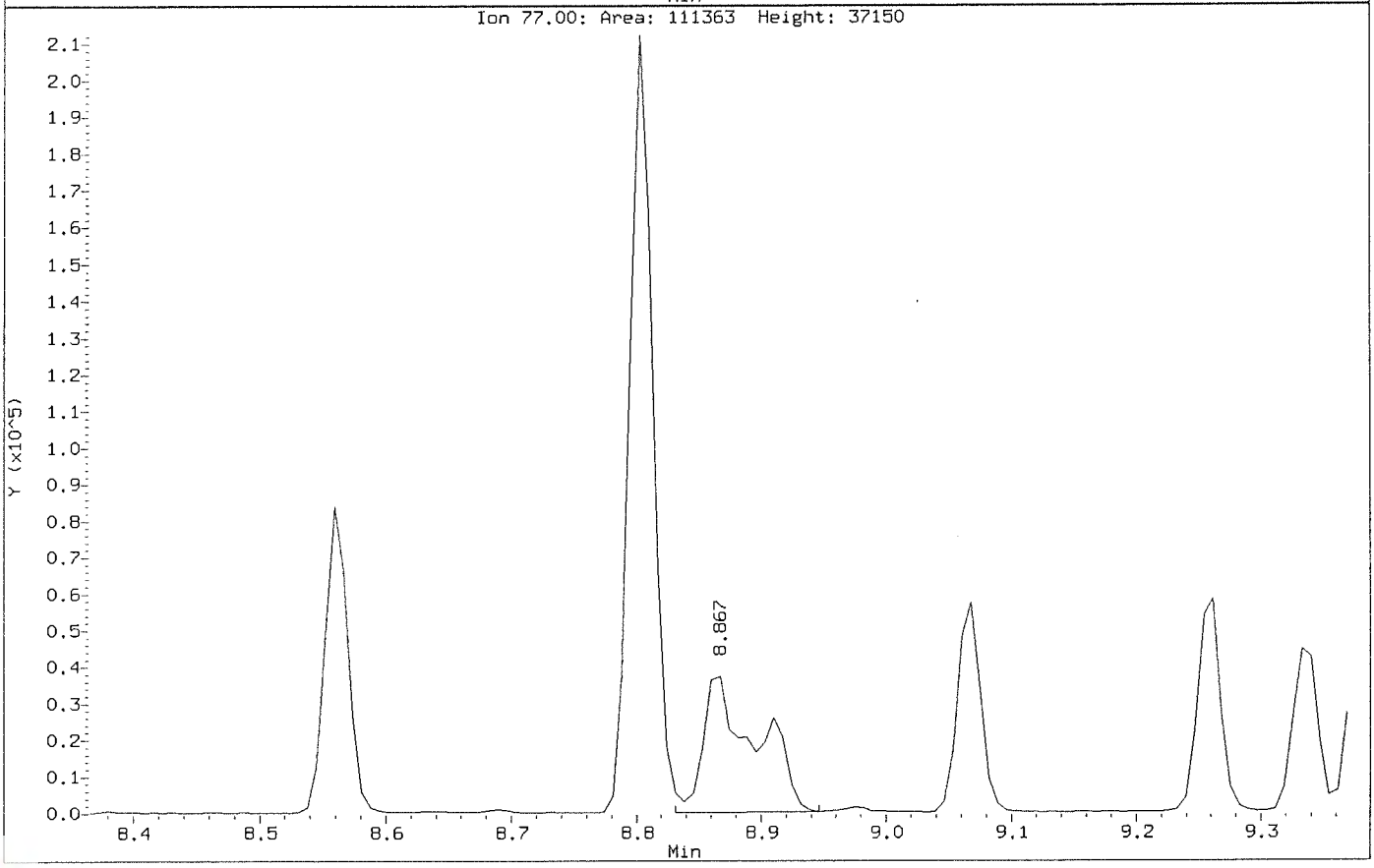
Injection Date: 22-JUN-2021 21:38
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





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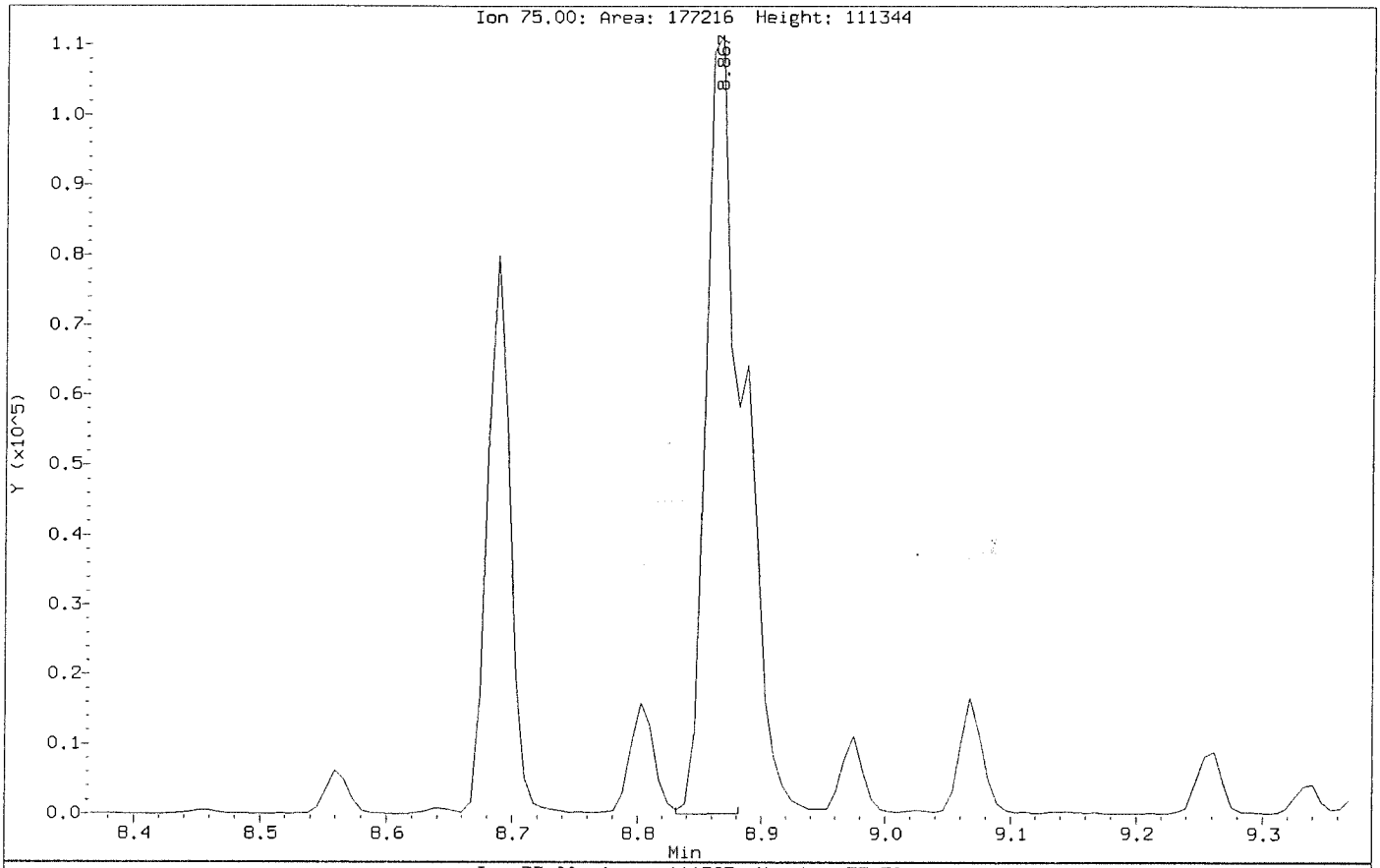
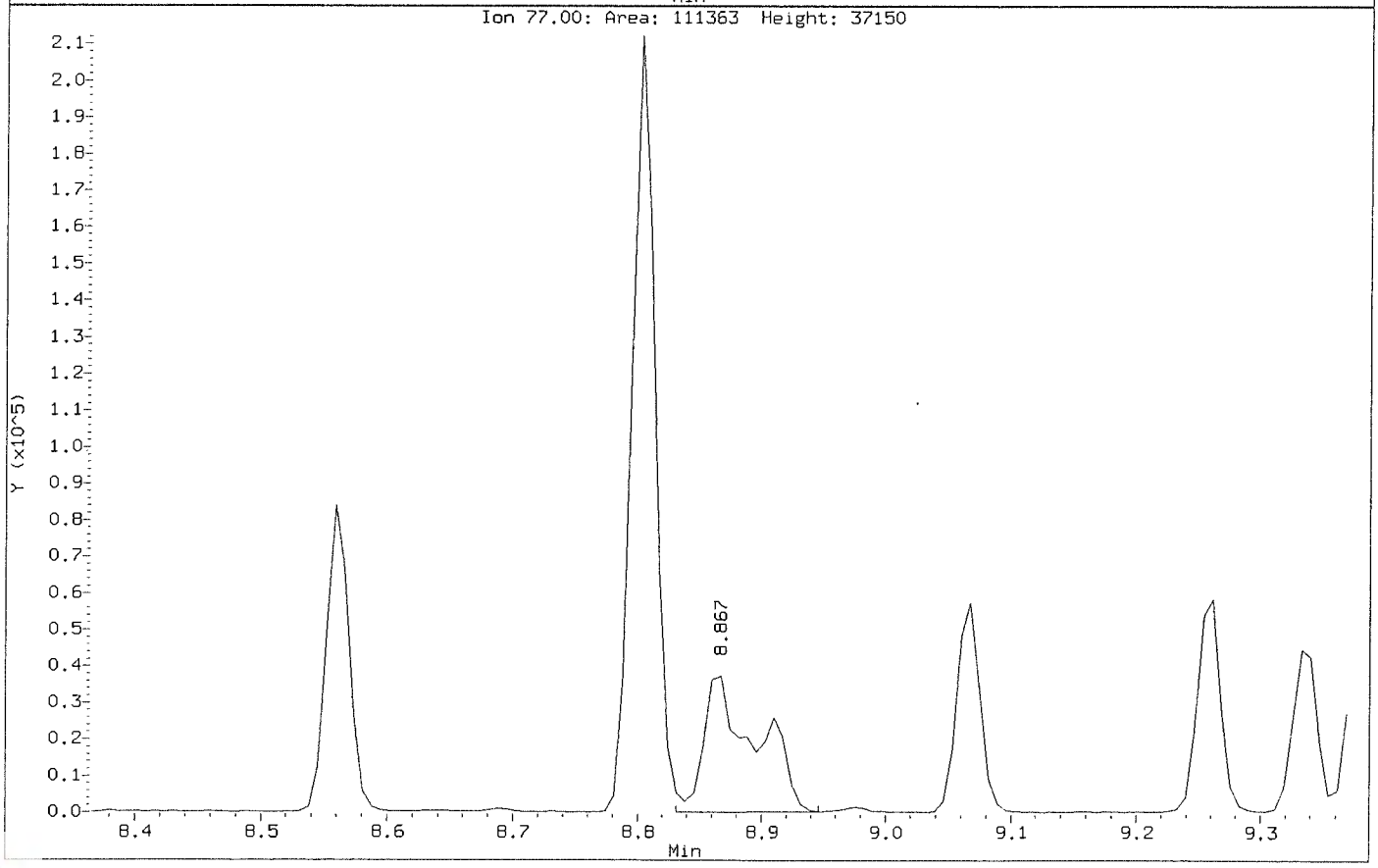
Injection Date: 22-JUN-2021 21:38
Instrument: voa6.i
Client Sample ID: CCV-END

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4





HS21060908 8270 Raw Data

ALS WO# HS21060908

SV06 -Logbook

Batch: 45062
Date: 06-07-2021
Method: 8270DSIM
Comments: MSSV003

Analyst: Andrew Neir
Reviewer:
Laboratory: Houston

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	p
1	DFTPP	TUNE	06-07-2021 10:54 am	1.00			001.D	Liquid	Y	N
2	SLSTD-2.5	SAMP	06-07-2021 11:05 am	1.00			002.D	Liquid	Y	N
3	DXSIM-0.08	SAMP	06-07-2021 11:25 am	1.00			003.D	Liquid	Y	N
4	DXSIM-0.01	SAMP	06-07-2021 11:43 am	1.00			004.D	Liquid	Y	N
5	DXSIM-0.03	SAMP	06-07-2021 12:01 pm	1.00			005.D	Liquid	Y	N
6	DXSIM-0.05	SAMP	06-07-2021 12:19 pm	1.00			006.D	Liquid	Y	N
7	DXSIM-0.1	SAMP	06-07-2021 12:43 pm	1.00			007.D	Liquid	Y	N
8	DXSIM-0.15	SAMP	06-07-2021 01:01 pm	1.00			008.D	Liquid	Y	N
9	DXSIM-0.2	SAMP	06-07-2021 01:19 pm	1.00			009.D	Liquid	Y	N
10	DXSIM-0.5	SAMP	06-07-2021 01:37 pm	1.00			010.D	Liquid	Y	N
11	DXSIM-ICV	SAMP	06-07-2021 01:55 pm	1.00			011.D	Liquid	Y	N

Chemical	Value
IS ID	3141114-01
CAL STD ID	3141106-05/ 3141114-07
DFTPP ID	31411105-05
PCP Tailing	1.19
Benz. Tailing	1.16
Routine SOP Maintenance	ACN

FORM 3
WATER SEMIVOLATILE METHOD SPIKE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Matrix Spike - Sample No.: DXSIM-ICV

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	% REC #	QC. LIMITS REC.
1,4-Dioxane	0.08000	0.08066	101	40-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

_____

FORM III SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID: 001 BFB Injection Date: 06/07/21

Instrument ID: SV6 BFB Injection Time: 1054

GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	19.2
68	Less than 2.0% of mass 69	0.3 (1.6)1
69	Mass 69 relative abundance	21.4
70	Less than 2.0% of mass 69	0.1 (0.5)1
127	10.0 - 80.0% of mass 198	30.8
197	Less than 2.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	28.7
365	1.0 - 100.0% of mass 198	3.8
441	Present, but less than mass 443	17.3
442	50.0 - 150.0% of mass 198	118.6
443	15.0 - 24.0% of mass 442	23.0 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DXSIM-0.08	DXSIM-0.08	003	06/07/21	1125
02	DXSIM-0.01	DXSIM-0.01	004	06/07/21	1143
03	DXSIM-0.03	DXSIM-0.03	005	06/07/21	1201
04	DXSIM-0.05	DXSIM-0.05	006	06/07/21	1219
05	DXSIM-0.1	DXSIM-0.1	007	06/07/21	1243
06	DXSIM-0.15	DXSIM-0.15	008	06/07/21	1301
07	DXSIM-0.2	DXSIM-0.2	009	06/07/21	1319
08	DXSIM-0.5	DXSIM-0.5	010	06/07/21	1337
09	DXSIM-ICV	DXSIM-ICV	011	06/07/21	1355
10					
11					
12					
13					
14					
15					
16					
17					
18					

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: SV6 Calibration Date(s): 06/07/21 06/07/21

Column: RTX-5SIL MS ID: 0.28 (mm) Calibration Time(s): 1125 1337

LAB FILE ID: RF0.01: 004 RF0.03: 005 RF0.05: 006
RF0.08: 003 RF0.1: 007 RF0.15: 008

COMPOUND	RF0.01	RF0.03	RF0.05	RF0.08	RF0.1	RF0.15
1,4-Dioxane	0.045	0.050	0.050	0.050	0.052	0.050
Nitrobenzene-d5	6821	13323	15816	28048	31308	37770
4-Terphenyl-d14	0.872	0.984	0.900	0.878	0.885	0.882
2-Fluorobiphenyl	1.469	1.506	1.386	1.139	1.282	1.246

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: SV6 Calibration Date(s): 06/07/21 06/07/21

Column: RTX-5SIL MS ID: 0.28 (mm) Calibration Time(s): 1125 1337

LAB FILE ID: RF0.2: 009 RF0.5: 010

COMPOUND	RF0.2	RF0.5
1,4-Dioxane	0.053	0.062
Nitrobenzene-d5	51149	80842
4-Terphenyl-d14	0.916	0.902
2-Fluorobiphenyl	1.279	1.369

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2106090

Instrument ID: SV6 Calibration Date(s): 06/07/21 06/07/21

Column: RTX-5SIL MS ID: 0.28 (mm) Calibration Time(s): 1125 1337

COMPOUND	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MAX %RSD OR R^2
1,4-Dioxane	AVRG		5.153e-002		9.321	20.000
Nitrobenzene-d5	2ORDR	-0.1575236	4.13259107	1.49830062	0.9998634	0.9900000
4-Terphenyl-d14	AVRG		0.90228060		3.988	20.000
2-Fluorobiphenyl	AVRG		1.33461899		9.099	20.000

FORM VI SV

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\001.D

Date : 07-JUN-2021 10:54

Client ID: DFTPP

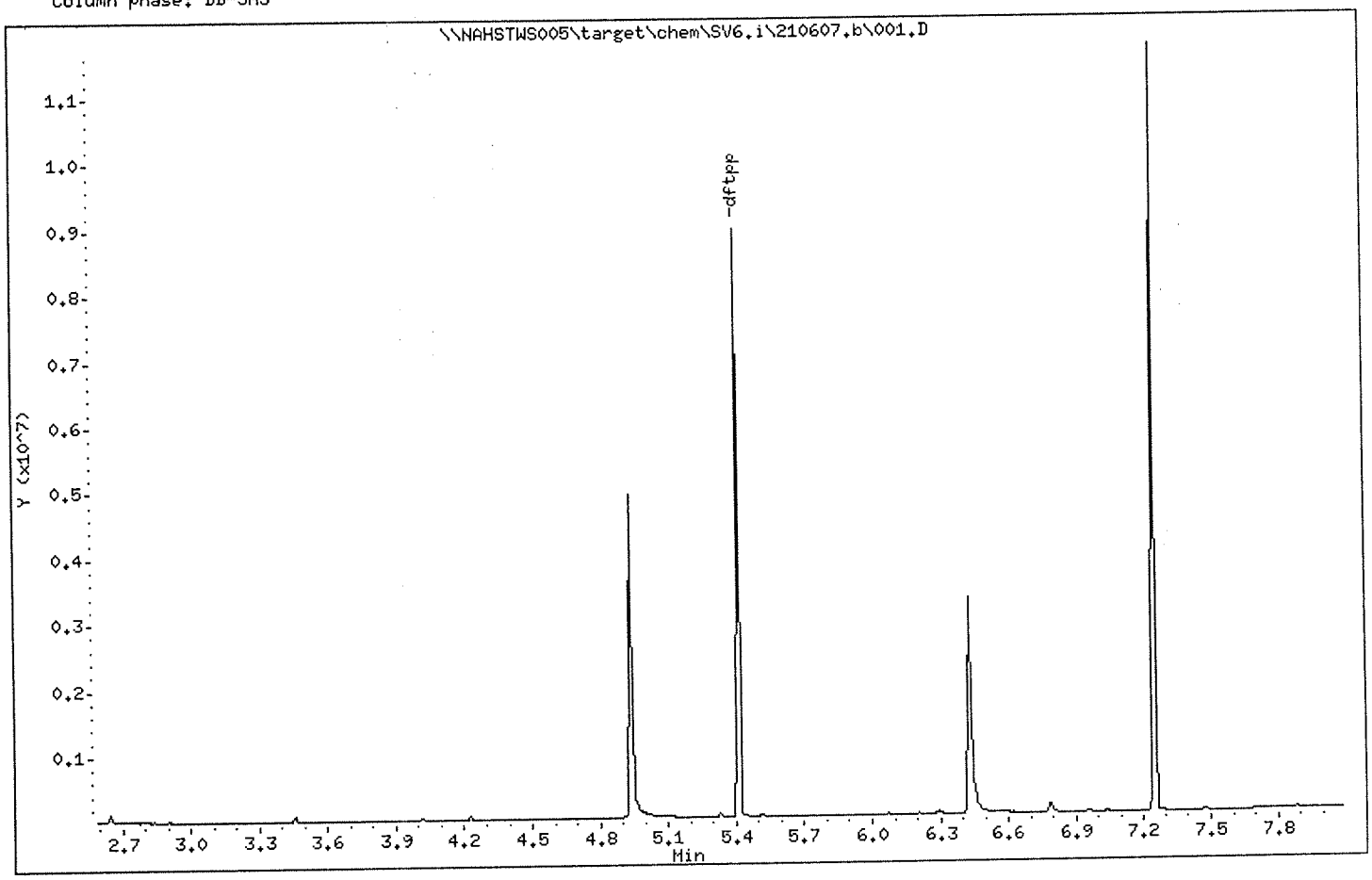
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\001.D

Date : 07-JUN-2021 10:54

Client ID: DFTPP

Instrument: SV6.i

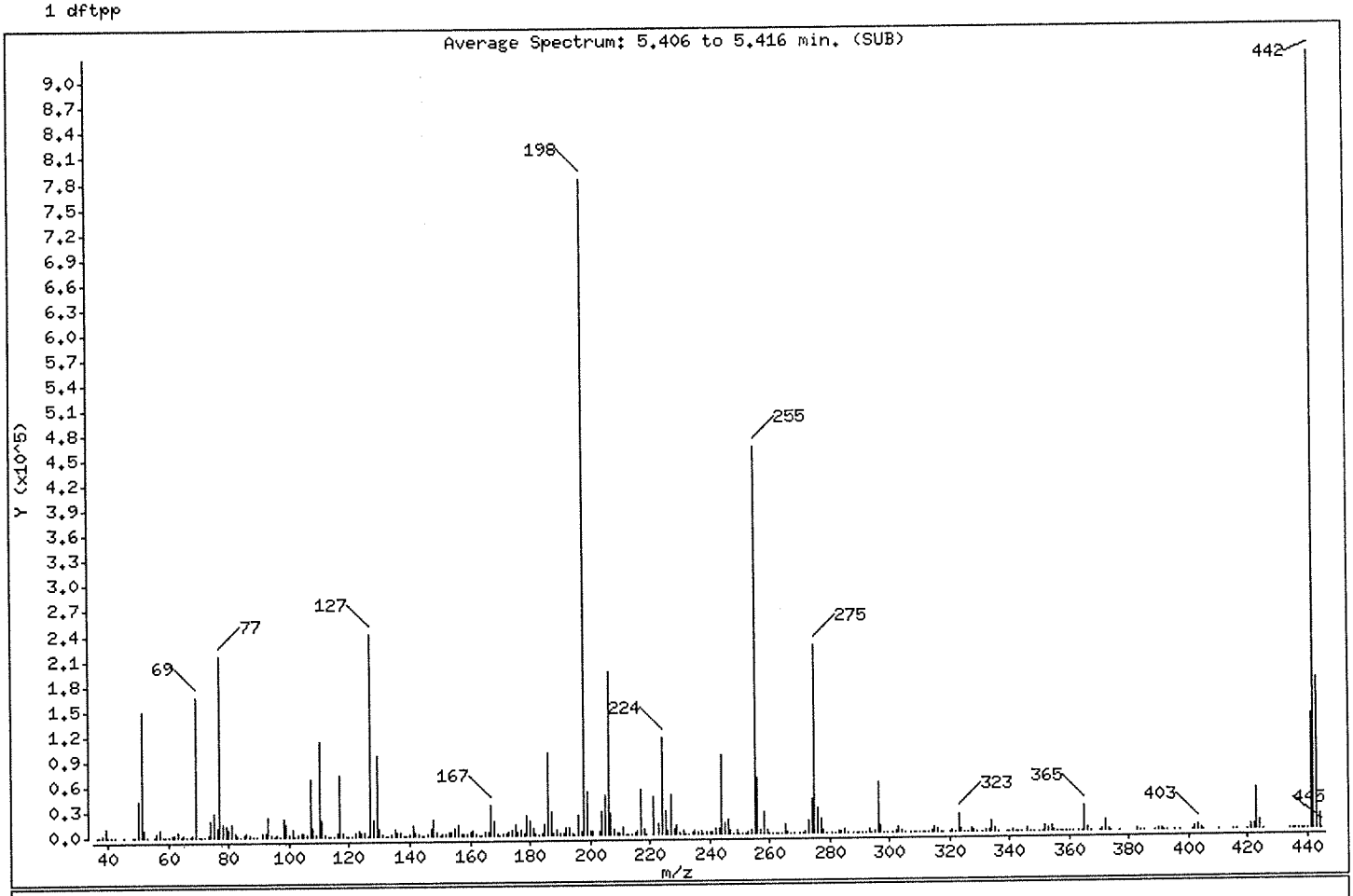
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	19.21
68	Less than 2.00% of mass 69	0.33 (1.57)
69	Mass 69 relative abundance	21.38
70	Less than 2.00% of mass 69	0.11 (0.50)
127	10.00 - 80.00% of mass 198	30.83
197	Less than 2.00% of mass 198	0.61
199	5.00 - 9.00% of mass 198	6.62
275	10.00 - 60.00% of mass 198	28.69
365	1.00 - 100.00% of mass 198	3.80
441	Present, but less than mass 443	17.33
442	50.00 - 150.00% of mass 198	118.56
443	15.00 - 24.00% of mass 442	22.98 (19.39)

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\001.D

Date : 07-JUN-2021 10:54

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D

Spectrum: Average Spectrum: 5.406 to 5.416 min. (SUB)

Location of Maximum: 442.00

Number of points: 353

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	32	131.00	1763	223.00	12579	317.00	584
37.00	737	132.00	831	224.00	115232	318.00	56
38.00	2043	133.00	377	225.00	28600	320.00	252
39.00	11229	134.00	2621	226.00	3248	321.00	1944
40.00	394	135.00	7725	227.00	47104	322.00	1018
41.00	218	136.00	3304	228.00	6479	323.00	21264
42.00	62	137.00	4189	229.00	10050	324.00	3631
45.00	365	138.00	952	230.00	1378	325.00	398
48.00	88	139.00	527	231.00	4009	326.00	436
49.00	864	140.00	1252	232.00	690	327.00	3762
50.00	42224	141.00	13201	233.00	705	328.00	2064
51.00	150336	142.00	4202	234.00	3071	329.00	354
52.00	7492	143.00	3139	235.00	3421	331.00	109
53.00	328	144.00	923	236.00	2568	332.00	1426
55.00	566	145.00	797	237.00	3623	333.00	1949
56.00	4165	146.00	2632	238.00	572	334.00	13486
57.00	8988	147.00	7724	239.00	1707	335.00	3455
58.00	479	148.00	18464	240.00	1426	336.00	343
59.00	114	149.00	3448	241.00	2597	339.00	392
60.00	172	150.00	969	242.00	6213	340.00	315
61.00	1654	151.00	1761	243.00	6616	341.00	2463
62.00	2216	152.00	1080	244.00	94136	342.00	600
63.00	5925	153.00	4348	245.00	12852	343.00	58
64.00	867	154.00	3320	246.00	16520	344.00	53
65.00	3055	155.00	8410	247.00	3359	346.00	4899
66.00	215	156.00	12127	248.00	750	347.00	952
67.00	254	157.00	2341	249.00	3284	348.00	108
68.00	2622	158.00	2773	250.00	713	350.00	180
69.00	167360	159.00	2014	251.00	651	351.00	390
70.00	829	160.00	4746	252.00	899	352.00	6578
71.00	68	161.00	6982	253.00	2075	353.00	4534
72.00	59	162.00	2099	254.00	3852	354.00	6410
73.00	1304	163.00	579	255.00	462080	355.00	1248
74.00	19304	164.00	745	256.00	66744	356.00	80
75.00	27632	165.00	5204	257.00	5328	357.00	58

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\001.D

Date : 07-JUN-2021 10:54

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D
Spectrum: Average Spectrum: 5.406 to 5.416 min. (SUB)
Location of Maximum: 442.00
Number of points: 353

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	11074	166.00	4676	258.00	26480	358.00	50
77.00	216256	167.00	37088	259.00	4102	359.00	611
78.00	14465	168.00	18080	260.00	784	360.00	143
79.00	12441	169.00	2930	261.00	920	361.00	70
80.00	9293	170.00	1048	262.00	57	363.00	142
81.00	13953	171.00	1286	263.00	325	364.00	111
82.00	3614	172.00	2817	264.00	789	365.00	29720
83.00	3018	173.00	3622	265.00	10214	366.00	4177
84.00	125	174.00	7244	266.00	1638	367.00	332
85.00	2317	175.00	12702	267.00	240	370.00	711
86.00	3873	176.00	3843	268.00	247	371.00	1852
87.00	1819	177.00	5824	270.00	376	372.00	11933
88.00	640	178.00	1919	271.00	919	373.00	2849
89.00	435	179.00	24312	272.00	1303	374.00	388
91.00	3408	180.00	16752	273.00	14813	377.00	295
92.00	3627	181.00	7877	274.00	39896	383.00	3114
93.00	24288	182.00	1305	275.00	224640	384.00	1003
94.00	1580	183.00	714	276.00	29208	385.00	290
95.00	339	184.00	2156	277.00	17128	389.00	83
96.00	1107	185.00	13039	278.00	3220	390.00	1821
97.00	505	186.00	98048	279.00	682	391.00	1091
98.00	20880	187.00	27080	281.00	269	392.00	816
99.00	14481	188.00	2756	282.00	504	393.00	145
100.00	1165	189.00	5710	283.00	1996	395.00	104
101.00	8180	190.00	1185	284.00	1277	397.00	90
102.00	416	191.00	2686	285.00	3304	401.00	780
103.00	2393	192.00	8554	286.00	617	402.00	4808
104.00	4903	193.00	9213	288.00	182	403.00	7371
105.00	5025	194.00	2230	289.00	853	404.00	2375
106.00	1677	195.00	945	290.00	581	405.00	406
107.00	68144	196.00	22808	291.00	379	410.00	155
108.00	9908	197.00	4765	292.00	842	415.00	336
109.00	1907	198.00	783040	293.00	4140	416.00	54
110.00	113504	199.00	51872	294.00	1017	420.00	52
111.00	18288	200.00	4114	295.00	1230	421.00	6894

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\001.D

Date : 07-JUN-2021 10:54

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D

Spectrum: Average Spectrum: 5.406 to 5.416 min. (SUB)

Location of Maximum: 442.00

Number of points: 353

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	2524	201.00	3696	296.00	60224	422.00	5733
113.00	877	203.00	4906	297.00	8093	423.00	48256
114.00	144	204.00	27960	298.00	571	424.00	10206
115.00	330	205.00	47464	299.00	66	425.00	1053
116.00	3774	206.00	194624	301.00	750	434.00	180
117.00	72080	207.00	24816	302.00	1146	435.00	69
118.00	4720	208.00	6444	303.00	7252	436.00	150
119.00	506	209.00	1938	304.00	1958	437.00	424
120.00	849	210.00	2528	305.00	239	438.00	424
121.00	305	211.00	7991	307.00	131	439.00	582
122.00	4253	212.00	332	308.00	857	440.00	872
123.00	7126	213.00	596	309.00	712	441.00	135680
124.00	3246	214.00	173	310.00	892	442.00	928384
125.00	3307	215.00	2085	311.00	121	443.00	179968
126.00	934	216.00	4468	312.00	218	444.00	16496
127.00	241408	217.00	52712	313.00	591	445.00	1040
128.00	18256	218.00	6847	314.00	2982		
129.00	95912	219.00	669	315.00	6744		
130.00	8042	221.00	44744	316.00	3681		

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\003.D
Report Date: 30-Aug-2021 17:20

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\003.D
Lab Smp Id: DXSIM-0.08 Client Smp ID: DXSIM-0.08
Inj Date : 07-JUN-2021 11:25 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : DXSIM-0.08;DXSIM-0.08
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

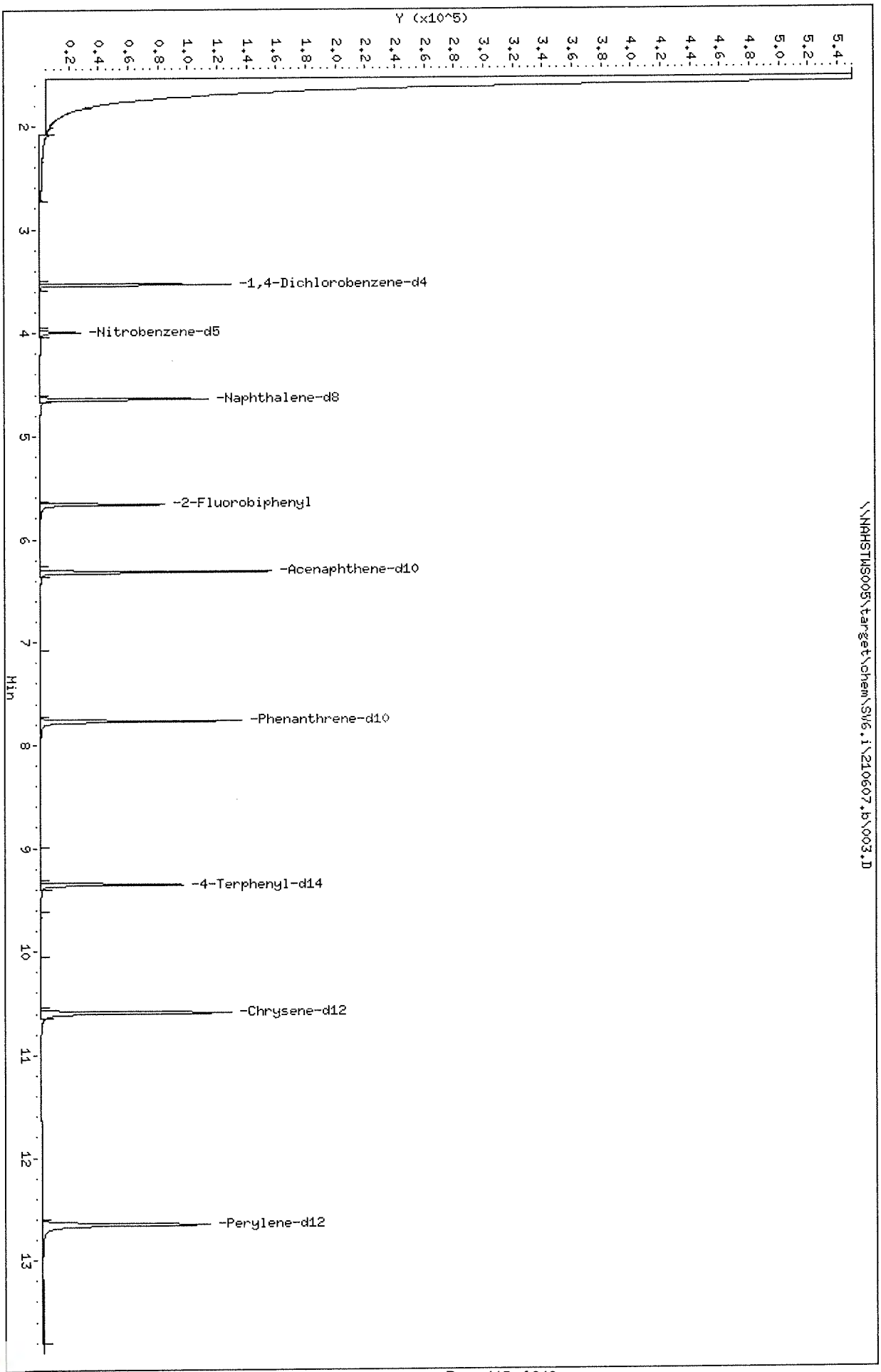
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.537	3.537	(1.000)	37444	0.10000		(a)
* 45 Naphthalene-d8	136	4.641	4.641	(1.000)	127295	0.10000		
$ 33 Nitrobenzene-d5	82	3.993	3.993	(0.860)	28048	0.08000	0.08258	(Q)
* 86 Acenaphthene-d10	164	6.321	6.321	(1.000)	78359	0.10000		(Q)
$ 69 2-Fluorobiphenyl	172	5.666	5.666	(0.896)	71387	0.08000	0.06826	(Q)
* 126 Phenanthrene-d10	188	7.770	7.770	(1.000)	161444	0.10000		
* 182 Chrysene-d12	240	10.594	10.594	(1.000)	161496	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.357	9.357	(0.883)	113379	0.08000	0.07781	(M)
* 198 Perylene-d12	264	12.657	12.657	(1.000)	163563	0.10000		
1 1,4-Dioxane	58	1.833	1.833	(0.518)	1504	0.08000	0.07795	(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\003.D
Date : 07-JUN-2021 11:25
Client ID: DXSIM-0.08
Sample Info: DXSIM-0.08;DXSIM-0.08
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\004.D Page 1
Report Date: 30-Aug-2021 17:20

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\004.D
Lab Smp Id: DXSIM-0.01 Client Smp ID: DXSIM-0.01
Inj Date : 07-JUN-2021 11:43 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : DXSIM-0.01;DXSIM-0.01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 11:25 Cal File: 003.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.532	3.532	(1.000)	32441	0.10000		(a)
* 45 Naphthalene-d8	136	4.645	4.645	(1.000)	108743	0.10000		(M)
$ 33 Nitrobenzene-d5	82	3.993	3.993	(1.000)	6821	0.01000	0.01076	
* 86 Acenaphthene-d10	164	6.321	6.321	(1.000)	69538	0.10000		(M)
$ 69 2-Fluorobiphenyl	172	5.670	5.670	(0.897)	10217	0.01000	0.01101	
* 126 Phenanthrene-d10	188	7.770	7.770	(1.000)	139165	0.10000		
* 182 Chrysene-d12	240	10.594	10.594	(1.000)	139300	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.357	9.357	(0.883)	12143	0.01000	0.009661	(M)
* 198 Perylene-d12	264	12.657	12.657	(1.000)	136463	0.10000		

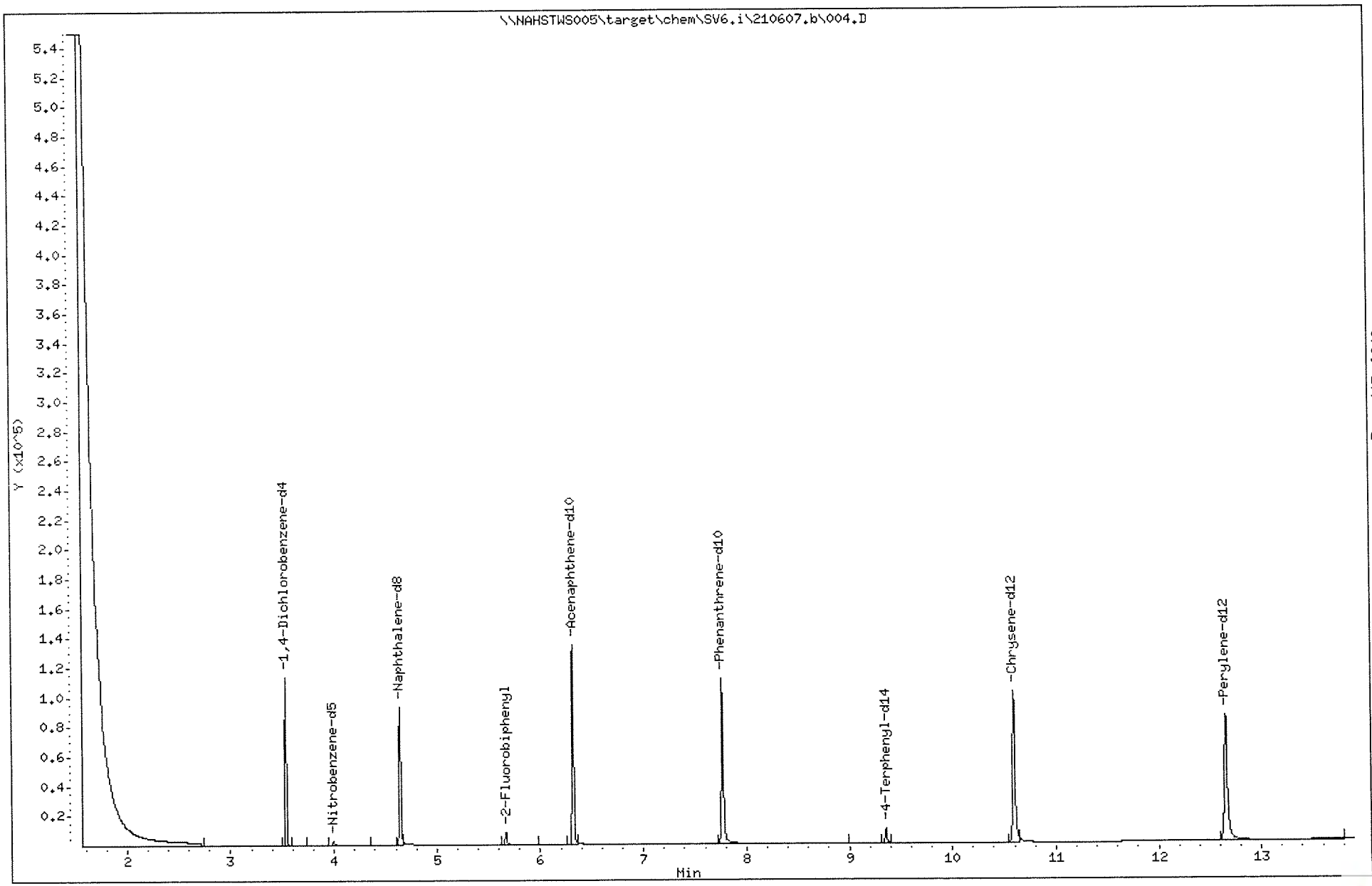
QC Flag Legend

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

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\004.D
Date : 07-JUN-2021 11:43
Client ID: DXSIM-0.01
Sample Info: DXSIM-0.01;DXSIM-0.01
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i

Operator: LG
Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\005.D
Report Date: 30-Aug-2021 17:20

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\005.D
Lab Smp Id: DXSIM-0.03 Client Smp ID: DXSIM-0.03
Inj Date : 07-JUN-2021 12:01 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : DXSIM-0.03;DXSIM-0.03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 11:43 Cal File: 004.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

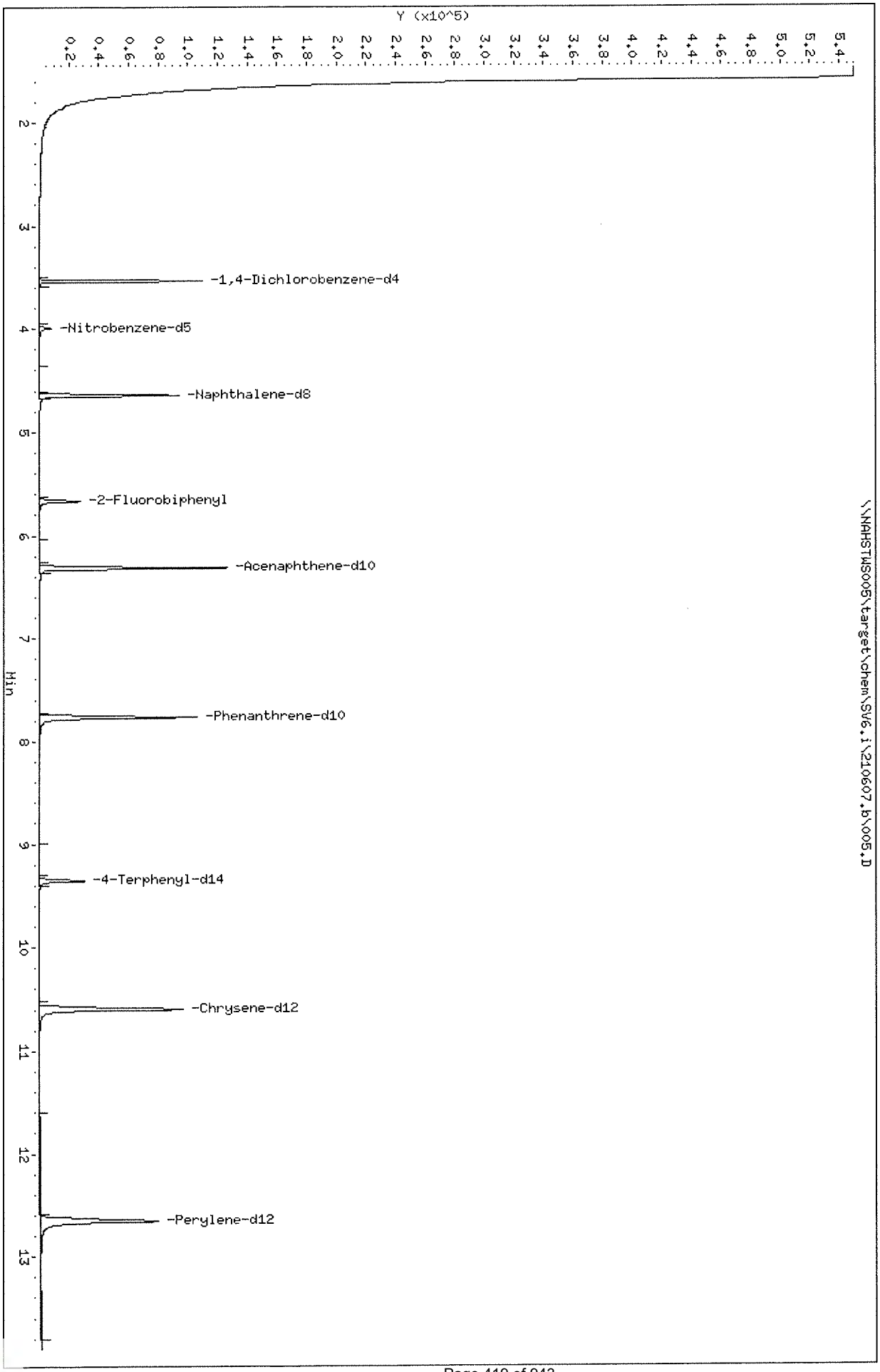
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.537	3.537	(1.000)	38001	0.10000		(a)
* 45 Naphthalene-d8	136	4.641	4.641	(1.000)	129653	0.10000		
$ 33 Nitrobenzene-d5	82	3.993	3.993	(0.860)	13323	0.03000	0.02830	
* 86 Acenaphthene-d10	164	6.320	6.320	(1.000)	79894	0.10000		
$ 69 2-Fluorobiphenyl	172	5.666	5.666	(0.896)	36092	0.03000	0.03385	
* 126 Phenanthrene-d10	188	7.770	7.770	(1.000)	165510	0.10000		
* 182 Chrysene-d12	240	10.594	10.594	(1.000)	166418	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.357	9.357	(0.883)	49106	0.03000	0.03270	(M)
* 198 Perylene-d12	264	12.657	12.657	(1.000)	160787	0.10000		

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\SV6.i\210607.b\005.D
Date : 07-JUN-2021 12:01
Client ID: DXSIM-0.03
Sample Info: DXSIM-0.03;DXSIM-0.03
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\006.D
Lab Smp Id: DXSIM-0.05 Client Smp ID: DXSIM-0.05
Inj Date : 07-JUN-2021 12:19 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : DXSIM-0.05;DXSIM-0.05
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 12:01 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

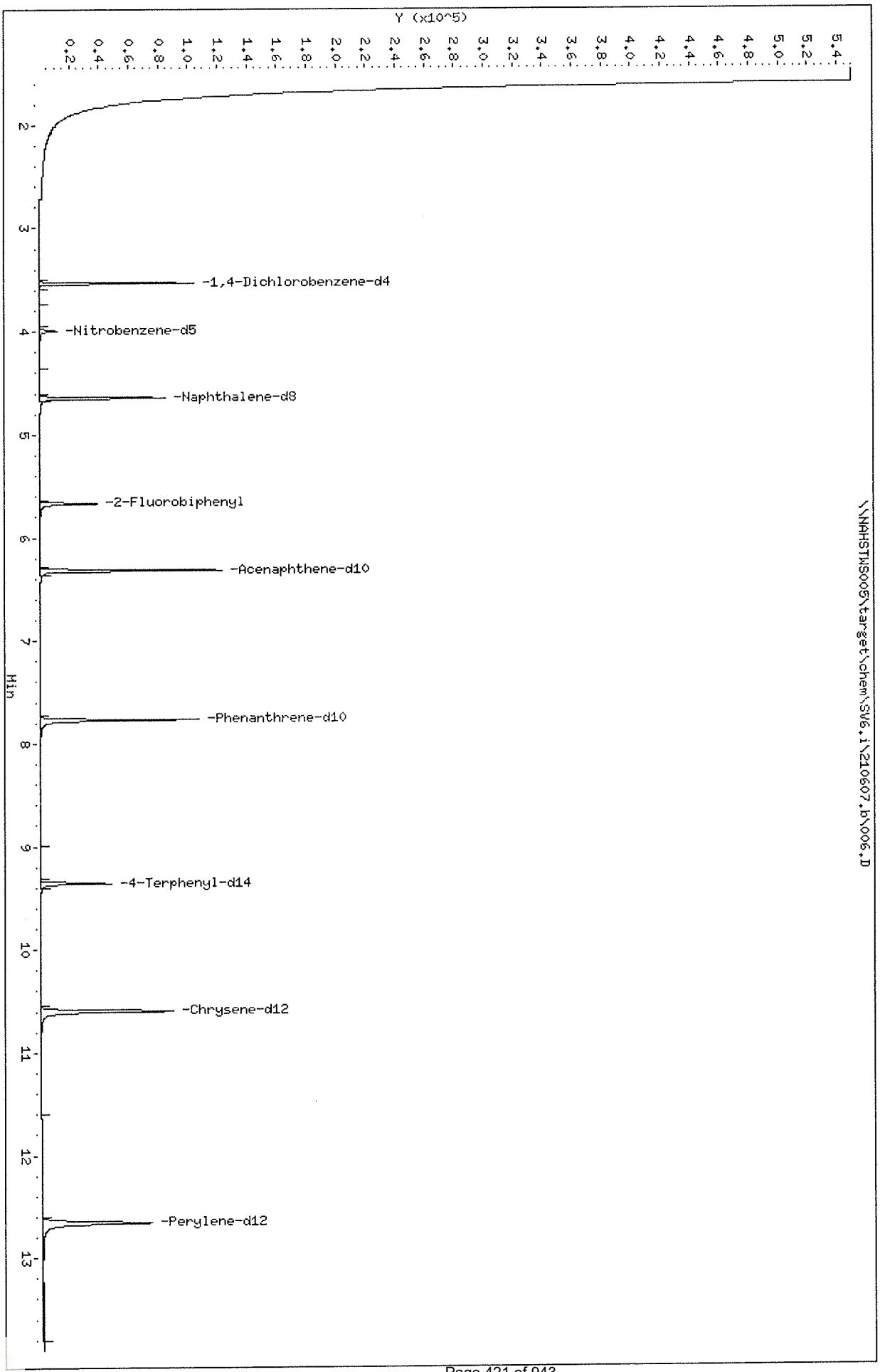
Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.531	3.531	(1.000)	30540	0.10000		(a)
* 45 Naphthalene-d8	136	4.641	4.641	(1.000)	102937	0.10000		
$ 33 Nitrobenzene-d5	82	3.993	3.993	(0.860)	15816	0.05000	0.05128	
* 86 Acenaphthene-d10	164	6.321	6.321	(1.000)	62420	0.10000		(Q)
$ 69 2-Fluorobiphenyl	172	5.670	5.670	(0.897)	43274	0.05000	0.05194	
* 126 Phenanthrene-d10	188	7.770	7.770	(1.000)	129763	0.10000		
* 182 Chrysene-d12	240	10.594	10.594	(1.000)	129060	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.357	9.357	(0.883)	58071	0.05000	0.04987	(M)
* 198 Perylene-d12	264	12.657	12.657	(1.000)	123621	0.10000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\006.D
Date : 07-JUN-2021 12:19
Client ID: DXSIM-0.05
Sample Info: DXSIM-0.05;DXSIM-0.05
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\007.D
Report Date: 30-Aug-2021 17:20

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\007.D
Lab Smp Id: DXSIM-0.1 Client Smp ID: DXSIM-0.1
Inj Date : 07-JUN-2021 12:43 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : DXSIM-0.1;DXSIM-0.1
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 12:19 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.537	3.537	(1.000)	36721	0.10000		(a)
* 45 Naphthalene-d8	136	4.644	4.644	(1.000)	125484	0.10000		
$ 33 Nitrobenzene-d5	82	3.998	3.998	(0.861)	31308	0.10000	0.09668	
* 86 Acenaphthene-d10	164	6.320	6.320	(1.000)	79287	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.669	5.669	(0.936)	101666	0.10000	0.09608	
* 126 Phenanthrene-d10	188	7.776	7.776	(1.000)	157971	0.10000		
* 182 Chrysene-d12	240	10.600	10.600	(1.000)	160256	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.362	9.362	(0.883)	141769	0.10000	0.09804	(M)
* 198 Perylene-d12	264	12.662	12.662	(1.000)	155555	0.10000		
1 1,4-Dioxane	58	1.836	1.836	(0.519)	1898	0.10000	0.1003	(aQM)

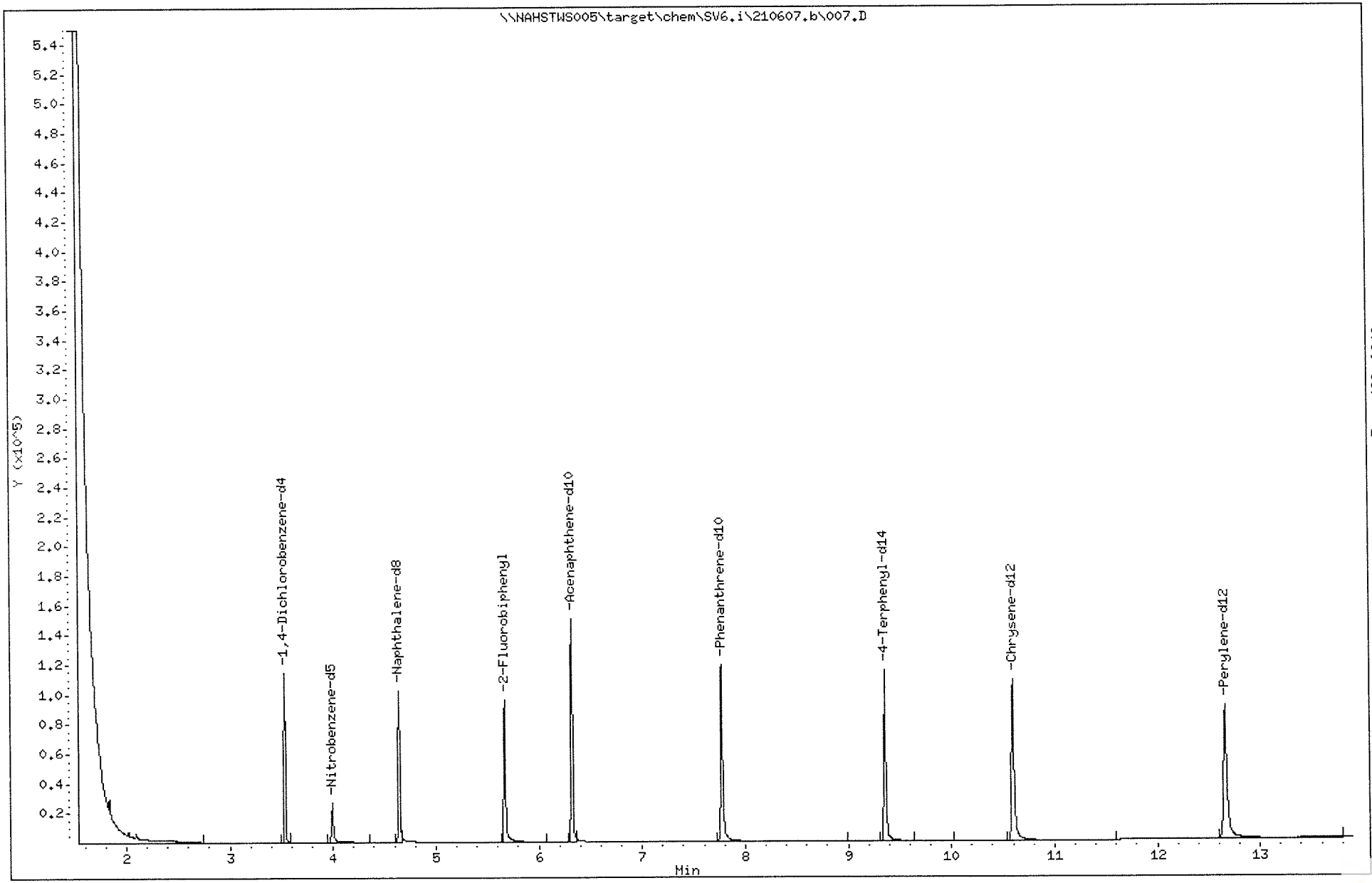
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\007.D
Date : 07-JUN-2021 12:43
Client ID: DXSIM-0.1
Sample Info: DXSIM-0.1;DXSIM-0.1
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i

Operator: LG
Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\008.D
Report Date: 30-Aug-2021 17:20

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\008.D
Lab Smp Id: DXSIM-0.15 Client Smp ID: DXSIM-0.15
Inj Date : 07-JUN-2021 13:01 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : DXSIM-0.15;DXSIM-0.15
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 12:43 Cal File: 007.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

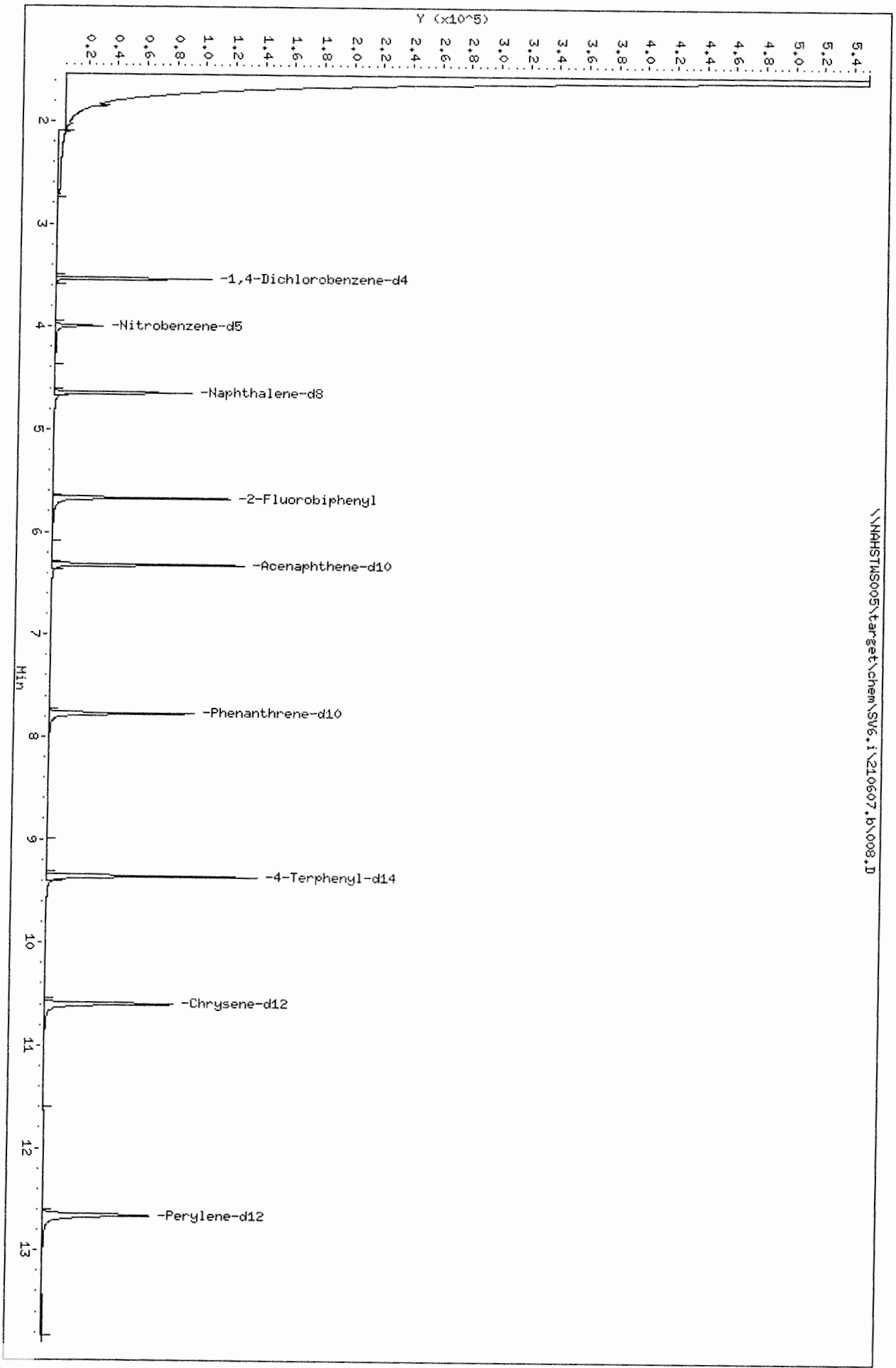
Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.537	3.537	(1.000)	31974	0.10000		(a)
* 45 Naphthalene-d8	136	4.644	4.644	(1.000)	106586	0.10000		
$ 33 Nitrobenzene-d5	82	3.998	3.998	(0.861)	37770	0.15000	0.1495	
* 86 Acenaphthene-d10	164	6.321	6.321	(1.000)	68282	0.10000		(M)
$ 69 2-Fluorobiphenyl	172	5.670	5.670	(0.932)	127675	0.15000	0.1401	
* 126 Phenanthrene-d10	188	7.770	7.770	(1.000)	133068	0.10000		
* 182 Chrysene-d12	240	10.594	10.594	(1.000)	136695	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.357	9.357	(0.883)	180944	0.15000	0.1467	(M)
* 198 Perylene-d12	264	12.662	12.662	(1.000)	128306	0.10000		
1 1,4-Dioxane	58	1.847	1.847	(0.522)	2410	0.15000	0.1463	(aQM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\008.D
Date : 07-JUN-2021 13:01
Client ID: DXSIM-0.15
Sample Info: DXSIM-0.15;DXSIM-0.15
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\009.D
Report Date: 30-Aug-2021 17:20

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\009.D
Lab Smp Id: DXSIM-0.2 Client Smp ID: DXSIM-0.2
Inj Date : 07-JUN-2021 13:19 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : DXSIM-0.2;DXSIM-0.2
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 13:01 Cal File: 008.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.532	3.532	(1.000)	32671	0.10000		(a)
* 45 Naphthalene-d8	136	4.626	4.626	(1.000)	113469	0.10000		(M)
$ 33 Nitrobenzene-d5	82	3.982	3.982	(0.917)	51149	0.20000	0.2010	(A)
* 86 Acenaphthene-d10	164	6.299	6.299	(1.000)	68302	0.10000		(M)
$ 69 2-Fluorobiphenyl	172	5.648	5.648	(1.000)	174723	0.20000	0.1917	(A)
* 126 Phenanthrene-d10	188	7.749	7.749	(1.000)	141566	0.10000		
* 182 Chrysene-d12	240	10.562	10.562	(1.000)	134180	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.330	9.330	(0.883)	245911	0.20000	0.2031	(AM)
* 198 Perylene-d12	264	12.625	12.625	(1.000)	125962	0.10000		(M)
1 1,4-Dioxane	58	1.881	1.881	(0.533)	3443	0.20000	0.2045	(QM)

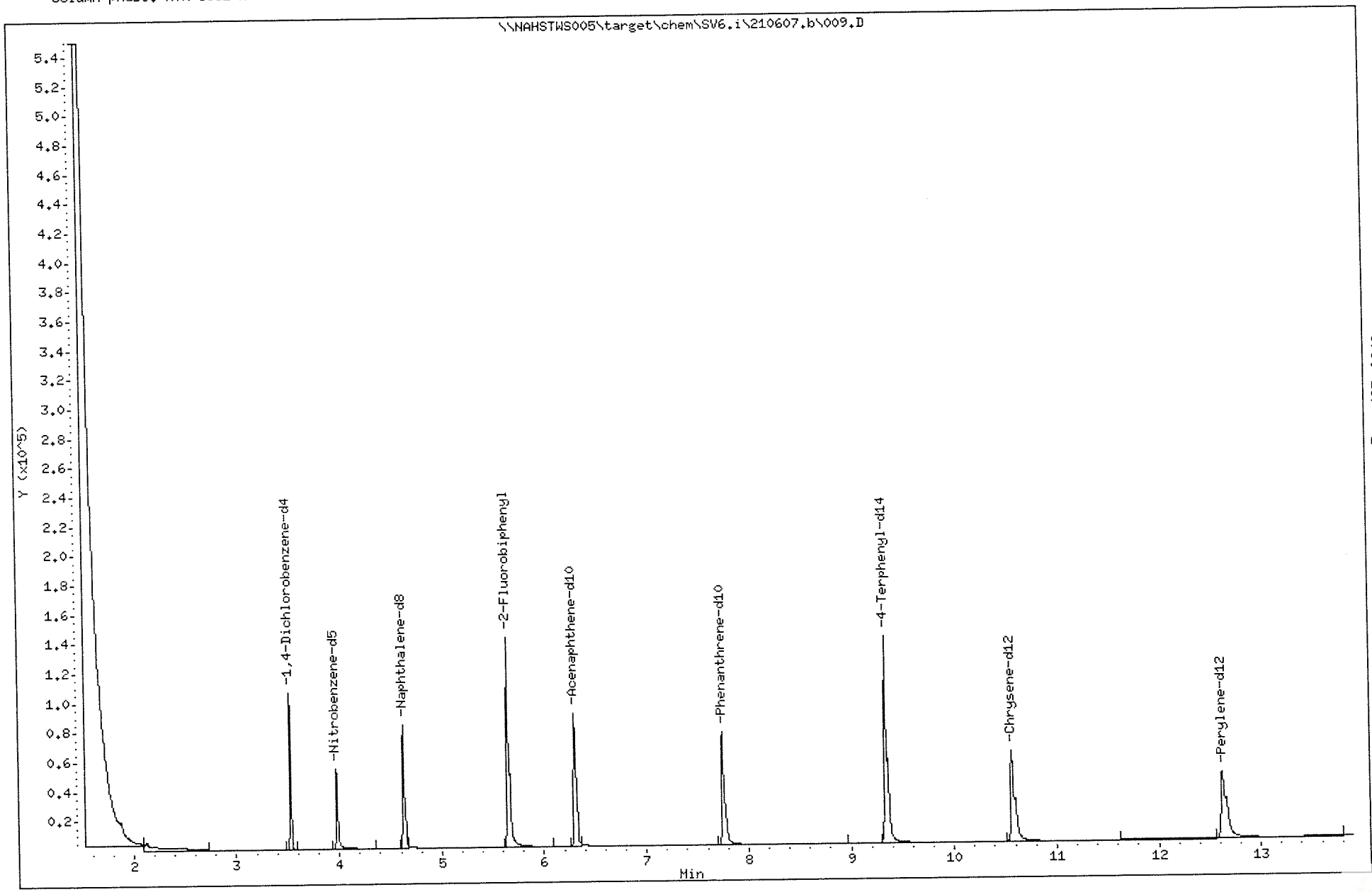
QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\009.D
Date : 07-JUN-2021 13:19
Client ID: DXSIM-0.2
Sample Info: DXSIM-0.2;DXSIM-0.2
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i

Operator: LG
Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\010.D
Report Date: 30-Aug-2021 17:20

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\010.D
Lab Smp Id: DXSIM-0.5 Client Smp ID: DXSIM-0.5
Inj Date : 07-JUN-2021 13:37 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : DXSIM-0.5;DXSIM-0.5
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 13:19 Cal File: 009.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.505	3.505	(1.000)	28197	0.10000		(a)
* 45 Naphthalene-d8	136	4.585	4.585	(1.000)	86691	0.10000		(M)
$ 33 Nitrobenzene-d5	82	3.945	3.945	(0.860)	80842	0.50000	0.4999	(AQM)
* 86 Acenaphthene-d10	164	6.251	6.251	(1.000)	49687	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.600	5.600	(0.896)	340029	0.50000	0.5128	(AM)
* 126 Phenanthrene-d10	188	7.700	7.700	(1.000)	111127	0.10000		(M)
* 182 Chrysene-d12	240	10.503	10.503	(1.000)	104718	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.362	9.362	(0.891)	472282	0.50000	0.4998	(AM)
* 198 Perylene-d12	264	12.668	12.668	(1.000)	98459	0.10000		(M)
1 1,4-Dioxane	58	2.006	2.006	(0.572)	8747	0.50000	0.6020	(AQM)

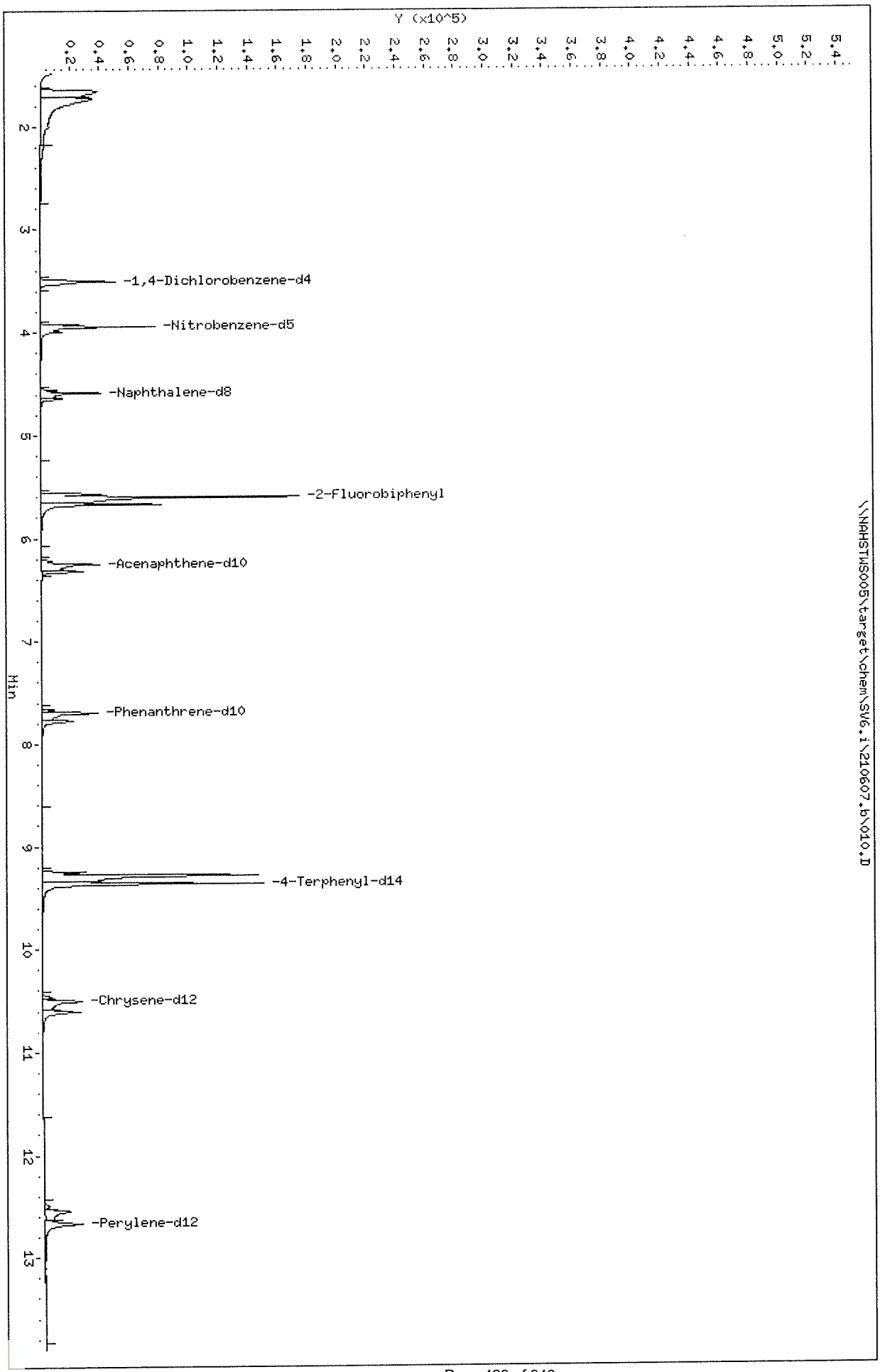
QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\010.D
Date : 07-JUN-2021 13:37
Client ID: DXSIM-0.5
Sample Info: DXSIM-0.5;DXSIM-0.5
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28

\\NAHSTWS005\target\chem\SV6.i\210607.b\010.D



Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\011.D
Report Date: 30-Aug-2021 17:20

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210607.b\011.D
Lab Smp Id: DXSIM-ICV
Client Smp ID: DXSIM-ICV
Inj Date : 07-JUN-2021 13:55
MS Autotune Date: 27-MAY-2021 10:12
Operator : LG
Inst ID: SV6.i
Smp Info : DXSIM-ICV;DXSIM-ICV
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210607.b\DXSIM.m
Meth Date : 30-Aug-2021 17:20 SV6.i
Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37
Cal File: 010.D
Als bottle: 11
QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.532	3.505	(1.000)	31156	0.10000		(a)
* 45 Naphthalene-d8	136	4.645	4.585	(1.000)	105707	0.10000		(M)
$ 33 Nitrobenzene-d5	82	3.998	3.945	(0.921)	20403	0.06959	0.06959	
* 86 Acenaphthene-d10	164	6.321	6.251	(1.000)	68049	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.670	5.600	(1.000)	66382	0.07309	0.07309	
* 126 Phenanthrene-d10	188	7.770	7.700	(1.000)	137852	0.10000		(M)
* 182 Chrysene-d12	240	10.594	10.503	(1.000)	131692	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.357	9.362	(0.883)	93833	0.07897	0.07897	(M)
* 198 Perylene-d12	264	12.662	12.668	(1.000)	121944	0.10000		
1 1,4-Dioxane	58	1.818	2.006	(0.515)	1295	0.08066	0.08066	(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210607.b\011.D

Date : 07-JUN-2021 13:55

Client ID: DXSIM-ICV

Instrument: SV6.i

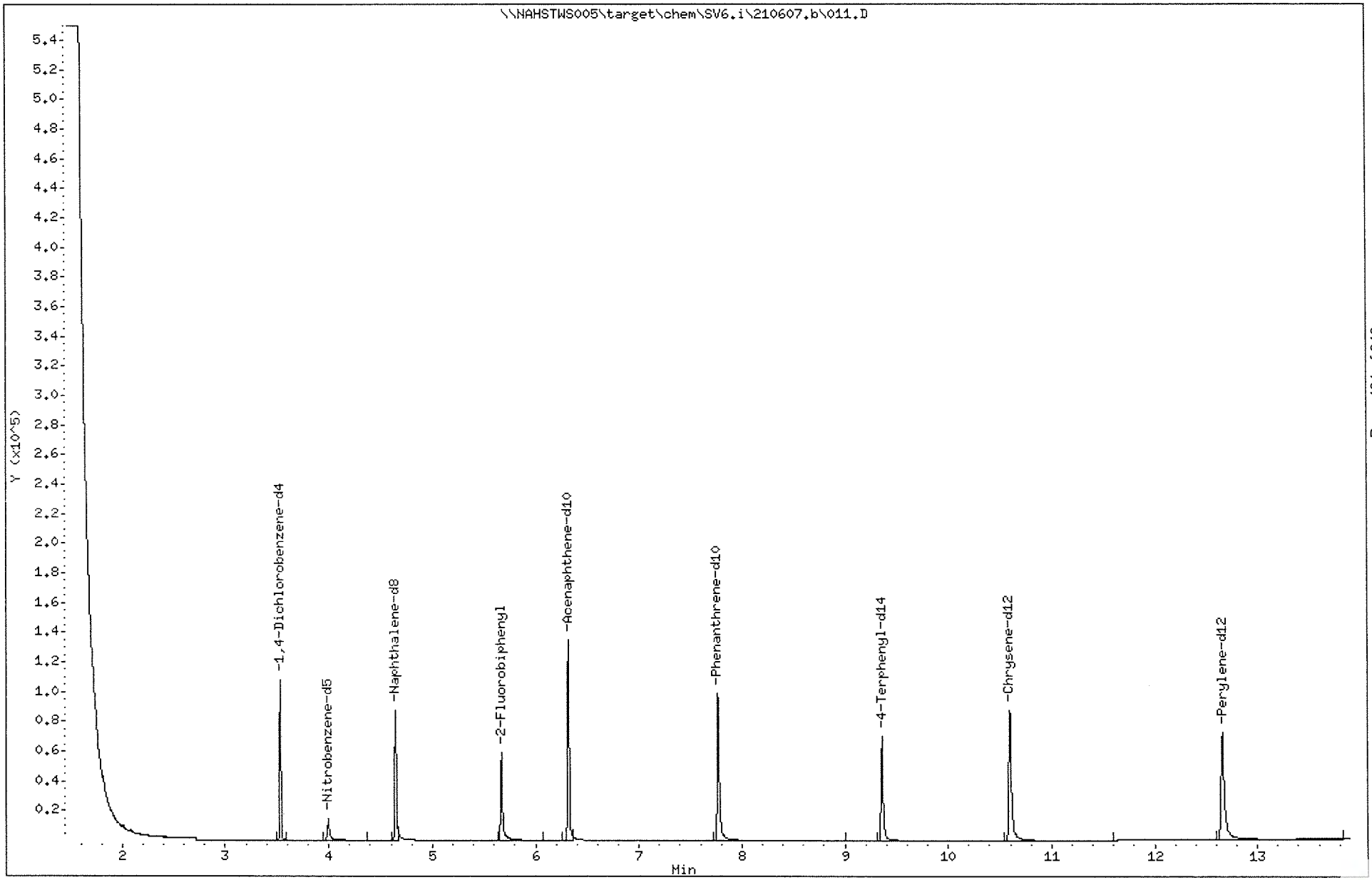
Sample Info: DXSIM-ICV;DXSIM-ICV

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



SV06 -Logbook

Batch: 45275
Date: 06-23-2021
Method: 8270DSIM
Comments: MSSV003

Analyst: Andrew Neir
Reviewer:
Laboratory: Houston

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	p
1	DFTPP	TUNE	06-23-2021 09:50 am	1.00			001.D		Y	N
2	SLSTD-2.5	SAMP	06-23-2021 10:01 am	1.00			002.D		Y	N
3	14DX	CCV	06-23-2021 10:26 am	1.00			003.D		Y	N
4	CCB	SAMP	06-23-2021 10:48 am	1.00			004.D		Y	N
5	MBLK-167083	MBLK	06-23-2021 11:08 am	1.00	1000.00 mL	1.00 mL	005.D	Liquid	Y	N
6	LCS-167083	LCS	06-23-2021 11:26 am	1.00	1000.00 mL	1.00 mL	006.D	Liquid	Y	N
7	LCSD-167083	LCSD	06-23-2021 11:44 am	1.00	1000.00 mL	1.00 mL	007.D	Liquid	Y	N
8	HS21060632-01	SAMP	06-23-2021 12:02 pm	10.00	1000.00 mL	1.00 mL	008.D	Liquid	Y	N
9	HS21060632-02	SAMP	06-23-2021 12:20 pm	5.00	1000.00 mL	1.00 mL	009.D	Liquid	Y	N
10	HS21060632-03	SAMP	06-23-2021 12:38 pm	10.00	1000.00 mL	1.00 mL	010.D	Liquid	Y	N
11	HS21060632-04	SAMP	06-23-2021 12:56 pm	10.00	1000.00 mL	1.00 mL	011.D	Liquid	Y	N
12	HS21060632-07	SAMP	06-23-2021 01:14 pm	10.00	1000.00 mL	1.00 mL	012.D	Liquid	Y	N
13	HS21060632-08	SAMP	06-23-2021 01:32 pm	10.00	1000.00 mL	1.00 mL	013.D	Liquid	Y	N
14	LCSD-167083	LCSD	06-23-2021 01:50 pm	1.00	1000.00 mL	1.00 mL	014.D	Liquid	Y	N
15	HS21060908-02	SAMP	06-23-2021 02:08 pm	1.00	1000.00 mL	1.00 mL	015.D	Liquid	Y	N
16	HS21060908-01	SAMP	06-23-2021 02:26 pm	50.00	1000.00 mL	1.00 mL	016.D	Liquid	Y	N
17	HS21060908-03	SAMP	06-23-2021 02:44 pm	10.00	1000.00 mL	1.00 mL	017.D	Liquid	Y	N
18	HS21060908-05	SAMP	06-23-2021 03:02 pm	5.00	1000.00 mL	1.00 mL	018.D	Liquid	Y	N
19	HS21060908-06	SAMP	06-23-2021 03:20 pm	10.00	1000.00 mL	1.00 mL	019.D	Liquid	Y	N
20	HS21060908-08	SAMP	06-23-2021 03:38 pm	50.00	1000.00 mL	1.00 mL	020.D	Liquid	Y	N
21	HS21060937-01	SAMP	06-23-2021 03:56 pm	1.00	1000.00 mL	1.00 mL	021.D	Liquid	Y	N
22	HS21060937-01	SAMP	06-23-2021 04:14 pm	10.00	1000.00 mL	1.00 mL	022.D	Liquid	Y	N
23	HS21060937-02	SAMP	06-23-2021 04:32 pm	1.00	1000.00 mL	1.00 mL	023.D	Liquid	Y	N
24	HS21060937-03	SAMP	06-23-2021 04:50 pm	100.0(	1000.00 mL	1.00 mL	024.D	Liquid	Y	N
25	HS21060937-05	SAMP	06-23-2021 05:08 pm	1.00	1000.00 mL	1.00 mL	025.D	Liquid	Y	N
26	HS21060937-05	SAMP	06-23-2021 05:26 pm	10.00	1000.00 mL	1.00 mL	026.D	Liquid	Y	N
27	HS21060937-06	SAMP	06-23-2021 05:44 pm	1.00	1000.00 mL	1.00 mL	027.D	Liquid	Y	N
28	HS21060937-09	SAMP	06-23-2021 06:02 pm	50.00	1000.00 mL	1.00 mL	028.D	Liquid	Y	N
29	HS21061094-01	SAMP	06-23-2021 06:20 pm	500.0(	1000.00 mL	1.00 mL	029.D	Liquid	Y	N
30	HS21061094-02	SAMP	06-23-2021 06:38 pm	5000.0	1000.00 mL	1.00 mL	030.D	Liquid	Y	N
31	HS21061094-04	SAMP	06-23-2021 06:56 pm	10.00	1000.00 mL	1.00 mL	031.D	Liquid	Y	N
32	HS21061094-05	SAMP	06-23-2021 07:14 pm	1.00	1000.00 mL	1.00 mL	032.D	Liquid	Y	N
33	HS21061094-05	SAMP	06-23-2021 07:32 pm	10.00	1000.00 mL	1.00 mL	033.D	Liquid	Y	N
34	HS21061094-06	SAMP	06-23-2021 07:50 pm	10.00	1000.00 mL	1.00 mL	034.D	Liquid	Y	N
35	HS21061094-07	SAMP	06-23-2021 08:08 pm	10.00	1000.00 mL	1.00 mL	035.D	Liquid	Y	N
36	14DX	SAMP	06-23-2021 08:26 pm	1.00	1000.00 mL	1.00 mL	036.D	Liquid	Y	N

SV06 -Logbook

Chemical	Value
IS ID	3141114-01
CAL STD ID	3141106-05/ 3141114-06
DFTPP ID	31411105-05
PCP Tailing	0.53
Benz. Tailing	0.72
Routine SOP Maintenance	ACN

FORM 2
WATER SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

	CLIENT SAMPLE NO.	SMC1 (NBZ)#	SMC2 #	SMC3 (FBP)#	OTHER	TOT OUT
01	MBLK-167083	81	94	84		0
02	LCS-167083	53	58	70		0
03	LCSD-167083	61	121	82		0
04	HS21060908-02	56	96	66		0
05	HS21060908-03	53	96	79		0
06	HS21060908-06	51	92	76		0
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						

	QC LIMITS
SMC1 (NBZ) = Nitrobenzene-d5	(40-140)
SMC2 = 4-Terphenyl-d14	(40-140)
SMC3 (FBP) = 2-Fluorobiphenyl	(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID: 001 BFB Injection Date: 06/23/21

Instrument ID: SV6 BFB Injection Time: 0950

GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	21.7
68	Less than 2.0% of mass 69	0.4 (1.5)1
69	Mass 69 relative abundance	24.4
70	Less than 2.0% of mass 69	0.1 (0.6)1
127	10.0 - 80.0% of mass 198	35.2
197	Less than 2.0% of mass 198	0.5
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	25.8
365	1.0 - 100.0% of mass 198	3.1
441	Present, but less than mass 443	11.3
442	50.0 - 150.0% of mass 198	77.4
443	15.0 - 24.0% of mass 442	15.7 (20.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	14DX	14DX	003	06/23/21	1026
02	MBLK-167083	MBLK-167083	005	06/23/21	1108
03	LCS-167083	LCS-167083	006	06/23/21	1126
04	LCSD-167083	LCSD-167083	014	06/23/21	1350
05	HS21060908-02	HS21060908-02	015	06/23/21	1408
06	HS21060908-03	HS21060908-03	017	06/23/21	1444
07	HS21060908-06	HS21060908-06	019	06/23/21	1520
08	14DX	14DX	036	06/23/21	2026
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: SV6 Calibration Date: 06/23/21 Time: 1026

Lab File ID: 003 Init. Calib. Date(s): 06/07/21 06/07/21

Init. Calib. Times: 1125 1337

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	5.2e-002	5.51e-002	0.01	5.96	20.00	AVRG
Nitrobenzene-d5	0.3060000	0.2927194	0.01	-4.34	20.00	AVRG
4-Terphenyl-d14	0.9020000	0.9963664	0.01	10.46	20.00	AVRG
2-Fluorobiphenyl	1.3340000	1.2983269	0.01	-2.67	20.00	AVRG

FORM VII SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: SV6 Calibration Date: 06/23/21 Time: 2026

Lab File ID: 036 Init. Calib. Date(s): 06/07/21 06/07/21

Init. Calib. Times: 1125 1337

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	5.2e-002	3.41e-002	0.01	-34.42	50.00	AVRG
Nitrobenzene-d5	0.3060000	0.2206857	0.01	-27.88	50.00	AVRG
4-Terphenyl-d14	0.9020000	1.0569505	0.01	17.18	50.00	AVRG
2-Fluorobiphenyl	1.3340000	1.2830725	0.01	-3.82	50.00	AVRG

FORM VII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID (Standard): 003 Date Analyzed: 06/23/21

Instrument ID: SV6 Time Analyzed: 1026

GC Column: RTX-5SIL MS ID: 0.28 (mm) Heated Purge: (Y/N) N

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	8732	3.40	29922	4.51	18080	6.19
	UPPER LIMIT	17464	3.90	59844	5.01	36160	6.69
	LOWER LIMIT	4366	2.90	14961	4.01	9040	5.69
	CLIENT SAMPLE NO.						
01	MBLK-167083	10387	3.40	34321	4.51	21369	6.18
02	LCS-167083	6630	3.39	15861	4.51	9230	6.18
03	LCSD-167083	6683	3.39	19841	4.51	13561	6.18
04	HS21060908-02	7101	3.40	24312	4.51	17473	6.18
05	HS21060908-03	10467	3.40	33792	4.51	23980	6.18
06	HS21060908-06	10285	3.40	33447	4.51	23896	6.18
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID (Standard): 003 Date Analyzed: 06/23/21

Instrument ID: SV6 Time Analyzed: 1026

GC Column: RTX-5SIL MS ID: 0.28 (mm) Heated Purge: (Y/N) N

		IS4(PHN) AREA #	IS4(PHN) RT #	IS5(CRY) AREA #	IS5(CRY) RT #	IS6(PRY) AREA #	IS6(PRY) RT #
	12 HOUR STD	35614	7.63	29654	10.42	26508	12.44
	UPPER LIMIT	71228	8.13	59308	10.92	53016	12.94
	LOWER LIMIT	17807	7.13	14827	9.92	13254	11.94
	CLIENT SAMPLE NO.						
01	MBLK-167083	41283	7.63	33626	10.42	26644	12.44
02	LCS-167083	18630	7.63	17174	10.41	19711	12.43
03	LCSD-167083	27356	7.63	16155	10.41	15435	12.43
04	HS21060908-02	33978	7.63	36130	10.41	35642	12.44
05	HS21060908-03	50437	7.63	42366	10.41	33192	12.43
06	HS21060908-06	49938	7.63	44429	10.41	46718	12.44
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Data File: \\NAHSTWS005\Target\chem\SV6.i\210623.b\001.D

Date : 23-JUN-2021 09:50

Client ID: DFTPP

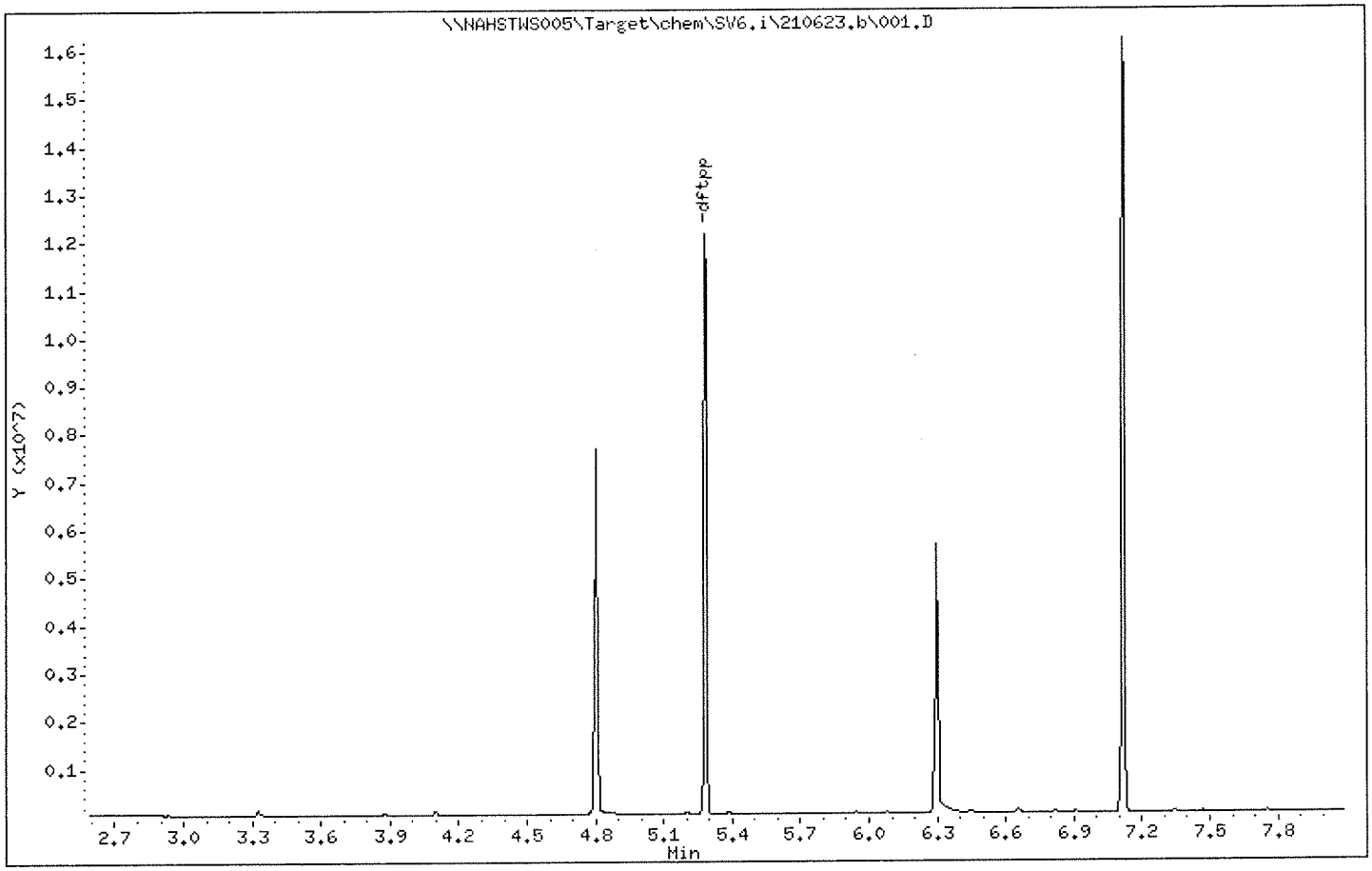
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\SV6.i\210623.b\001.D

Date : 23-JUN-2021 09:50

Client ID: DFTPP

Instrument: SV6.i

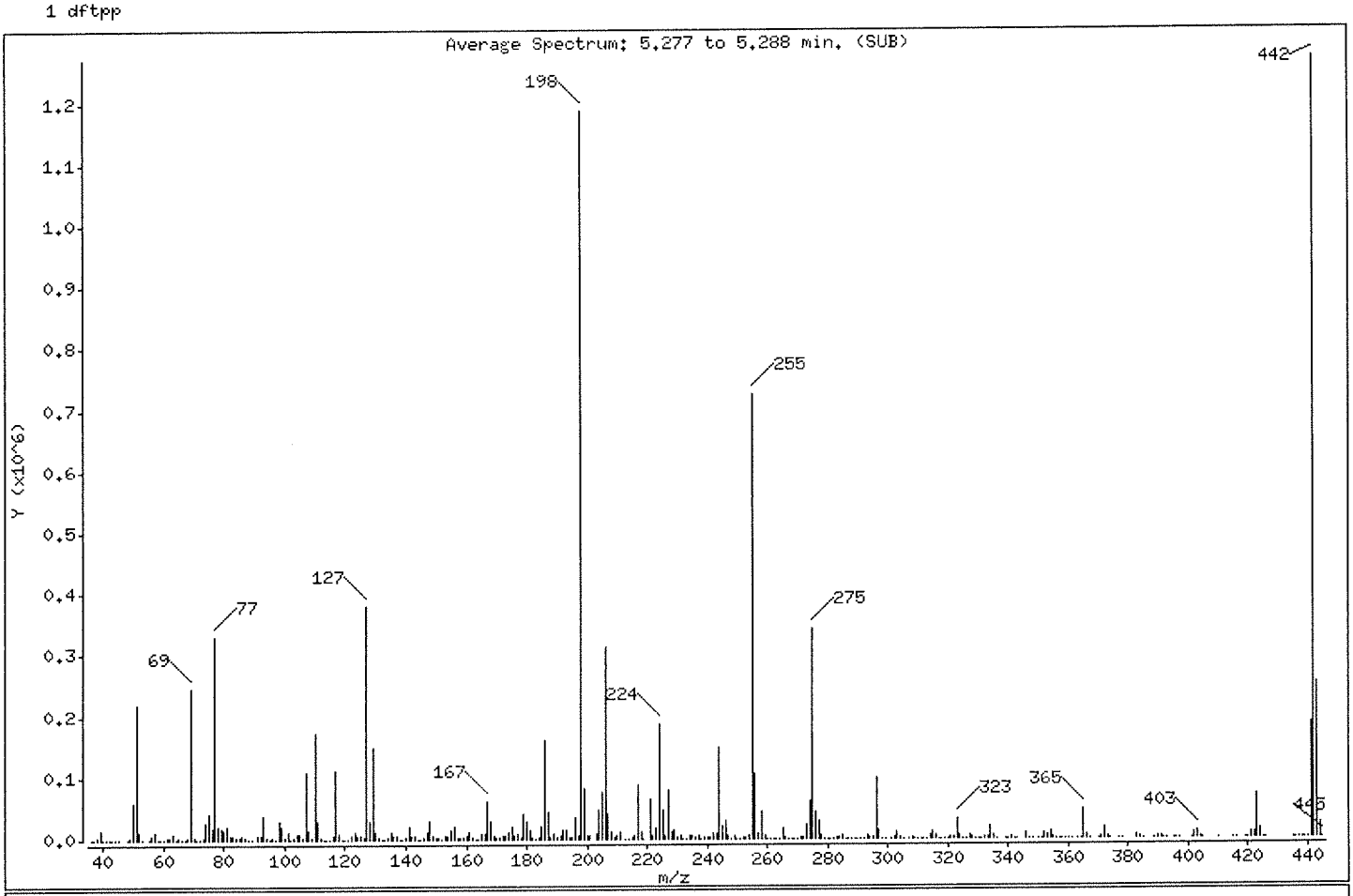
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	18.40
68	Less than 2.00% of mass 69	0.30 (1.46)
69	Mass 69 relative abundance	20.70
70	Less than 2.00% of mass 69	0.13 (0.62)
127	10.00 - 80.00% of mass 198	31.88
197	Less than 2.00% of mass 198	0.54
199	5.00 - 9.00% of mass 198	6.83
275	10.00 - 60.00% of mass 198	28.67
365	1.00 - 100.00% of mass 198	3.92
441	Present, but less than mass 443	15.80
442	50.00 - 150.00% of mass 198	107.03
443	15.00 - 24.00% of mass 442	21.20 (19.81)

Data File: \\NAHSTWS005\Target\chem\SV6.i\210623.b\001.D

Date : 23-JUN-2021 09:50

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D
Spectrum: Average Spectrum: 5.277 to 5.288 min. (SUB)
Location of Maximum: 442.00
Number of points: 362

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	340	131.00	2574	225.00	46624	318.00	50
37.00	738	132.00	1447	226.00	4541	319.00	214
38.00	2780	133.00	703	227.00	77904	320.00	412
39.00	15663	134.00	3897	228.00	10695	321.00	3360
40.00	788	135.00	13108	229.00	15843	322.00	1603
41.00	218	136.00	4969	230.00	2286	323.00	32072
42.00	263	137.00	6403	231.00	6590	324.00	6118
43.00	71	138.00	1420	232.00	1176	325.00	599
44.00	218	139.00	760	233.00	1288	326.00	688
45.00	514	140.00	1972	234.00	4830	327.00	6212
48.00	136	141.00	19888	235.00	5623	328.00	3302
49.00	1595	142.00	6784	236.00	3862	329.00	612
50.00	59824	143.00	4939	237.00	5888	330.00	148
51.00	218816	144.00	1284	238.00	799	331.00	132
52.00	10773	145.00	1085	239.00	3052	332.00	2422
53.00	463	146.00	3812	240.00	2532	333.00	3207
55.00	1153	147.00	11487	241.00	4332	334.00	20648
56.00	5550	148.00	30168	242.00	10041	335.00	5440
57.00	13130	149.00	5717	243.00	10229	336.00	642
58.00	656	150.00	1502	244.00	149312	339.00	455
59.00	179	151.00	3390	245.00	19232	340.00	438
60.00	232	152.00	335	246.00	27792	341.00	3780
61.00	2315	153.00	7049	247.00	5522	342.00	1023
62.00	3337	154.00	5625	248.00	1299	343.00	84
63.00	8482	155.00	13349	249.00	4970	346.00	7532
64.00	1151	156.00	19152	250.00	1124	347.00	1288
65.00	4172	157.00	3466	251.00	1280	348.00	140
66.00	342	158.00	3785	252.00	1474	350.00	291
67.00	367	159.00	3440	253.00	3149	351.00	571
68.00	3605	160.00	7227	254.00	5318	352.00	9942
69.00	246144	161.00	11323	255.00	724416	353.00	6962
70.00	1514	162.00	3096	256.00	106496	354.00	10243
71.00	233	163.00	955	257.00	7985	355.00	1860
72.00	258	164.00	1073	258.00	43808	356.00	197
73.00	1951	165.00	8501	259.00	6905	357.00	108

Data File: \\NAHSTWS005\Target\chem\SV6.i\210623.b\001.D

Date : 23-JUN-2021 09:50

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D
Spectrum: Average Spectrum: 5.277 to 5.288 min. (SUB)
Location of Maximum: 442.00
Number of points: 362

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	27624	166.00	7461	260.00	1226	358.00	169
75.00	41312	167.00	61320	261.00	1290	359.00	729
76.00	16776	168.00	27864	262.00	178	360.00	93
77.00	330048	169.00	4510	263.00	420	361.00	136
78.00	21672	170.00	1693	264.00	1279	363.00	77
79.00	17672	171.00	1958	265.00	17168	364.00	402
80.00	13838	172.00	4390	266.00	2735	365.00	46656
81.00	20640	173.00	6468	267.00	414	366.00	6270
82.00	5204	174.00	11707	268.00	654	367.00	455
83.00	4912	175.00	21560	269.00	200	370.00	1063
84.00	2794	176.00	5824	270.00	933	371.00	2524
85.00	4174	177.00	9020	271.00	1472	372.00	17776
86.00	6912	178.00	3274	272.00	2132	373.00	4176
87.00	2654	179.00	40512	273.00	23480	374.00	426
88.00	1176	180.00	28176	274.00	61616	377.00	424
89.00	523	181.00	13260	275.00	340928	378.00	65
91.00	4457	182.00	1999	276.00	44232	383.00	4990
92.00	4856	183.00	1003	277.00	28536	384.00	1472
93.00	36728	184.00	3289	278.00	4584	385.00	397
94.00	2368	185.00	21008	279.00	973	389.00	65
95.00	605	186.00	162048	280.00	60	390.00	2615
96.00	1662	187.00	45168	281.00	420	391.00	1673
97.00	779	188.00	4161	282.00	705	392.00	1226
98.00	30416	189.00	9300	283.00	3200	393.00	184
99.00	21504	190.00	1664	284.00	2178	395.00	154
100.00	1849	191.00	4788	285.00	4961	396.00	73
101.00	13038	192.00	14160	286.00	870	397.00	192
102.00	774	193.00	15679	287.00	130	401.00	1284
103.00	3444	194.00	3423	288.00	308	402.00	7453
104.00	7739	195.00	1767	289.00	1191	403.00	10579
105.00	7832	196.00	34704	290.00	963	404.00	3700
106.00	2480	197.00	6431	291.00	629	405.00	480
107.00	106784	198.00	1188864	292.00	1247	410.00	324
108.00	15556	199.00	81192	293.00	6512	415.00	458
109.00	2549	200.00	6590	294.00	1551	416.00	62

Data File: \\NAHSTWS005\Target\chem\SV6.i\210623.b\001.D

Date : 23-JUN-2021 09:50

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D
Spectrum: Average Spectrum: 5.277 to 5.288 min. (SUB)
Location of Maximum: 442.00
Number of points: 362

m/z	Y	m/z	Y	m/z	Y	m/z	Y
110.00	171840	201.00	5446	295.00	2007	419.00	51
111.00	27816	203.00	8234	296.00	99176	420.00	159
112.00	3524	204.00	46312	297.00	13833	421.00	9642
113.00	1110	205.00	76176	298.00	933	422.00	8163
114.00	333	206.00	312064	299.00	187	423.00	70840
115.00	375	207.00	39944	301.00	1283	424.00	13706
116.00	5497	208.00	10309	302.00	1600	425.00	1379
117.00	111352	209.00	3319	303.00	11211	426.00	116
118.00	7537	210.00	5405	304.00	2920	435.00	183
119.00	804	211.00	13059	305.00	340	436.00	321
120.00	1396	213.00	954	307.00	143	437.00	429
121.00	464	214.00	372	308.00	1537	438.00	433
122.00	6695	215.00	3416	309.00	897	439.00	1029
123.00	10626	216.00	7284	310.00	1450	440.00	858
124.00	4934	217.00	88088	311.00	269	441.00	187840
125.00	5024	218.00	11124	312.00	388	442.00	1272320
126.00	1626	219.00	1036	313.00	1094	443.00	252096
127.00	379072	221.00	64712	314.00	4718	444.00	22672
128.00	28408	222.00	5407	315.00	10837	445.00	1335
129.00	148928	223.00	18976	316.00	6354		
130.00	12793	224.00	188544	317.00	1099		

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\003.D Page 1
Report Date: 30-Aug-2021 17:08

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210623.b\003.D
Lab Smp Id: 14DX Client Smp ID: 14DX
Inj Date : 23-JUN-2021 10:26 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : 14DX;14DX
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210623.b\DXSIM.m
Meth Date : 30-Aug-2021 17:08 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

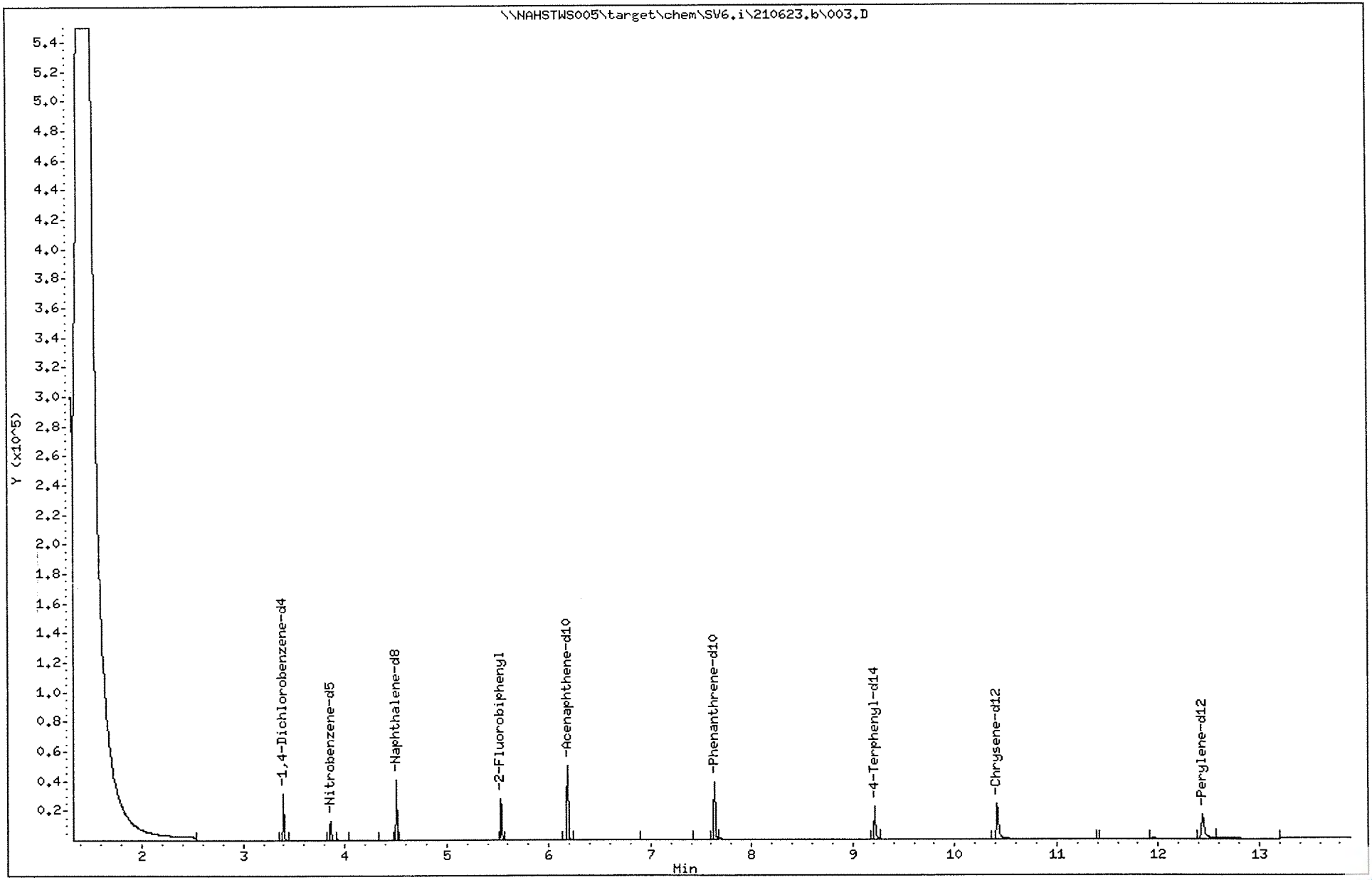
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.398	3.398	(1.000)	8732	0.10000		(a)
* 45 Naphthalene-d8	136	4.508	4.508	(1.000)	29922	0.10000		
$ 33 Nitrobenzene-d5	82	3.860	3.860	(0.856)	7007	0.08000	0.07646	(QM)
* 86 Acenaphthene-d10	164	6.186	6.186	(1.000)	18080	0.10000		
$ 69 2-Fluorobiphenyl	172	5.533	5.533	(0.894)	18779	0.08000	0.07782	
* 126 Phenanthrene-d10	188	7.630	7.630	(1.000)	35614	0.10000		
* 182 Chrysene-d12	240	10.417	10.417	(1.000)	29654	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.217	9.217	(0.885)	23637	0.08000	0.08834	(M)
* 198 Perylene-d12	264	12.442	12.442	(1.000)	26508	0.10000		
1 1,4-Dioxane	58	1.662	1.662	(0.489)	385	0.08000	0.08556	(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\003.D
Date : 23-JUN-2021 10:26
Client ID: 14DX
Sample Info: 14DX;14DX
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210623.b\005.D
Lab Smp Id: MBLK-167083 Client Smp ID: MBLK-167083
Inj Date : 23-JUN-2021 11:08 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : MBLK-167083;MBLK-167083;3;;BLANK
Misc Info : HS21060908;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210623.b\DXSIM.m
Meth Date : 30-Aug-2021 16:55 Genoveva.R Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.403	3.398	(1.000)	10387	0.10000		(a)
* 45 Naphthalene-d8	136	4.508	4.508	(1.000)	34321	0.10000		
$ 33 Nitrobenzene-d5	82	3.860	3.860	(0.856)	6811	0.06480	0.06480	(Q)
* 86 Acenaphthene-d10	164	6.180	6.186	(1.000)	21369	0.10000		
$ 69 2-Fluorobiphenyl	172	5.533	5.533	(0.895)	19160	0.06718	0.06718	
* 126 Phenanthrene-d10	188	7.630	7.630	(1.000)	41283	0.10000		
* 182 Chrysene-d12	240	10.417	10.417	(1.000)	33626	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.211	9.217	(0.884)	22711	0.07485	0.07485	(M)
* 198 Perylene-d12	264	12.436	12.442	(1.000)	26644	0.10000		

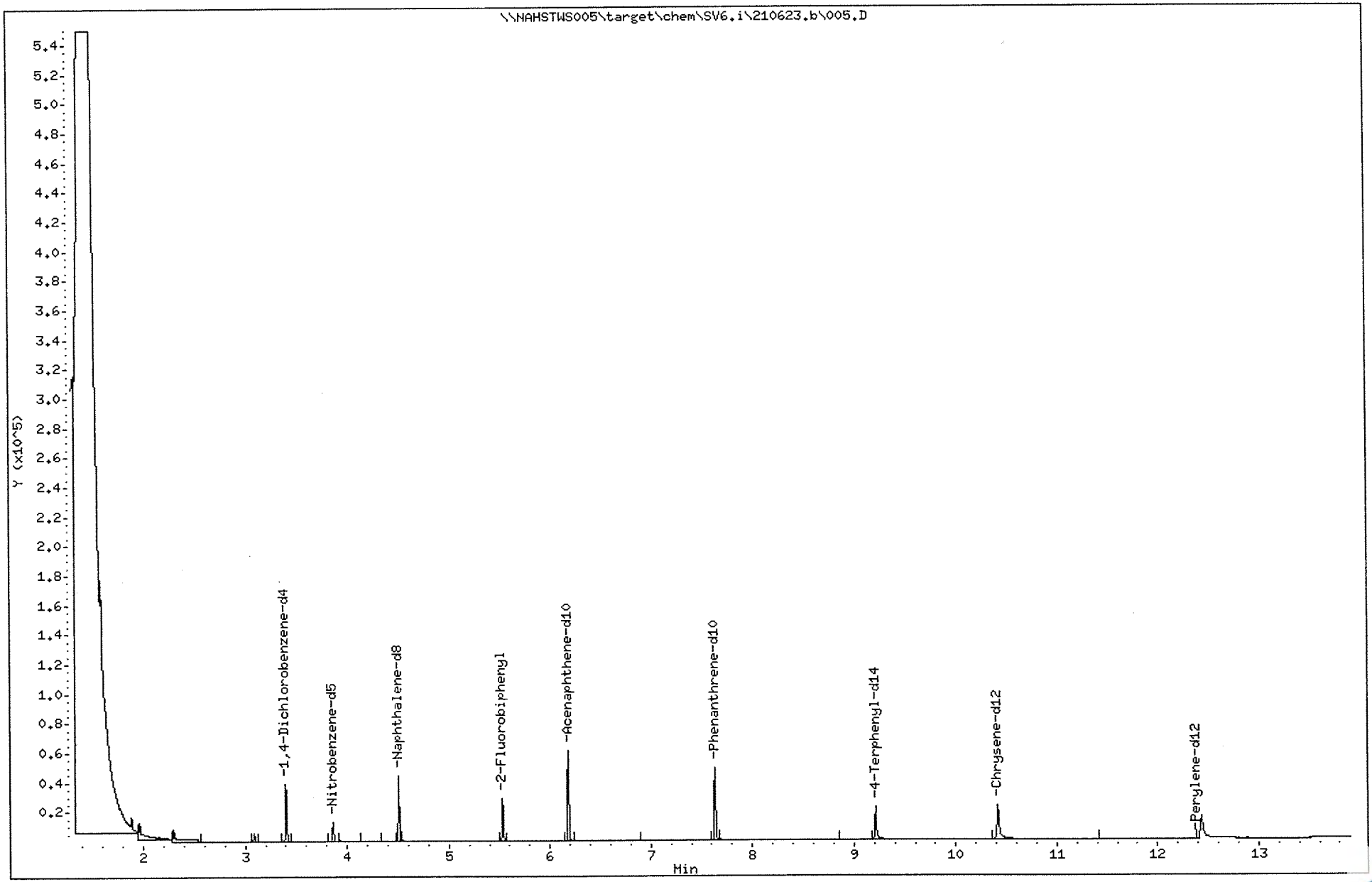
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\005.D
Date : 23-JUN-2021 11:08
Client ID: MBLK-167083
Sample Info: MBLK-167083;MBLK-167083;3;;BLANK
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i

Operator: LG
Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\006.D Page 1
Report Date: 30-Aug-2021 16:56

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210623.b\006.D
Lab Smp Id: LCS-167083 Client Smp ID: LCS-167083
Inj Date : 23-JUN-2021 11:26 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : LCS-167083;LCS-167083;3;;LCS
Misc Info : HS21060908;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210623.b\DXSIM.m
Meth Date : 30-Aug-2021 16:55 Genoveva.R Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.393	3.398	(1.000)	6630	0.10000		(aM)
* 45 Naphthalene-d8	136	4.508	4.508	(1.000)	15861	0.10000		(M)
$ 33 Nitrobenzene-d5	82	3.860	3.860	(0.856)	2072	0.04265	0.04265	(M)
* 86 Acenaphthene-d10	164	6.180	6.186	(1.000)	9230	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.533	5.533	(1.000)	6853	0.05563	0.05563	
* 126 Phenanthrene-d10	188	7.630	7.630	(1.000)	18630	0.10000		(M)
* 182 Chrysene-d12	240	10.411	10.417	(1.000)	17174	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.211	9.217	(0.885)	7198	0.04645	0.04645	(M)
* 198 Perylene-d12	264	12.431	12.442	(1.000)	19711	0.10000		(M)
1 1,4-Dioxane	58	1.636	1.662	(0.482)	329	0.09630	0.09630	(aMH)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\006.D

Date : 23-JUN-2021 11:26

Client ID: LCS-167083

Instrument: SV6.i

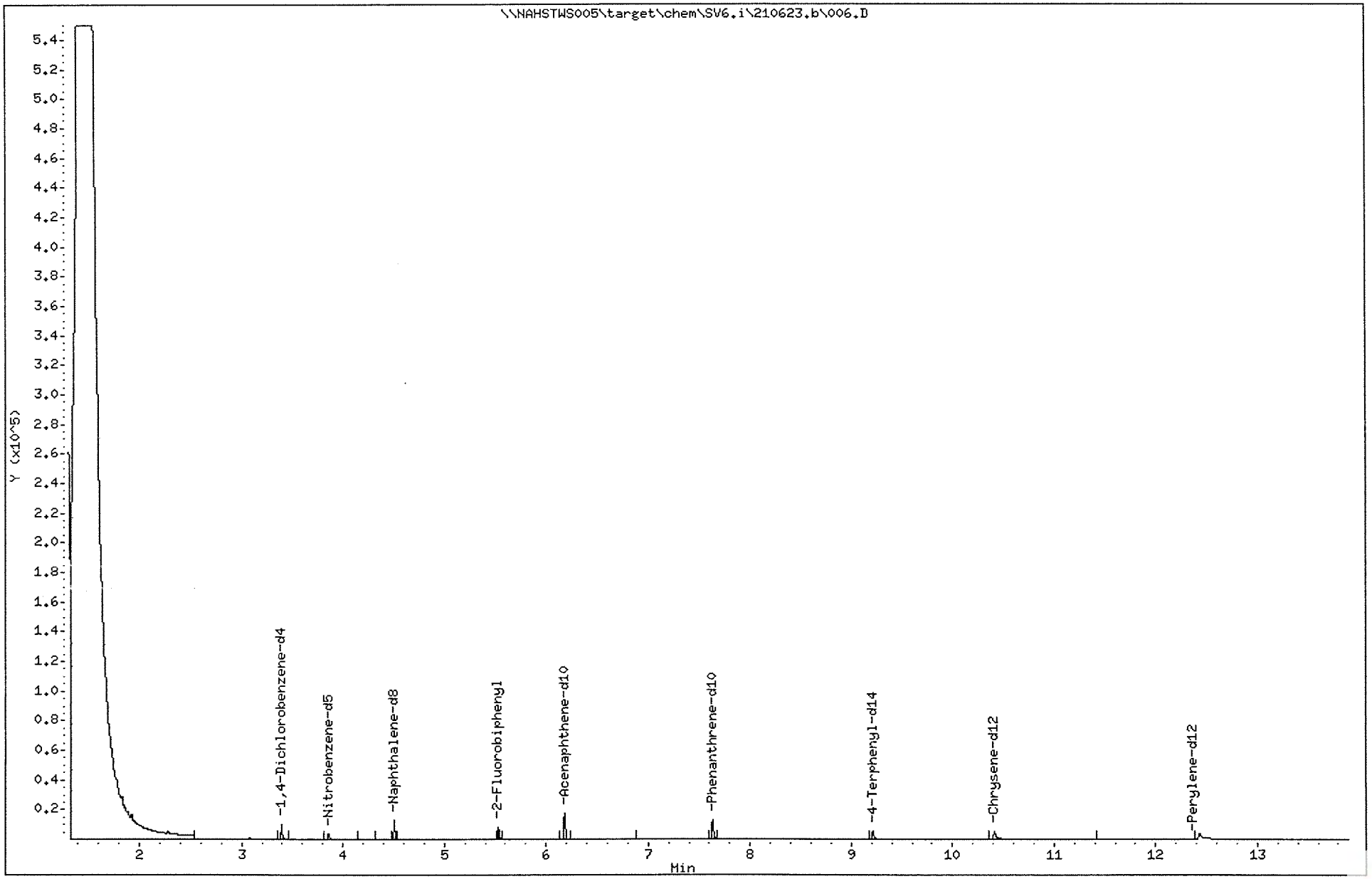
Sample Info: LCS-167083;LCS-167083;3;;LCS

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\014.D
Report Date: 30-Aug-2021 16:56

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210623.b\014.D
Lab Smp Id: LCSD-167083 Client Smp ID: LCSD-167083
Inj Date : 23-JUN-2021 13:50 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : LCSD-167083;LCSD-167083;3;;LCSD
Misc Info : HS21060908;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210623.b\DXSIM.m
Meth Date : 30-Aug-2021 16:55 Genoveva.R Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.393	3.398	(1.000)	6683	0.10000		(aQ)
* 45 Naphthalene-d8	136	4.508	4.508	(1.000)	19841	0.10000		
$ 33 Nitrobenzene-d5	82	3.860	3.860	(0.856)	2989	0.04919	0.04919	(M)
* 86 Acenaphthene-d10	164	6.180	6.186	(1.000)	13561	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.533	5.533	(0.895)	11891	0.06570	0.06570	(M)
* 126 Phenanthrene-d10	188	7.630	7.630	(1.000)	27356	0.10000		
* 182 Chrysene-d12	240	10.411	10.417	(1.000)	16155	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.211	9.217	(0.885)	14117	0.09685	0.09685	(M)
* 198 Perylene-d12	264	12.431	12.442	(1.000)	15435	0.10000		
1 1,4-Dioxane	58	1.636	1.662	(0.482)	332	0.09641	0.09640	(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\014.D

Date : 23-JUN-2021 13:50

Client ID: LCSD-167083

Instrument: SV6.i

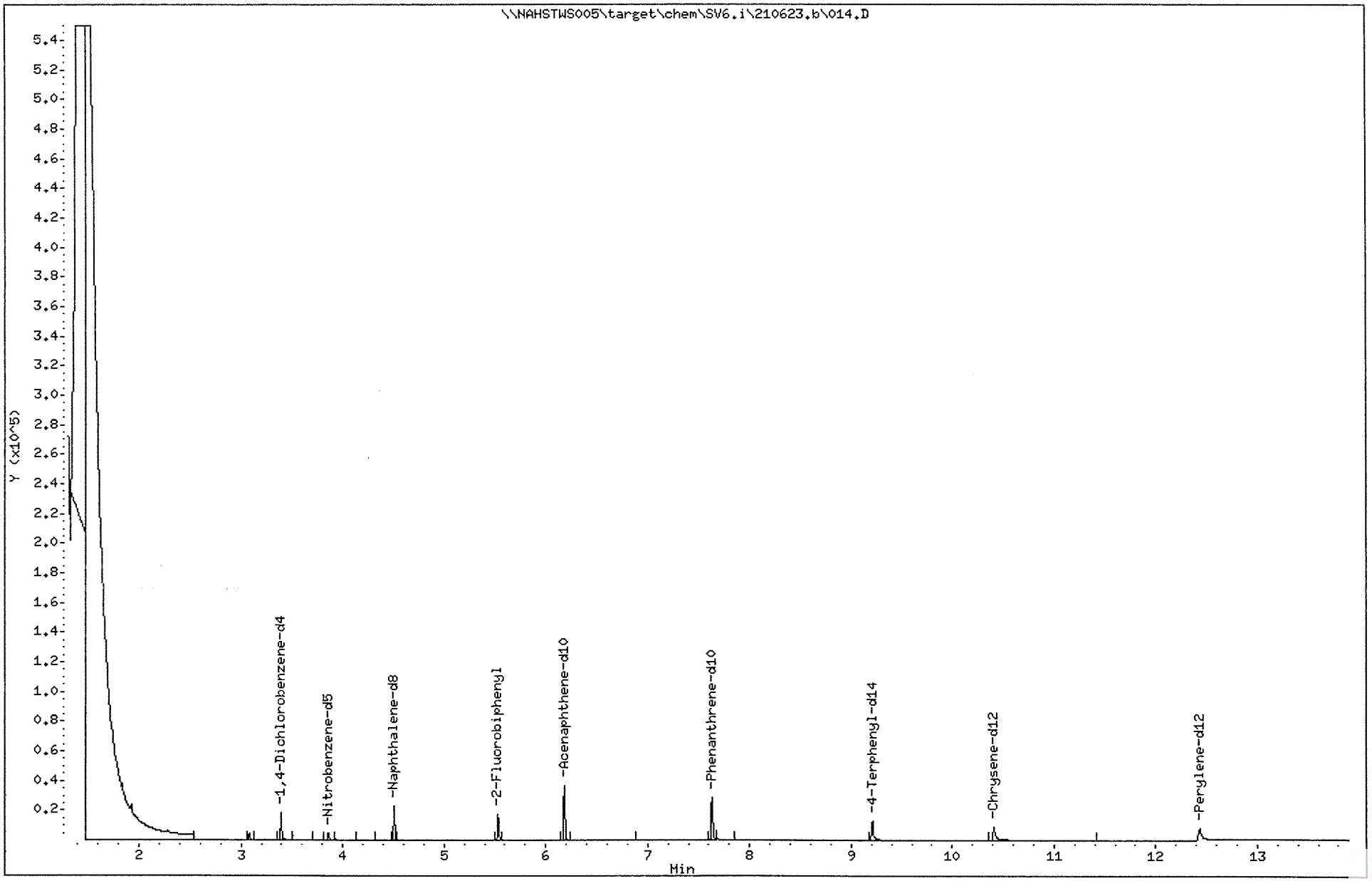
Sample Info: LCSD-167083;LCSD-167083;3;;LCSD

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\015.D Page 1
Report Date: 30-Aug-2021 16:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210623.b\015.D
Lab Smp Id: HS21060908-02 Client Smp ID: HS21060908-02
Inj Date : 23-JUN-2021 14:08 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : HS21060908-02;HS21060908-02
Misc Info : HS21060908;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210623.b\DXSIM.m
Meth Date : 30-Aug-2021 16:49 Genoveva.R Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

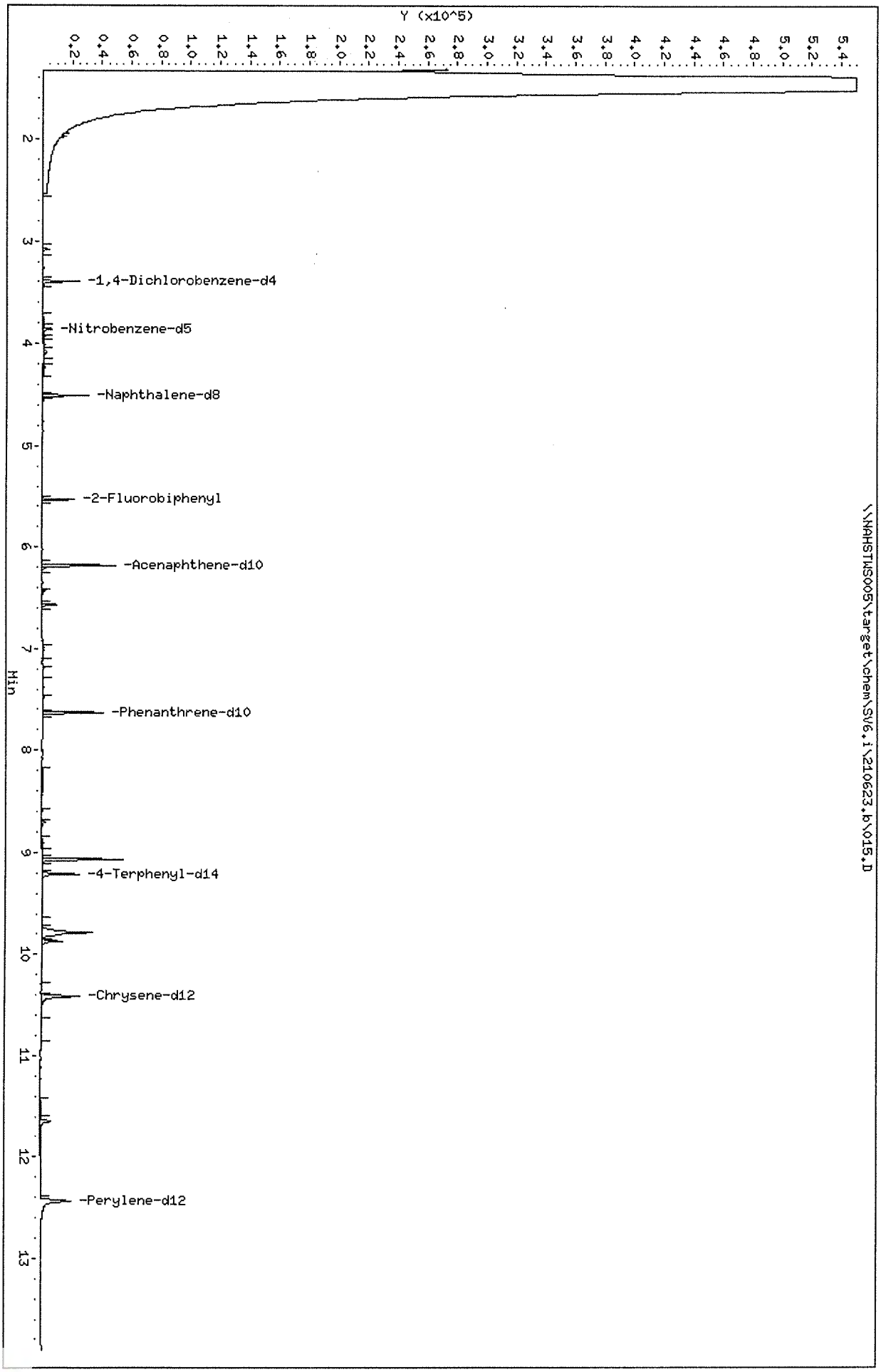
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.398	3.398	(1.000)	7101	0.10000	(a)
* 45 Naphthalene-d8	136	4.508	4.508	(1.000)	24312	0.10000	
$ 33 Nitrobenzene-d5	82	3.860	3.860	(0.856)	3322	0.04461	0.04461(M)
* 86 Acenaphthene-d10	164	6.180	6.186	(1.000)	17473	0.10000	
$ 69 2-Fluorobiphenyl	172	5.533	5.533	(0.895)	12357	0.05299	0.05299
* 126 Phenanthrene-d10	188	7.630	7.630	(1.000)	33978	0.10000	
* 182 Chrysene-d12	240	10.411	10.417	(1.000)	36130	0.10000	
$ 158 4-Terphenyl-d14	244	9.212	9.217	(0.885)	25139	0.07711	0.07711(M)
* 198 Perylene-d12	264	12.436	12.442	(1.000)	35642	0.10000	
1 1,4-Dioxane	58	1.662	1.662	(0.489)	1409	0.38506	0.3850(QH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\015.D
Date : 23-JUN-2021 14:08
Client ID: HS21060908-02
Sample Info: HS21060908-02;HS21060908-02
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\015.D

Date : 23-JUN-2021 14:08

Client ID: HS21060908-02

Instrument: SV6.i

Sample Info: HS21060908-02;HS21060908-02

Purge Volume: 1000.0

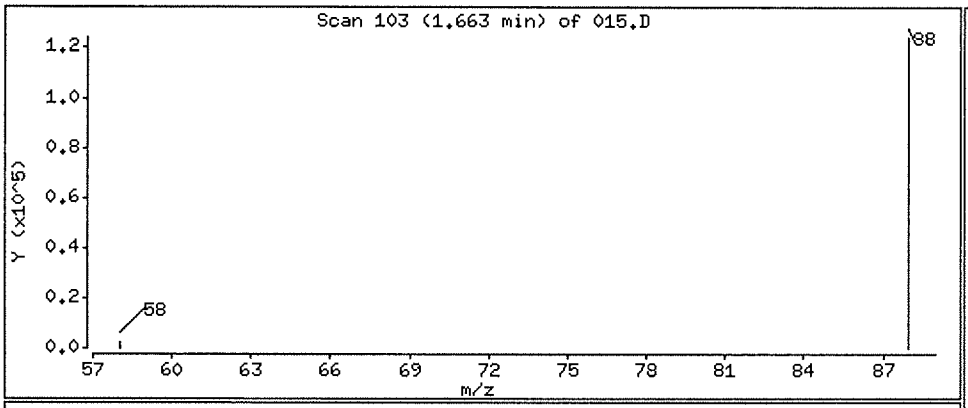
Operator: LG

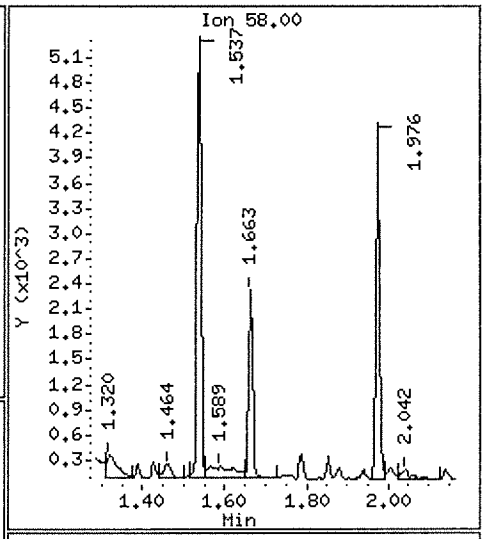
Column phase: RTX-5SIL MS

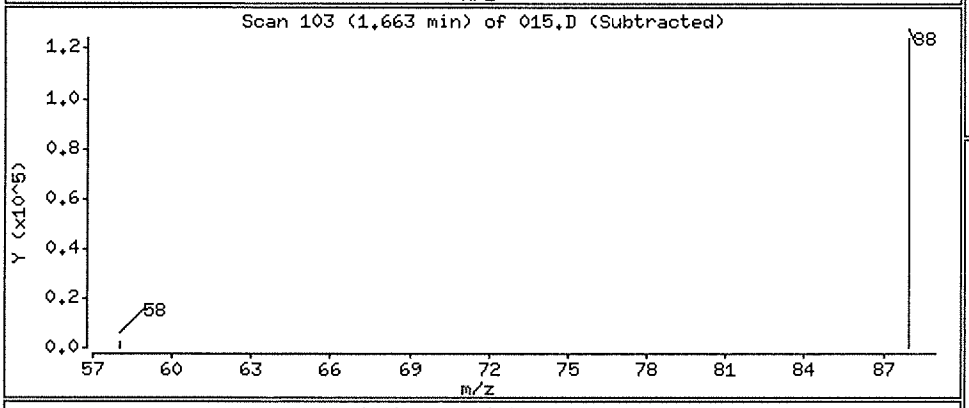
Column diameter: 0.28

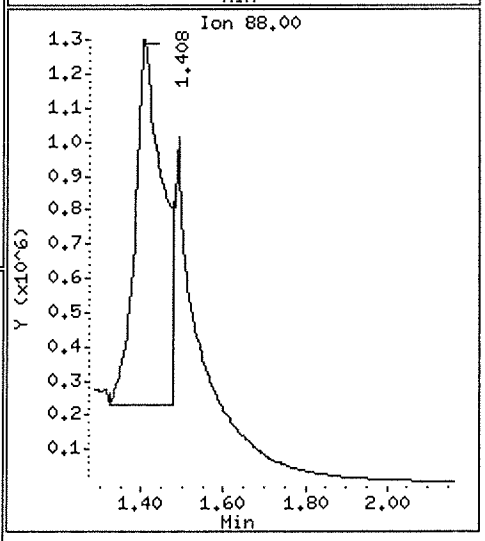
1 1,4-Dioxane

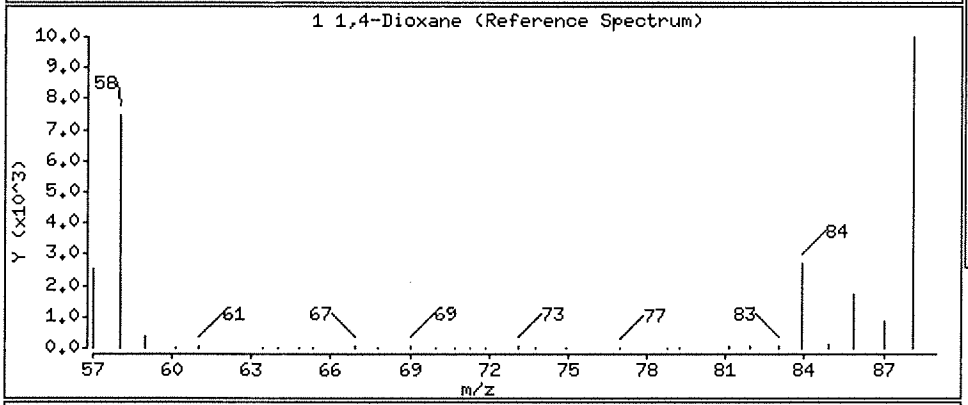
Concentration: 0.3850 ug/L

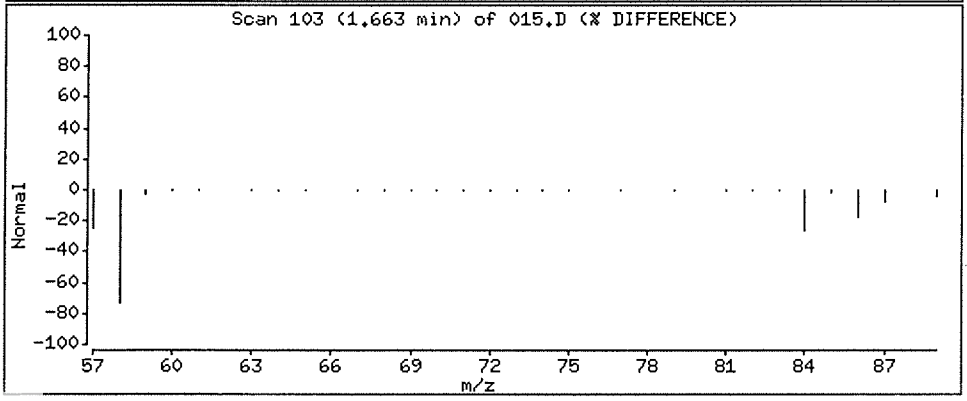












Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\017.D Page 1
Report Date: 30-Aug-2021 16:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210623.b\017.D
Lab Smp Id: HS21060908-03 Client Smp ID: HS21060908-03
Inj Date : 23-JUN-2021 14:44 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : HS21060908-03;HS21060908-03
Misc Info : HS21060908;1;0;10
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210623.b\DXSIM.m
Meth Date : 30-Aug-2021 16:49 Genoveva.R Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 17
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

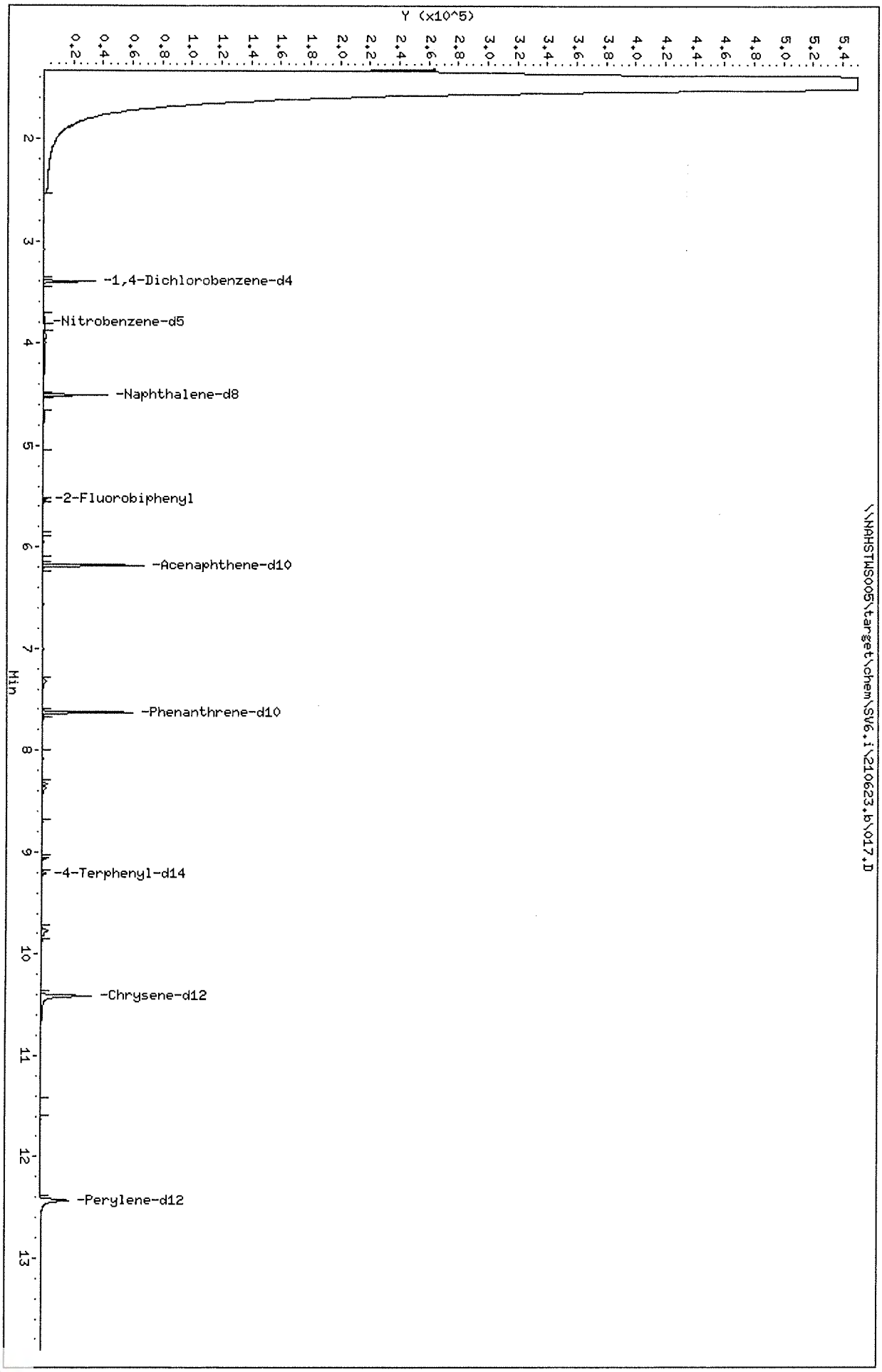
Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.398	3.398	(1.000)	10467	0.10000		(a)
* 45 Naphthalene-d8	136	4.508	4.508	(1.000)	33792	0.10000		
$ 33 Nitrobenzene-d5	82	3.860	3.860	(0.856)	437	0.00422	0.04222	(M)
* 86 Acenaphthene-d10	164	6.180	6.186	(1.000)	23980	0.10000		
$ 69 2-Fluorobiphenyl	172	5.533	5.533	(0.895)	2018	0.00631	0.06305	
* 126 Phenanthrene-d10	188	7.630	7.630	(1.000)	50437	0.10000		
* 182 Chrysene-d12	240	10.411	10.417	(1.000)	42366	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.212	9.217	(0.885)	2954	0.00773	0.07728	(M)
* 198 Perylene-d12	264	12.431	12.442	(1.000)	33192	0.10000		
1 1,4-Dioxane	58	1.544	1.662	(0.455)	377	0.06990	0.6990	(aM)

QC Flag Legend

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



Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\017.D
Date : 23-JUN-2021 14:44
Client ID: HS21060908-03
Sample Info: HS21060908-03;HS21060908-03
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\017.D

Date : 23-JUN-2021 14:44

Client ID: HS21060908-03

Instrument: SV6.i

Sample Info: HS21060908-03;HS21060908-03

Purge Volume: 1000.0

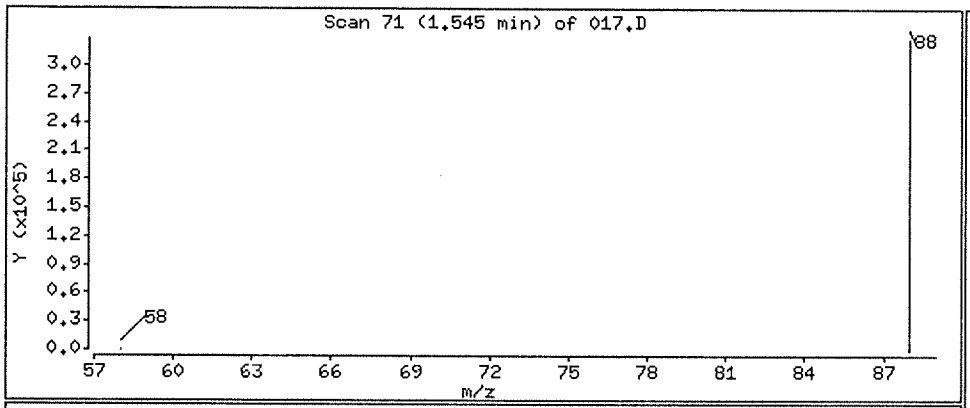
Operator: LC

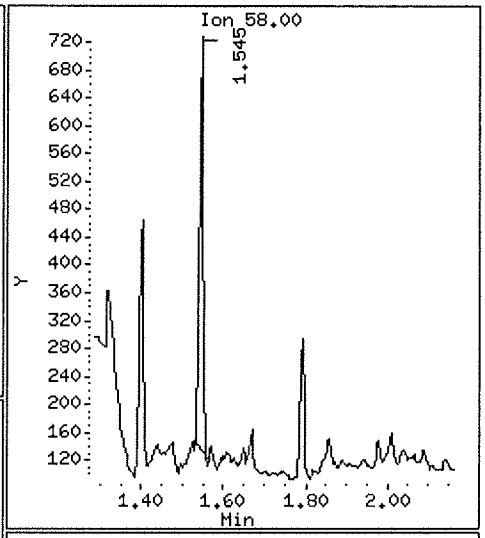
Column phase: RTX-5SIL MS

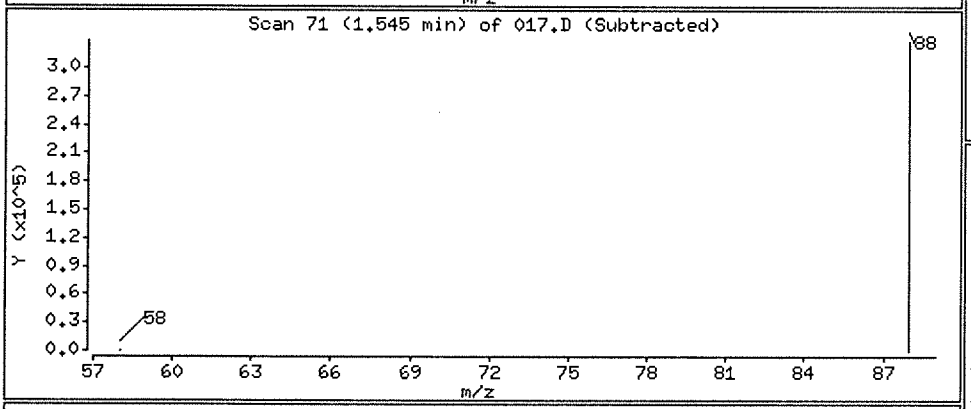
Column diameter: 0.28

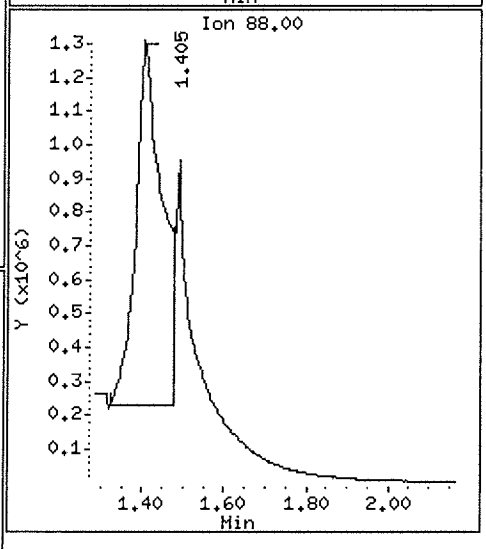
1 1,4-Dioxane

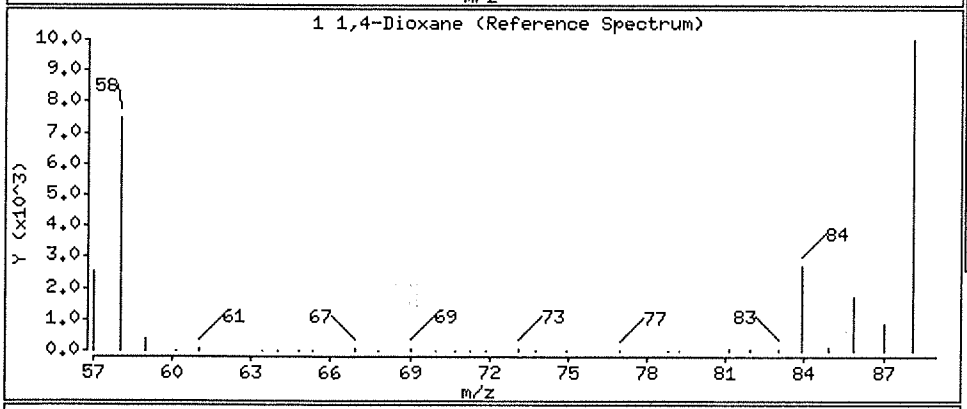
Concentration: 0.6990 ug/L

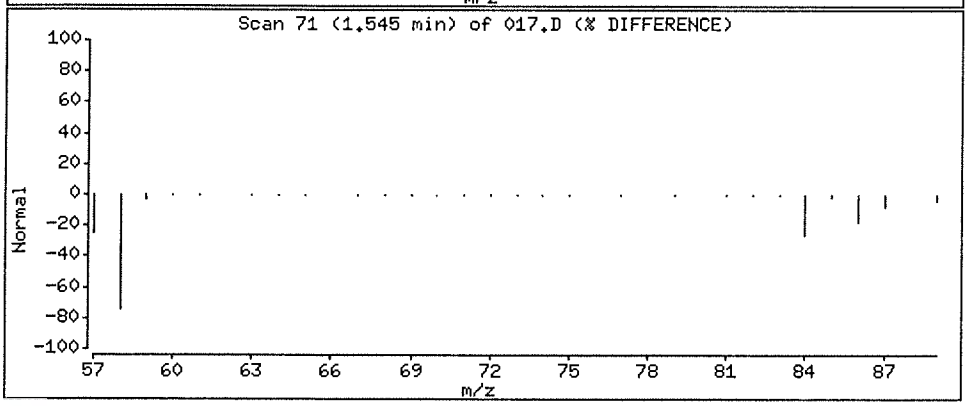












Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\019.D Page 1
Report Date: 30-Aug-2021 16:50

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210623.b\019.D
Lab Smp Id: HS21060908-06 Client Smp ID: HS21060908-06
Inj Date : 23-JUN-2021 15:20 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : HS21060908-06;HS21060908-06
Misc Info : HS21060908;1;0;10
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210623.b\DXSIM.m
Meth Date : 30-Aug-2021 16:49 Genoveva.R Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 19
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

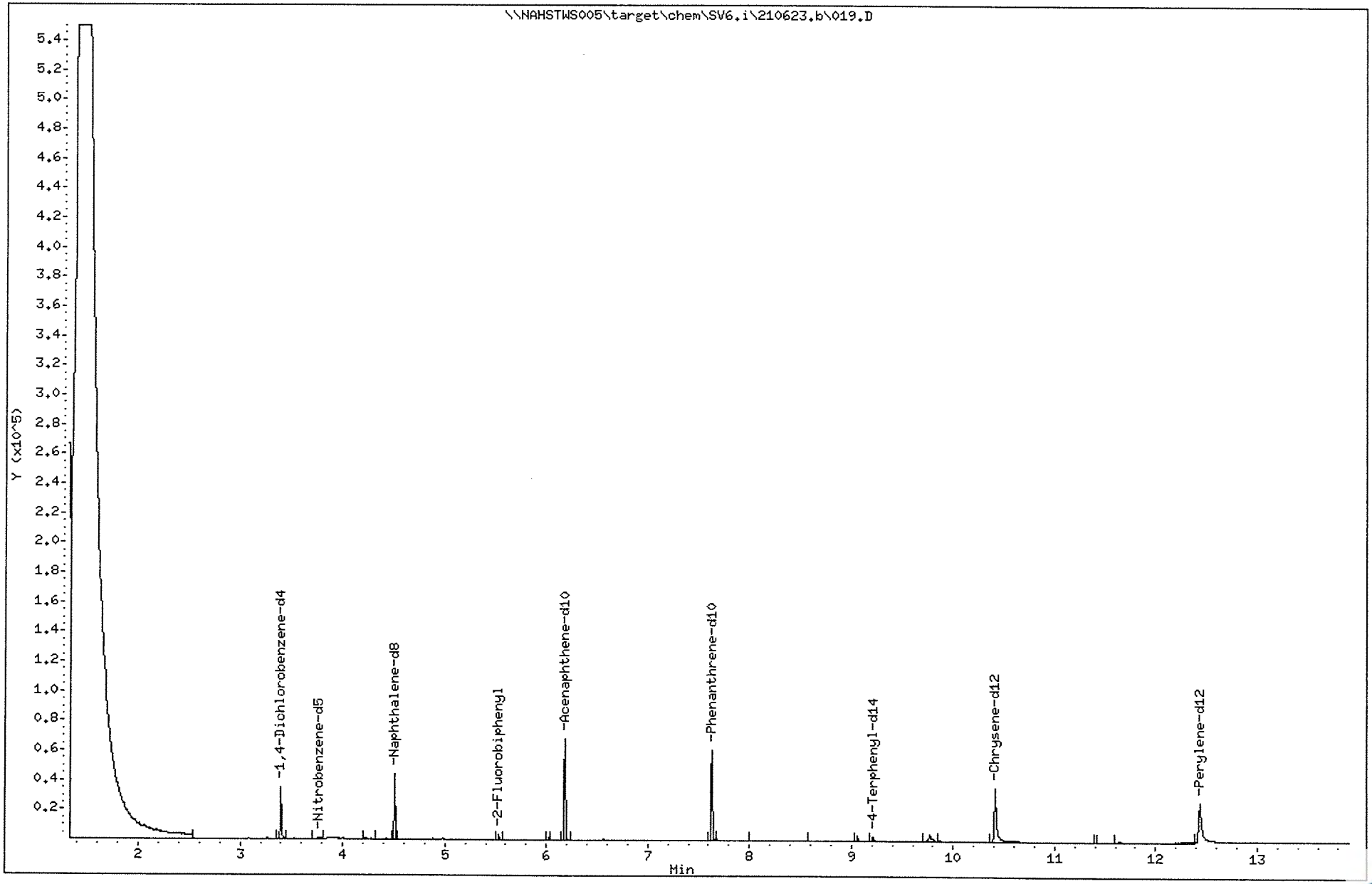
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.398	3.398	(1.000)	10285	0.10000		(a)
* 45 Naphthalene-d8	136	4.508	4.508	(1.000)	33447	0.10000		
$ 33 Nitrobenzene-d5	82	3.860	3.860	(0.856)	417	0.00407	0.04071	(M)
* 86 Acenaphthene-d10	164	6.180	6.186	(1.000)	23896	0.10000		
$ 69 2-Fluorobiphenyl	172	5.533	5.533	(0.895)	1943	0.00609	0.06092	
* 126 Phenanthrene-d10	188	7.630	7.630	(1.000)	49938	0.10000		
* 182 Chrysene-d12	240	10.411	10.417	(1.000)	44429	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.212	9.217	(0.885)	2950	0.00736	0.07359	(M)
* 198 Perylene-d12	264	12.436	12.442	(1.000)	46718	0.10000		
1 1,4-Dioxane	58	1.662	1.662	(0.489)	1142	0.21548	2.155	(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\019.D
Date : 23-JUN-2021 15:20
Client ID: HS21060908-06
Sample Info: HS21060908-06;HS21060908-06
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\019.D

Date : 23-JUN-2021 15:20

Client ID: HS21060908-06

Instrument: SV6.i

Sample Info: HS21060908-06;HS21060908-06

Purge Volume: 1000.0

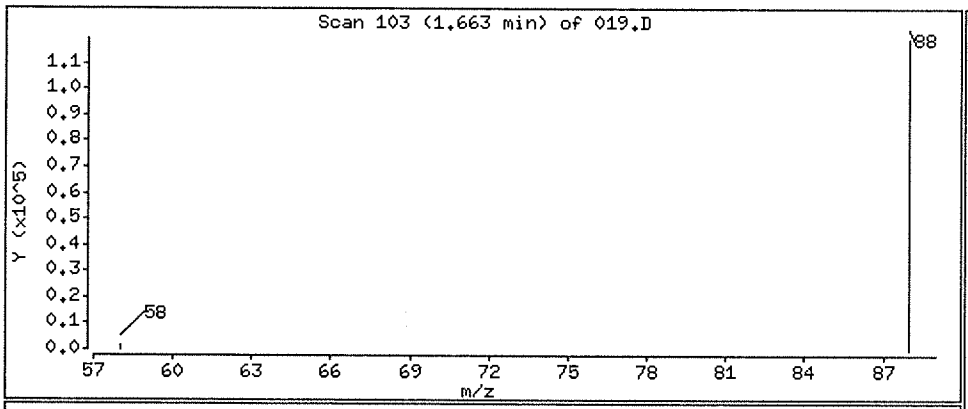
Operator: LC

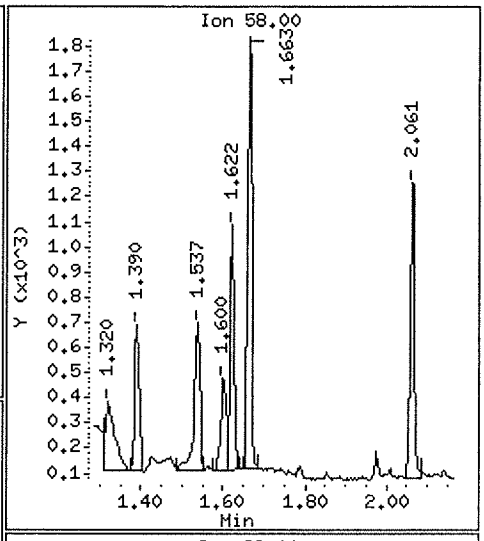
Column phase: RTX-5SIL MS

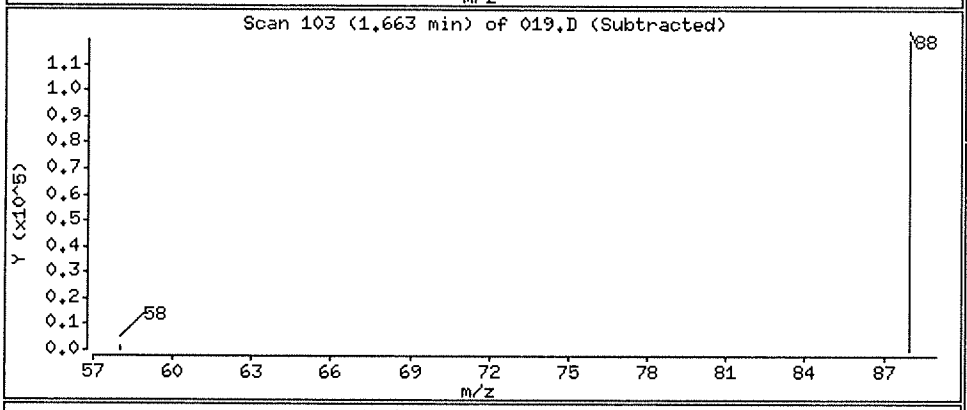
Column diameter: 0.28

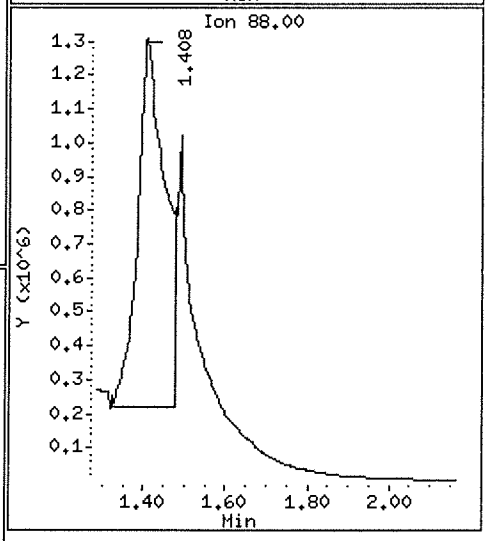
1 1,4-Dioxane

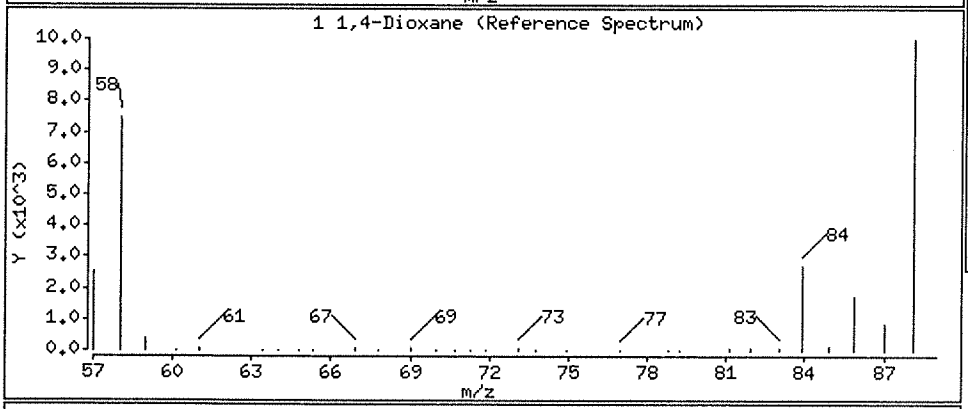
Concentration: 2.155 ug/L

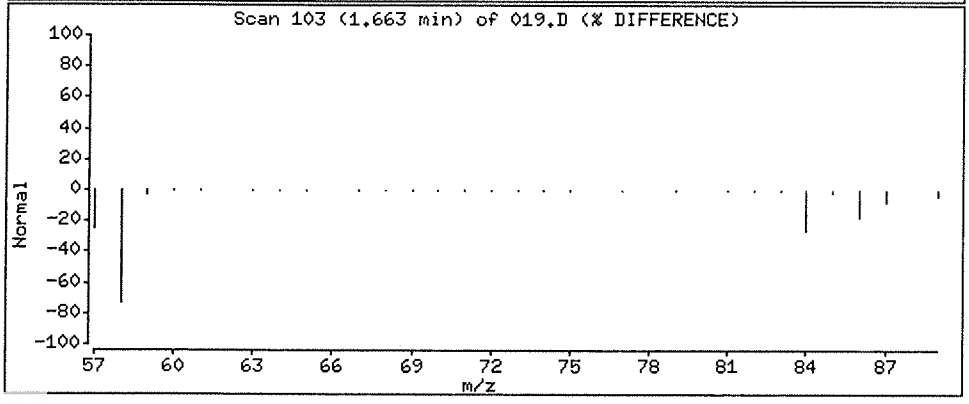












Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\036.D Page 1
Report Date: 30-Aug-2021 17:06

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210623.b\036.D
Lab Smp Id: 14DX Client Smp ID: 14DX
Inj Date : 23-JUN-2021 20:26 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : 14DX;14DX
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210623.b\DXSIMEND.m
Meth Date : 30-Aug-2021 17:06 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 36 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.404	3.404	(1.000)	16721	0.10000		(a)
* 45 Naphthalene-d8	136	4.508	4.508	(1.000)	52031	0.10000		
$ 33 Nitrobenzene-d5	82	3.860	3.860	(0.856)	9186	0.08000	0.05764	(Q)
* 86 Acenaphthene-d10	164	6.180	6.180	(1.000)	37191	0.10000		(M)
$ 69 2-Fluorobiphenyl	172	5.533	5.533	(0.929)	38175	0.08000	0.07691	
* 126 Phenanthrene-d10	188	7.630	7.630	(1.000)	80764	0.10000		
* 182 Chrysene-d12	240	10.411	10.411	(1.000)	60276	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.212	9.212	(0.885)	50967	0.08000	0.09371	(M)
* 198 Perylene-d12	264	12.436	12.436	(1.000)	60371	0.10000		
1 1,4-Dioxane	58	1.688	1.688	(0.496)	456	0.08000	0.05292	(aQM)

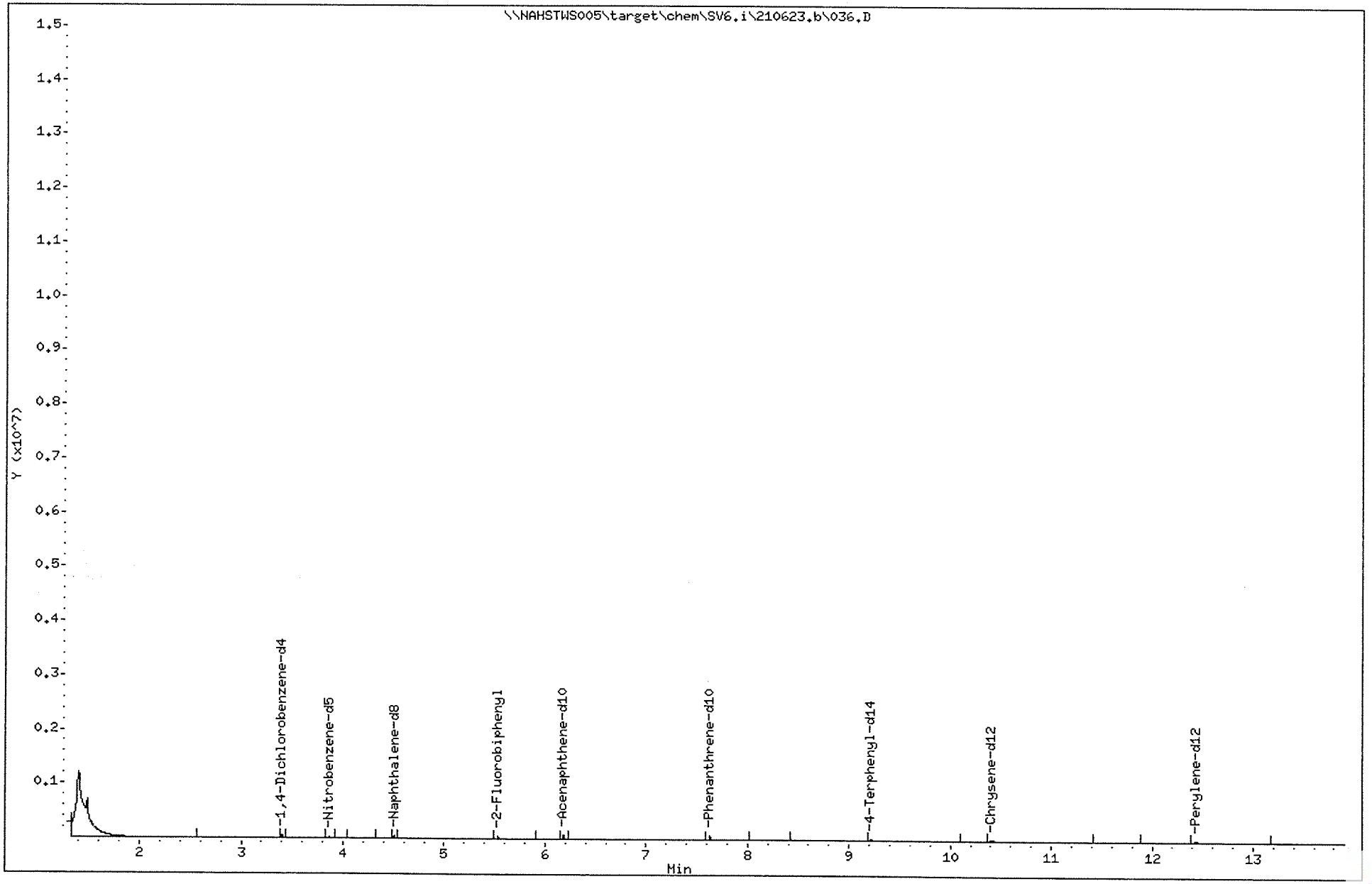
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210623.b\036.D
Date : 23-JUN-2021 20:26
Client ID: 14DX
Sample Info: 14DX;14DX
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i

Operator: LG
Column diameter: 0.28



SV06 -Logbook

Batch: 45299
Date: 06-25-2021
Method: 8270DSIM
Comments: MSSV003

Analyst: Andrew Neir
Reviewer:
Laboratory: Houston

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	p
1	DFTPP	TUNE	06-25-2021 11:00 am	1.00			001.D		Y	N
2	SLSTD-2.5	SAMP	06-25-2021 11:10 am	1.00			002.D		Y	N
3	14DXSIM	CCV	06-25-2021 11:37 am	1.00			003.D		Y	N
4	CCB	SAMP	06-25-2021 12:05 pm	1.00			004.D		Y	N
5	HS21060908-01	SAMP	06-25-2021 12:23 pm	50.00	1000.00 mL	1.00 mL	005.D	Liquid	Y	N
6	HS21060908-05	SAMP	06-25-2021 12:41 pm	5.00	1000.00 mL	1.00 mL	006.D	Liquid	Y	N
7	HS21060908-08	SAMP	06-25-2021 12:59 pm	50.00	1000.00 mL	1.00 mL	007.D	Liquid	Y	N
8	HS21060937-02	SAMP	06-25-2021 01:17 pm	1.00	1000.00 mL	1.00 mL	008.D	Liquid	Y	N
9	HS21060937-03	SAMP	06-25-2021 01:35 pm	100.0(	1000.00 mL	1.00 mL	009.D	Liquid	Y	N
10	HS21060937-05	SAMP	06-25-2021 01:53 pm	1.00	1000.00 mL	1.00 mL	010.D	Liquid	Y	N
11	HS21060937-05	SAMP	06-25-2021 02:11 pm	10.00	1000.00 mL	1.00 mL	011.D	Liquid	Y	N
12	HS21060937-06	SAMP	06-25-2021 02:29 pm	1.00	1000.00 mL	1.00 mL	012.D	Liquid	Y	N
13	HS21060937-02	SAMP	06-25-2021 02:47 pm	10.00	1000.00 mL	1.00 mL	013.D	Liquid	Y	N
14	HS21060937-09	SAMP	06-25-2021 03:04 pm	50.00	1000.00 mL	1.00 mL	014.D	Liquid	Y	N
15	HS21060908-05	SAMP	06-25-2021 03:22 pm	5.00	1000.00 mL	1.00 mL	015.D	Liquid	Y	N
16	HS21060937-05	SAMP	06-25-2021 03:41 pm	10.00	1000.00 mL	1.00 mL	016.D	Liquid	Y	N
17	HS21060937-06	SAMP	06-25-2021 03:58 pm	10.00	1000.00 mL	1.00 mL	017.D	Liquid	Y	N
18	HS21061094-01	SAMP	06-25-2021 04:16 pm	500.0(	1000.00 mL	1.00 mL	018.D	Liquid	Y	N
19	HS21060937-09	SAMP	06-25-2021 04:34 pm	50.00	1000.00 mL	1.00 mL	019.D	Liquid	Y	N
20	HS21060937-02	SAMP	06-25-2021 04:52 pm	1.00	1000.00 mL	1.00 mL	020.D	Liquid	Y	N
21	HS21060937-02	SAMP	06-25-2021 05:10 pm	10.00	1000.00 mL	1.00 mL	021.D	Liquid	Y	N
22	HS21060937-05	SAMP	06-25-2021 05:28 pm	10.00	1000.00 mL	1.00 mL	022.D	Liquid	Y	N
23	HS21061094-02	SAMP	06-25-2021 05:46 pm	5000.0	1000.00 mL	1.00 mL	023.D	Liquid	Y	N
24	HS21061094-04	SAMP	06-25-2021 06:04 pm	10.00	1000.00 mL	1.00 mL	024.D	Liquid	Y	N
25	HS21061094-05	SAMP	06-25-2021 06:22 pm	1.00	1000.00 mL	1.00 mL	025.D	Liquid	Y	N
26	HS21061094-05	SAMP	06-25-2021 06:40 pm	10.00	1000.00 mL	1.00 mL	026.D	Liquid	Y	N
27	HS21061094-06	SAMP	06-25-2021 06:58 pm	10.00	1000.00 mL	1.00 mL	027.D	Liquid	Y	N
28	HS21061094-07	SAMP	06-25-2021 07:16 pm	10.00	1000.00 mL	1.00 mL	028.D	Liquid	Y	N
29	14DXSIM	SAMP	06-25-2021 07:34 pm	1.00	1000.00 mL	1.00 mL	029.D	Liquid	Y	N

Chemical	Value
IS ID	3141114-01
CAL STD ID	3141106-05/ 3141114-06
DFTPP ID	31411105-05
PCP Tailing	0.75
Benz. Tailing	0.82
Routine SOP Maintenance	ACN

FORM 2
WATER SEMIVOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

	CLIENT SAMPLE NO.	SMC1 (NBZ)#	SMC2 #	SMC3 (FBP)#	OTHER	TOT OUT
01	HS21060908-01	118	137	70		0
02	HS21060908-08	72	136	83		0
03	HS21060908-05	87	108	90		0
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						

		QC LIMITS
SMC1 (NBZ)	= Nitrobenzene-d5	(40-140)
SMC2	= 4-Terphenyl-d14	(40-140)
SMC3 (FBP)	= 2-Fluorobiphenyl	(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID: 001 BFB Injection Date: 06/25/21

Instrument ID: SV6 BFB Injection Time: 1100

GC Column: DB-5MS ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	25.8
68	Less than 2.0% of mass 69	0.4 (1.5)1
69	Mass 69 relative abundance	24.9
70	Less than 2.0% of mass 69	0.1 (0.6)1
127	10.0 - 80.0% of mass 198	36.5
197	Less than 2.0% of mass 198	0.8
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	27.5
365	1.0 - 100.0% of mass 198	3.8
441	Present, but less than mass 443	17.4
442	50.0 - 150.0% of mass 198	116.6
443	15.0 - 24.0% of mass 442	22.7 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	14DXSIM	14DXSIM	003	06/25/21	1137
02	HS21060908-01	HS21060908-01	005	06/25/21	1223
03	HS21060908-08	HS21060908-08	007	06/25/21	1259
04	HS21060908-05	HS21060908-05	015	06/25/21	1522
05	14DXSIM	14DXSIM	029	06/25/21	1934
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: SV6 Calibration Date: 06/25/21 Time: 1137

Lab File ID: 003 Init. Calib. Date(s): 06/07/21 06/07/21

Init. Calib. Times: 1125 1337

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	5.2e-002	5.75e-002	0.01	10.58	20.00	AVRG
Nitrobenzene-d5	0.3060000	0.2569254	0.01	-16.04	20.00	AVRG
4-Terphenyl-d14	0.9020000	1.0067582	0.01	11.61	20.00	AVRG
2-Fluorobiphenyl	1.3340000	1.2292413	0.01	-7.85	20.00	AVRG

FORM VII SV

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Instrument ID: SV6 Calibration Date: 06/25/21 Time: 1934

Lab File ID: 029 Init. Calib. Date(s): 06/07/21 06/07/21

Init. Calib. Times: 1125 1337

GC Column: RTX-5SIL MS ID: 0.28 (mm)

COMPOUND	RRF OR AMOUNT	RRF8e-002 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,4-Dioxane	5.2e-002	3.55e-002	0.01	-31.73	50.00	AVRG
Nitrobenzene-d5	0.3060000	0.2785477	0.01	-8.97	50.00	AVRG
4-Terphenyl-d14	0.9020000	1.0317387	0.01	14.38	50.00	AVRG
2-Fluorobiphenyl	1.3340000	1.2398176	0.01	-7.06	50.00	AVRG

FORM VII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID (Standard): 003 Date Analyzed: 06/25/21

Instrument ID: SV6 Time Analyzed: 1137

GC Column: RTX-5SIL MS ID: 0.28 (mm) Heated Purge: (Y/N) N

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	3936	3.35	17111	4.47	8370	6.14
	UPPER LIMIT	7872	3.85	34222	4.97	16740	6.64
	LOWER LIMIT	1968	2.85	8556	3.97	4185	5.64
	CLIENT SAMPLE NO.						
01	HS21060908-01	4409	3.36	16271	4.47	9581	6.14
02	HS21060908-08	3448	3.36	12780	4.47	7528	6.14
03	HS21060908-05	2722	3.36	10041	4.47	6386	6.14
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS21060908

Lab File ID (Standard): 003 Date Analyzed: 06/25/21

Instrument ID: SV6 Time Analyzed: 1137

GC Column: RTX-5SIL MS ID: 0.28 (mm) Heated Purge: (Y/N) N

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	16997	7.59	13613	10.36	10442	12.36
	UPPER LIMIT	33994	8.09	27226	10.86	20884	12.86
	LOWER LIMIT	8499	7.09	6807	9.86	5221	11.86
	CLIENT SAMPLE NO.						
01	HS21060908-01	18519	7.59	13363	10.36	10107	12.36
02	HS21060908-08	14468	7.59	10603	10.36	8358	12.36
03	HS21060908-05	12583	7.59	9625	10.36	7477	12.37
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII SV

Data File: \\NAHSTWS005\Target\chem\SV6.i\210625.b\001.D

Date : 25-JUN-2021 11:00

Client ID: DFTPP

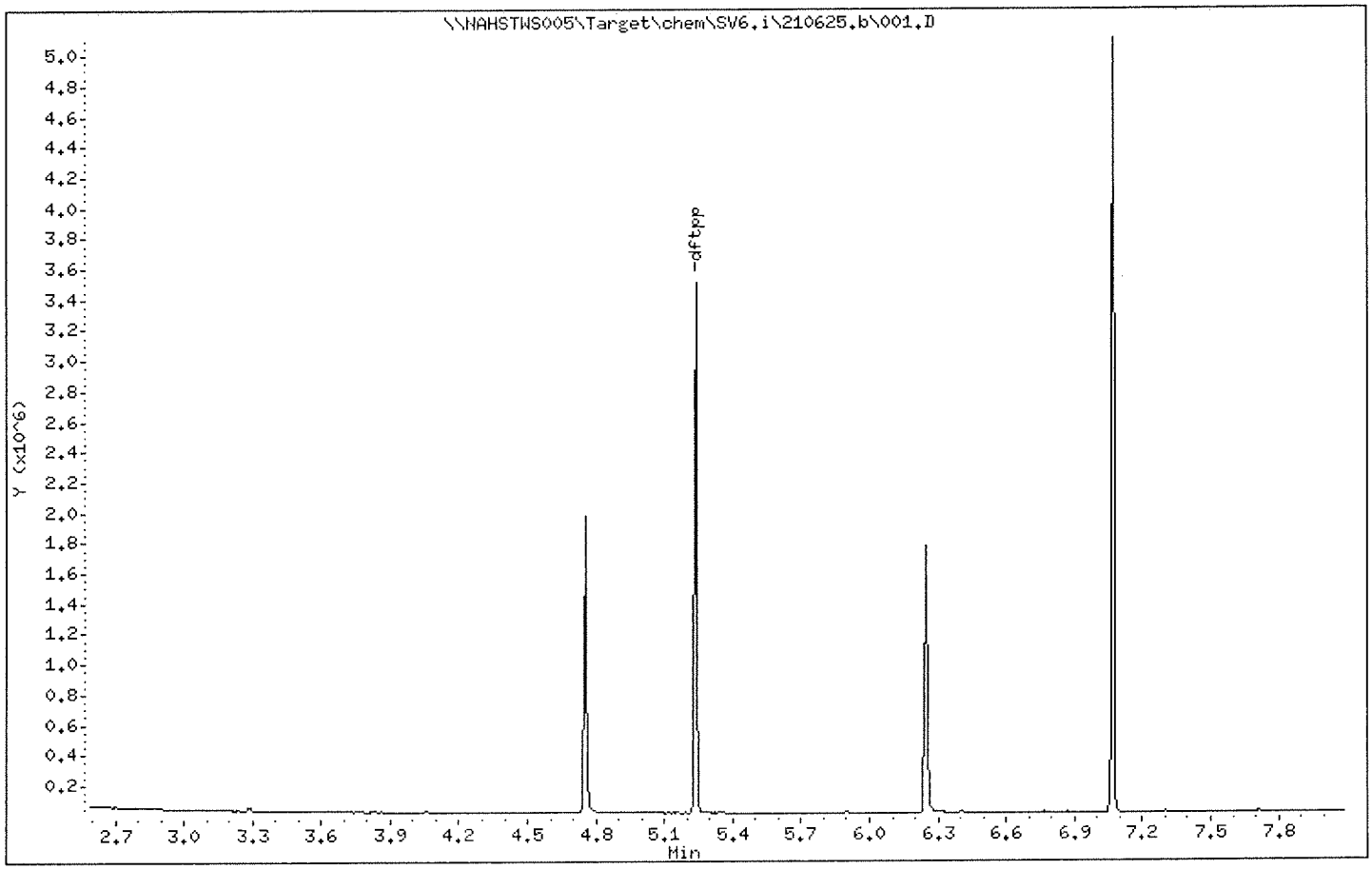
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\SV6.i\210625.b\001.D

Date : 25-JUN-2021 11:00

Client ID: DFTPP

Instrument: SV6.i

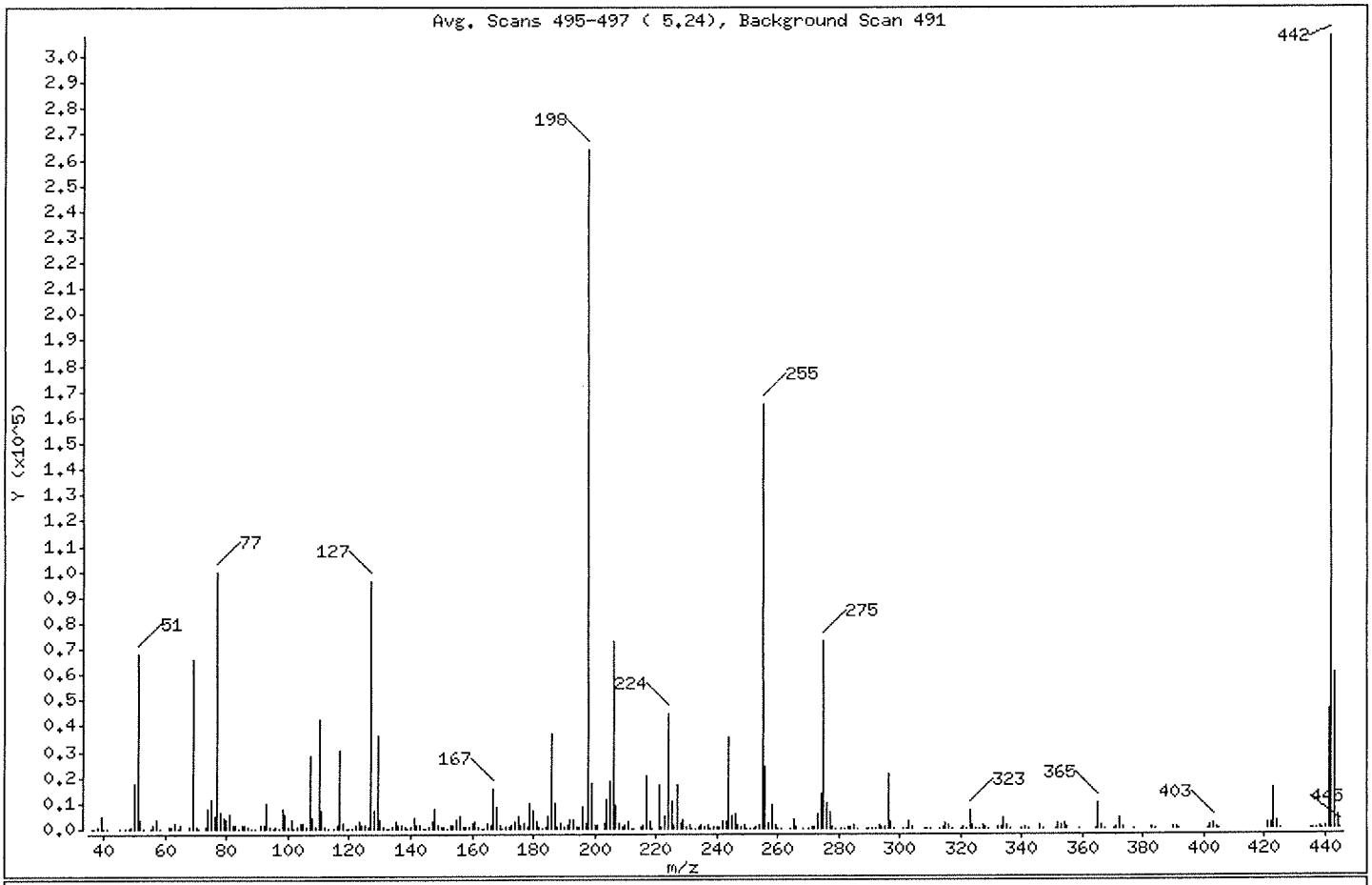
Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	25.78
68	Less than 2.00% of mass 69	0.36 (1.45)
69	Mass 69 relative abundance	24.88
70	Less than 2.00% of mass 69	0.14 (0.56)
127	10.00 - 80.00% of mass 198	36.48
197	Less than 2.00% of mass 198	0.76
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 60.00% of mass 198	27.48
365	1.00 - 100.00% of mass 198	3.84
441	Present, but less than mass 443	17.40
442	50.00 - 150.00% of mass 198	116.61
443	15.00 - 24.00% of mass 442	22.68 (19.45)

Data File: \\NAHSTWS005\Target\chem\SV6.i\210625.b\001.D

Date : 25-JUN-2021 11:00

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D
Spectrum: Avg. Scans 495-497 (5.24), Background Scan 491
Location of Maximum: 442.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	118	127.00	96272	207.00	9295	295.00	451
37.00	233	128.00	7138	208.00	2209	296.00	21424
38.00	852	129.00	36336	209.00	788	297.00	3008
39.00	4831	130.00	3253	210.00	1319	298.00	129
40.00	221	131.00	671	211.00	3058	301.00	283
41.00	277	132.00	312	212.00	249	302.00	340
45.00	136	133.00	150	213.00	175	303.00	2507
47.00	87	134.00	870	215.00	703	304.00	619
48.00	63	135.00	3081	216.00	1628	308.00	253
49.00	801	136.00	1253	217.00	20328	309.00	175
50.00	17944	137.00	1658	218.00	2639	310.00	202
51.00	68032	138.00	377	219.00	208	313.00	95
52.00	3231	139.00	146	221.00	16904	314.00	1041
53.00	77	140.00	401	222.00	446	315.00	2246
55.00	218	141.00	4450	223.00	4882	316.00	1373
56.00	1587	142.00	1509	224.00	44320	317.00	228
57.00	3637	143.00	1262	225.00	10924	320.00	56
58.00	220	144.00	296	226.00	1164	321.00	734
61.00	610	145.00	263	227.00	16784	322.00	329
62.00	1035	146.00	1061	228.00	2380	323.00	6884
63.00	2402	147.00	2737	229.00	3870	324.00	1257
64.00	349	148.00	8054	230.00	575	325.00	67
65.00	1209	149.00	1538	231.00	1476	326.00	68
68.00	955	150.00	372	232.00	307	327.00	1254
69.00	65672	151.00	856	233.00	283	328.00	698
70.00	370	152.00	142	234.00	1001	329.00	108
71.00	55	153.00	1599	235.00	1278	332.00	543
73.00	556	154.00	1166	236.00	1037	333.00	692
74.00	7828	155.00	3243	237.00	1402	334.00	4514
75.00	11111	156.00	4669	238.00	197	335.00	1071
76.00	5145	157.00	954	239.00	676	336.00	92
77.00	99920	158.00	901	240.00	474	340.00	83
78.00	6526	159.00	771	241.00	978	341.00	876
79.00	4527	160.00	1769	242.00	2498	342.00	256
80.00	3598	161.00	2579	243.00	2597	346.00	1616

Data File: \\NAHSTWS005\Target\chem\SV6.i\210625.b\001.D

Date : 25-JUN-2021 11:00

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D

Spectrum: Avg. Scans 495-497 (5.24), Background Scan 491

Location of Maximum: 442.00

Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5459	162.00	921	244.00	35040	347.00	343
82.00	1332	163.00	214	245.00	4607	351.00	82
83.00	1238	164.00	264	246.00	5951	352.00	2042
84.00	198	165.00	1847	247.00	1271	353.00	1394
85.00	1143	166.00	1767	248.00	369	354.00	1995
86.00	1609	167.00	15754	249.00	1194	355.00	385
87.00	808	168.00	8334	250.00	210	359.00	164
88.00	201	169.00	1252	251.00	292	364.00	70
89.00	153	170.00	329	252.00	346	365.00	10130
91.00	1117	171.00	391	253.00	869	366.00	1470
92.00	1373	172.00	984	254.00	1582	367.00	65
93.00	9849	173.00	1481	255.00	164736	370.00	281
94.00	617	174.00	2732	256.00	23864	371.00	562
95.00	146	175.00	5106	257.00	1797	372.00	4180
96.00	532	176.00	1388	258.00	9320	373.00	910
97.00	143	177.00	1980	259.00	1556	377.00	69
98.00	8018	178.00	707	260.00	247	383.00	996
99.00	5539	179.00	9554	261.00	203	384.00	298
100.00	482	180.00	6887	264.00	333	390.00	616
101.00	3533	181.00	3108	265.00	3563	391.00	402
102.00	150	182.00	553	266.00	714	392.00	267
103.00	809	183.00	296	268.00	185	401.00	189
104.00	1943	184.00	713	270.00	175	402.00	1559
105.00	1877	185.00	4888	271.00	356	403.00	2447
106.00	633	186.00	36776	272.00	499	404.00	810
107.00	28376	187.00	9981	273.00	5765	405.00	65
108.00	4257	188.00	1042	274.00	13482	421.00	2145
109.00	646	189.00	1902	275.00	72536	422.00	2004
110.00	42792	190.00	367	276.00	9725	423.00	15724
111.00	6921	191.00	1112	277.00	6062	424.00	3045
112.00	847	192.00	3334	278.00	971	425.00	266
113.00	322	193.00	3611	279.00	247	435.00	56
115.00	111	194.00	788	281.00	72	436.00	123
116.00	1312	195.00	479	282.00	121	437.00	220
117.00	30640	196.00	8494	283.00	768	438.00	478

Data File: \\NAHSTWS005\Target\chem\SV6.i\210625.b\001.D

Date : 25-JUN-2021 11:00

Client ID: DFTPP

Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25

Data File: 001.D
Spectrum: Avg. Scans 495-497 (5.24), Background Scan 491
Location of Maximum: 442.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	2211	197.00	2010	284.00	495	439.00	163
119.00	215	198.00	263936	285.00	1102	440.00	432
120.00	299	199.00	17640	286.00	102	441.00	45928
121.00	58	200.00	1487	289.00	163	442.00	307776
122.00	1588	201.00	1482	290.00	178	443.00	59856
123.00	2604	203.00	1942	291.00	150	444.00	5295
124.00	1197	204.00	11091	292.00	345	445.00	349
125.00	1228	205.00	18344	293.00	1455		
126.00	531	206.00	72984	294.00	413		

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210625.b\003.D
Lab Smp Id: 14DXSIM Client Smp ID: 14DXSIM
Inj Date : 25-JUN-2021 11:37 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : 14DXSIM;14DXSIM
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210625.b\DXSIM.m
Meth Date : 30-Aug-2021 17:49 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

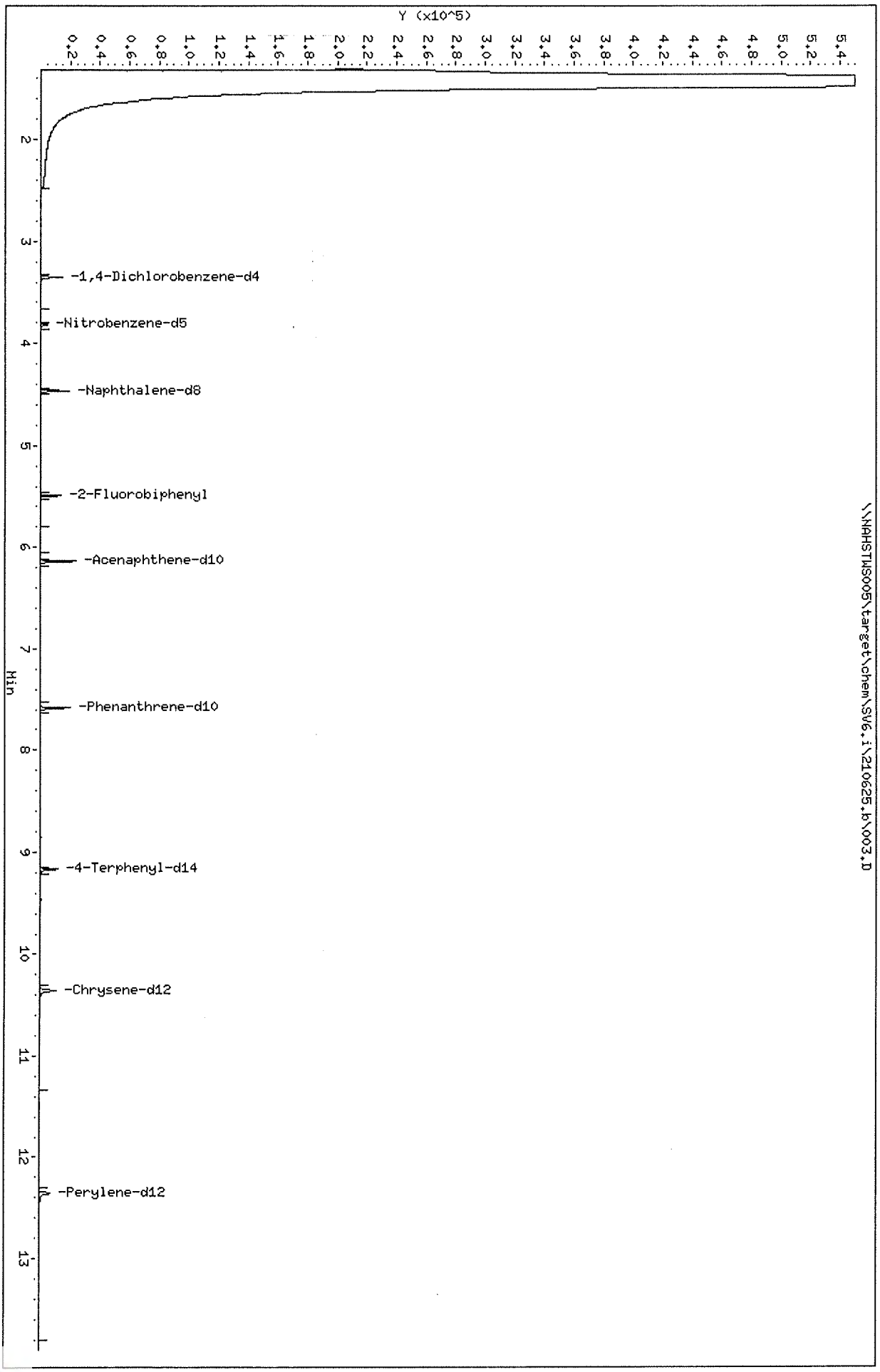
Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.353	3.353	(1.000)	3936	0.10000	(a)
* 45 Naphthalene-d8	136	4.465	4.465	(1.000)	17111	0.10000	
$ 33 Nitrobenzene-d5	82	3.820	3.820	(0.856)	3517	0.08000	0.06711(QM)
* 86 Acenaphthene-d10	164	6.141	6.141	(1.000)	8370	0.10000	
$ 69 2-Fluorobiphenyl	172	5.490	5.490	(0.894)	8231	0.08000	0.07368
* 126 Phenanthrene-d10	188	7.585	7.585	(1.000)	16997	0.10000	
* 182 Chrysene-d12	240	10.356	10.356	(1.000)	13613	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.167	9.167	(0.885)	10964	0.08000	0.08926(M)
* 198 Perylene-d12	264	12.359	12.359	(1.000)	10442	0.10000	
1 1,4-Dioxane	58	1.614	1.614	(0.481)	181	0.08000	0.08924(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\003.D
Date : 25-JUN-2021 11:37
Client ID: 14DXSIM
Sample Info: 14DXSIM;14DXSIM
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210625.b\005.D
Lab Smp Id: HS21060908-01 Client Smp ID: HS21060908-01
Inj Date : 25-JUN-2021 12:23 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : HS21060908-01;HS21060908-01
Misc Info : HS21060908;1;0;50
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210625.b\DXSIM.m
Meth Date : 30-Aug-2021 17:38 Genoveva.R Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 5
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.359	3.353	(1.000)	4409	0.10000	(a)
* 45 Naphthalene-d8	136	4.465	4.465	(1.000)	16271	0.10000	
$ 33 Nitrobenzene-d5	82	4.046	3.820	(0.906)	94	0.00189	0.09432(M)
* 86 Acenaphthene-d10	164	6.136	6.141	(1.000)	9581	0.10000	
$ 69 2-Fluorobiphenyl	172	5.490	5.490	(0.895)	144	0.00113	0.05631(M)
* 126 Phenanthrene-d10	188	7.585	7.585	(1.000)	18519	0.10000	
* 182 Chrysene-d12	240	10.356	10.356	(1.000)	13363	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.167	9.167	(0.885)	264	0.00219	0.1095(M)
* 198 Perylene-d12	264	12.359	12.359	(1.000)	10107	0.10000	
1 1,4-Dioxane	58	1.625	1.614	(0.484)	275	0.12104	6.052(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\005.D

Date : 25-JUN-2021 12:23

Client ID: HS21060908-01

Instrument: SV6.i

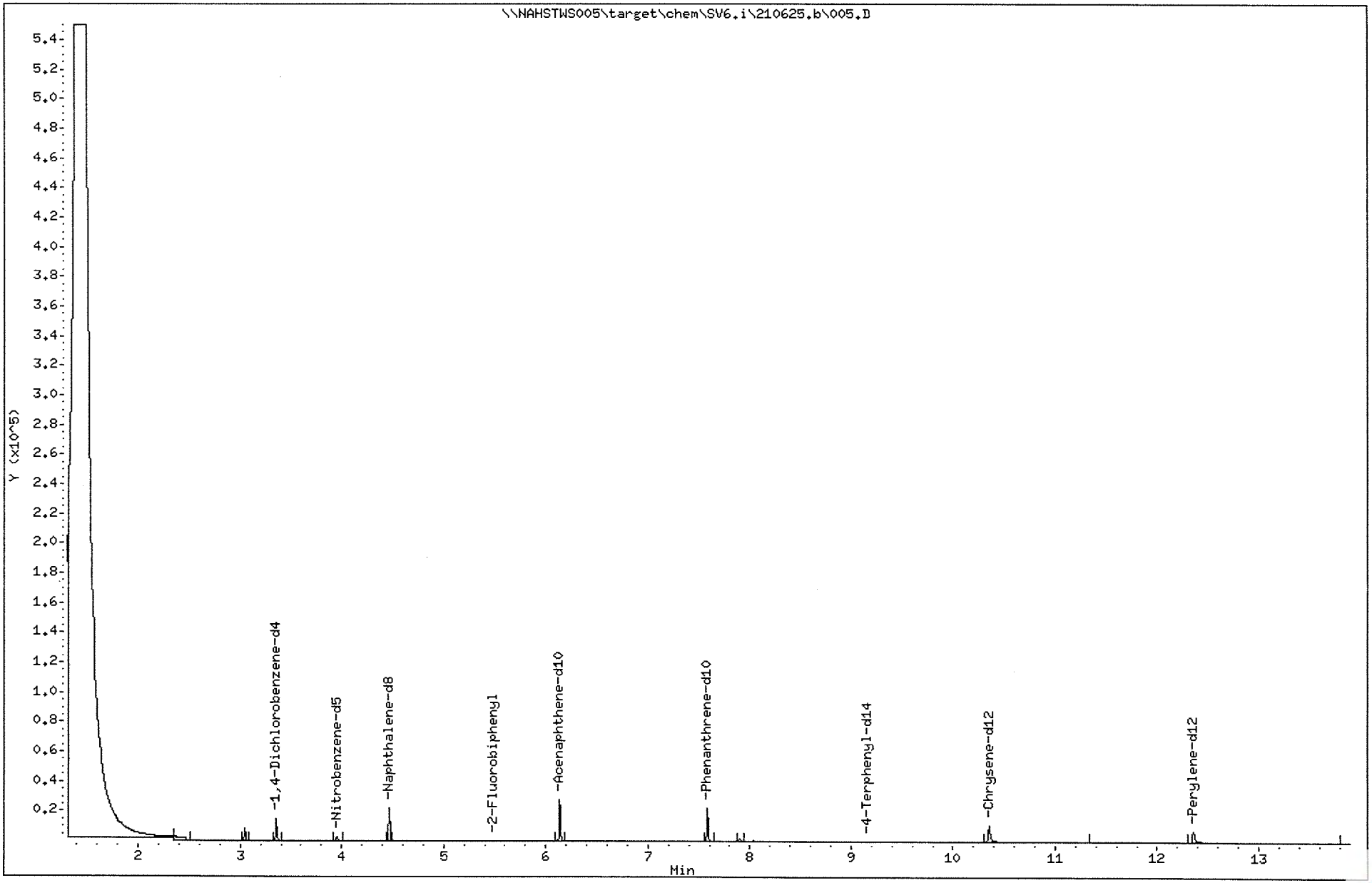
Sample Info: HS21060908-01;HS21060908-01

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\005.D

Date : 25-JUN-2021 12:23

Client ID: HS21060908-01

Instrument: SV6.i

Sample Info: HS21060908-01;HS21060908-01

Purge Volume: 1000.0

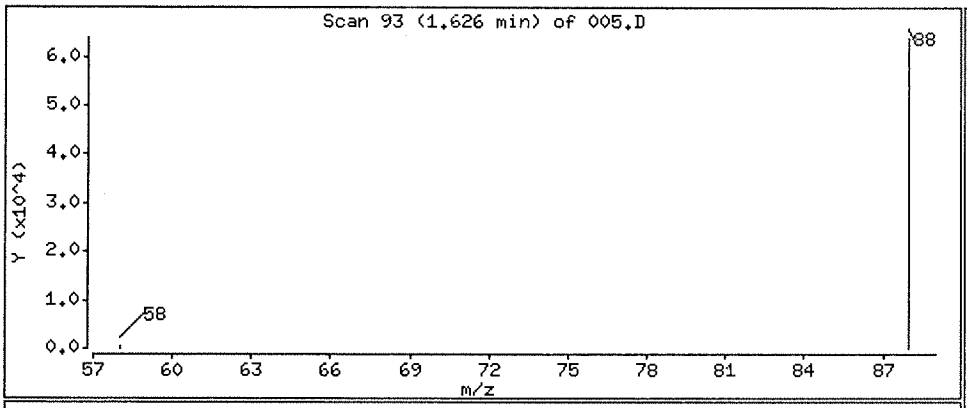
Operator: LG

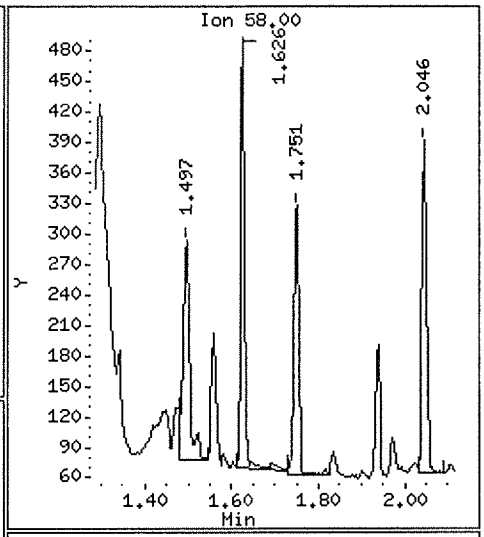
Column phase: RTX-5SIL MS

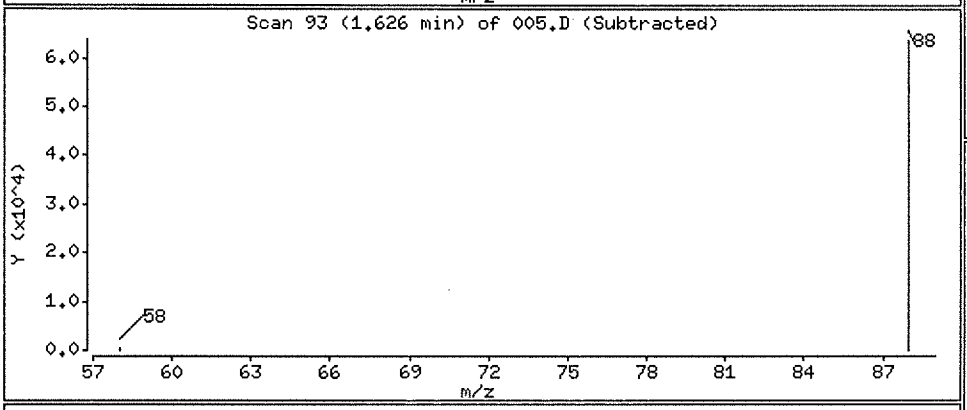
Column diameter: 0.28

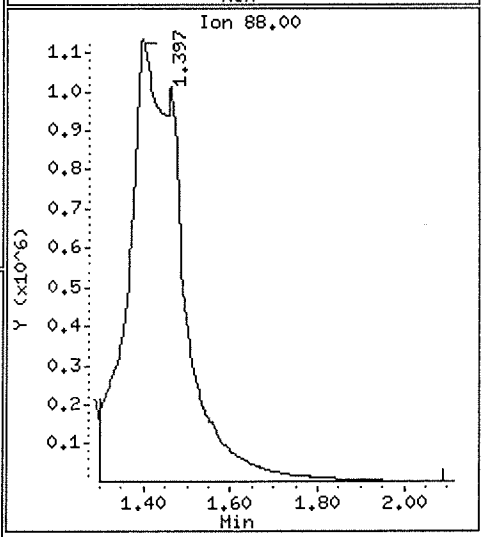
1 1,4-Dioxane

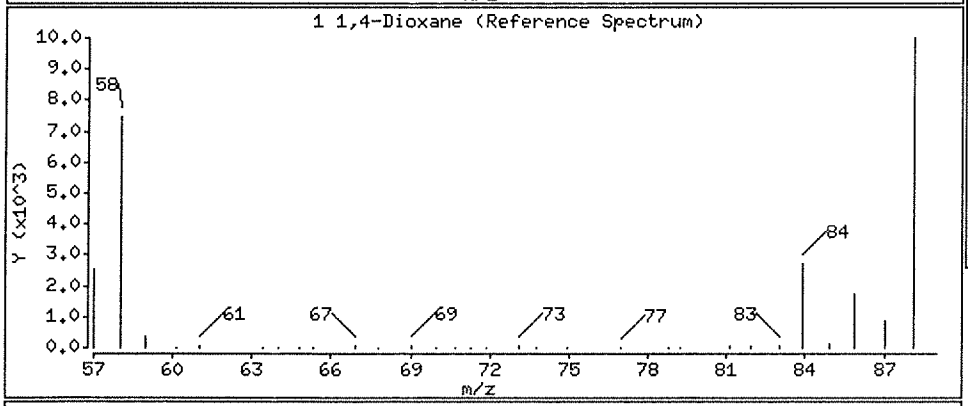
Concentration: 6.052 ug/L

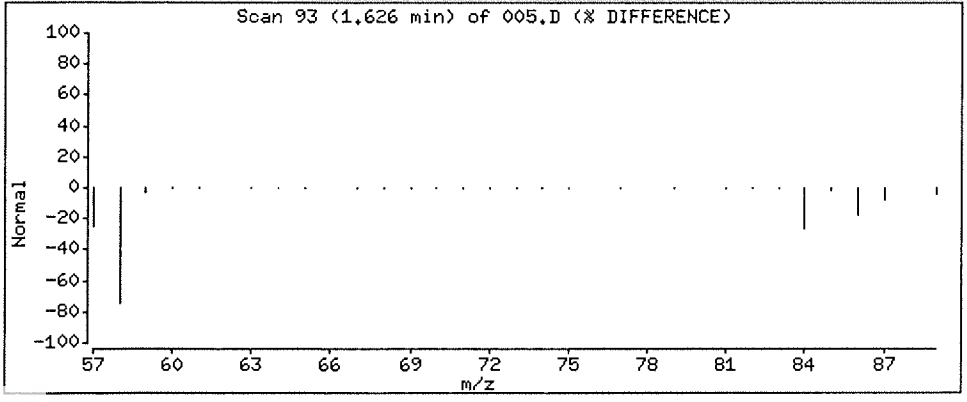












Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\007.D Page 1
Report Date: 30-Aug-2021 17:42

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210625.b\007.D
Lab Smp Id: HS21060908-08 Client Smp ID: HS21060908-08
Inj Date : 25-JUN-2021 12:59 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : HS21060908-08;HS21060908-08
Misc Info : HS21060908;1;0;50
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210625.b\DXSIM.m
Meth Date : 30-Aug-2021 17:38 Genoveva.R Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 7
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.359	3.353	(1.000)	3448	0.10000		(a)
* 45 Naphthalene-d8	136	4.465	4.465	(1.000)	12780	0.10000		(M)
$ 33 Nitrobenzene-d5	82	3.820	3.820	(0.856)	45	0.00115	0.05748	(M)
* 86 Acenaphthene-d10	164	6.141	6.141	(1.000)	7528	0.10000		
$ 69 2-Fluorobiphenyl	172	5.494	5.490	(0.895)	134	0.00133	0.06669	(M)
* 126 Phenanthrene-d10	188	7.585	7.585	(1.000)	14468	0.10000		
* 182 Chrysene-d12	240	10.356	10.356	(1.000)	10603	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.167	9.167	(0.885)	209	0.00218	0.1092	(M)
* 198 Perylene-d12	264	12.359	12.359	(1.000)	8358	0.10000		
1 1,4-Dioxane	58	1.614	1.614	(0.481)	259	0.14577	7.288	(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\007.D

Date : 25-JUN-2021 12:59

Client ID: HS21060908-08

Instrument: SV6.i

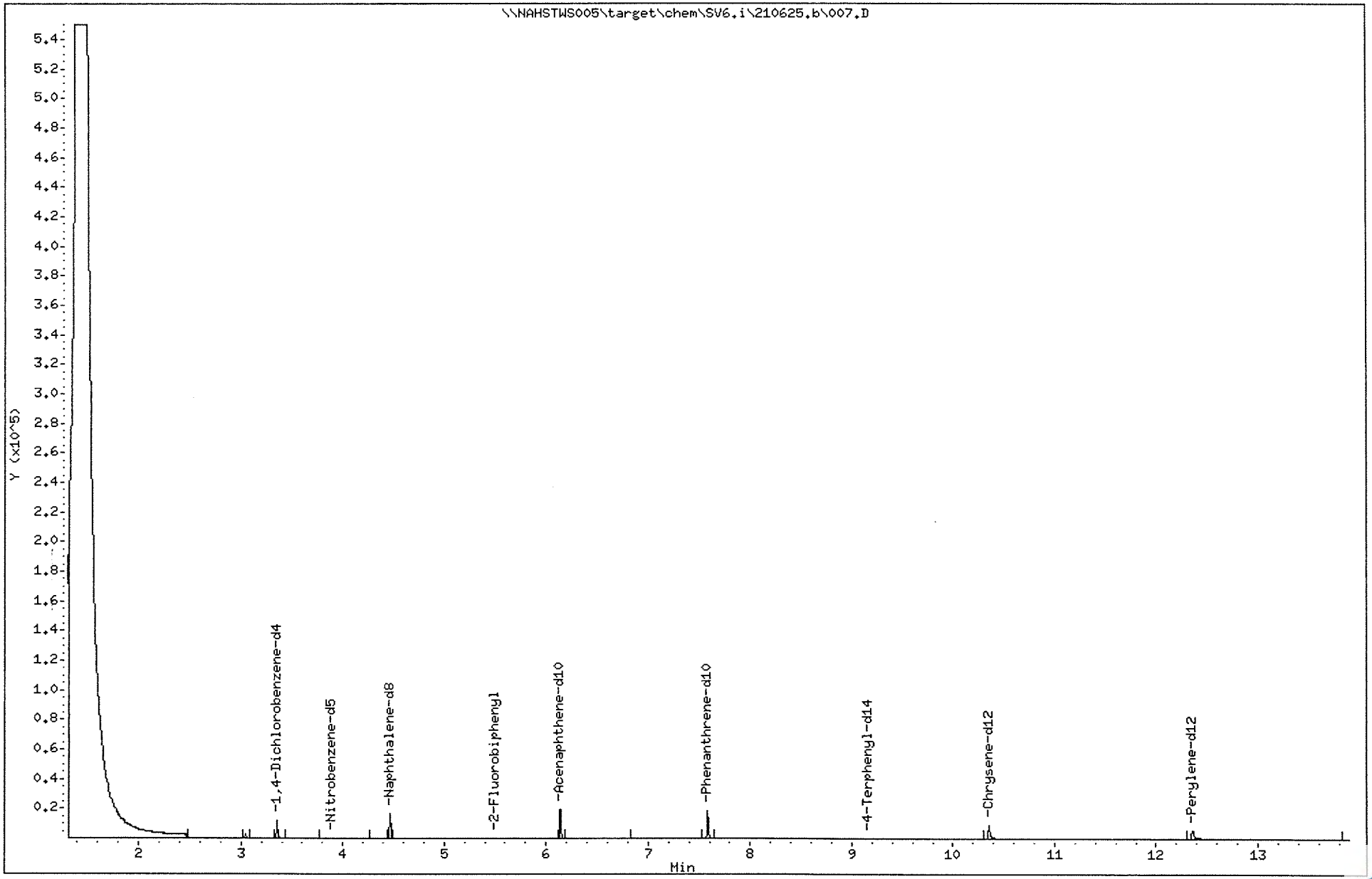
Sample Info: HS21060908-08;HS21060908-08

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\007.D

Date : 25-JUN-2021 12:59

Client ID: HS21060908-08

Instrument: SV6.i

Sample Info: HS21060908-08;HS21060908-08

Purge Volume: 1000.0

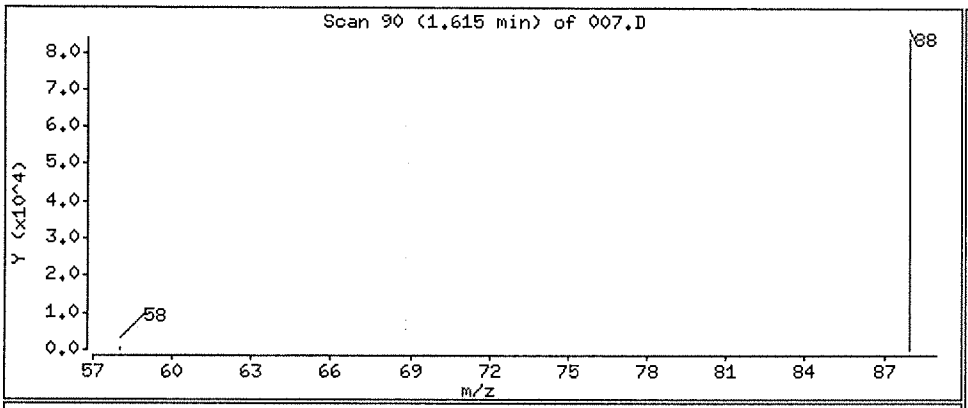
Operator: LG

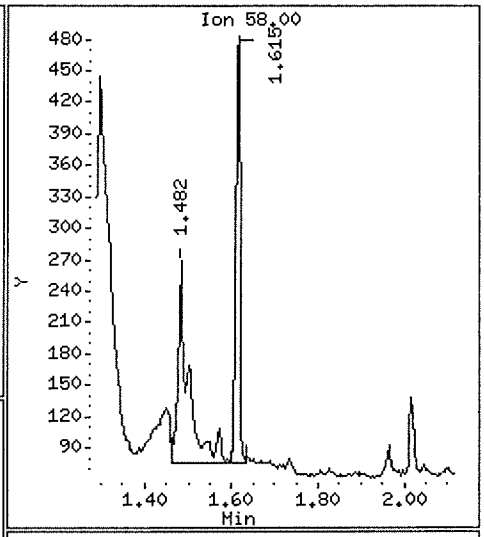
Column phase: RTX-5SIL MS

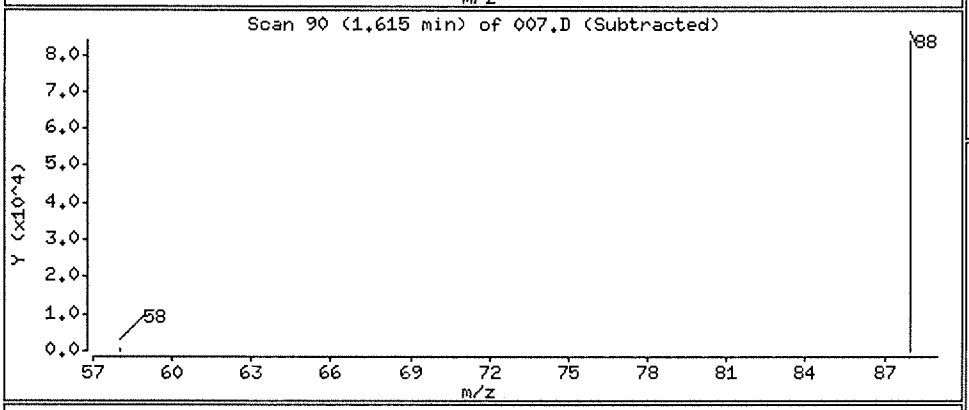
Column diameter: 0.28

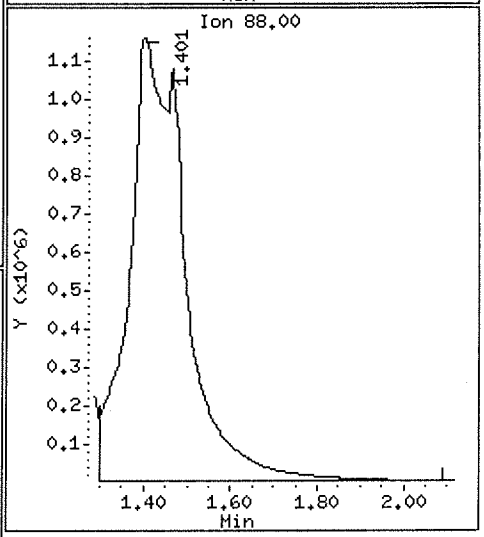
1 1,4-Dioxane

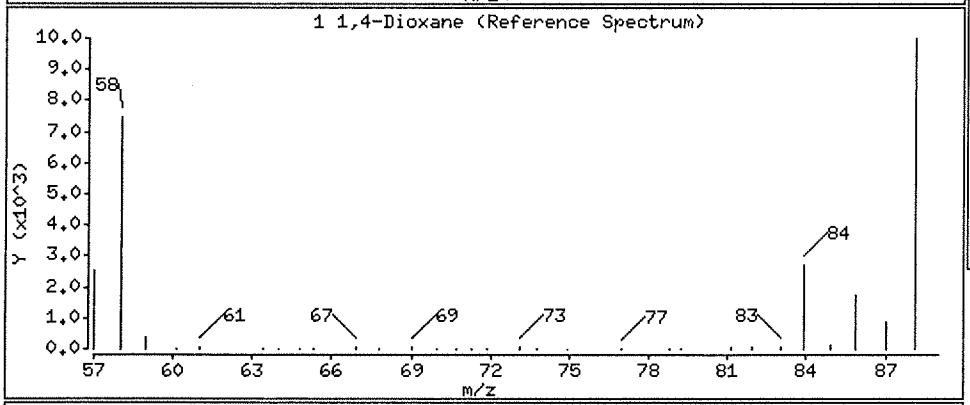
Concentration: 7.288 ug/L

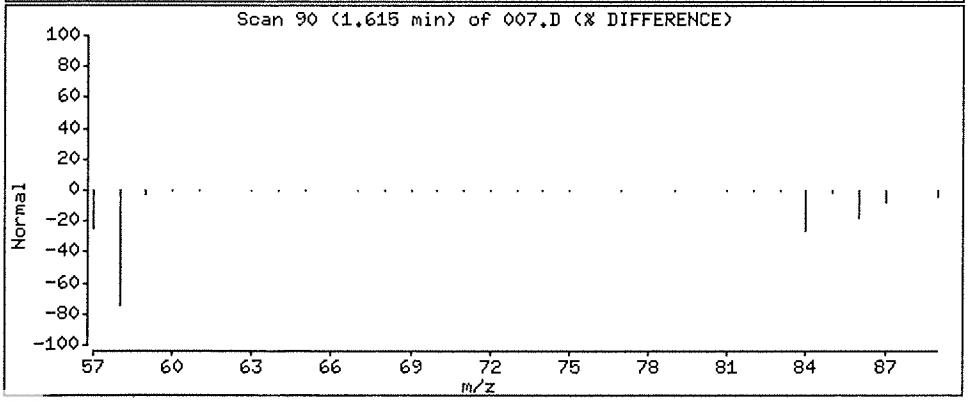












Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\015.D Page 1
Report Date: 30-Aug-2021 17:37

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\target\chem\SV6.i\210625.b\015.D
Lab Smp Id: HS21060908-05 Client Smp ID: HS21060908-05
Inj Date : 25-JUN-2021 15:22 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : HS21060908-05;HS21060908-05
Misc Info : HS21060908;1;0;5
Comment :
Method : \\NAHSTWS005\target\chem\SV6.i\210625.b\DXSIM.m
Meth Date : 30-Aug-2021 17:33 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 15
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	
* 20 1,4-Dichlorobenzene-d4	152	3.359	3.353	(1.000)	2722	0.10000		(a)
* 45 Naphthalene-d8	136	4.469	4.465	(1.000)	10041	0.10000		(M)
$ 33 Nitrobenzene-d5	82	3.820	3.820	(0.855)	430	0.01398	0.06991	(M)
* 86 Acenaphthene-d10	164	6.141	6.141	(1.000)	6386	0.10000		
$ 69 2-Fluorobiphenyl	172	5.494	5.490	(0.895)	1225	0.01437	0.07186	(Q)
* 126 Phenanthrene-d10	188	7.585	7.585	(1.000)	12583	0.10000		
* 182 Chrysene-d12	240	10.361	10.356	(1.000)	9625	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.172	9.167	(0.885)	1505	0.01733	0.08665	(M)
* 198 Perylene-d12	264	12.365	12.359	(1.000)	7477	0.10000		
1 1,4-Dioxane	58	1.607	1.614	(0.479)	312	0.22243	1.112	(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\015.D

Date : 25-JUN-2021 15:22

Client ID: HS21060908-05

Sample Info: HS21060908-05;HS21060908-05

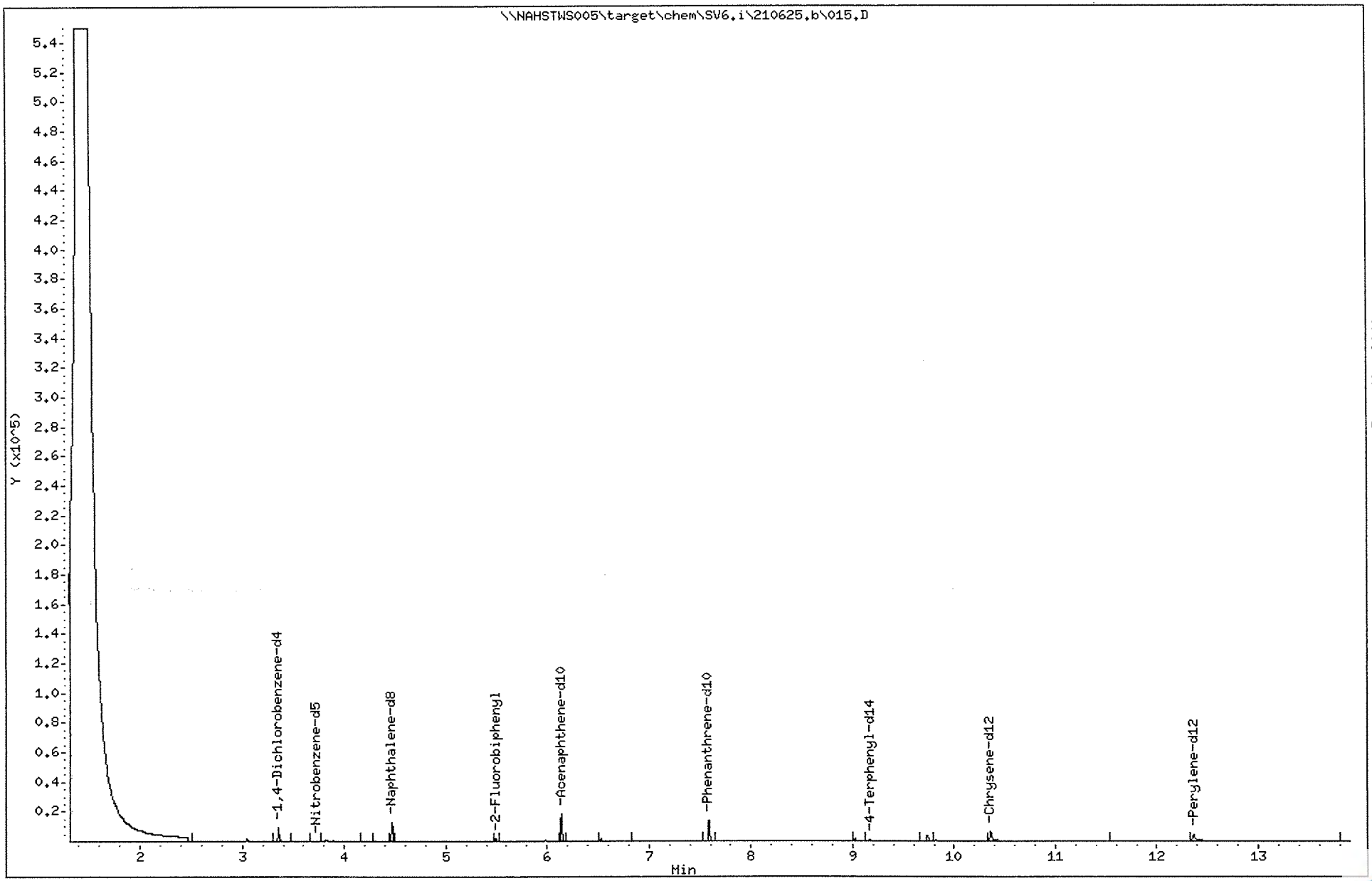
Purge Volume: 1000.0

Column phase: RTX-5SIL MS

Instrument: SV6.i

Operator: LC

Column diameter: 0.28



Data File: \\NAHSTWS005\target\chem\SV6.i\210625.b\015.D

Date : 25-JUN-2021 15:22

Client ID: HS21060908-05

Instrument: SV6.i

Sample Info: HS21060908-05;HS21060908-05

Purge Volume: 1000.0

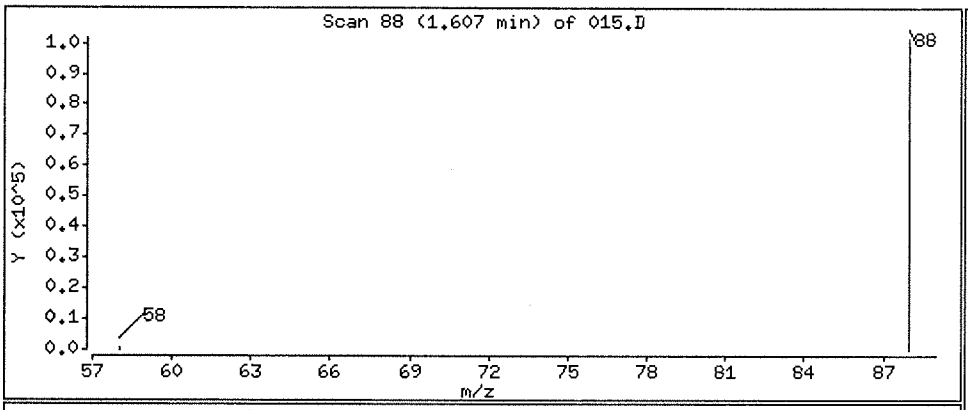
Operator: LG

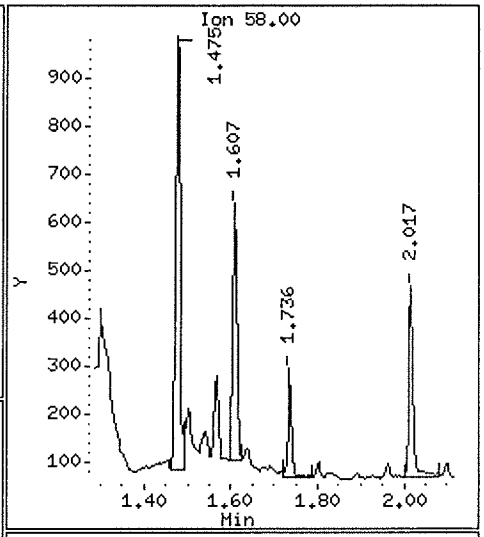
Column phase: RTX-5SIL MS

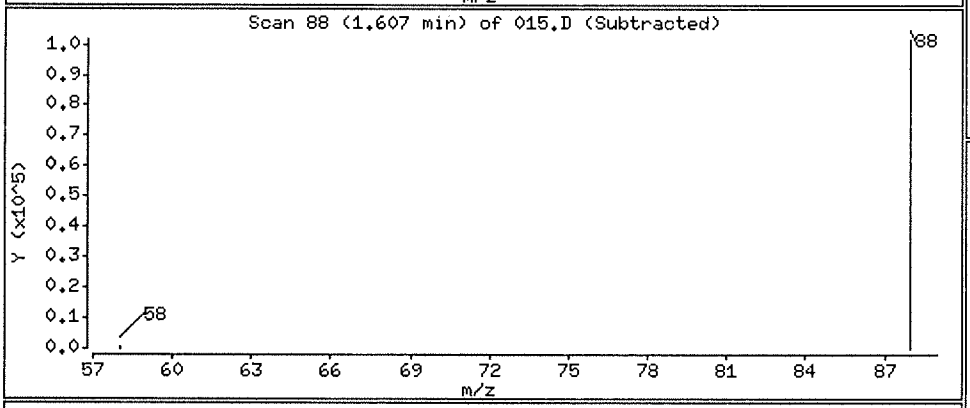
Column diameter: 0.28

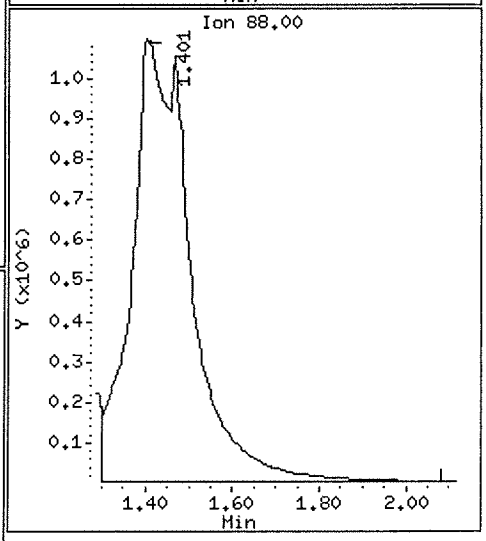
1 1,4-Dioxane

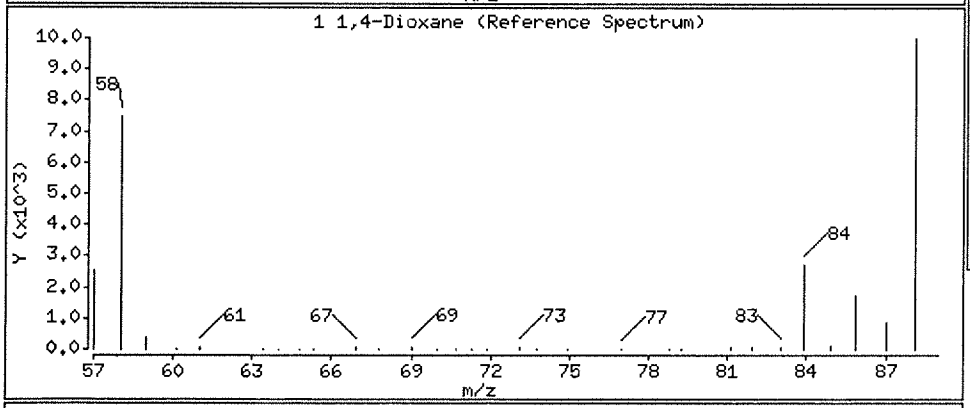
Concentration: 1.112 ug/L

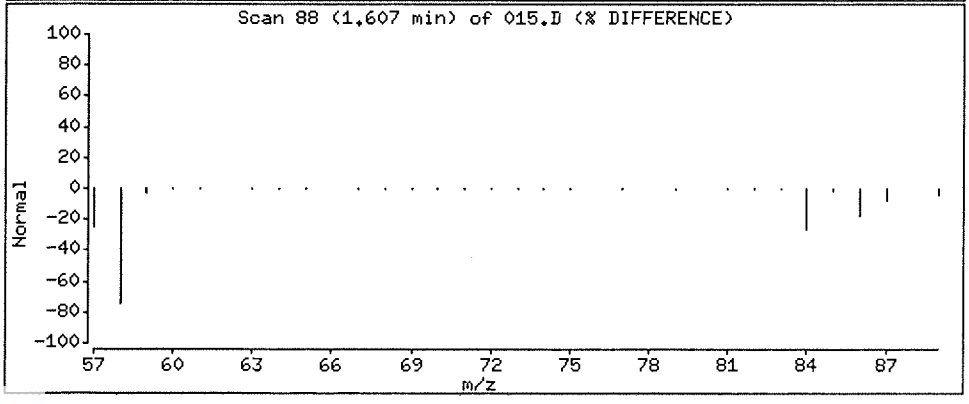












Data File: \\NAHSTWS005\Target\chem\SV6.i\210625.b\029.D
Report Date: 31-Aug-2021 10:03

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\210625.b\029.D
Lab Smp Id: 14DXSIM Client Smp ID: 14DXSIM
Inj Date : 25-JUN-2021 19:34 MS Autotune Date: 27-MAY-2021 10:12
Operator : LG Inst ID: SV6.i
Smp Info : 14DXSIM;14DXSIM
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\210625.b\DXSIMEND.m
Meth Date : 31-Aug-2021 10:02 SV6.i Quant Type: ISTD
Cal Date : 07-JUN-2021 13:37 Cal File: 010.D
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

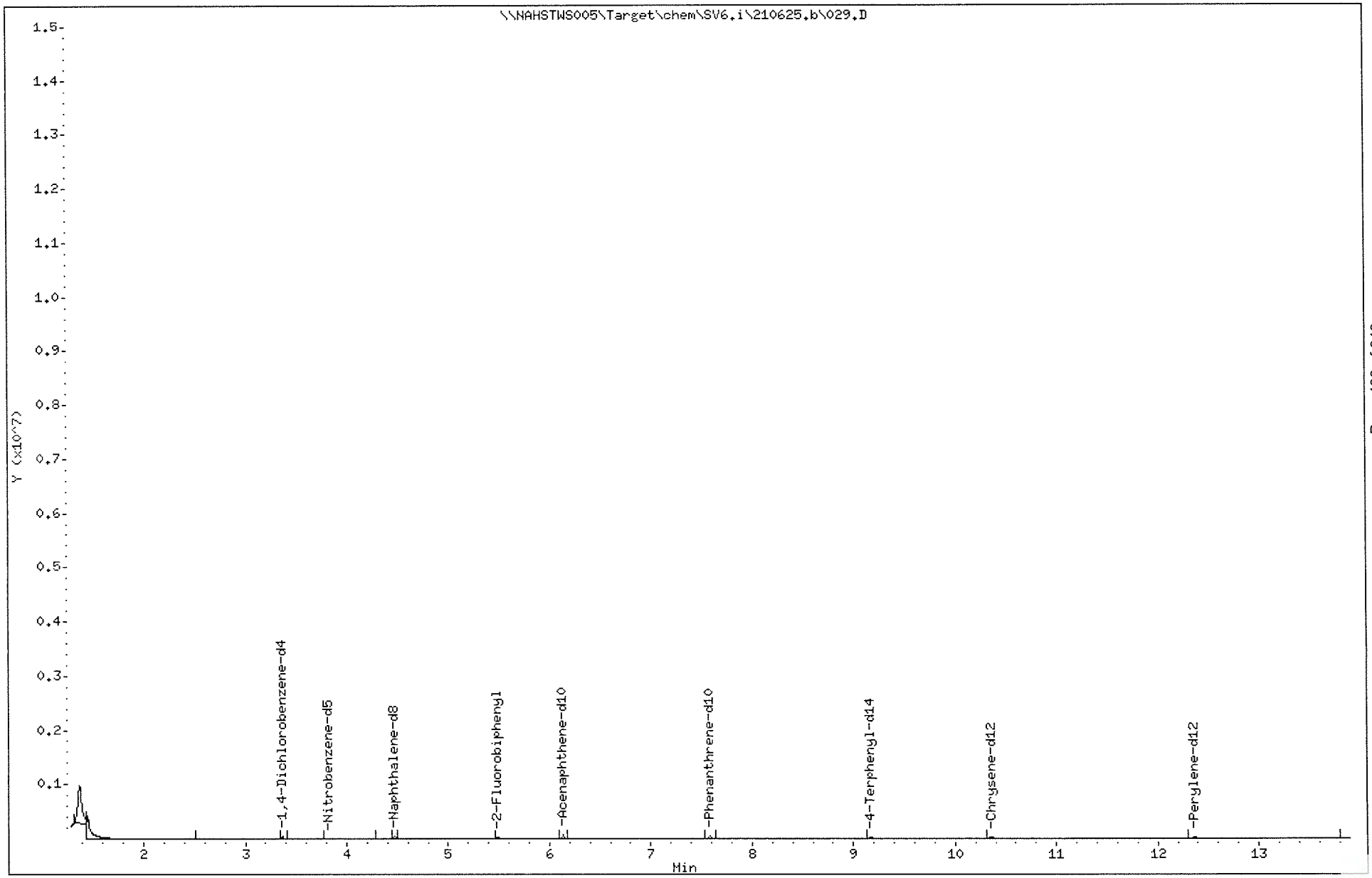
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	
* 20 1,4-Dichlorobenzene-d4	152	3.369	3.369	(1.000)	19345	0.10000		(a)
* 45 Naphthalene-d8	136	4.469	4.469	(1.000)	58630	0.10000		(M)
$ 33 Nitrobenzene-d5	82	3.825	3.825	(0.899)	13065	0.08000	0.07276	
* 86 Acenaphthene-d10	164	6.135	6.135	(1.000)	40634	0.10000		(QM)
$ 69 2-Fluorobiphenyl	172	5.490	5.490	(1.000)	40303	0.08000	0.07432	
* 126 Phenanthrene-d10	188	7.585	7.585	(1.000)	83654	0.10000		(M)
* 182 Chrysene-d12	240	10.361	10.361	(1.000)	72648	0.10000		(M)
$ 158 4-Terphenyl-d14	244	9.167	9.167	(0.885)	59963	0.08000	0.09148	(M)
* 198 Perylene-d12	264	12.364	12.364	(1.000)	61642	0.10000		
1 1,4-Dioxane	58	1.710	1.710	(0.508)	550	0.08000	0.05517	(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\SV6.i\210625.b\029.D
Date : 25-JUN-2021 19:34
Client ID: 14DXSIM
Sample Info: 14DXSIM;14DXSIM
Purge Volume: 1000.0
Column phase: RTX-5SIL MS

Instrument: SV6.i
Operator: LG
Column diameter: 0.28



HS21060908 - ME - HG_W_DODICP_W_DOD

ALS WO# HS21060908

ALS Houston, US

Date: 31-Aug-21

Form 11 - INTERNAL STANDARD ASSOCIATION

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Instrument:ICPMS06

Mass	Analyte	Assoc Int Standard 1	Assoc Int Standard 2	Mode
9	Beryllium	Lithium		Ar
11	Boron	Lithium		Ar
23	Sodium	Germanium		ArHe
24	Magnesium	Germanium		ArHe
27	Aluminum	Germanium		ArHe
39	Potassium	Germanium		ArHe
44	Calcium	Germanium		Ar
47	Titanium	Germanium		Ar
51	Vanadium	Germanium		ArHe
52	Chromium	Germanium		ArHe
55	Manganese	Germanium		ArHe
56	Iron	Germanium		ArHe
59	Cobalt	Germanium		ArHe
60	Nickel	Germanium		ArHe
63	Copper	Germanium		ArHe
66	Zinc	Germanium		ArHe
75	Arsenic	Germanium		ArHe
82	Selenium	Germanium		Ar
88	Strontium	Indium		Ar
95	Molybdenum	Indium		Ar
105	Palladium	Germanium		Ar
107	Silver	Indium		Ar
114	Cadmium	Indium		Ar
118	Tin	Indium		Ar
121	Antimony	Germanium		ArHe
137	Barium	Indium		Ar
205	Thallium	Bismuth		Ar
208	Lead	Bismuth		Ar

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ALS Houston, US

Date: 31-Aug-21

FORM 12 - PREPARATION LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908
Start Date: 18-Jun-2021 08:30 End Date: 18-Jun-2021 11:30

Batch ID: 167023
Prep Code: Hg_WPr
Method: SW7470A
Technician:

SampID	ClientID	Matrix	Init Wt	Init Vol	FinalVol (mL)	PrepFac
HS21060495-07MS				10	10	1
HS21060495-07MSD				10	10	1
HS21060908-02	18CPTMW01DW_061521	Groundwater		10	10	1
HS21060908-03	18CPTMW01SW_061521	Groundwater		10	10	1
HS21060908-04	125_061521	Groundwater		10	10	1
HS21060908-06	MW21_061521	Groundwater		10	10	1
HS21060908-08	129_061521	Groundwater		10	10	1
LCS-167023				10	10	1
MBLK-167023				10	10	1

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ALS Houston, US

Date: 31-Aug-21

FORM 12 - PREPARATION LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908
Start Date: 21-Jun-2021 09:00 End Date: 21-Jun-2021 13:00

Batch ID: 167071
Prep Code: 3010A
Method: SW3010A
Technician:

SampID	ClientID	Matrix	Init Wt	Init Vol	FinalVol (mL)	PrepFac
HS21060495-07MS				10	10	1
HS21060495-07MSD				10	10	1
HS21060495-07PDS				10	10	1
HS21060495-07SD				10	10	1
HS21060908-02	18CPTMW01DW_061521	Groundwater		10	10	1
HS21060908-03	18CPTMW01SW_061521	Groundwater		10	10	1
HS21060908-04	125_061521	Groundwater		10	10	1
HS21060908-06	MW21_061521	Groundwater		10	10	1
HS21060908-08	129_061521	Groundwater		10	10	1
LCS-167071				10	10	1
MBLK-167071				10	10	1

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Date: 31-Aug-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908
Start Date: 18-Jun-2021 End Date: 18-Jun-2021

Run ID:HG03_385824
Instrument:HG03
Method:SW7470A

Sample No.	D/F	Time	FileID	Analytes
ICV	1	18-Jun-2021 12:06	HG03_385824 Raw Data_6143407	HG
ICB	1	18-Jun-2021 12:08	_6143408	HG
CRA	1	18-Jun-2021 12:10	_6143409	HG
ICCV 1	1	18-Jun-2021 12:18	_6143410	HG
CCV 2	1	18-Jun-2021 13:11	_6143571	HG
CCB 1	1	18-Jun-2021 13:12	_6143572	HG
CCV 3	1	18-Jun-2021 13:37	_6143703	HG
CCB 2	1	18-Jun-2021 13:38	_6143704	HG
CCV 4	1	18-Jun-2021 14:01	_6143901	HG
CCB 3	1	18-Jun-2021 14:03	_6143902	HG
CCV 5	1	18-Jun-2021 14:23	_6143913	HG
CCB 4	1	18-Jun-2021 14:25	_6143914	HG
CCV 6	1	18-Jun-2021 15:16	_6143937	HG
CCB 5	1	18-Jun-2021 15:18	_6143938	HG
CCV 7	1	18-Jun-2021 15:37	_6144190	HG
CCB 6	1	18-Jun-2021 15:39	_6144191	HG
MBLK-167023	1	18-Jun-2021 15:51	_6144197	HG
LCS-167023	1	18-Jun-2021 15:53	_6144198	HG
ZZZZZZMS	1	18-Jun-2021 15:56	_6144200	HG
ZZZZZZMSD	1	18-Jun-2021 15:58	_6144201	HG
CCV 8	1	18-Jun-2021 16:01	_6144264	HG
CCB 7	1	18-Jun-2021 16:03	_6144265	HG
CCV 9	1	18-Jun-2021 16:27	_6144366	HG
CCB 8	1	18-Jun-2021 16:29	_6144367	HG
18CPTMW01DW_061521	1	18-Jun-2021 16:38	_6144371	HG
18CPTMW01SW_061521	1	18-Jun-2021 16:39	_6144372	HG
125_061521	1	18-Jun-2021 16:41	_6144373	HG
MW21_061521	1	18-Jun-2021 16:43	_6144374	HG
129_061521	1	18-Jun-2021 16:44	_6144375	HG
CCV 10	1	18-Jun-2021 16:50	_6144400	HG
CCB 9	1	18-Jun-2021 16:53	_6144401	HG

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ALS Houston, US

Date: 31-Aug-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908
Start Date: 23-Jun-2021 End Date: 23-Jun-2021

Run ID:ICPMS06_386127
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS06_386127_Tune	1	23-Jun-2021 00:00	ICPMS06_386127_Tune_1	
CAL BLK	1	23-Jun-2021 10:49	010CALB.d_6150890	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
2/10/200	1	23-Jun-2021 10:51	011CALS.d_6150891	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
5/25/500	1	23-Jun-2021 10:53	012CALS.d_6150892	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
10/50/100	1	23-Jun-2021 10:55	013CALS.d_6150893	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
100/500/10K	1	23-Jun-2021 10:57	014CALS.d_6150894	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
200/1000/20K	1	23-Jun-2021 10:59	015CALS.d_6150895	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICV	1	23-Jun-2021 11:12	017_ICV.d_6150897	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	23-Jun-2021 11:14	018_ICB.d_6150898	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	23-Jun-2021 11:16	019LCV2.d_6150899	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV5	1	23-Jun-2021 11:18	020LCV5.d_6150900	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSA	1	23-Jun-2021 11:20	021ICSA.d_6150901	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICSAB	1	23-Jun-2021 11:22	022ICSB.d_6150902	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 1	1	23-Jun-2021 11:27	024_CCV.d_6150918	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 1	1	23-Jun-2021 11:31	026_CCB.d_6150920	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
MBLK-167071	1	23-Jun-2021 11:33	027SMPL.d_6150921	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LCS-167071	1	23-Jun-2021 11:35	028SMPL.d_6150922	AG AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZSD	5	23-Jun-2021 11:39	030SMPL.d_6150924	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZMS	1	23-Jun-2021 11:41	031SMPL.d_6150925	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZMSD	1	23-Jun-2021 11:43	032SMPL.d_6150926	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ZZZZZZPDS	1	23-Jun-2021 11:45	033SMPL.d_6150927	AG AL AS BA BE CA CO CR CU FE K MG NA NI PB SB TL
CCV 2	1	23-Jun-2021 11:53	037_CCV.d_6150931	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 2	1	23-Jun-2021 11:55	038_CCB.d_6150932	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LCS-167071	1	23-Jun-2021 12:09	044SMPL.d_6151409	AL
ZZZZZZPDS	1	23-Jun-2021 12:10	045SMPL.d_6151410	CD MN SE V ZN
CCV 3	1	23-Jun-2021 12:19	049_CCV.d_6151414	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 3	1	23-Jun-2021 12:21	050_CCB.d_6151415	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 4	1	23-Jun-2021 12:43	061_CCV.d_6151419	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 4	1	23-Jun-2021 12:45	062_CCB.d_6151420	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 5	1	23-Jun-2021 15:25	130_CCB.d_6152256	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 5	1	23-Jun-2021 15:27	131_CCV.d_6152257	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
18CPTMW01DW_061521	1	23-Jun-2021 15:41	136SMPL.d_6152262	AG AL AS BA BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
18CPTMW01SW_061521	1	23-Jun-2021 15:43	137SMPL.d_6152263	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

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ALS Houston, US Date: 31-Aug-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908
Start Date: 23-Jun-2021 End Date: 23-Jun-2021

Run ID:ICPMS06_386127
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
125_061521	1	23-Jun-2021 15:45	138SMPL.d_6152264	AG AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
MW21_061521	1	23-Jun-2021 15:47	139SMPL.d_6152265	AG AL AS BE CA CD CO CR CU FE K MG MN NI PB SB SE TL V ZN
129_061521	1	23-Jun-2021 15:49	140SMPL.d_6152266	AG AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCV 6	1	23-Jun-2021 16:07	142_CCV.d_6152268	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
CCB 6	1	23-Jun-2021 16:08	143_CCB.d_6152269	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN

ALS Houston, US

Date: 31-Aug-21

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908
Start Date: 24-Jun-2021 End Date: 24-Jun-2021

Run ID:ICPMS06_386210
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS06_386210_Tune	1	24-Jun-2021 00:00	ICPMS06_386210_Tune_1	
CAL BLK	1	24-Jun-2021 09:54	010CALB.d_6152983	AL BA NA
2/10/200	1	24-Jun-2021 09:56	011CALS.d_6152984	AL BA NA
5/25/500	1	24-Jun-2021 09:58	012CALS.d_6152985	AL BA NA
10/50/100	1	24-Jun-2021 10:00	013CALS.d_6152971	AL BA NA
100/500/10K	1	24-Jun-2021 10:02	014CALS.d_6152972	AL BA NA
200/1000/20K	1	24-Jun-2021 10:04	015CALS.d_6152973	AL BA NA
ICV	1	24-Jun-2021 10:07	017_ICV.d_6152975	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
ICB	1	24-Jun-2021 10:09	018_ICB.d_6152976	AG AL AS BA BE CA CD CO CR CU FE K MG MN NA NI PB SB SE TL V ZN
LLICV2	1	24-Jun-2021 10:11	019LCV2.d_6152977	AL BA NA
LLICV5	1	24-Jun-2021 10:13	020LCV5.d_6152978	AL BA NA
ICSA	1	24-Jun-2021 10:29	022ICSA.d_6152980	AL BA NA
ICSAB	1	24-Jun-2021 10:31	023ICSB.d_6152981	AL BA NA
CCB 1	1	24-Jun-2021 10:41	026_CCB.d_6153005	AL BA NA
CCV 1	1	24-Jun-2021 10:43	027_CCV.d_6153006	AL BA NA
18CPTMW01DW_061521	10	24-Jun-2021 10:52	031SMPL.d_6153010	NA
125_061521	10	24-Jun-2021 10:54	032SMPL.d_6153011	AL
MW21_061521	10	24-Jun-2021 10:56	033SMPL.d_6153012	BA NA
129_061521	10	24-Jun-2021 10:58	034SMPL.d_6153013	AL
CCV 2	1	24-Jun-2021 11:06	038_CCV.d_6153014	AL BA NA
CCB 2	1	24-Jun-2021 11:08	039_CCB.d_6153015	AL BA NA
CCV 3	1	24-Jun-2021 11:38	050_CCV.d_6153029	AL BA NA
CCB 3	1	24-Jun-2021 11:40	051_CCB.d_6153030	AL BA NA
CCV 4	1	24-Jun-2021 12:03	062_CCV.d_6153261	AL BA NA
CCB 4	1	24-Jun-2021 12:05	063_CCB.d_6153262	AL BA NA
CCV 5	1	24-Jun-2021 12:29	074_CCV.d_6153478	AL BA NA
CCB 5	1	24-Jun-2021 12:31	075_CCB.d_6153479	AL BA NA
CCV 6	1	24-Jun-2021 12:53	086_CCV.d_6153582	AL BA NA
CCB 6	1	24-Jun-2021 12:55	087_CCB.d_6153583	AL BA NA
CCV 7	1	24-Jun-2021 13:16	098_CCV.d_6153844	AL BA NA
CCB 7	1	24-Jun-2021 13:18	099_CCB.d_6153845	AL BA NA

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ALS Houston, US

Date: 31-Aug-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: HG03_385824
Instrument: HG03
Method: SW7470A

ICV | Date: 18-Jun-2021 12:06 | Seq: 6143407 | ICV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.94	99	90-110	

ICCV1 | Date: 18-Jun-2021 12:18 | Seq: 6143410 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	5.02	100	90-110	

CCV2 | Date: 18-Jun-2021 13:11 | Seq: 6143571 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.93	99	90-110	

CCV3 | Date: 18-Jun-2021 13:37 | Seq: 6143703 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.9	98	90-110	

CCV4 | Date: 18-Jun-2021 14:01 | Seq: 6143901 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.87	97	90-110	

CCV5 | Date: 18-Jun-2021 14:23 | Seq: 6143913 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.9	98	90-110	

CCV6 | Date: 18-Jun-2021 15:16 | Seq: 6143937 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.87	97	90-110	

CCV7 | Date: 18-Jun-2021 15:37 | Seq: 6144190 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.87	97	90-110	

CCV8 | Date: 18-Jun-2021 16:01 | Seq: 6144264 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.97	99	90-110	

CCV9 | Date: 18-Jun-2021 16:27 | Seq: 6144366 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	4.99	100	90-110	

CCV10 | Date: 18-Jun-2021 16:50 | Seq: 6144400 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Mercury	5	5.09	102	90-110	

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Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386127
Instrument: ICPMS06
Method: SW6020A

ICV Date: 23-Jun-2021 11:12 Seq: 6150897 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.344	106	90-110	
Antimony	100	100.314	100	90-110	
Arsenic	100	101.057	101	90-110	
Barium	100	102.036	102	90-110	
Beryllium	100	105.102	105	90-110	
Cadmium	100	100.641	101	90-110	
Calcium	10000	10049.49	100	90-110	
Chromium	100	101.436	101	90-110	
Cobalt	100	99.958	100	90-110	
Copper	100	102.541	103	90-110	
Iron	10000	10179.304	102	90-110	
Lead	100	100.694	101	90-110	
Magnesium	10000	10374.292	104	90-110	
Manganese	100	102.452	102	90-110	
Nickel	100	104.629	105	90-110	
Potassium	10000	10219.714	102	90-110	
Selenium	100	101.492	101	90-110	
Silver	100	103.283	103	90-110	
Sodium	10000	10199.242	102	90-110	
Thallium	100	104.516	105	90-110	
Vanadium	100	102.071	102	90-110	
Zinc	100	102.667	103	90-110	

CCV1 Date: 23-Jun-2021 11:27 Seq: 6150918 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	102.182	102	90-110	
Antimony	100	98.281	98	90-110	
Arsenic	100	100.819	101	90-110	
Barium	100	100.343	100	90-110	
Beryllium	100	99.375	99	90-110	
Cadmium	100	101.003	101	90-110	
Calcium	10000	10168.843	102	90-110	
Chromium	100	100.561	101	90-110	
Cobalt	100	99.041	99	90-110	
Copper	100	102.113	102	90-110	
Iron	10000	10189.461	102	90-110	
Lead	100	98.576	99	90-110	
Magnesium	10000	10309.125	103	90-110	
Manganese	100	101.627	102	90-110	
Nickel	100	102.249	102	90-110	
Potassium	10000	10258.447	103	90-110	
Selenium	100	101.678	102	90-110	
Silver	100	100.72	101	90-110	
Sodium	10000	10171.223	102	90-110	
Thallium	100	102.294	102	90-110	
Vanadium	100	101.377	101	90-110	
Zinc	100	101.17	101	90-110	

CCV2 Date: 23-Jun-2021 11:53 Seq: 6150931 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	102.117	102	90-110	
Antimony	100	97.183	97	90-110	
Arsenic	100	101.31	101	90-110	
Barium	100	98.938	99	90-110	
Beryllium	100	95.997	96	90-110	

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Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386127
Instrument: ICPMS06
Method: SW6020A

CCV2 Date: 23-Jun-2021 11:53 Seq: 6150931 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Cadmium	100	99.642	100	90-110	
Calcium	10000	10174.032	102	90-110	
Chromium	100	100.97	101	90-110	
Cobalt	100	100.201	100	90-110	
Copper	100	103.593	104	90-110	
Iron	10000	10306.939	103	90-110	
Lead	100	99.787	100	90-110	
Magnesium	10000	10233.864	102	90-110	
Manganese	100	102.416	102	90-110	
Nickel	100	103.982	104	90-110	
Potassium	10000	10277.948	103	90-110	
Selenium	100	101.944	102	90-110	
Silver	100	100.139	100	90-110	
Sodium	10000	10345.383	103	90-110	
Thallium	100	102.13	102	90-110	
Vanadium	100	102.417	102	90-110	
Zinc	100	100.98	101	90-110	

CCV3 Date: 23-Jun-2021 12:19 Seq: 6151414 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	99.479	100	90-110	
Antimony	100	96.923	97	90-110	
Arsenic	100	99.478	100	90-110	
Barium	100	101.051	101	90-110	
Beryllium	100	97.273	97	90-110	
Cadmium	100	100.936	101	90-110	
Calcium	10000	9988.629	100	90-110	
Chromium	100	100.495	100	90-110	
Cobalt	100	98.843	99	90-110	
Copper	100	101.198	101	90-110	
Iron	10000	10133.928	101	90-110	
Lead	100	101.185	101	90-110	
Magnesium	10000	10016.694	100	90-110	
Manganese	100	100.373	100	90-110	
Nickel	100	101.802	102	90-110	
Potassium	10000	9986.704	100	90-110	
Selenium	100	98.974	99	90-110	
Silver	100	101.006	101	90-110	
Sodium	10000	10025.254	100	90-110	
Thallium	100	103.797	104	90-110	
Vanadium	100	100.75	101	90-110	
Zinc	100	99.694	100	90-110	

CCV4 Date: 23-Jun-2021 12:43 Seq: 6151419 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	97.493	98	90-110	
Antimony	100	98.387	98	90-110	
Arsenic	100	99.301	99	90-110	
Barium	100	98.77	99	90-110	
Beryllium	100	95.769	96	90-110	
Cadmium	100	99.758	100	90-110	
Calcium	10000	9950.168	100	90-110	
Chromium	100	99.944	100	90-110	
Cobalt	100	99.221	99	90-110	
Copper	100	101.871	102	90-110	

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Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386127
Instrument: ICPMS06
Method: SW6020A

CCV4 Date: 23-Jun-2021 12:43 Seq: 6151419 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Iron	10000	10248.127	102	90-110	
Lead	100	99.338	99	90-110	
Magnesium	10000	10061.116	101	90-110	
Manganese	100	101.177	101	90-110	
Nickel	100	101.804	102	90-110	
Potassium	10000	9885.326	99	90-110	
Selenium	100	100.56	101	90-110	
Silver	100	99.468	100	90-110	
Sodium	10000	10184.536	102	90-110	
Thallium	100	102.181	102	90-110	
Vanadium	100	100.655	101	90-110	
Zinc	100	101.824	102	90-110	

CCV5 Date: 23-Jun-2021 15:27 Seq: 6152257 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	108.138	108	90-110	
Antimony	100	103.268	103	90-110	
Arsenic	100	102.36	102	90-110	
Barium	100	104.462	104	90-110	
Beryllium	100	99.969	100	90-110	
Cadmium	100	104.203	104	90-110	
Calcium	10000	10133.685	101	90-110	
Chromium	100	102.489	102	90-110	
Cobalt	100	101.672	102	90-110	
Copper	100	105.252	105	90-110	
Iron	10000	10443.612	104	90-110	
Lead	100	105.301	105	90-110	
Magnesium	10000	10606.716	106	90-110	
Manganese	100	102.655	103	90-110	
Nickel	100	106.083	106	90-110	
Potassium	10000	10506.236	105	90-110	
Selenium	100	100.114	100	90-110	
Silver	100	103.117	103	90-110	
Sodium	10000	10802.164	108	90-110	
Thallium	100	106.545	107	90-110	
Vanadium	100	101.97	102	90-110	
Zinc	100	106.253	106	90-110	

CCV6 Date: 23-Jun-2021 16:07 Seq: 6152268 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	107.434	107	90-110	
Antimony	100	101.213	101	90-110	
Arsenic	100	102.383	102	90-110	
Barium	100	103.257	103	90-110	
Beryllium	100	97.288	97	90-110	
Cadmium	100	104.9	105	90-110	
Calcium	10000	10251.865	103	90-110	
Chromium	100	101.968	102	90-110	
Cobalt	100	101.29	101	90-110	
Copper	100	105.063	105	90-110	
Iron	10000	10442.364	104	90-110	
Lead	100	103.338	103	90-110	
Magnesium	10000	10587.898	106	90-110	
Manganese	100	102.655	103	90-110	
Nickel	100	104.45	104	90-110	

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ALS Houston, US Date: 31-Aug-21

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386127
Instrument: ICPMS06
Method: SW6020A

CCV6 Date: 23-Jun-2021 16:07 Seq: 6152268 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Potassium	10000	10386.747	104	90-110	
Selenium	100	101.784	102	90-110	
Silver	100	102.651	103	90-110	
Sodium	10000	10812.4	108	90-110	
Thallium	100	103.203	103	90-110	
Vanadium	100	103.288	103	90-110	
Zinc	100	105.236	105	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386210
Instrument: ICPMS06
Method: SW6020A

ICV Date: 24-Jun-2021 10:07 Seq: 6152975 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.197	106	90-110	
Barium	100	105.211	105	90-110	
Sodium	10000	10056.176	101	90-110	

CCV1 Date: 24-Jun-2021 10:43 Seq: 6153006 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	105.713	106	90-110	
Barium	100	104.684	105	90-110	
Sodium	10000	10121.562	101	90-110	

CCV2 Date: 24-Jun-2021 11:06 Seq: 6153014 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	103.884	104	90-110	
Barium	100	102.35	102	90-110	
Sodium	10000	10135.5	101	90-110	

CCV3 Date: 24-Jun-2021 11:38 Seq: 6153029 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	107.428	107	90-110	
Barium	100	101.616	102	90-110	
Sodium	10000	10240.509	102	90-110	

CCV4 Date: 24-Jun-2021 12:03 Seq: 6153261 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	106.517	107	90-110	
Barium	100	104.738	105	90-110	
Sodium	10000	10321.998	103	90-110	

CCV5 Date: 24-Jun-2021 12:29 Seq: 6153478 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	107.164	107	90-110	
Barium	100	103.466	103	90-110	
Sodium	10000	10469.449	105	90-110	

CCV6 Date: 24-Jun-2021 12:53 Seq: 6153582 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	108.854	109	90-110	
Barium	100	105.518	106	90-110	
Sodium	10000	10350.243	104	90-110	

CCV7 Date: 24-Jun-2021 13:16 Seq: 6153844 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Aluminum	100	109.616	110	90-110	
Barium	100	104.913	105	90-110	
Sodium	10000	10404.612	104	90-110	

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Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: HG03_385824
Instrument: HG03
Method: SW7470A

ICB	Date: 18-Jun-2021 12:08		Seq: 6143408	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB1	Date: 18-Jun-2021 13:12		Seq: 6143572	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB2	Date: 18-Jun-2021 13:38		Seq: 6143704	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB3	Date: 18-Jun-2021 14:03		Seq: 6143902	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB4	Date: 18-Jun-2021 14:25		Seq: 6143914	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB5	Date: 18-Jun-2021 15:18		Seq: 6143938	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB6	Date: 18-Jun-2021 15:39		Seq: 6144191	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

MBLK-167023	Date: 18-Jun-2021 15:51		Seq: 6144197	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB7	Date: 18-Jun-2021 16:03		Seq: 6144265	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.057	0.03	0.2	J	

CCB8	Date: 18-Jun-2021 16:29		Seq: 6144367	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

CCB9	Date: 18-Jun-2021 16:53		Seq: 6144401	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Mercury	0.2	0.03	0.2	U	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386127
Instrument: ICPMS06
Method: SW6020A

ICB	Date: 23-Jun-2021 11:14		Seq: 6150898	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	5	0.4	5	U	
Arsenic	5	0.4	5	U	
Barium	5	1.9	5	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	5	0.4	5	U	
Cobalt	5	0.1	5	U	
Copper	5	1	5	U	
Iron	200	12	200	U	
Lead	5	0.6	5	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Potassium	200	18	200	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	5	2	5	U	

CCB1	Date: 23-Jun-2021 11:31		Seq: 6150920	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	-18.34	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

MBLK-167071	Date: 23-Jun-2021 11:33		Seq: 6150921	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	5	0.4	5	U	
Arsenic	5	0.4	5	U	
Barium	5	1.9	5	U	
Beryllium	2	0.2	2	U	

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Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386127
Instrument: ICPMS06
Method: SW6020A

MBLK-167071 Date: 23-Jun-2021 11:33 Seq: 6150921 MBLK Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	5	0.4	5	U
Cobalt	5	0.1	5	U
Copper	5	1	5	U
Iron	200	12	200	U
Lead	5	0.6	5	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	5	0.6	5	U
Potassium	200	18	200	U
Selenium	5	1.1	5	U
Silver	5	0.2	5	U
Sodium	200	14	200	U
Thallium	2	0.2	2	U
Vanadium	0.875	0.6	5	J
Zinc	5	2	5	U

CCB2 Date: 23-Jun-2021 11:55 Seq: 6150932 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U
Iron	200	12	200	U
Lead	2	0.6	2	U
Magnesium	200	10	200	U
Manganese	5	0.7	5	U
Nickel	2	0.6	2	U
Potassium	200	18	200	U
Selenium	2	1.1	2	U
Silver	2	0.2	2	U
Sodium	32.81	14	200	J
Thallium	2	0.2	2	U
Vanadium	0.765	0.6	5	J
Zinc	4	2	4	U

CCB3 Date: 23-Jun-2021 12:21 Seq: 6151415 CCB Units: ug/L

Analyte	Result	MDL	Report Limit	Qual
Aluminum	10	1.8	10	U
Antimony	2	0.4	2	U
Arsenic	2	0.4	2	U
Barium	4	1.9	4	U
Beryllium	2	0.2	2	U
Cadmium	2	0.2	2	U
Calcium	500	34	500	U
Chromium	4	0.4	4	U
Cobalt	5	0.2	5	U
Copper	2	1	2	U

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Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386127
Instrument: ICPMS06
Method: SW6020A

CCB3	Date: 23-Jun-2021 12:21		Seq: 6151415	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	200	14	200	U	
Thallium	2	0.2	2	U	
Vanadium	0.862	0.6	5	J	
Zinc	4	2	4	U	

CCB4	Date: 23-Jun-2021 12:45		Seq: 6151420	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	-16.62	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	5	0.6	5	U	
Zinc	4	2	4	U	

CCB5	Date: 23-Jun-2021 15:25		Seq: 6152256	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	0.896	0.7	5	J	
Nickel	2	0.6	2	U	

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Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386127
Instrument: ICPMS06
Method: SW6020A

CCB5	Date: 23-Jun-2021 15:25		Seq: 6152256	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	38.88	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	-0.631	0.6	5	J	
Zinc	4	2	4	U	

CCB6	Date: 23-Jun-2021 16:08		Seq: 6152269	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Antimony	2	0.4	2	U	
Arsenic	2	0.4	2	U	
Barium	4	1.9	4	U	
Beryllium	2	0.2	2	U	
Cadmium	2	0.2	2	U	
Calcium	500	34	500	U	
Chromium	4	0.4	4	U	
Cobalt	5	0.2	5	U	
Copper	2	1	2	U	
Iron	200	12	200	U	
Lead	2	0.6	2	U	
Magnesium	200	10	200	U	
Manganese	0.899	0.7	5	J	
Nickel	2	0.6	2	U	
Potassium	200	18	200	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	
Sodium	85.1	14	200	J	
Thallium	2	0.2	2	U	
Vanadium	1.384	0.6	5	J	
Zinc	4	2	4	U	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386210
Instrument: ICPMS06
Method: SW6020A

ICB	Date: 24-Jun-2021 10:09		Seq: 6152976	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	8.874	1.8	10	J	
Barium	5	1.9	5	U	
Sodium	200	14	200	U	

CCB1	Date: 24-Jun-2021 10:41		Seq: 6153005	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Sodium	200	14	200	U	

CCB2	Date: 24-Jun-2021 11:08		Seq: 6153015	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Sodium	200	14	200	U	

CCB3	Date: 24-Jun-2021 11:40		Seq: 6153030	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Sodium	200	14	200	U	

CCB4	Date: 24-Jun-2021 12:05		Seq: 6153262	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Sodium	200	14	200	U	

CCB5	Date: 24-Jun-2021 12:31		Seq: 6153479	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Sodium	200	14	200	U	

CCB6	Date: 24-Jun-2021 12:55		Seq: 6153583	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Sodium	200	14	200	U	

CCB7	Date: 24-Jun-2021 13:18		Seq: 6153845	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Aluminum	10	1.8	10	U	
Barium	4	1.9	4	U	
Sodium	45.25	14	200	J	

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Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc. Run ID:ICPMS06_386127
Project: LHAAP 18 24 Instrument:ICPMS06
WorkOrder: HS21060908 Method:SW6020A

ICSA	Date: 23-Jun-2021 11:20	Seq: 6150901	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	99600	99.6	
Antimony		0.109	0	
Arsenic		0.011	0	
Barium		0.322	0	
Beryllium		-0.002	0	
Cadmium		1.934	0	
Calcium	100000	103200	103	
Chromium		2.043	0	
Cobalt		0.086	0	
Copper		0.384	0	
Iron	100000	101500	102	
Lead		0.08	0	
Magnesium	100000	103000	103	
Manganese		0.613	0	
Nickel		0.128	0	
Potassium	100000	103200	103	
Selenium		0.221	0	
Silver		0.287	0	
Sodium	100000	103300	103	
Thallium		0.016	0	
Vanadium		-0.153	0	
Zinc		1.336	0	

ICSAB	Date: 23-Jun-2021 11:22	Seq: 6150902	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	96840	96.4	
Antimony	100	96.91	96.9	
Arsenic	100	101.7	102	
Barium	100	100.4	100	
Beryllium	100	98.68	98.7	
Cadmium	100	99.74	99.7	
Calcium	110000	113400	103	
Chromium	100	100.9	101	
Cobalt	100	97.51	97.5	
Copper	100	97.74	97.7	
Iron	110000	111300	101	
Lead	100	96.31	96.3	
Magnesium	110000	110700	101	
Manganese	100	100.2	100	
Nickel	100	99.11	99.1	
Potassium	110000	111700	102	
Selenium	100	103.2	103	
Silver	100	96.64	96.6	
Sodium	110000	112800	103	
Thallium	100	99.65	99.7	
Vanadium	100	100.6	101	
Zinc	100	100.1	100	

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Run ID: ICPMS06_386210
Instrument: ICPMS06
Method: SW6020A

ICSA	Date: 24-Jun-2021 10:29	Seq: 6152980	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100000	96780	96.8	
Barium		0.34	0	
Sodium	100000	99750	99.8	

ICSAB	Date: 24-Jun-2021 10:31	Seq: 6152981	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Aluminum	100500	96500	96.0	
Barium	100	98.75	98.8	
Sodium	110000	110900	101	

ALS Houston, US

Date: 31-Aug-21

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Date Analyzed: 18-Jun-2021 15:58
Date Extracted: 18-Jun-2021 11:30
Units: ug/L

Matrix Spike: HS21060495-07MS
Client Sample ID:

Analysis Method: SW7470A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Mercury	0.2000	5.890	5.000	119	6.050	5.000	122	82-119	2.68	20

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ALS Houston, US Date: 31-Aug-21

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Date Analyzed: 23-Jun-2021 11:43
Date Extracted: 21-Jun-2021 13:00
Units: ug/L

Matrix Spike: HS21060495-07MS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum	1439	1729	100.0	290	1535	100.0	95.6	84-117	11.9	20
Antimony	5.000	50.44	50.00	101	50.24	50.00	100	85-117	0.385	20
Arsenic	0.4630	50.39	50.00	99.8	50.90	50.00	101	84-116	1.02	20
Barium	410.4	484.4	50.00	148	488.3	50.00	156	86-114	0.804	20
Beryllium	2.000	50.57	50.00	101	50.38	50.00	101	83-121	0.392	20
Cadmium	0.2710	52.76	50.00	105	53.27	50.00	106	87-115	0.953	20
Calcium	44520	50410	5000	118	50110	5000	112	87-118	0.597	20
Chromium	24.10	75.58	50.00	103	74.04	50.00	99.9	85-116	2.06	20
Cobalt	11.08	61.80	50.00	101	61.58	50.00	101	86-115	0.349	20
Copper	4.310	55.97	50.00	103	55.66	50.00	103	85-118	0.559	20
Iron	1246	6392	5000	103	6360	5000	102	87-118	0.503	20
Lead	5.000	51.17	50.00	101	51.35	50.00	102	88-115	0.349	20
Magnesium	10930	16720	5000	116	16480	5000	111	83-118	1.45	20
Manganese	249.5	311.2	50.00	124	312.4	50.00	126	87-115	0.384	20
Nickel	433.6	490.4	50.00	114	491.3	50.00	115	85-117	0.168	20
Potassium	581.4	6065	5000	110	5863	5000	106	87-115	3.38	20
Selenium	5.000	52.51	50.00	105	52.16	50.00	104	80-120	0.661	20
Silver	5.000	51.10	50.00	102	51.45	50.00	103	85-116	0.677	20
Sodium	41430	48140	5000	134	47520	5000	122	85-117	1.30	20
Thallium	0.3490	52.88	50.00	105	52.10	50.00	104	82-116	1.48	20
Vanadium	1.810	54.23	50.00	105	53.91	50.00	104	86-115	0.590	20
Zinc	10.93	62.62	50.00	103	62.70	50.00	104	83-119	0.131	20

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Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Date Analyzed: 23-Jun-2021 11:45
Date Extracted: 21-Jun-2021 13:00
Units: ug/L

Lab Sample ID: HS21060495-07PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Aluminum	1439	1521	100	82	80-120
Antimony	0	114.1	100	114	80-120
Arsenic	0.463	116.9	100	116	80-120
Barium	410.4	541.2	100	131	80-120
Beryllium	0	115.9	100	116	80-120
Calcium	44520	56010	10000	115	80-120
Chromium	24.1	142.2	100	118	80-120
Cobalt	11.08	126.9	100	116	80-120
Copper	4.31	122.9	100	119	80-120
Iron	1246	13040	10000	118	80-120
Lead	0	117.8	100	117	80-120
Magnesium	10930	22830	10000	119	80-120
Nickel	433.6	555.5	100	122	80-120
Potassium	581.4	12530	10000	120	80-120
Silver	0	114.4	100	114	80-120
Sodium	41430	54400	10000	130	80-120
Thallium	0.349	119.2	100	119	80-120
Cadmium	0.271	95.55	100	95	80-120
Manganese	249.5	336	100	87	80-120
Selenium	0	95.81	100	96	80-120
Vanadium	1.81	96.43	100	95	80-120
Zinc	10.93	105.5	100	95	80-120

ALS Houston, US

Date: 31-Aug-21

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Date Analyzed: 18-Jun-2021 15:53
Date Extracted: 18-Jun-2021 11:30
Units: ug/L

Lab Sample ID: LCS-167023

Analysis Method: SW7470A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Mercury	5	5.16	103	82-119

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Date: 31-Aug-21

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Date Analyzed: 23-Jun-2021 11:35
Date Extracted: 21-Jun-2021 13:00
Units: ug/L

Lab Sample ID: LCS-167071
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Antimony	50	51.69	103	85-117
Arsenic	50	50.53	101	84-116
Barium	50	52.42	105	86-114
Beryllium	50	51.02	102	83-121
Cadmium	50	53.55	107	87-115
Calcium	5000	5152	103	87-118
Chromium	50	52.39	105	85-116
Cobalt	50	52.53	105	86-115
Copper	50	54.53	109	85-118
Iron	5000	5311	106	87-118
Lead	50	51.39	103	88-115
Magnesium	5000	5343	107	83-118
Manganese	50	52.59	105	87-115
Nickel	50	54.72	109	85-117
Potassium	5000	5425	109	87-115
Selenium	50	53.95	108	80-120
Silver	50	52.78	106	85-116
Sodium	5000	5329	107	85-117
Thallium	50	52.73	105	82-116
Vanadium	50	53.36	107	86-115
Zinc	50	55.44	111	83-119
Aluminum	100	107.4	107	84-117

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Date: 31-Aug-21

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP 18 24
WorkOrder: HS21060908

Date Analyzed: 23-Jun-2021 11:39
Date Extracted: 21-Jun-2021 13:00
Units: ug/L

Lab Sample ID: HS21060495-07SD
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Aluminum	1439		1366		5	
Antimony	0	U	0	U	0	
Arsenic	0.463	J	0	U	0	
Barium	410.4		405.4		1	
Beryllium	0	U	0	U	0	
Cadmium	0.271	J	0	U	0	
Calcium	44520		43430		2	
Chromium	24.1		24.16	J	0	
Cobalt	11.08		11.27	J	2	
Copper	4.31	J	0	U	0	
Iron	1246		1332		7	
Lead	0	U	0	U	0	
Magnesium	10930		11680		7	
Manganese	249.5		252.1		1	
Nickel	433.6		448.5		3	
Potassium	581.4		594.2	J	2	
Selenium	0	U	0	U	0	
Silver	0	U	0	U	0	
Sodium	41430		43960		6	
Thallium	0.349	J	0	U	0	
Vanadium	1.81	J	9.468	J	423	
Zinc	10.93		11.22	J	3	

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Report Generated By Teledyne Leeman QuickTrace

Analyst: ALSHS.NoUser

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\06182021AW.wszf

Creation Date: 6/18/2021 11:37:59 AM

Comment:

Results

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
Calibration Blank					STD	06/18/21 11:53:43 am	0.000	-13	138.54	2.28	
	Replicates	-38.0	7.6	-12.3	-11.3						
Standard #1 (0.2 ppb)					STD	06/18/21 11:55:25 am	0.200	883	5.26	8.12	
	Replicates	835.9	854.0	902.9	937.9						
Standard #2 (0.5 ppb)					STD	06/18/21 11:57:06 am	0.500	2140	2.04	-3.17	
	Replicates	2075.4	2153.8	2158.4	2171.4						
Standard #3 (2.0 ppb)					STD	06/18/21 11:58:49 am	2.000	8612	2.21	-16.66	
	Replicates	8346.8	8613.7	8697.9	8788.6						
Standard #4 (5.0 ppb)					STD	06/18/21 12:00:31 pm	5.000	21496	0.86	-57.31	
	Replicates	21233.6	21523.1	21560.2	21668.5						
Standard #5 (10.0 ppb)					STD	06/18/21 12:02:13 pm	10.000	44026	1.55	117.25	
	Replicates	43038.1	44125.3	44380.0	44559.0						

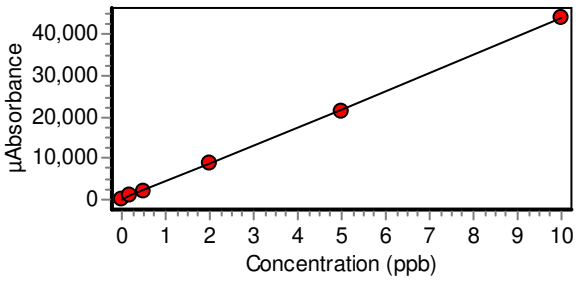
Calibration

Equation: Abs = 4353.851x + -23.422

R2: 0.99978

SEE: 287.0738

Flags:



ICCV					UNK	06/18/21 12:05:08 pm	4.490	19679	4.08		
	Replicates	18761.9	19380.2	19920.2	20653.2						
ICV					UNK	06/18/21 12:06:49 pm	4.940	21640	0.69		
	Replicates	21435.8	21636.8	21695.4	21790.8						
ICB					UNK	06/18/21 12:08:31 pm	-0.006	-39	91.79		
	Replicates	-64.2	-49.3	-10.1	-31.9						
CRA					UNK	06/18/21 12:10:12 pm	0.195	839	2.22		
	Replicates	821.9	828.5	841.1	864.8						
ICCV					UNK	06/18/21 12:18:54 pm	5.020	21983	2.53		
	Replicates	21214.0	21960.2	22274.2	22483.8						
MBLK-167024					UNK	06/18/21 12:49:49 pm	0.002	-5	324.10		
	Replicates	-13.6	-13.5	-27.9	35.0						
MBLKT1-167024					UNK	06/18/21 12:51:31 pm	0.022	82	14.83		s
	Replicates	76.1	65.7	97.4	90.3						

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Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
MBLKT2-167024					UNK	06/18/21 12:54:35 pm	0.018	65	11.64		s
	Replicates	53.7	65.3	65.7	76.1						
MBLKT3-167024					UNK	06/18/21 12:56:17 pm	0.021	79	31.86		s
	Replicates	77.4	70.5	49.1	119.5						
LCS-167024					UNK	06/18/21 12:59:19 pm	5.490	24054	1.10		
	Replicates	23671.0	24121.7	24144.3	24280.8						
HS21060873-01					UNK	06/18/21 01:01:01 pm	0.022	84	16.21		s
	Replicates	83.9	89.0	62.2	99.6						
HS21060873-01MS					UNK	06/18/21 01:04:16 pm	5.340	23380	0.09		
	Replicates	23376.7	23389.3	23353.3	23401.9						
HS21060873-01MSD					UNK	06/18/21 01:05:59 pm	5.260	23053	0.23		
	Replicates	23016.3	23054.8	23012.3	23127.9						
HS21060777-01					UNK	06/18/21 01:07:40 pm	0.048	196	8.61		s
	Replicates	212.6	170.5	199.1	202.5						
HS21060803-01					UNK	06/18/21 01:09:21 pm	0.022	81	28.99		s
	Replicates	79.4	102.5	43.3	100.5						
CCV					UNK	06/18/21 01:11:04 pm	4.930	21605	1.88		
	Replicates	21007.3	21694.4	21824.4	21892.8						
CCB					UNK	06/18/21 01:12:47 pm	0.000	-15	147.95		
	Replicates	-46.2	-10.3	11.7	-13.6						
HS21060803-02					UNK	06/18/21 01:19:05 pm	0.021	78	14.96		s
	Replicates	90.3	67.7	64.6	89.1						
HS21060803-03					UNK	06/18/21 01:20:47 pm	0.031	122	15.77		s
	Replicates	149.6	107.6	129.3	103.1						
HS21060807-01					UNK	06/18/21 01:22:28 pm	0.021	81	7.98		s
	Replicates	73.5	90.4	76.1	82.4						
HS21060840-01					UNK	06/18/21 01:24:10 pm	0.007	18	66.45		
	Replicates	22.3	43.7	12.2	-6.5						
HS21060896-01					UNK	06/18/21 01:25:52 pm	0.066	277	7.93		s
	Replicates	269.4	295.9	295.7	248.2						
HS21060903-01					UNK	06/18/21 01:27:34 pm	0.016	57	10.20		s
	Replicates	50.6	51.0	65.5	59.5						
MBLKT4-167024					UNK	06/18/21 01:30:14 pm	0.001	-8	102.90		
	Replicates	-7.3	-11.9	-13.0	-1.4						
MBLKT5-167024					UNK	06/18/21 01:31:57 pm	0.007	16	137.25		
	Replicates	62.3	-34.8	25.3	10.3						
HS21060877-01					UNK	06/18/21 01:33:39 pm	0.011	34	46.76		
	Replicates	19.1	52.9	53.6	11.1						

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Sample Name				Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
HS21060878-01				UNK	06/18/21 01:35:22 pm	0.006	11	103.18		
	Replicates	4.0	9.9	44.5	-15.5					
CCV				UNK	06/18/21 01:37:05 pm	4.900	21447	1.08		
	Replicates	21101.9	21541.5	21533.9	21609.5					
CCB				UNK	06/18/21 01:38:48 pm	0.005	8	29.34		
	Replicates	11.3	5.0	13.9	0.2					
HS21060894-01				UNK	06/18/21 01:42:38 pm	0.001	-8	388.74		
	Replicates	7.3	-37.3	-11.9	10.7					
HS21060896-02				UNK	06/18/21 01:44:19 pm	0.017	62	11.46		s
	Replicates	56.0	60.8	74.8	57.1					
HS21060906-01				UNK	06/18/21 01:46:00 pm	0.003	-2	71.13		
	Replicates	-7.2	7.8	-9.7	-0.7					
HS21060923-01				UNK	06/18/21 01:47:41 pm	0.011	33	16.67		
	Replicates	25.6	36.5	27.5	42.0					
HS21060935-01				UNK	06/18/21 01:49:23 pm	0.005	10	76.74		
	Replicates	-8.9	4.1	33.4	9.5					
HS21060960-01				UNK	06/18/21 01:51:05 pm	0.006	11	85.12		
	Replicates	-1.3	-6.9	40.1	12.6					
MBLK-167026				UNK	06/18/21 01:52:47 pm	0.005	7	97.17		
	Replicates	18.2	5.4	-20.3	24.5					
LCS-167026				UNK	06/18/21 01:56:17 pm	4.860	21293	2.86		
	Replicates	20689.1	21018.3	21356.4	22109.9					
HS21060786-01				UNK	06/18/21 01:57:59 pm	0.026	99	30.49		s
	Replicates	63.5	141.0	112.5	80.4					
HS21060786-01MS				UNK	06/18/21 01:59:41 pm	5.510	24143	0.69		
	Replicates	23896.8	24187.7	24238.7	24248.4					
CCV				UNK	06/18/21 02:01:24 pm	4.870	21314	2.11		
	Replicates	20675.3	21336.2	21554.2	21690.7					
CCB				UNK	06/18/21 02:03:07 pm	-0.002	-22	110.75		
	Replicates	-22.0	-33.5	-9.6	-24.4					
HS21060786-01MSD				UNK	06/18/21 02:06:55 pm	5.650	24749	0.51		
	Replicates	24564.1	24851.5	24776.1	24802.5					
HS21060857-01				UNK	06/18/21 02:08:37 pm	0.003	-1	74.56		
	Replicates	-5.8	-1.3	-8.4	13.1					
HS21060940-01				UNK	06/18/21 02:10:19 pm	-0.005	-36	118.63		
	Replicates	-49.9	-64.2	-20.6	-7.3					
HS21060948-05				UNK	06/18/21 02:12:00 pm	0.031	122	14.19		s
	Replicates	110.1	109.2	150.3	119.6					

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Sample Name		Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
HS21060973-01		UNK	06/18/21 02:13:41 pm	0.020	72	23.10		s
Replicates	67.7	47.4	78.1	94.6				
HS21060976-01		UNK	06/18/21 02:15:23 pm	0.218	943	2.49		
Replicates	920.1	975.2	945.9	931.5				
HS21060976-02		UNK	06/18/21 02:17:04 pm	0.036	145	21.67		s
Replicates	132.6	149.0	191.0	109.2				
HS21060976-04		UNK	06/18/21 02:18:46 pm	0.216	934	2.03		
Replicates	954.0	908.7	932.7	942.4				
HS21060976-06		UNK	06/18/21 02:20:28 pm	0.011	34	32.43		
Replicates	18.0	23.7	42.5	50.2				
HS21060976-07		UNK	06/18/21 02:22:10 pm	0.007	17	62.46		
Replicates	-5.3	7.8	29.0	35.5				
CCV		UNK	06/18/21 02:23:53 pm	4.900	21470	1.89		
Replicates	20881.5	21532.1	21685.9	21779.1				
CCB		UNK	06/18/21 02:25:36 pm	0.000	-13	132.03		
Replicates	-10.6	-15.5	-9.5	-17.5				
HS21060976-09		UNK	06/18/21 02:49:01 pm	0.035	138	14.53		s
Replicates	106.9	155.2	137.4	151.5				
MBLK-167022		UNK	06/18/21 02:57:23 pm	-0.002	-23	259.89		
Replicates	-47.5	-37.0	-21.1	11.8				
LCS-167022		UNK	06/18/21 03:02:43 pm	4.920	21521	1.79		
Replicates	20949.2	21629.6	21781.3	21723.2				
HS21060700-02		UNK	06/18/21 03:04:25 pm	0.265	1146	1.57		
Replicates	1119.2	1157.5	1156.9	1151.4				
HS21060700-02MS		UNK	06/18/21 03:06:07 pm	5.770	25256	1.62		
Replicates	24650.5	25376.0	25448.6	25548.0				
HS21060700-02MSD		UNK	06/18/21 03:07:48 pm	5.680	24886	1.21		
Replicates	24446.0	24969.0	25010.2	25120.7				
HS21060700-01		UNK	06/18/21 03:09:30 pm	0.105	446	7.46		s
Replicates	416.4	419.3	486.5	463.3				
HS21060700-03		UNK	06/18/21 03:11:11 pm	0.065	269	8.12		s
Replicates	275.8	264.0	241.4	296.4				
HS21060700-04		UNK	06/18/21 03:12:53 pm	0.137	587	5.88		s
Replicates	549.7	570.0	631.0	598.7				
HS21060700-05		UNK	06/18/21 03:14:34 pm	0.172	740	3.31		
Replicates	706.6	741.5	746.1	766.7				
CCV		UNK	06/18/21 03:16:17 pm	4.870	21324	2.78		
Replicates	20475.8	21360.2	21676.4	21783.4				

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Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
CCB	UNK	06/18/21 03:18:01 pm	0.002	-3	219.64		
Replicates	-7.3	-31.1	2.1	23.6			
HS21060700-06	UNK	06/18/21 03:20:37 pm	0.101	430	4.23		
Replicates	451.3	426.6	406.2	435.0			
HS21060700-07	UNK	06/18/21 03:22:19 pm	0.151	647	3.73		
Replicates	620.0	633.2	671.6	664.2			
HS21060700-08	UNK	06/18/21 03:24:01 pm	0.245	1062	14.89		s
Replicates	858.8	1020.5	1137.9	1229.6			
HS21060700-09	UNK	06/18/21 03:25:43 pm	-0.003	-25	353.10		
Replicates	-61.1	-54.7	-1.6	18.8			
HS21060700-10	UNK	06/18/21 03:27:26 pm	0.026	101	5.84		s
Replicates	92.3	105.3	99.3	107.1			
HS21060700-11	UNK	06/18/21 03:29:08 pm	0.006	13	67.15		
Replicates	-6.3	1.7	26.4	28.4			
HS21060700-12	UNK	06/18/21 03:30:50 pm	0.336	1459	4.78		
Replicates	1371.8	1438.7	1489.2	1536.2			
HS21060700-13	UNK	06/18/21 03:32:32 pm	0.015	52	26.77		s
Replicates	71.9	30.3	47.3	56.9			
HS21060700-14	UNK	06/18/21 03:34:13 pm	0.127	543	4.01		
Replicates	509.5	556.5	549.0	555.3			
HS21060700-15	UNK	06/18/21 03:35:55 pm	0.073	308	8.47		s
Replicates	289.3	305.2	347.7	290.7			
CCV	UNK	06/18/21 03:37:38 pm	4.870	21304	1.55		
Replicates	20818.8	21377.4	21520.2	21500.4			
CCB	UNK	06/18/21 03:39:21 pm	0.003	-2	218.85		
Replicates	-21.5	-16.8	31.9	-3.4			
HS21060700-16	UNK	06/18/21 03:42:51 pm	0.049	202	11.55		s
Replicates	209.4	165.2	217.6	216.5			
HS21060700-17	UNK	06/18/21 03:44:32 pm	0.022	82	35.19		s
Replicates	45.2	79.4	127.2	78.1			
HS21060700-18	UNK	06/18/21 03:46:14 pm	0.174	750	3.14		
Replicates	737.8	731.4	745.3	784.7			
HS21060700-19	UNK	06/18/21 03:47:56 pm	0.567	2469	5.24		s
Replicates	2310.1	2435.8	2510.7	2619.5			
HS21060700-20	UNK	06/18/21 03:49:38 pm	0.032	127	12.85		s
Replicates	135.2	104.6	123.1	147.1			
MBLK-167023	UNK	06/18/21 03:51:21 pm	0.022	81	19.39		s
Replicates	70.1	62.1	101.5	92.0			

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Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
LCS-167023					UNK	06/18/21 03:53:03 pm	5.160	22576	0.64		
	Replicates	22363.3	22604.7	22657.5	22679.2						
HS21060495-07					UNK	06/18/21 03:54:46 pm	-0.038	-179	29.24		
	Replicates	-125.4	-163.2	-187.2	-241.0						
HS21060495-07MS					UNK	06/18/21 03:56:27 pm	5.890	25778	0.36		
	Replicates	25652.9	25759.9	25843.4	25857.1						
HS21060495-07MSD					UNK	06/18/21 03:58:09 pm	6.050	26513	0.32		
	Replicates	26394.2	26517.5	26548.3	26592.0						
HS21060495-01					UNK	06/18/21 03:59:51 pm	0.379	1648	7.66		s
	Replicates	1813.7	1675.9	1578.5	1523.5						
CCV					UNK	06/18/21 04:01:34 pm	4.970	21750	0.68		
	Replicates	21540.8	21773.7	21799.1	21886.8						
CCB					UNK	06/18/21 04:03:17 pm	0.057	235	57.44		s
	Replicates	408.9	284.3	167.7	80.0						
HS21060495-02					UNK	06/18/21 04:09:58 pm	0.079	333	18.44		s
	Replicates	424.4	330.9	291.2	286.5						
HS21060495-03					UNK	06/18/21 04:11:40 pm	0.125	535	2.29		
	Replicates	545.6	544.2	532.5	518.5						
HS21060495-04					UNK	06/18/21 04:13:22 pm	0.028	110	18.44		s
	Replicates	111.8	111.3	136.6	80.9						
HS21060495-05					UNK	06/18/21 04:15:04 pm	0.136	584	2.36		
	Replicates	604.5	581.4	573.5	576.2						
HS21060495-06					UNK	06/18/21 04:16:46 pm	0.121	517	5.95		s
	Replicates	515.4	557.6	480.3	516.2						
HS21060632-05					UNK	06/18/21 04:18:28 pm	0.060	249	2.49		
	Replicates	255.6	251.7	247.2	240.4						
HS21060632-06					UNK	06/18/21 04:20:10 pm	0.051	212	7.70		s
	Replicates	197.0	236.7	203.6	211.9						
HS21060632-07					UNK	06/18/21 04:21:53 pm	0.092	389	1.38		
	Replicates	386.6	392.7	394.1	382.1						
HS21060632-09					UNK	06/18/21 04:23:35 pm	0.024	93	8.92		s
	Replicates	85.9	90.2	89.4	107.2						
HS21060700-21					UNK	06/18/21 04:25:17 pm	0.104	443	2.48		
	Replicates	436.7	452.6	429.9	452.1						
CCV					UNK	06/18/21 04:27:00 pm	4.990	21830	0.86		
	Replicates	21592.7	21786.1	21907.3	22035.0						
CCB					UNK	06/18/21 04:29:59 pm	-0.003	-25	156.05		
	Replicates	-20.9	-24.0	-50.5	-6.0						

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Sample Name		Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags
HS21060700-22		UNK	06/18/21 04:33:00 pm	0.034	136	16.41		s
Replicates	125.8	107.7	164.7	144.2				
HS21060700-23		UNK	06/18/21 04:34:42 pm	0.075	315	2.58		
Replicates	322.4	321.7	309.1	306.0				
HS21060700-24		UNK	06/18/21 04:36:24 pm	0.053	218	8.87		s
Replicates	193.7	227.5	210.5	241.0				
HS21060908-02		UNK	06/18/21 04:38:06 pm	0.021	80	30.97		s
Replicates	108.6	87.7	85.9	39.7				
HS21060908-03		UNK	06/18/21 04:39:48 pm	0.011	37	26.38		
Replicates	40.8	52.6	32.2	21.3				
HS21060908-04		UNK	06/18/21 04:41:30 pm	0.049	199	9.26		s
Replicates	173.7	221.4	203.0	197.2				
HS21060908-06		UNK	06/18/21 04:43:12 pm	0.026	102	8.77		s
Replicates	111.6	91.6	95.2	109.9				
HS21060908-08		UNK	06/18/21 04:44:55 pm	0.019	68	27.12		s
Replicates	42.4	69.3	96.6	65.4				
CCV		UNK	06/18/21 04:50:08 pm	5.090	22301	5.20		s
Replicates	20655.6	22335.1	22986.9	23227.2				
CCB		UNK	06/18/21 04:53:05 pm	0.004	4	99.82		
Replicates	-8.5	-8.1	3.9	28.7				

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Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	017_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:12:09-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	105.421	4.308	1295238	1.22	100	105.4	90	110	
Be	9	1	No Gas	105.102	2.311	299335	0.68	100	105.1	90	110	
V	51	2	He	102.071	0.603	424068	0.14	100	102.1	90	110	
Cr	52	2	He	101.436	0.589	500583	0.45	100	101.4	90	110	
Fe	56	2	He	10179.304	0.261	45863406	0.47	10000	101.8	90	110	
Se	78	2	He	101.492	2.714	6133	2.20	100	101.5	90	110	
As	75	2	He	101.057	0.779	68084	1.20	100	101.1	90	110	
Ca	44	2	He	10049.490	0.764	251656	1.07	10000	100.5	90	110	
Na	23	2	He	10199.242	1.777	7782449	2.38	10000	102.0	90	110	
Mg	24	2	He	10374.292	0.815	4652761	1.25	10000	103.7	90	110	
K	39	2	He	10219.714	1.690	4672808	2.01	10000	102.2	90	110	
Mn	55	2	He	102.452	0.671	364351	0.09	100	102.5	90	110	
Co	59	2	He	99.958	0.692	746183	0.48	100	100.0	90	110	
Ni	60	2	He	104.629	1.254	189665	1.15	100	104.6	90	110	
Cu	63	2	He	102.541	0.508	500712	0.54	100	102.5	90	110	
Zn	66	2	He	102.667	0.437	97985	0.37	100	102.7	90	110	
Al	27	2	He	106.344	3.260	27654	3.34	100	106.3	90	110	
B	11	1	No Gas	514.612	2.788	887534	0.53	500	102.9	90	110	
Al	27	1	No Gas	106.740	0.844	1191413	0.10	100	106.7	90	110	
Si	28	1	No Gas	523.127	1.039	2997086	1.59	500	104.6	90	110	
Ag	107	1	No Gas	103.283	0.803	1378381	0.56	100	103.3	90	110	
Cd	111	1	No Gas	100.641	0.693	272421	0.40	100	100.6	90	110	
Sr	88	1	No Gas	102.925	1.924	2386033	1.11	100	102.9	90	110	
Mo	95	1	No Gas	97.907	1.065	473659	0.83	100	97.9	90	110	
Sn	118	1	No Gas	97.642	0.664	843036	0.43	100	97.6	90	110	
Sb	121	1	No Gas	101.215	0.689	1228756	1.40	100	101.2	90	110	
Ba	137	1	No Gas	102.036	0.880	423437	1.78	100	102.0	90	110	
Tl	205	1	No Gas	104.516	0.235	3478538	0.33	100	104.5	90	110	
Tl	203	1	No Gas	102.288	0.956	1426855	0.81	100	102.3	90	110	
Pb	208	1	No Gas	100.694	1.010	4666221	0.77	100	100.7	90	110	
U	238	1	No Gas	98.168	1.850	5006519	1.68	100	98.2	90	110	
Ca	43	2	He	9906.303	2.314	14434	2.18	10000	99.1	90	110	
Sb	121	2	He	100.314	0.533	557565	0.55	100	100.3	90	110	
Ti	47	2	He	99.948	1.357	15392	1.39	100	99.9	90	110	
Cu	63	1	No Gas	100.078	0.644	891342	0.09	100	100.1	90	110	
Se	82	1	No Gas	102.826	2.303	14919	1.59	100	102.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	894210	2.97	974206	91.79	70	120	
Ge	72	2	He	521322	0.66	536534	97.16	70	120	
Ge	72	1	No Gas	1823844	0.73	1897028	96.14	70	120	
In	115	1	No Gas	2443274	0.93	2503440	97.60	70	120	
Bi	209	1	No Gas	2909237	0.29	2946615	98.73	70	120	

Calibration for 017_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\062321A.b\
Analysis File: 062321A.batch.bin
DA Date-Time: 6/23/2021 8:14:31 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	010CALB.d	CAL BLK	6/23/2021 10:49:41 AM
2	011CALS.d	2/10/200	6/23/2021 10:51:41 AM
3	012CALS.d	5/25/500	6/23/2021 10:53:40 AM
4	013CALS.d	10/50/100	6/23/2021 10:55:39 AM
5	014CALS.d	100/500/10K	6/23/2021 10:57:38 AM
6	015CALS.d	200/1000/20K	6/23/2021 10:59:32 AM

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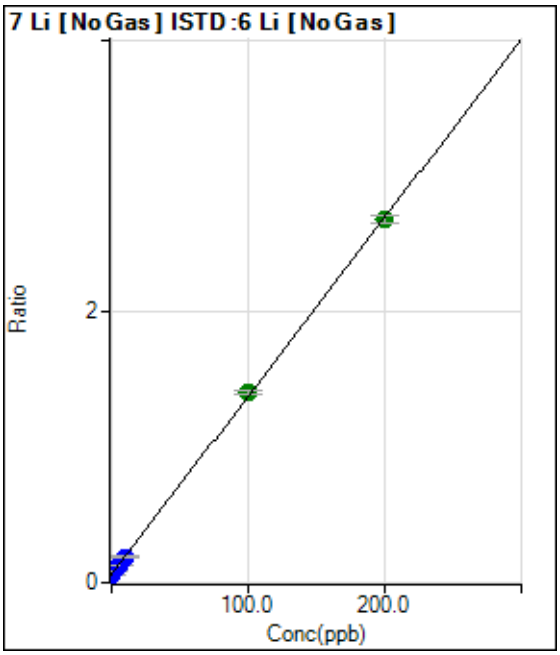
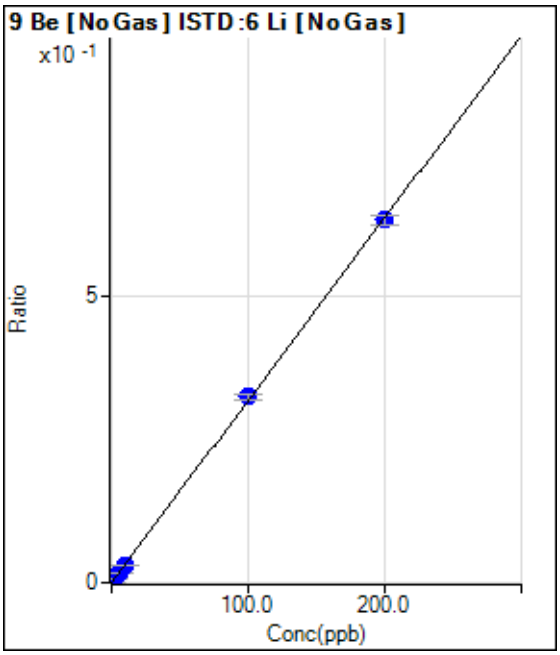
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	59162.01	0.0607	P	1.9
2	☐	2.000	1.969	83822.72	0.0867	P	0.7
3	☐	5.000	5.029	121577.86	0.1270	P	2.1
4	☐	10.000	9.934	182721.60	0.1916	P	1.7
5	☐	100.000	102.390	1281756.54	1.4097	A	1.9
6	☐	200.000	198.808	2416219.75	2.6800	A	2.2

y = 0.0132 * x + 0.0607
R = 0.9999
DL = 0.2697
BEC = 4.61

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	62.4
2	☐	2.000	1.897	5862.94	0.0061	P	0.3
3	☐	5.000	4.962	15153.22	0.0158	P	2.4
4	☐	10.000	9.864	29985.31	0.0314	P	2.2
5	☐	100.000	101.928	295272.17	0.3248	P	2.7
6	☐	200.000	199.045	571702.83	0.6342	P	2.5

y = 0.0032 * x + 1.7139E-005
R = 0.9999
DL = 0.01008
BEC = 0.005379

Weight: <None>
Min Conc: <None>

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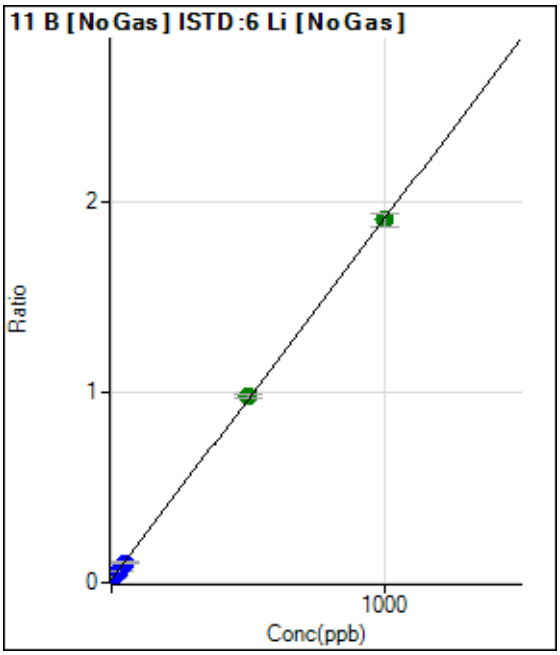
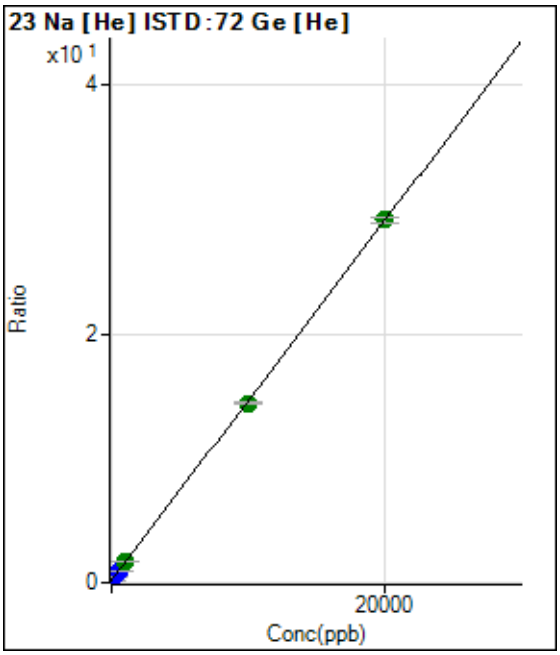
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15935.79	0.0164	P	1.9
2	☐	10.000	8.947	32243.63	0.0333	P	0.5
3	☐	25.000	23.332	58056.04	0.0606	P	2.3
4	☐	50.000	46.998	100649.34	0.1056	P	3.2
5	☐	500.000	506.833	889543.71	0.9783	A	1.9
6	☐	1000.000	996.786	1719882.74	1.9082	A	3.4

y = 0.0019 * x + 0.0164
R = 1.0000
DL = 0.4786
BEC = 8.619

Weight: <None>
Min Conc: <None>



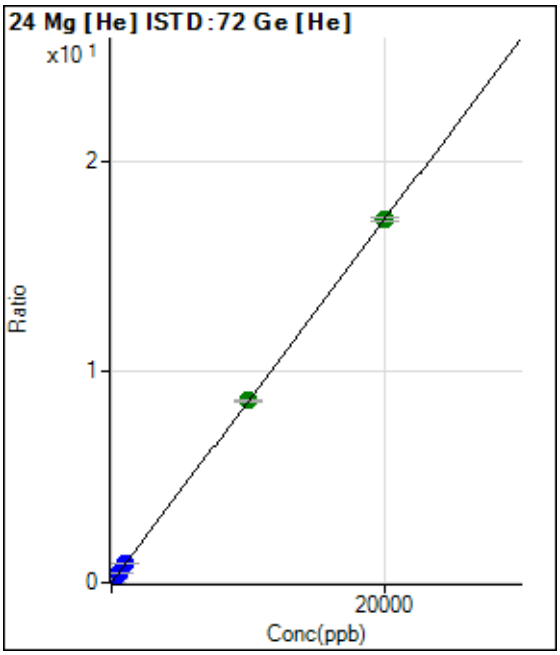
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	98807.94	0.1842	P	0.9
2	☐	200.000	210.013	260753.00	0.4877	P	1.2
3	☐	500.000	519.771	500841.03	0.9355	P	0.6
4	☐	1000.000	1040.013	896989.75	1.6875	A	4.5
5	☐	10000.000	9872.136	7620871.97	14.4544	A	0.5
6	☐	20000.000	20061.337	14862201.03	29.1829	A	1.9

y = 0.0014 * x + 0.1842
R = 1.0000
DL = 3.277
BEC = 127.4

Weight: <None>
Min Conc: <None>

RIGHT SOLUTIONS | RIGHT PARTNER

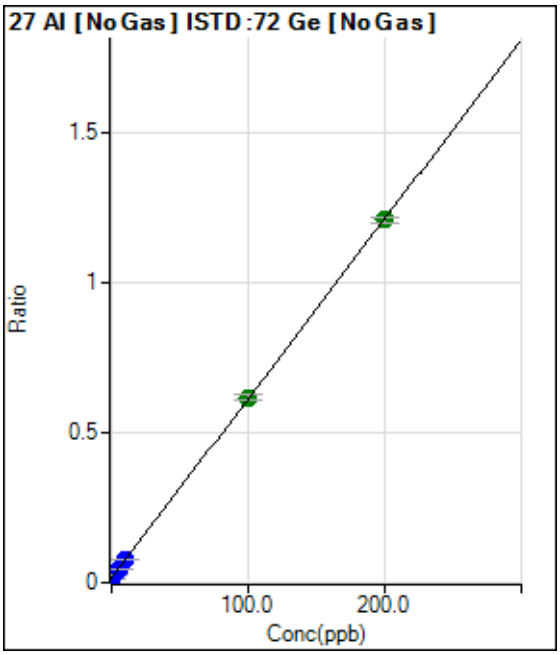
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	440.01	0.0008	P	17.2
2	☐	200.000	210.943	97448.80	0.1823	P	1.1
3	☐	500.000	524.645	242054.74	0.4521	P	0.5
4	☐	1000.000	1042.137	476962.39	0.8973	P	1.9
5	☐	10000.000	10013.878	4541920.45	8.6148	A	1.2
6	☐	20000.000	19990.228	8757767.99	17.1964	A	1.1

y = 8.6020E-004 * x + 8.2007E-004
R = 1.0000
DL = 0.4908
BEC = 0.9534

Weight: <None>
Min Conc: <None>



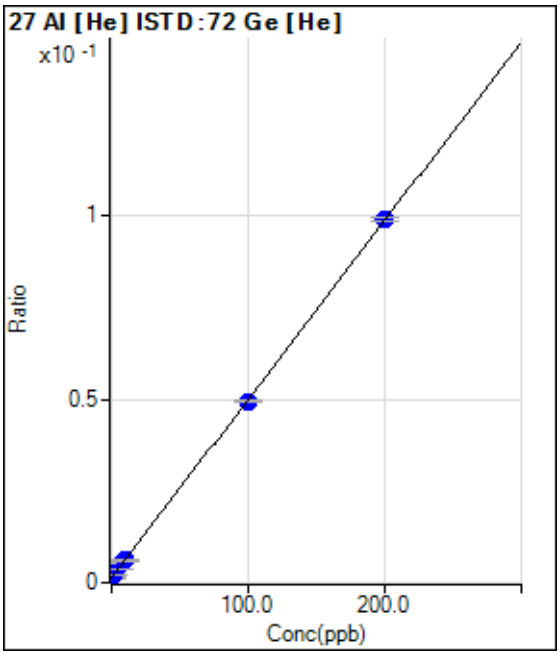
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28031.92	0.0148	P	1.5
2	☐	2.000	2.145	51856.64	0.0276	P	2.9
3	☐	5.000	5.236	86370.46	0.0461	P	2.8
4	☐	10.000	10.226	141783.25	0.0759	P	0.6
5	☐	100.000	100.740	1130678.13	0.6174	A	3.3
6	☐	200.000	199.611	2135163.46	1.2088	A	1.6

y = 0.0060 * x + 0.0148
R = 1.0000
DL = 0.1088
BEC = 2.47

Weight: <None>
Min Conc: <None>

RIGHT SOLUTIONS | RIGHT PARTNER

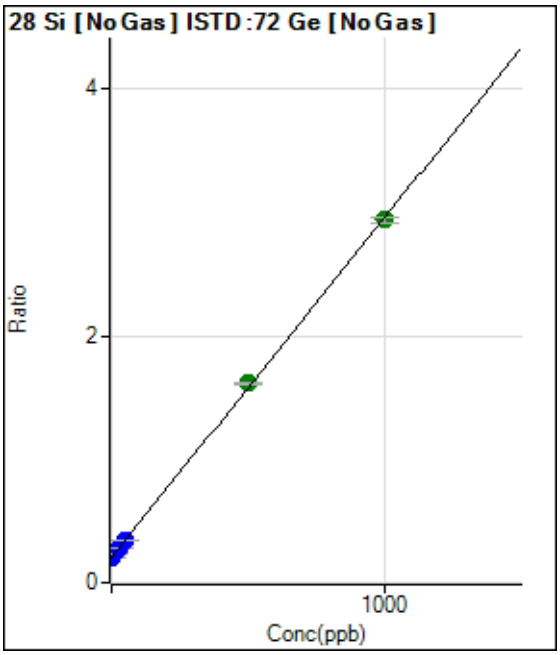
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	703.36	0.0013	P	19.5
2	☐	2.000	1.986	1216.75	0.0023	P	6.9
3	☐	5.000	6.784	2468.13	0.0046	P	32.9
4	☐	10.000	9.941	3267.13	0.0061	P	7.3
5	☐	100.000	98.959	26074.79	0.0495	P	1.8
6	☐	200.000	200.479	50337.96	0.0988	P	1.2

y = 4.8649E-004 * x + 0.0013
R = 0.9999
DL = 1.575
BEC = 2.693

Weight: <None>
Min Conc: <None>

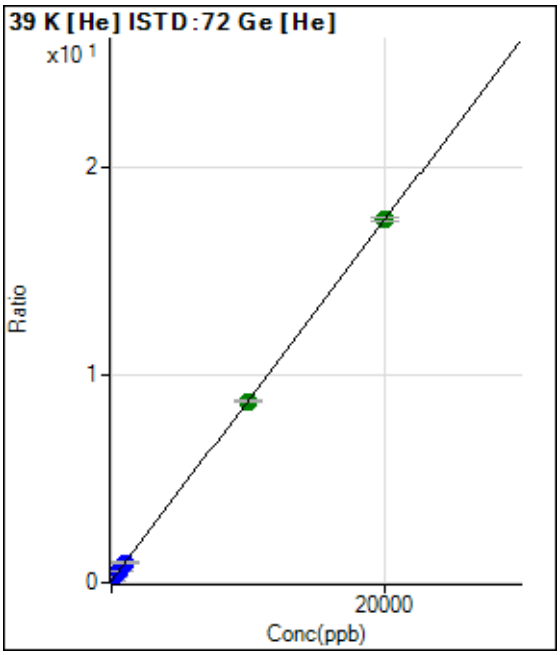


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	389258.18	0.2052	P	0.9
2	☐	10.000	11.407	444363.22	0.2366	P	1.4
3	☐	25.000	26.885	522963.89	0.2791	P	3.1
4	☐	50.000	51.104	645354.63	0.3457	P	0.8
5	☐	500.000	512.533	2956504.23	1.6141	A	0.8
6	☐	1000.000	993.617	5186966.90	2.9365	A	1.3

y = 0.0027 * x + 0.2052
R = 0.9999
DL = 2.106
BEC = 74.65

Weight: <None>
Min Conc: <None>

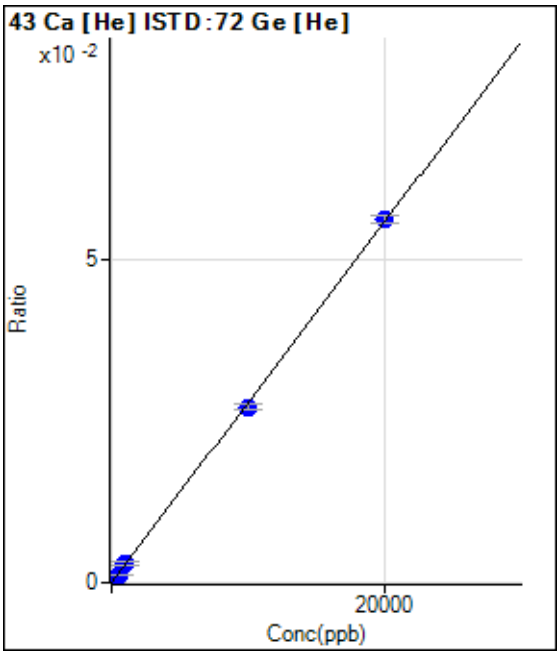
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	45542.34	0.0849	P	2.9
2	☐	200.000	204.631	140421.43	0.2627	P	1.1
3	☐	500.000	514.421	284697.19	0.5318	P	1.2
4	☐	1000.000	1014.813	513765.27	0.9665	P	1.3
5	☐	10000.000	9959.139	4606282.33	8.7368	A	1.3
6	☐	20000.000	20019.283	8900407.37	17.4764	A	1.0

y = 8.6874E-004 * x + 0.0849
R = 1.0000
DL = 8.463
BEC = 97.71

Weight: <None>
Min Conc: <None>

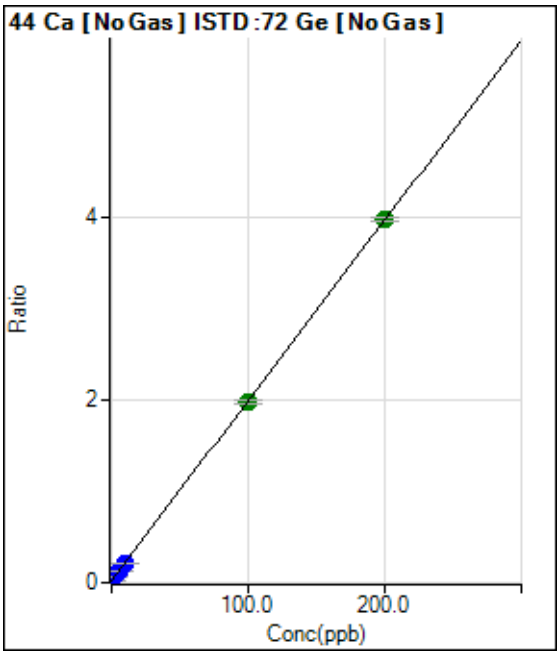


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	43.6
2	☐	200.000	205.711	333.34	0.0006	P	9.7
3	☐	500.000	428.454	666.69	0.0012	P	13.8
4	☐	1000.000	1065.176	1606.79	0.0030	P	22.6
5	☐	10000.000	9747.494	14364.39	0.0272	P	3.2
6	☐	20000.000	20124.726	28620.24	0.0562	P	2.1

y = 2.7901E-006 * x + 4.9746E-005
R = 0.9999
DL = 23.35
BEC = 17.83

Weight: <None>
Min Conc: <None>

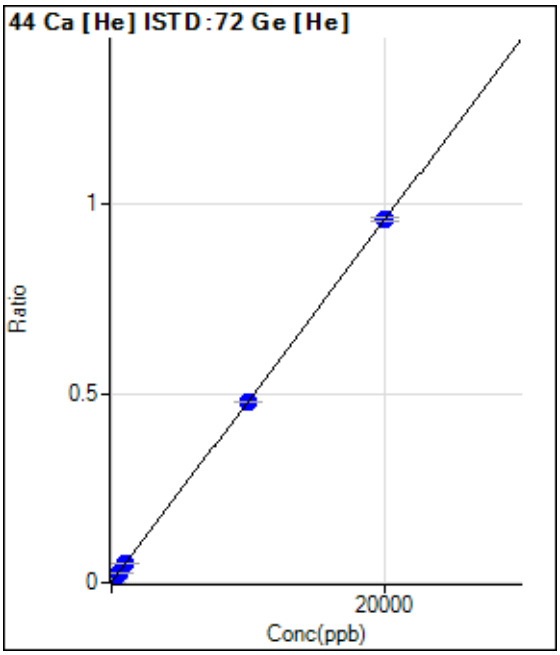
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40804.19	0.0215	P	3.9
2	☐	2.000	2.017	115034.10	0.0612	P	2.4
3	☐	5.000	5.031	226029.55	0.1206	P	2.3
4	☐	10.000	9.964	406643.11	0.2178	P	0.9
5	☐	100.000	99.392	3625517.97	1.9798	A	2.2
6	☐	200.000	200.305	7009160.73	3.9679	A	1.0

y = 0.0197 * x + 0.0215
R = 1.0000
DL = 0.1279
BEC = 1.092

Weight: <None>
Min Conc: <None>

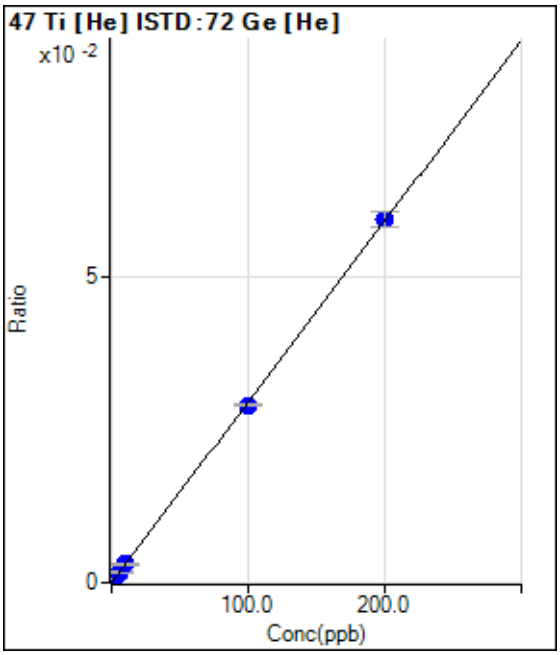


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	533.35	0.0010	P	15.6
2	☐	200.000	193.756	5494.54	0.0103	P	8.1
3	☐	500.000	507.019	13543.61	0.0253	P	1.7
4	☐	1000.000	1013.459	26352.27	0.0496	P	3.7
5	☐	10000.000	9981.664	252798.30	0.4795	P	0.3
6	☐	20000.000	20008.382	488962.86	0.9601	P	1.2

y = 4.7936E-005 * x + 9.9405E-004
R = 1.0000
DL = 9.717
BEC = 20.74

Weight: <None>
Min Conc: <None>

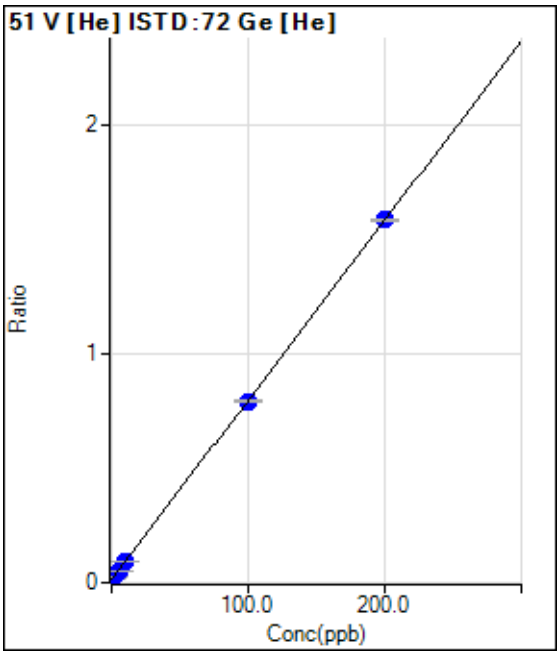
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	2.000	2.092	330.01	0.0006	P	19.9
3	☐	5.000	5.607	886.71	0.0017	P	9.7
4	☐	10.000	10.464	1643.46	0.0031	P	8.4
5	☐	100.000	98.422	15328.73	0.0291	P	2.1
6	☐	200.000	200.749	30200.42	0.0593	P	4.2

y = 2.9541E-004 * x + 0.0000E+000
R = 0.9999
DL = 0
BEC = 0

Weight: <None>
Min Conc: <None>

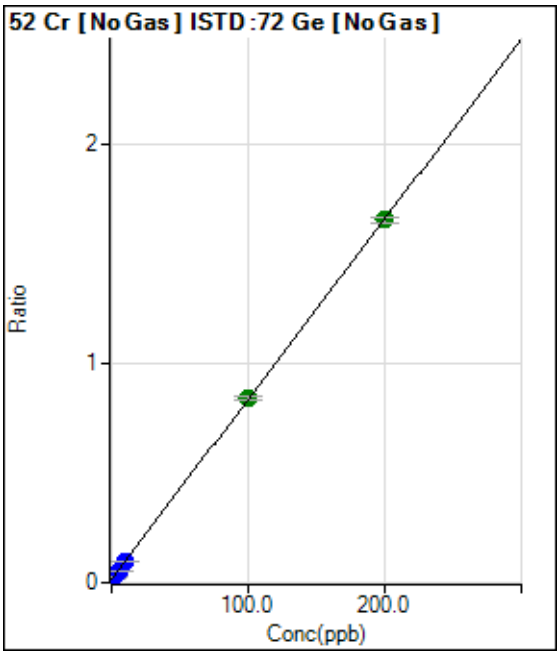


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7032.95	0.0131	P	3.2
2	☐	2.000	2.042	15568.86	0.0291	P	1.4
3	☐	5.000	4.884	27519.82	0.0514	P	1.3
4	☐	10.000	10.161	49321.59	0.0928	P	0.2
5	☐	100.000	99.172	416907.03	0.7907	P	1.0
6	☐	200.000	200.408	806984.90	1.5846	P	0.8

y = 0.0078 * x + 0.0131
R = 1.0000
DL = 0.1627
BEC = 1.672

Weight: <None>
Min Conc: <None>

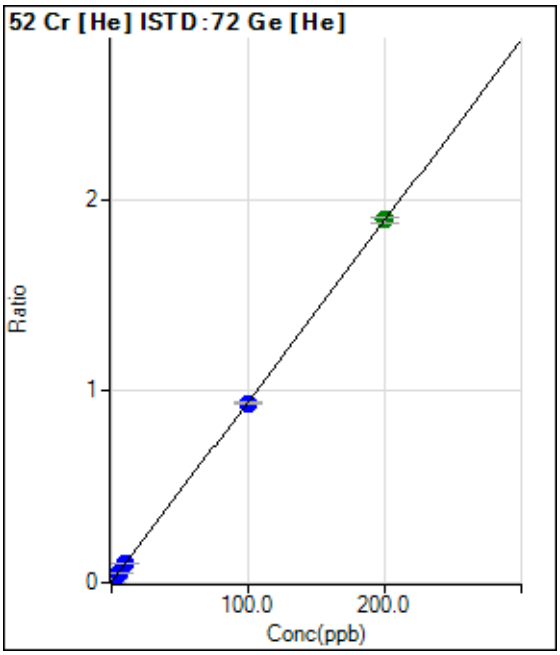
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26876.77	0.0142	P	1.9
2	☐	2.000	1.999	57530.97	0.0306	P	1.4
3	☐	5.000	4.991	103556.61	0.0553	P	1.5
4	☐	10.000	10.084	181440.33	0.0972	P	1.4
5	☐	100.000	100.775	1545637.06	0.8439	A	1.4
6	☐	200.000	199.609	2928157.77	1.6577	A	1.7

y = 0.0082 * x + 0.0142
R = 1.0000
DL = 0.09867
BEC = 1.721

Weight: <None>
Min Conc: <None>

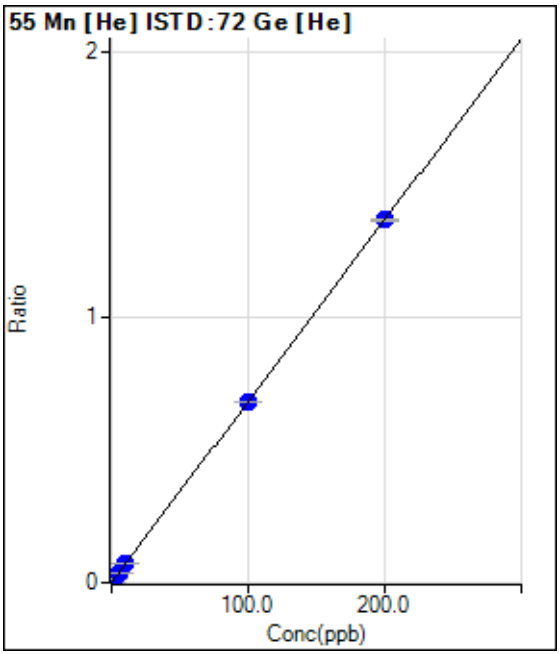


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1100.06	0.0021	P	9.9
2	☐	2.000	2.109	11748.55	0.0220	P	1.2
3	☐	5.000	5.153	27157.11	0.0507	P	1.9
4	☐	10.000	10.400	53313.77	0.1003	P	1.8
5	☐	100.000	99.019	494223.48	0.9374	P	1.1
6	☐	200.000	200.466	965426.21	1.8957	A	1.4

y = 0.0094 * x + 0.0021
R = 1.0000
DL = 0.06446
BEC = 0.2171

Weight: <None>
Min Conc: <None>

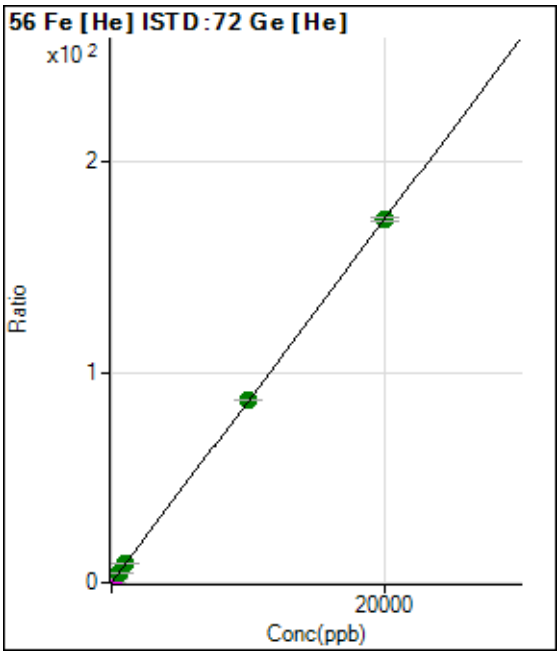
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	326.68	0.0006	P	16.1
2	☐	2.000	2.114	8025.84	0.0150	P	6.3
3	☐	5.000	5.169	19190.43	0.0358	P	0.5
4	☐	10.000	10.218	37347.98	0.0703	P	2.1
5	☐	100.000	99.666	358482.22	0.6799	P	0.5
6	☐	200.000	200.151	695093.43	1.3648	P	0.6

y = 0.0068 * x + 6.0916E-004
R = 1.0000
DL = 0.04323
BEC = 0.08937

Weight: <None>
Min Conc: <None>

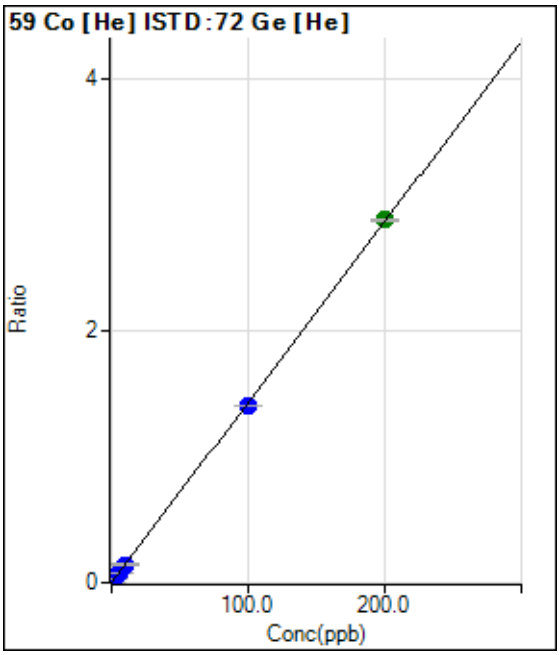


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5367.81	0.0100	P	5.9
2	☐	200.000	210.277	976663.14	1.8271	M	3.7
3	☐	500.000	530.262	2458630.80	4.5923	A	1.0
4	☐	1000.000	1031.651	4744546.08	8.9252	A	1.0
5	☐	10000.000	10045.297	45773245.99	86.8179	A	0.7
6	☐	20000.000	19974.910	87914925.35	172.6261	A	1.0

y = 0.0086 * x + 0.0100
R = 1.0000
DL = 0.2045
BEC = 1.158

Weight: <None>
Min Conc: <None>

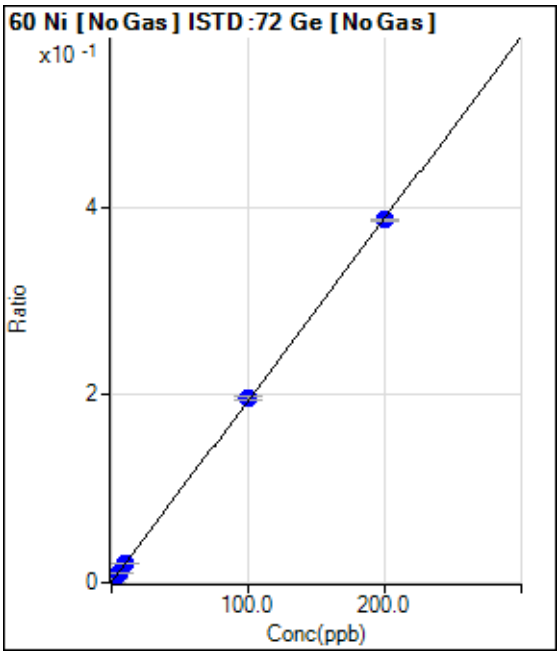
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	73.33	0.0001	P	20.4
2	☐	2.000	2.045	15725.95	0.0294	P	2.3
3	☐	5.000	5.065	38895.92	0.0727	P	2.5
4	☐	10.000	10.036	76464.40	0.1438	P	2.1
5	☐	100.000	97.846	738736.21	1.4011	P	0.5
6	☐	200.000	201.073	1466325.45	2.8791	A	0.4

y = 0.0143 * x + 1.3660E-004
R = 0.9999
DL = 0.005826
BEC = 0.00954

Weight: <None>
Min Conc: <None>

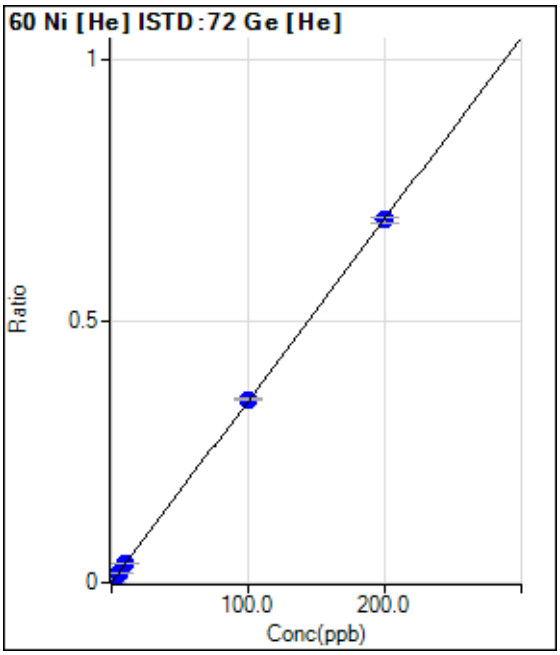


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	650.03	0.0003	P	17.9
2	☐	2.000	2.086	8245.97	0.0044	P	3.8
3	☐	5.000	5.249	19721.30	0.0105	P	1.8
4	☐	10.000	10.220	37635.50	0.0202	P	2.2
5	☐	100.000	101.384	360651.92	0.1969	P	2.3
6	☐	200.000	199.290	683233.40	0.3868	P	0.6

y = 0.0019 * x + 3.4304E-004
R = 1.0000
DL = 0.09525
BEC = 0.1769

Weight: <None>
Min Conc: <None>

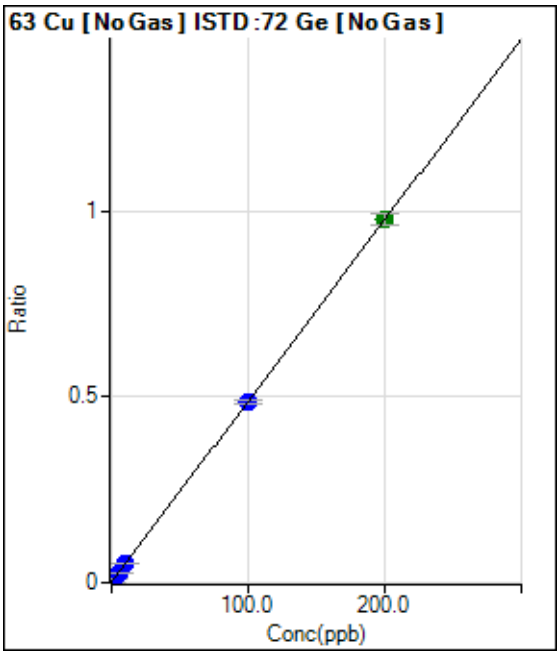
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	216.68	0.0004	P	13.7
2	☐	2.000	1.974	3880.62	0.0073	P	6.5
3	☐	5.000	5.068	9640.27	0.0180	P	2.3
4	☐	10.000	10.339	19303.98	0.0363	P	4.6
5	☐	100.000	100.688	184608.25	0.3501	P	1.2
6	☐	200.000	199.638	353352.52	0.6938	P	1.3

y = 0.0035 * x + 4.0396E-004
R = 1.0000
DL = 0.04763
BEC = 0.1163

Weight: <None>
Min Conc: <None>



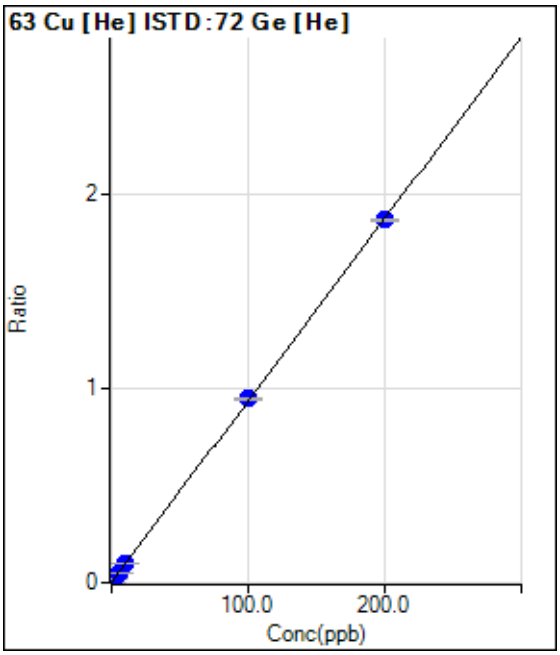
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1926.84	0.0010	P	5.5
2	☐	2.000	1.985	20081.75	0.0107	P	2.5
3	☐	5.000	5.046	47978.19	0.0256	P	2.8
4	☐	10.000	10.078	93580.59	0.0501	P	0.8
5	☐	100.000	99.649	891141.21	0.4866	P	2.6
6	☐	200.000	200.170	1724919.77	0.9765	A	3.3

y = 0.0049 * x + 0.0010
R = 1.0000
DL = 0.03433
BEC = 0.2085

Weight: <None>
Min Conc: <None>

RIGHT SOLUTIONS | RIGHT PARTNER

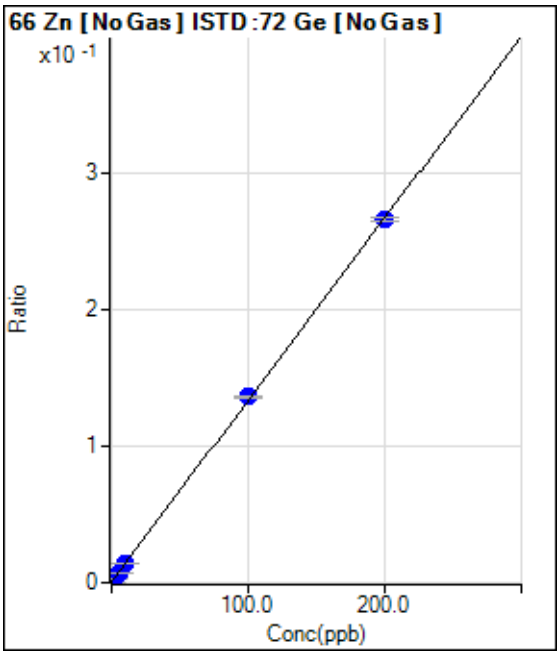
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	703.37	0.0013	P	2.8
2	☐	2.000	2.053	10967.96	0.0205	P	3.4
3	☐	5.000	5.230	26890.28	0.0502	P	2.0
4	☐	10.000	10.329	52056.39	0.0979	P	0.9
5	☐	100.000	100.946	498531.83	0.9456	P	0.8
6	☐	200.000	199.504	951081.60	1.8675	P	0.7

y = 0.0094 * x + 0.0013
R = 1.0000
DL = 0.01192
BEC = 0.1401

Weight: <None>
Min Conc: <None>



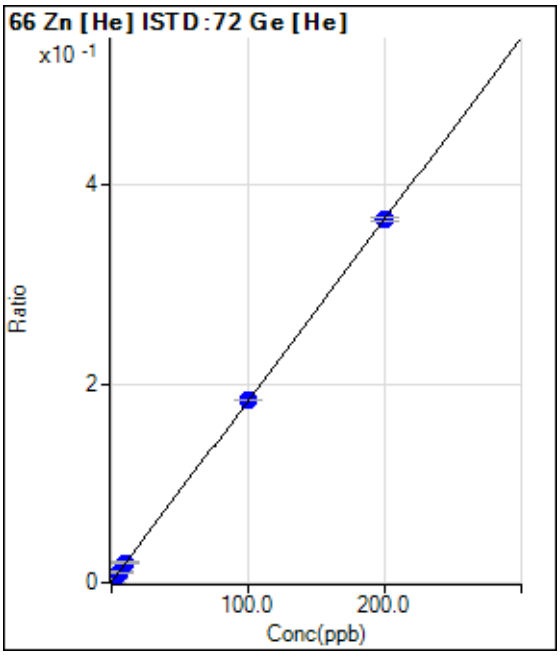
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1143.40	0.0006	P	2.1
2	☐	2.000	2.053	6274.91	0.0033	P	6.1
3	☐	5.000	5.231	14200.93	0.0076	P	1.6
4	☐	10.000	10.173	26446.12	0.0142	P	2.0
5	☐	100.000	101.658	249326.80	0.1361	P	1.2
6	☐	200.000	199.156	470064.04	0.2661	P	1.0

y = 0.0013 * x + 6.0266E-004
R = 1.0000
DL = 0.02878
BEC = 0.452

Weight: <None>
Min Conc: <None>

RIGHT SOLUTIONS | RIGHT PARTNER

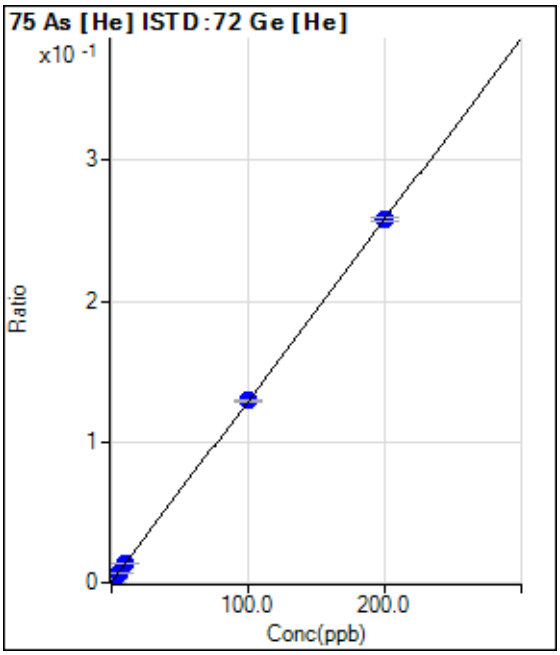
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	393.35	0.0007	P	17.5
2	☐	2.000	2.225	2560.30	0.0048	P	10.5
3	☐	5.000	5.407	5671.28	0.0106	P	2.0
4	☐	10.000	10.407	10477.53	0.0197	P	6.3
5	☐	100.000	100.520	97035.48	0.1840	P	0.6
6	☐	200.000	199.707	185856.28	0.3649	P	1.2

y = 0.0018 * x + 7.3286E-004
R = 1.0000
DL = 0.2114
BEC = 0.4019

Weight: <None>
Min Conc: <None>



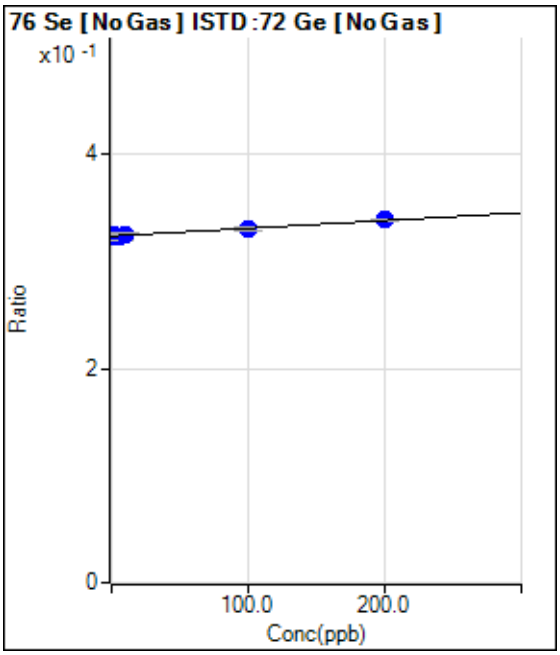
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	278.89	0.0005	P	12.9
2	☐	2.000	2.019	1667.89	0.0031	P	5.1
3	☐	5.000	5.080	3779.44	0.0071	P	1.7
4	☐	10.000	10.042	7147.47	0.0134	P	1.1
5	☐	100.000	100.191	68267.27	0.1295	P	0.6
6	☐	200.000	199.900	131306.92	0.2578	P	1.0

y = 0.0013 * x + 5.1996E-004
R = 1.0000
DL = 0.156
BEC = 0.404

Weight: <None>
Min Conc: <None>

RIGHT SOLUTIONS | RIGHT PARTNER

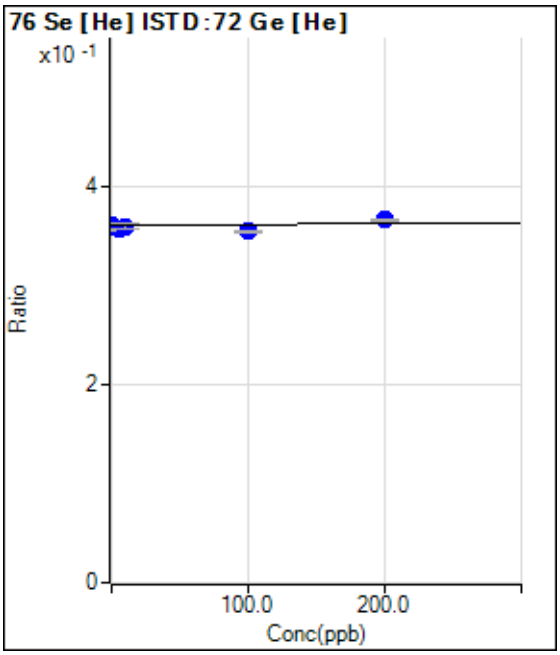
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	614439.73	0.3239	P	1.6
2	☐	2.000	10.105	609850.17	0.3247	P	1.0
3	☐	5.000	-5.854	606221.67	0.3235	P	1.7
4	☐	10.000	27.069	608394.97	0.3259	P	0.5
5	☐	100.000	84.778	604582.63	0.3301	P	1.0
6	☐	200.000	206.948	598799.95	0.3390	P	0.5

y = 7.2850E-005 * x + 0.3239
R = 0.9888
DL = 208.8
BEC = 4446

Weight: <None>
Min Conc: <None>



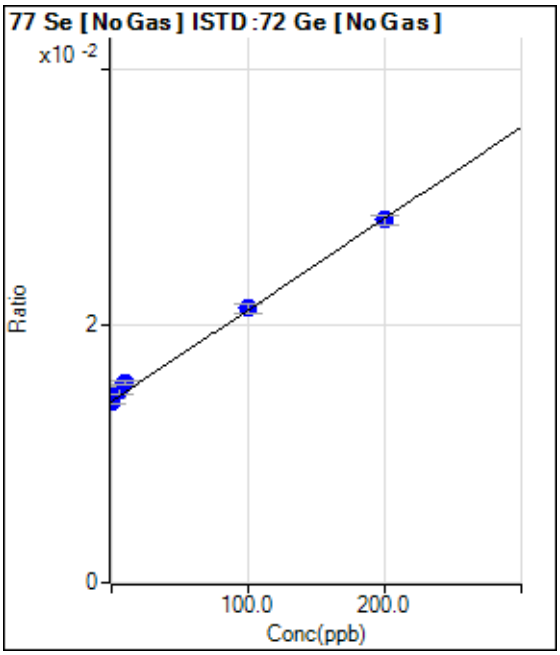
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	193319.38	0.3603	P	1.2
2	☐	2.000	-254.060	191354.07	0.3579	P	2.2
3	☐	5.000	-361.652	191076.42	0.3569	P	1.6
4	☐	10.000	-86.149	191116.22	0.3595	P	1.4
5	☐	100.000	-630.799	186841.15	0.3544	P	0.4
6	☐	200.000	581.934	186299.85	0.3658	P	0.5

y = 9.4222E-006 * x + 0.3603
R = 0.5345
DL = 1328
BEC = 3.824E+04

Weight: <None>
Min Conc: <None>

RIGHT SOLUTIONS | RIGHT PARTNER

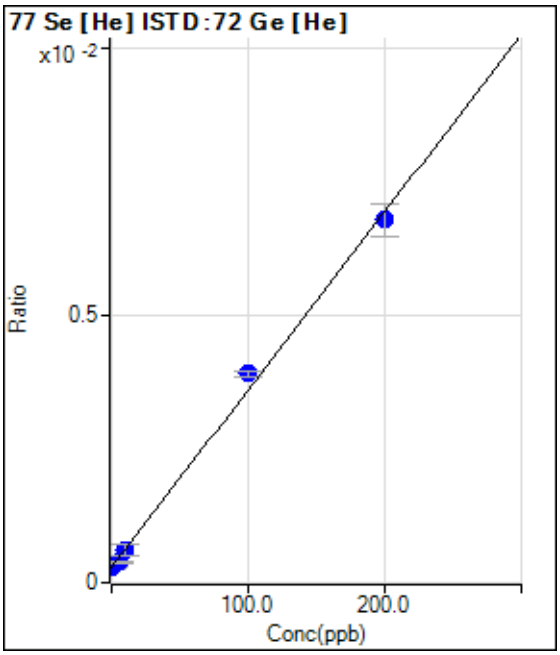
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26803.75	0.0141	P	3.0
2	☐	2.000	10.166	27902.61	0.0149	P	3.0
3	☐	5.000	12.143	28089.63	0.0150	P	3.3
4	☐	10.000	20.722	29128.39	0.0156	P	2.0
5	☐	100.000	101.765	39133.80	0.0214	P	3.7
6	☐	200.000	198.321	49889.43	0.0282	P	2.5

y = 7.1188E-005 * x + 0.0141
R = 0.9989
DL = 17.63
BEC = 198.5

Weight: <None>
Min Conc: <None>

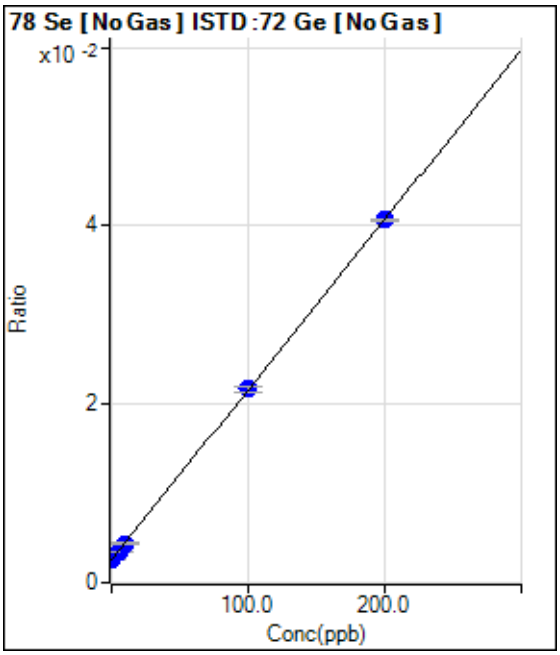


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	153.33	0.0003	P	26.5
2	☐	2.000	0.772	166.67	0.0003	P	22.0
3	☐	5.000	3.204	210.01	0.0004	P	9.2
4	☐	10.000	9.895	326.68	0.0006	P	36.6
5	☐	100.000	108.893	2056.87	0.0039	P	3.6
6	☐	200.000	195.616	3453.82	0.0068	P	8.7

y = 3.3204E-005 * x + 2.8580E-004
R = 0.9985
DL = 6.831
BEC = 8.607

Weight: <None>
Min Conc: <None>

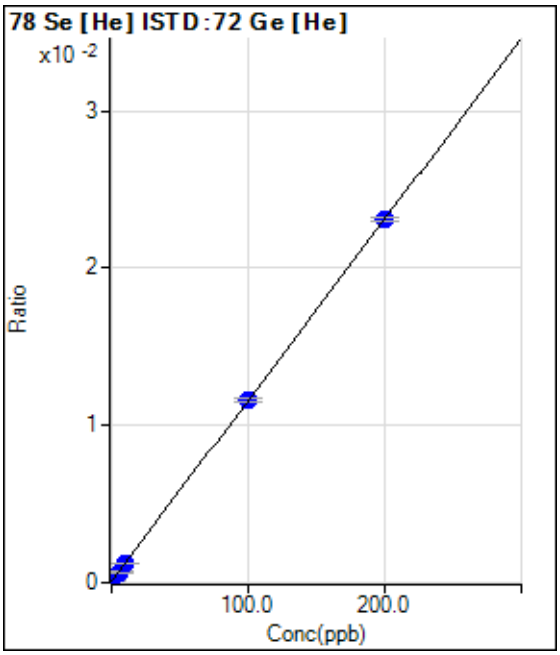
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4880.97	0.0026	P	2.5
2	☐	2.000	2.229	5631.27	0.0030	P	5.8
3	☐	5.000	4.547	6444.97	0.0034	P	1.5
4	☐	10.000	9.520	8189.32	0.0044	P	4.5
5	☐	100.000	100.283	39698.80	0.0217	P	2.3
6	☐	200.000	199.892	71818.06	0.0407	P	0.8

y = 1.9052E-004 * x + 0.0026
R = 1.0000
DL = 0.9981
BEC = 13.5

Weight: <None>
Min Conc: <None>



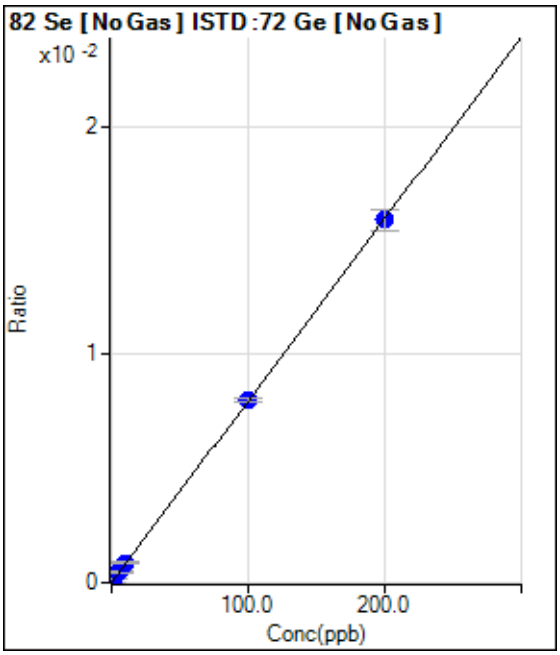
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	48.00	0.0001	P	25.1
2	☐	2.000	2.148	180.00	0.0003	P	9.0
3	☐	5.000	5.046	358.68	0.0007	P	1.3
4	☐	10.000	9.907	653.35	0.0012	P	3.4
5	☐	100.000	100.491	6142.08	0.0116	P	2.2
6	☐	200.000	199.757	11749.14	0.0231	P	1.0

y = 1.1504E-004 * x + 8.9414E-005
R = 1.0000
DL = 0.5845
BEC = 0.7772

Weight: <None>
Min Conc: <None>

RIGHT SOLUTIONS | RIGHT PARTNER

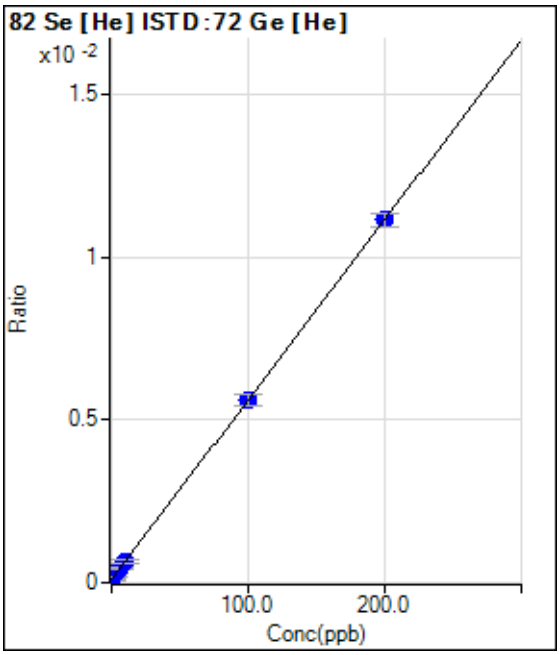
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-59.70	0.0000	P	-176.3
2	☐	2.000	2.258	280.35	0.0001	P	40.9
3	☐	5.000	6.124	861.11	0.0005	P	22.5
4	☐	10.000	10.795	1550.79	0.0008	P	9.6
5	☐	100.000	100.492	14641.55	0.0080	P	2.8
6	☐	200.000	199.684	28107.56	0.0159	P	5.8

y = 7.9863E-005 * x - 3.1182E-005
R = 1.0000
DL = 2.065
BEC = -0.3904

Weight: <None>
Min Conc: <None>

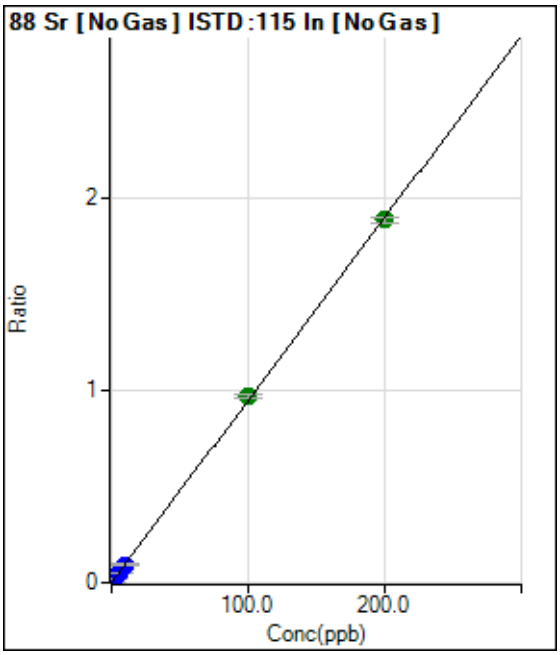


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0001	P	53.2
2	☐	2.000	2.604	126.67	0.0002	P	32.8
3	☐	5.000	6.084	230.01	0.0004	P	15.9
4	☐	10.000	9.877	340.01	0.0006	P	18.2
5	☐	100.000	99.847	2960.38	0.0056	P	6.0
6	☐	200.000	200.049	5681.29	0.0112	P	3.8

y = 5.5301E-005 * x + 9.3270E-005
R = 1.0000
DL = 2.693
BEC = 1.687

Weight: <None>
Min Conc: <None>

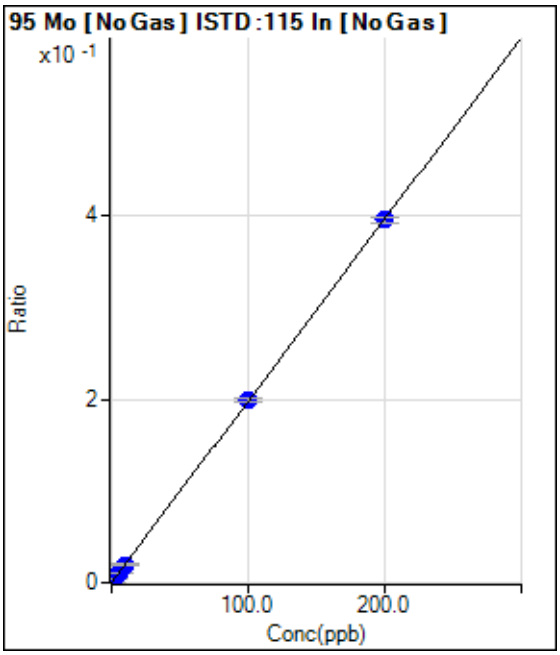
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1143.41	0.0005	P	5.3
2	☐	2.000	1.990	48554.97	0.0193	P	2.4
3	☐	5.000	4.958	118077.51	0.0475	P	1.5
4	☐	10.000	9.910	234749.14	0.0944	P	2.7
5	☐	100.000	102.153	2342148.46	0.9694	A	2.6
6	☐	200.000	198.929	4422990.25	1.8873	A	1.9

y = 0.0095 * x + 4.5720E-004
R = 0.9999
DL = 0.007659
BEC = 0.0482

Weight: <None>
Min Conc: <None>

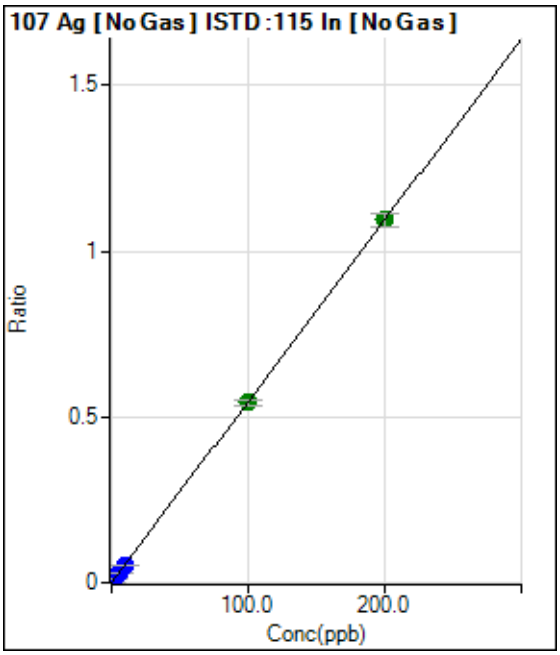


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.67	0.0000	P	33.0
2	☐	2.000	1.998	9977.24	0.0040	P	3.5
3	☐	5.000	4.861	23971.88	0.0096	P	0.5
4	☐	10.000	9.892	48712.62	0.0196	P	3.4
5	☐	100.000	100.488	480755.24	0.1990	P	2.6
6	☐	200.000	199.765	927038.29	0.3955	P	1.6

y = 0.0020 * x + 1.4694E-005
R = 1.0000
DL = 0.007343
BEC = 0.007421

Weight: <None>
Min Conc: <None>

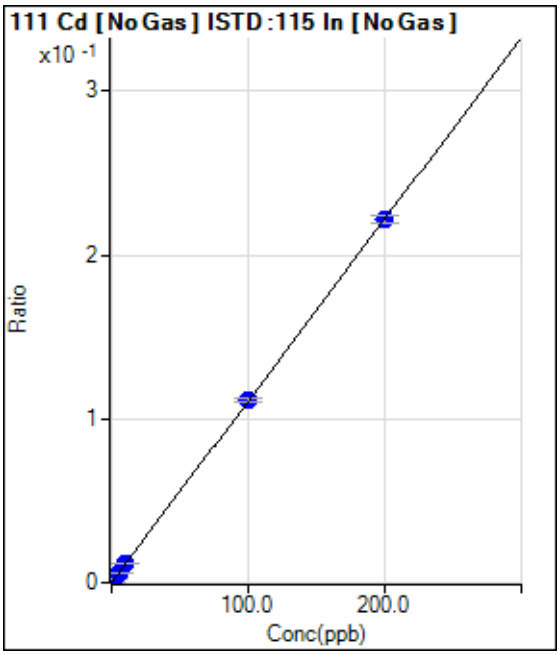
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	466.68	0.0002	P	17.1
2	☐	2.000	2.064	28791.68	0.0115	P	1.1
3	☐	5.000	4.975	68011.14	0.0274	P	1.8
4	☐	10.000	9.897	134798.56	0.0542	P	1.2
5	☐	100.000	99.447	1312437.66	0.5432	A	3.0
6	☐	200.000	200.281	2563050.54	1.0938	A	3.7

y = 0.0055 * x + 1.8680E-004
R = 1.0000
DL = 0.0176
BEC = 0.03421

Weight: <None>
Min Conc: <None>

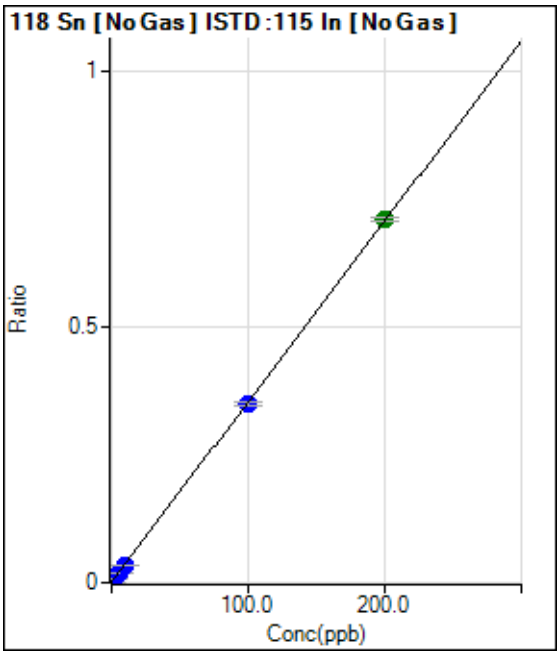


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	101.7
2	☐	2.000	1.995	5567.96	0.0022	P	7.5
3	☐	5.000	5.069	13970.99	0.0056	P	4.4
4	☐	10.000	10.127	27899.83	0.0112	P	1.2
5	☐	100.000	100.450	268907.12	0.1113	P	2.0
6	☐	200.000	199.767	518674.65	0.2213	P	2.1

y = 0.0011 * x + 4.0005E-006
R = 1.0000
DL = 0.01102
BEC = 0.003611

Weight: <None>
Min Conc: <None>

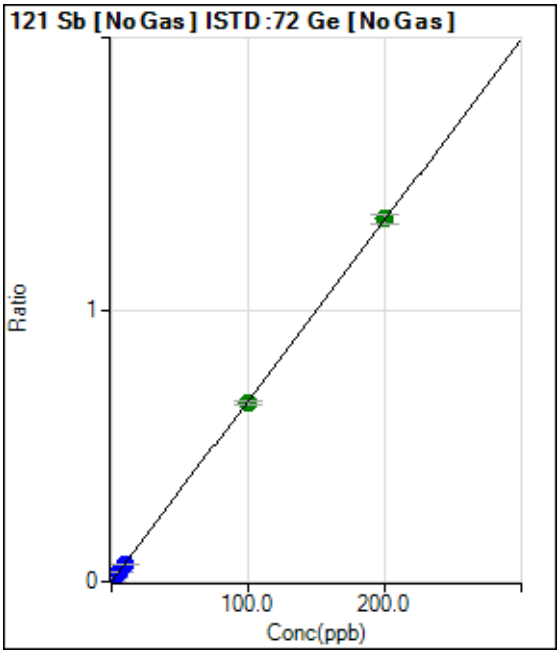
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1556.79	0.0006	P	6.3
2	☐	2.000	1.866	18096.15	0.0072	P	1.9
3	☐	5.000	4.905	44572.52	0.0179	P	1.6
4	☐	10.000	9.663	86272.18	0.0347	P	2.4
5	☐	100.000	98.462	840730.90	0.3480	P	2.1
6	☐	200.000	200.789	1661638.41	0.7089	A	0.9

y = 0.0035 * x + 6.2255E-004
R = 1.0000
DL = 0.03327
BEC = 0.1765

Weight: <None>
Min Conc: <None>

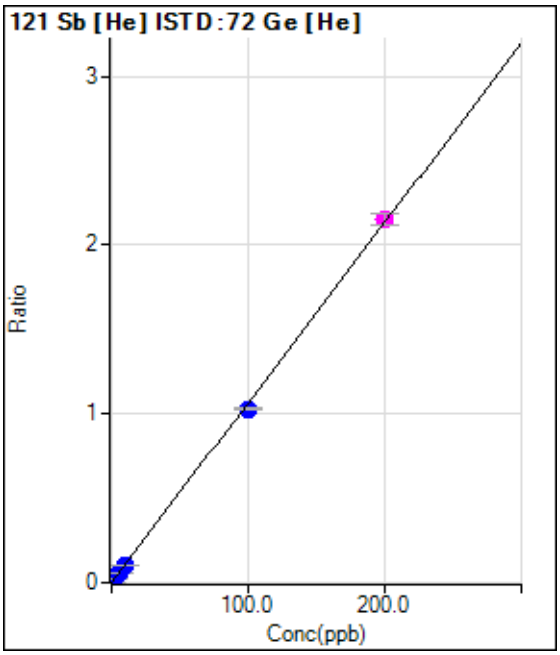


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1080.06	0.0006	P	2.7
2	☐	2.000	1.966	25631.93	0.0136	P	1.6
3	☐	5.000	4.820	61132.63	0.0326	P	2.0
4	☐	10.000	9.751	122127.53	0.0654	P	0.8
5	☐	100.000	98.593	1201765.69	0.6563	A	2.5
6	☐	200.000	200.721	2358828.87	1.3355	A	2.4

y = 0.0067 * x + 5.6944E-004
R = 1.0000
DL = 0.007033
BEC = 0.08562

Weight: <None>
Min Conc: <None>

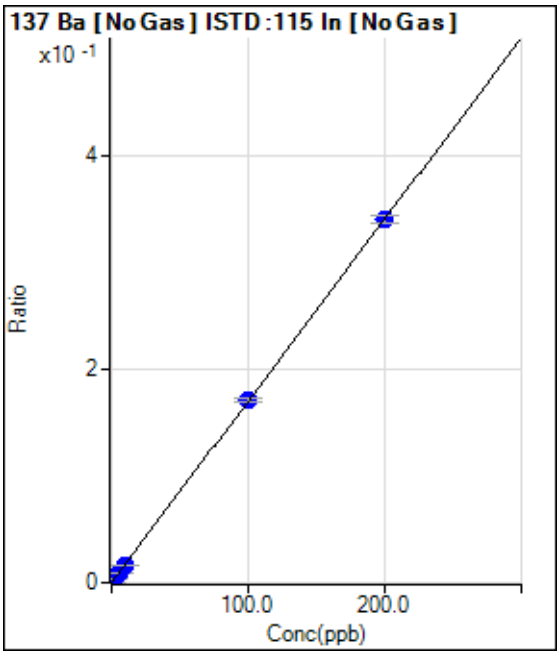
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	546.69	0.0010	P	11.8
2	☐	2.000	2.052	12229.26	0.0229	P	2.2
3	☐	5.000	4.824	28056.98	0.0524	P	0.9
4	☐	10.000	9.817	56126.94	0.1056	P	2.0
5	☐	100.000	96.632	543215.68	1.0303	P	1.0
6	☐	200.000	201.697	1094653.37	2.1494	M	3.2

y = 0.0107 * x + 0.0010
R = 0.9998
DL = 0.03375
BEC = 0.09563

Weight: <None>
Min Conc: <None>

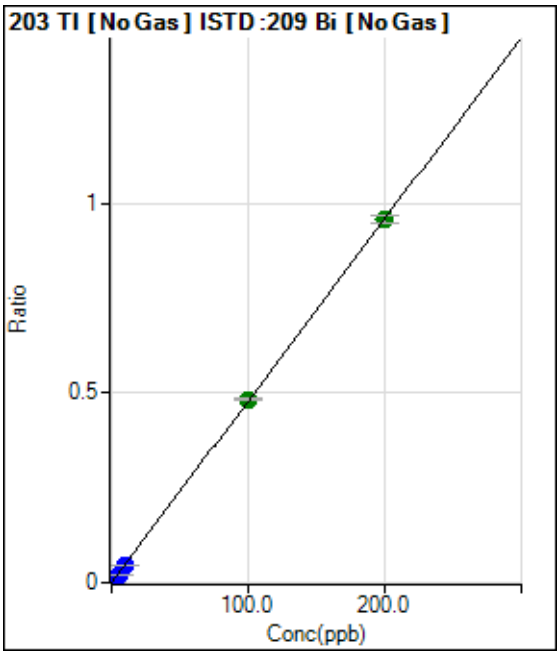


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	196.67	0.0001	P	16.7
2	☐	2.000	2.092	9120.02	0.0036	P	1.5
3	☐	5.000	5.030	21428.03	0.0086	P	1.8
4	☐	10.000	9.949	42178.83	0.0170	P	1.0
5	☐	100.000	100.455	412264.75	0.1706	P	1.6
6	☐	200.000	199.773	794963.30	0.3392	P	2.2

y = 0.0017 * x + 7.8657E-005
R = 1.0000
DL = 0.02314
BEC = 0.04633

Weight: <None>
Min Conc: <None>

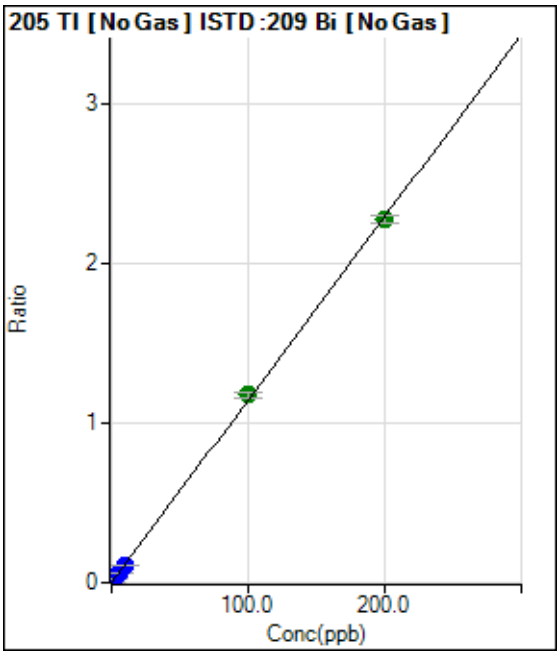
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	280.01	0.0001	P	6.9
2	☐	2.000	1.955	27841.39	0.0095	P	1.5
3	☐	5.000	4.722	68772.57	0.0227	P	0.5
4	☐	10.000	9.663	138826.41	0.0464	P	2.7
5	☐	100.000	100.750	1396784.20	0.4831	A	0.7
6	☐	200.000	199.649	2722148.19	0.9572	A	1.9

y = 0.0048 * x + 9.5070E-005
R = 1.0000
DL = 0.004101
BEC = 0.01983

Weight: <None>
Min Conc: <None>

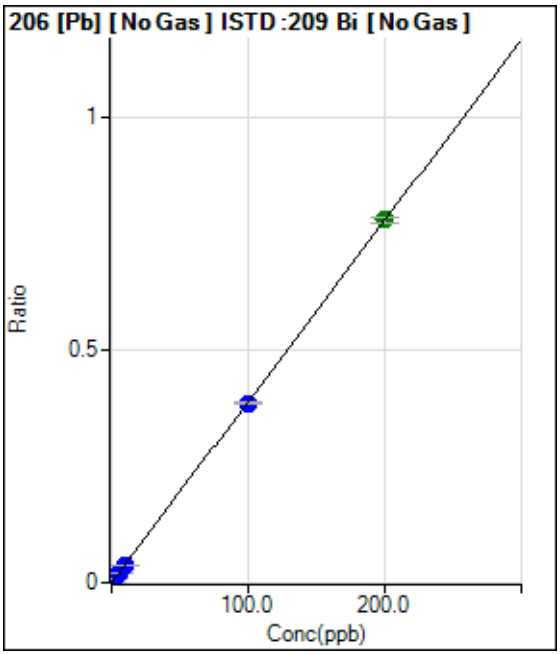


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	710.03	0.0002	P	10.7
2	☐	2.000	1.974	67120.93	0.0228	P	2.9
3	☐	5.000	4.823	167548.11	0.0554	P	2.2
4	☐	10.000	9.697	332461.41	0.1112	P	2.3
5	☐	100.000	102.920	3403736.72	1.1774	A	3.2
6	☐	200.000	198.560	6459220.74	2.2713	A	2.2

y = 0.0114 * x + 2.4125E-004
R = 0.9998
DL = 0.006774
BEC = 0.02109

Weight: <None>
Min Conc: <None>

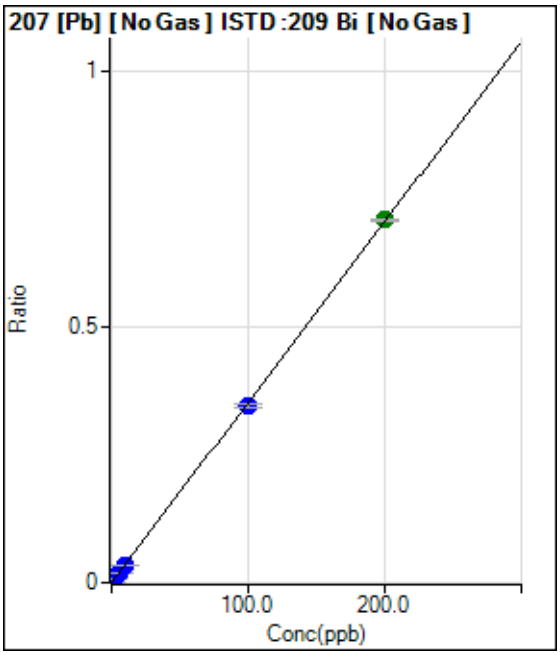
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	423.35	0.0001	P	24.0
2	☐	2.000	1.996	23208.52	0.0079	P	4.3
3	☐	5.000	4.897	57934.66	0.0192	P	2.7
4	☐	10.000	9.800	114236.53	0.0382	P	1.4
5	☐	100.000	98.933	1110913.42	0.3842	P	1.2
6	☐	200.000	200.546	2214520.80	0.7787	A	1.4

y = 0.0039 * x + 1.4404E-004
R = 1.0000
DL = 0.02668
BEC = 0.0371

Weight: <None>
Min Conc: <None>

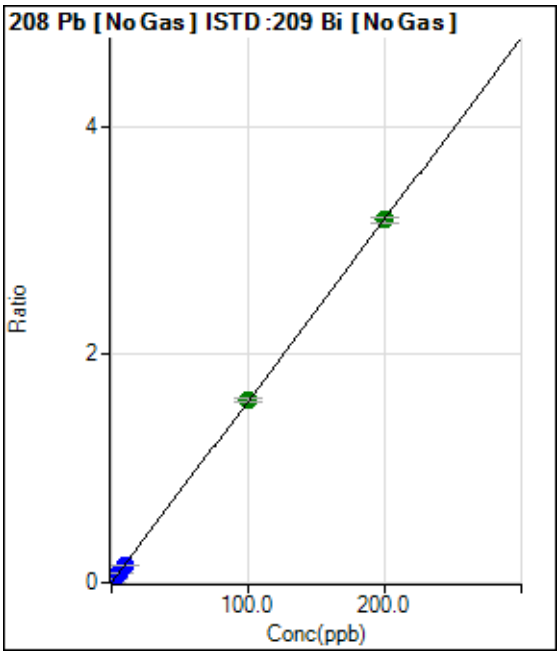


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	330.01	0.0001	P	26.2
2	☐	2.000	1.958	20647.42	0.0070	P	1.1
3	☐	5.000	4.901	52614.40	0.0174	P	2.7
4	☐	10.000	9.708	102751.18	0.0344	P	2.5
5	☐	100.000	97.799	997624.05	0.3451	P	1.8
6	☐	200.000	201.118	2017635.34	0.7095	A	0.6

y = 0.0035 * x + 1.1166E-004
R = 0.9999
DL = 0.02484
BEC = 0.03166

Weight: <None>
Min Conc: <None>

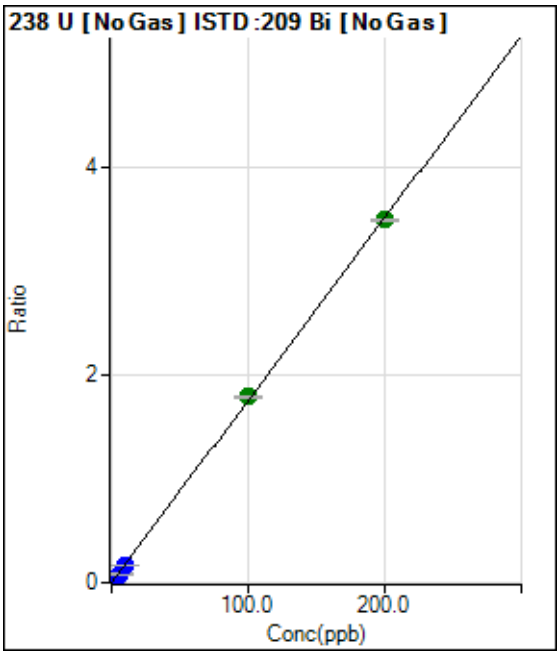
Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1680.08	0.0006	P	7.2
2	☐	2.000	1.963	93625.92	0.0318	P	2.3
3	☐	5.000	4.850	235309.45	0.0778	P	2.1
4	☐	10.000	9.698	463564.01	0.1550	P	2.0
5	☐	100.000	100.445	4625802.90	1.6000	A	1.8
6	☐	200.000	199.797	9048997.94	3.1820	A	1.3

y = 0.0159 * x + 5.7024E-004
R = 1.0000
DL = 0.007784
BEC = 0.03581

Weight: <None>
Min Conc: <None>

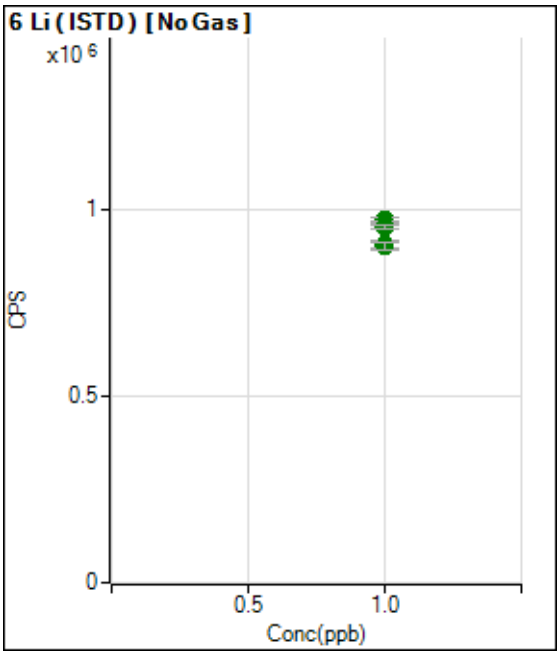


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.33	0.0000	P	20.9
2	☐	2.000	1.930	99657.69	0.0339	P	2.0
3	☐	5.000	4.729	250828.55	0.0829	P	2.7
4	☐	10.000	9.551	500941.32	0.1675	P	1.9
5	☐	100.000	101.996	5169652.32	1.7880	A	1.3
6	☐	200.000	199.032	9922685.27	3.4891	A	0.8

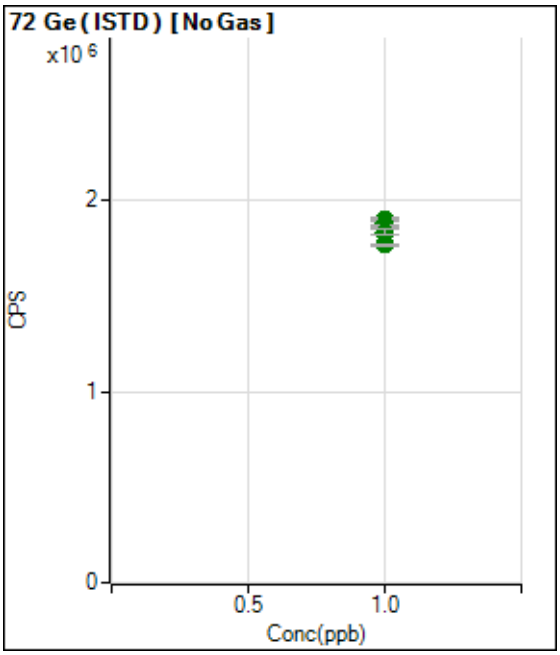
y = 0.0175 * x + 3.8495E-005
R = 0.9999
DL = 0.001379
BEC = 0.002196

Weight: <None>
Min Conc: <None>

Calibration for 017_ICV.d



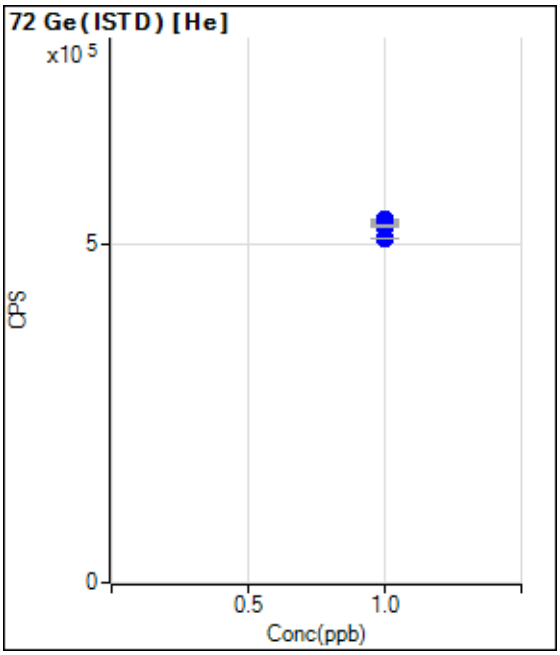
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		974206.47		A	1.0
2	☐	1.000		967105.77		A	1.1
3	☐	1.000		957554.66		A	1.3
4	☐	1.000		953725.94		A	1.2
5	☐	1.000		909447.43		A	2.1
6	☐	1.000		901758.82		A	2.2



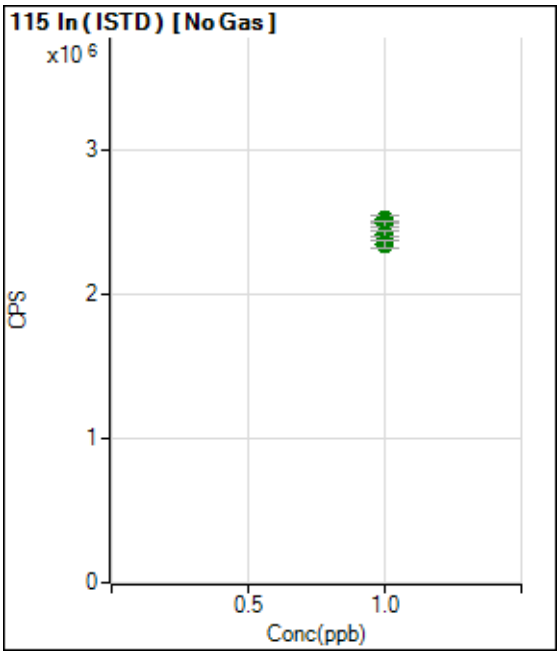
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1897028.41		A	1.0
2	☐	1.000		1878590.44		A	1.0
3	☐	1.000		1874462.89		A	2.3
4	☐	1.000		1866914.04		A	0.7
5	☐	1.000		1831736.69		A	1.7
6	☐	1.000		1766438.88		A	0.7

RIGHT SOLUTIONS | RIGHT PARTNER

Calibration for 017_ICV.d



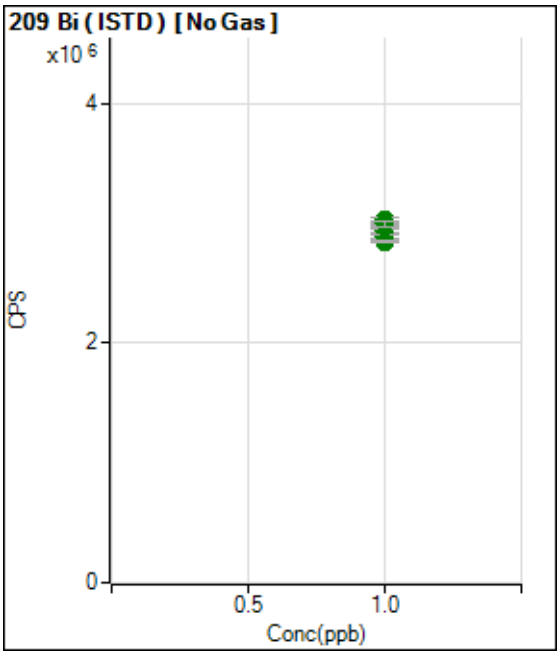
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		536534.25		P	0.5
2	☐	1.000		534655.32		P	1.0
3	☐	1.000		535386.89		P	0.6
4	☐	1.000		531588.89		P	0.3
5	☐	1.000		527241.36		P	0.4
6	☐	1.000		509292.89		P	0.4



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2503439.73		A	2.9
2	☐	1.000		2512512.61		A	2.0
3	☐	1.000		2486705.48		A	1.3
4	☐	1.000		2486035.48		A	1.4
5	☐	1.000		2416803.53		A	1.7
6	☐	1.000		2344132.08		A	1.9

RIGHT SOLUTIONS | RIGHT PARTNER

Calibration for 017_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2946615.16		A	2.0
2	☐	1.000		2941692.35		A	1.1
3	☐	1.000		3025037.77		A	1.8
4	☐	1.000		2991643.08		A	1.8
5	☐	1.000		2891515.37		A	1.2
6	☐	1.000		2843839.33		A	0.4

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	010CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T10:49:41-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	59162	0.00
Be	9	1	No Gas	17	374.70
V	51	2	He	7033	0.04
Cr	52	2	He	1100	0.86
Fe	56	2	He	5368	0.11
Se	78	2	He	48	52.80
As	75	2	He	279	4.50
Ca	44	2	He	533	2.93
Na	23	2	He	98808	0.00
Mg	24	2	He	440	3.90
K	39	2	He	45542	0.01
Mn	55	2	He	327	4.81
Co	59	2	He	73	28.40
Ni	60	2	He	217	6.15
Cu	63	2	He	703	0.47
Zn	66	2	He	393	4.54
Al	27	2	He	703	2.83
B	11	1	No Gas	15936	0.01
Al	27	1	No Gas	28032	0.01
Si	28	1	No Gas	389258	0.00
Ag	107	1	No Gas	467	3.32
Cd	111	1	No Gas	10	1000.00
Sr	88	1	No Gas	1143	0.22
Mo	95	1	No Gas	37	85.89
Sn	118	1	No Gas	1557	0.25
Sb	121	1	No Gas	1080	0.17
Ba	137	1	No Gas	197	7.90
Tl	205	1	No Gas	710	1.30
Tl	203	1	No Gas	280	2.21
Pb	208	1	No Gas	1680	0.43
U	238	1	No Gas	113	17.98
Ca	43	2	He	27	162.38
Sb	121	2	He	547	2.23
Cu	63	1	No Gas	1927	0.24

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	974206	1.01

Calibration Blank Report

Ge	72	2	He	536534	0.45
Ge	72	1	No Gas	1897028	1.03
In	115	1	No Gas	2503440	2.86
Bi	209	1	No Gas	2946615	1.96

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	011CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T10:51:41-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	5863	0.02
V	51	2	He	15569	0.01
Cr	52	2	He	11749	0.01
Fe	56	2	He	976663	0.00
Se	78	2	He	180	5.27
As	75	2	He	1668	0.35
Ca	44	2	He	5495	0.13
Na	23	2	He	260753	0.00
Mg	24	2	He	97449	0.00
K	39	2	He	140421	0.00
Mn	55	2	He	8026	0.07
Co	59	2	He	15726	0.02
Ni	60	2	He	3881	0.15
Cu	63	2	He	10968	0.04
Zn	66	2	He	2560	0.40
Al	27	2	He	1217	0.51
B	11	1	No Gas	32244	0.00
Al	27	1	No Gas	51857	0.00
Si	28	1	No Gas	444363	0.00
Ag	107	1	No Gas	28792	0.01
Cd	111	1	No Gas	5568	0.16
Sr	88	1	No Gas	48555	0.00
Mo	95	1	No Gas	9977	0.04
Sn	118	1	No Gas	18096	0.00
Sb	121	1	No Gas	25632	0.00
Ba	137	1	No Gas	9120	0.02
Tl	205	1	No Gas	67121	0.00
Tl	203	1	No Gas	27841	0.00
Pb	208	1	No Gas	93626	0.00
U	238	1	No Gas	99658	0.00
Ca	43	2	He	333	2.75
Sb	121	2	He	12229	0.02
Cu	63	1	No Gas	20082	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	967106	1.12	974206	99.27	70	120	
Ge	72	2	He	534655	0.96	536534	99.65	70	120	
Ge	72	1	No Gas	1878590	0.98	1897028	99.03	70	120	

Calibration Standard Report

In	115	1	No Gas	2512513	2.02	2503440	100.36	70	120	
Bi	209	1	No Gas	2941692	1.06	2946615	99.83	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	012CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T10:53:40-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	15153	0.01
V	51	2	He	27520	0.01
Cr	52	2	He	27157	0.01
Fe	56	2	He	2458631	0.00
Se	78	2	He	359	0.39
As	75	2	He	3779	0.06
Ca	44	2	He	13544	0.01
Na	23	2	He	500841	0.00
Mg	24	2	He	242055	0.00
K	39	2	He	284697	0.00
Mn	55	2	He	19190	0.00
Co	59	2	He	38896	0.01
Ni	60	2	He	9640	0.02
Cu	63	2	He	26890	0.01
Zn	66	2	He	5671	0.03
Al	27	2	He	2468	1.33
B	11	1	No Gas	58056	0.00
Al	27	1	No Gas	86370	0.00
Si	28	1	No Gas	522964	0.00
Ag	107	1	No Gas	68011	0.00
Cd	111	1	No Gas	13971	0.03
Sr	88	1	No Gas	118078	0.00
Mo	95	1	No Gas	23972	0.01
Sn	118	1	No Gas	44573	0.00
Sb	121	1	No Gas	61133	0.00
Ba	137	1	No Gas	21428	0.00
Tl	205	1	No Gas	167548	0.00
Tl	203	1	No Gas	68773	0.00
Pb	208	1	No Gas	235309	0.00
U	238	1	No Gas	250829	0.00
Ca	43	2	He	667	2.09
Sb	121	2	He	28057	0.00
Cu	63	1	No Gas	47978	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	957555	1.31	974206	98.29	70	120	
Ge	72	2	He	535387	0.55	536534	99.79	70	120	
Ge	72	1	No Gas	1874463	2.30	1897028	98.81	70	120	

Calibration Standard Report

In	115	1	No Gas	2486705	1.34	2503440	99.33	70	120	
Bi	209	1	No Gas	3025038	1.80	2946615	102.66	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	013CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T10:55:39-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	29985	0.00
V	51	2	He	49322	0.00
Cr	52	2	He	53314	0.00
Fe	56	2	He	4744546	0.00
Se	78	2	He	653	0.50
As	75	2	He	7147	0.01
Ca	44	2	He	26352	0.01
Na	23	2	He	896990	0.00
Mg	24	2	He	476962	0.00
K	39	2	He	513765	0.00
Mn	55	2	He	37348	0.01
Co	59	2	He	76464	0.00
Ni	60	2	He	19304	0.02
Cu	63	2	He	52056	0.00
Zn	66	2	He	10478	0.06
Al	27	2	He	3267	0.22
B	11	1	No Gas	100649	0.00
Al	27	1	No Gas	141783	0.00
Si	28	1	No Gas	645355	0.00
Ag	107	1	No Gas	134799	0.00
Cd	111	1	No Gas	27900	0.00
Sr	88	1	No Gas	234749	0.00
Mo	95	1	No Gas	48713	0.00
Sn	118	1	No Gas	86272	0.00
Sb	121	1	No Gas	122128	0.00
Ba	137	1	No Gas	42179	0.00
Tl	205	1	No Gas	332461	0.00
Tl	203	1	No Gas	138826	0.00
Pb	208	1	No Gas	463564	0.00
U	238	1	No Gas	500941	0.00
Ca	43	2	He	1607	1.42
Sb	121	2	He	56127	0.00
Cu	63	1	No Gas	93581	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	953726	1.24	974206	97.90	70	120	
Ge	72	2	He	531589	0.27	536534	99.08	70	120	
Ge	72	1	No Gas	1866914	0.72	1897028	98.41	70	120	

Calibration Standard Report

In	115	1	No Gas	2486035	1.35	2503440	99.30	70	120	
Bi	209	1	No Gas	2991643	1.78	2946615	101.53	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	014CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T10:57:38-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	295272	0.00
V	51	2	He	416907	0.00
Cr	52	2	He	494223	0.00
Fe	56	2	He	45773246	0.00
Se	78	2	He	6142	0.03
As	75	2	He	68267	0.00
Ca	44	2	He	252798	0.00
Na	23	2	He	7620872	0.00
Mg	24	2	He	4541920	0.00
K	39	2	He	4606282	0.00
Mn	55	2	He	358482	0.00
Co	59	2	He	738736	0.00
Ni	60	2	He	184608	0.00
Cu	63	2	He	498532	0.00
Zn	66	2	He	97035	0.00
Al	27	2	He	26075	0.01
B	11	1	No Gas	889544	0.00
Al	27	1	No Gas	1130678	0.00
Si	28	1	No Gas	2956504	0.00
Ag	107	1	No Gas	1312438	0.00
Cd	111	1	No Gas	268907	0.00
Sr	88	1	No Gas	2342148	0.00
Mo	95	1	No Gas	480755	0.00
Sn	118	1	No Gas	840731	0.00
Sb	121	1	No Gas	1201766	0.00
Ba	137	1	No Gas	412265	0.00
Tl	205	1	No Gas	3403737	0.00
Tl	203	1	No Gas	1396784	0.00
Pb	208	1	No Gas	4625803	0.00
U	238	1	No Gas	5169652	0.00
Ca	43	2	He	14364	0.02
Sb	121	2	He	543216	0.00
Cu	63	1	No Gas	891141	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	909447	2.06	974206	93.35	70	120	
Ge	72	2	He	527241	0.39	536534	98.27	70	120	
Ge	72	1	No Gas	1831737	1.67	1897028	96.56	70	120	

Calibration Standard Report

In	115	1	No Gas	2416804	1.70	2503440	96.54	70	120	
Bi	209	1	No Gas	2891515	1.16	2946615	98.13	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	015CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T10:59:32-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	571703	0.00
V	51	2	He	806985	0.00
Cr	52	2	He	965426	0.00
Fe	56	2	He	87914925	0.00
Se	78	2	He	11749	0.01
As	75	2	He	131307	0.00
Ca	44	2	He	488963	0.00
Na	23	2	He	14862201	0.00
Mg	24	2	He	8757768	0.00
K	39	2	He	8900407	0.00
Mn	55	2	He	695093	0.00
Co	59	2	He	1466325	0.00
Ni	60	2	He	353353	0.00
Cu	63	2	He	951082	0.00
Zn	66	2	He	185856	0.00
Al	27	2	He	50338	0.00
B	11	1	No Gas	1719883	0.00
Al	27	1	No Gas	2135163	0.00
Si	28	1	No Gas	5186967	0.00
Ag	107	1	No Gas	2563051	0.00
Cd	111	1	No Gas	518675	0.00
Sr	88	1	No Gas	4422990	0.00
Mo	95	1	No Gas	927038	0.00
Sn	118	1	No Gas	1661638	0.00
Sb	121	1	No Gas	2358829	0.00
Ba	137	1	No Gas	794963	0.00
Tl	205	1	No Gas	6459221	0.00
Tl	203	1	No Gas	2722148	0.00
Pb	208	1	No Gas	9048998	0.00
U	238	1	No Gas	9922685	0.00
Ca	43	2	He	28620	0.01
Sb	121	2	He	1094653	0.00
Cu	63	1	No Gas	1724920	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	901759	2.25	974206	92.56	70	120	
Ge	72	2	He	509293	0.40	536534	94.92	70	120	
Ge	72	1	No Gas	1766439	0.66	1897028	93.12	70	120	

Calibration Standard Report

In	115	1	No Gas	2344132	1.86	2503440	93.64	70	120	
Bi	209	1	No Gas	2843839	0.39	2946615	96.51	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	018_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:14:03-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.091	65.9	58508	0.3	0.5	
Be	9	1	No Gas	0.008	71.8	40	43.3	0.5	
V	51	2	He	-0.320	-9.5	5591	2.0	2.5	
Cr	52	2	He	0.009	195.4	1123	6.3	2.5	
Fe	56	2	He	0.827	19.0	9044	7.9	100	
Se	78	2	He	-0.020	-850.2	46	22.6	1	
As	75	2	He	-0.021	-70.9	260	3.4	2.5	
Ca	44	2	He	2.086	76.8	577	6.1	100	
Na	23	2	He	-0.890	-157.8	96435	0.2	100	
Mg	24	2	He	0.120	79.6	487	8.3	100	
K	39	2	He	3.628	81.6	46418	1.8	100	
Mn	55	2	He	0.019	53.2	390	10.3	2.5	
Co	59	2	He	0.003	62.6	97	15.8	2.5	
Ni	60	2	He	-0.043	-15.5	133	8.7	2.5	
Cu	63	2	He	-0.009	-89.0	647	6.3	1	
Zn	66	2	He	0.180	31.8	560	10.7	2.5	
Al	27	2	He	0.278	243.3	763	23.6	5	
B	11	1	No Gas	16.843	12.8	45683	9.3	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	0.358	1.2	31025	1.0	5	
Si	28	1	No Gas	7.868	21.4	415886	1.2	10	
Ag	107	1	No Gas	-0.006	-25.5	383	4.0	2.5	
Cd	111	1	No Gas	0.012	76.8	43	58.1	1	
Sr	88	1	No Gas	0.009	79.4	1333	11.3	2.5	
Mo	95	1	No Gas	0.089	31.9	470	27.9	2.5	
Sn	118	1	No Gas	0.126	12.1	2634	3.6	5	
Sb	121	1	No Gas	0.053	37.6	1690	14.5	2.5	
Ba	137	1	No Gas	0.020	91.7	280	27.0	2.5	
Tl	205	1	No Gas	0.086	59.2	3581	47.3	1	
Tl	203	1	No Gas	0.080	54.3	1403	43.2	1	
Pb	208	1	No Gas	0.042	34.7	3637	18.6	2.5	
U	238	1	No Gas	0.020	46.5	1147	41.9	2.5	
Ca	43	2	He	-6.487	-61.3	17	34.6	100	
Sb	121	2	He	0.027	58.1	690	13.8	2.5	
Ti	47	2	He	0.000	#DIV/0!	0	#DIV/0!	2.5	
Se	82	1	No Gas	0.713	49.8	47	109.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	944875	1.01	974206	96.99	70	120	
Ge	72	2	He	527361	1.09	536534	98.29	70	120	
Ge	72	1	No Gas	1833661	0.91	1897028	96.66	70	120	
In	115	1	No Gas	2473433	1.79	2503440	98.80	70	120	
Bi	209	1	No Gas	2920961	1.40	2946615	99.13	70	120	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	019LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:16:03-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.081	2.081	2.58	83253	0.00	2	
Be	9	1	No Gas	1.954	1.954	2.18	5898	0.03	2	
V	51	2	He	1.886	1.886	4.29	14805	0.01	2	
Cr	52	2	He	1.985	1.985	5.40	11035	0.02	2	
Fe	56	2	He	207.561	207.561	1.66	957505	0.02	200	
Se	78	2	He	2.228	2.228	12.85	183	1.22	2	
As	75	2	He	1.978	1.978	3.19	1627	0.12	2	
Ca	44	2	He	201.237	201.237	9.89	5645	3.57	200	
Na	23	2	He	208.024	208.024	2.27	257336	0.08	200	
Mg	24	2	He	209.941	209.941	1.06	96285	0.22	200	
K	39	2	He	205.317	205.317	0.59	139742	0.15	200	
Mn	55	2	He	2.015	2.015	3.55	7612	0.03	2	
Co	59	2	He	2.014	2.014	3.11	15386	0.01	2	
Ni	60	2	He	2.097	2.097	2.67	4081	0.05	2	
Cu	63	2	He	2.090	2.090	1.87	11075	0.02	2	
Zn	66	2	He	2.271	2.271	13.69	2587	0.09	2	
Al	27	2	He	2.249	2.249	15.39	1277	0.18	2	
B	11	1	No Gas	14.685	14.685	1.66	41774	0.04	10	NewName Main CR1 Failed
Al	27	1	No Gas	2.173	2.173	2.45	51275	0.00	2	
Si	28	1	No Gas	12.998	12.998	12.74	444758	0.00	10	
Ag	107	1	No Gas	2.153	2.153	4.49	29219	0.01	2	
Cd	111	1	No Gas	2.064	2.064	5.29	5608	0.04	2	
Sr	88	1	No Gas	1.995	1.995	3.92	47418	0.00	2	
Mo	95	1	No Gas	2.017	2.017	2.60	9810	0.02	2	
Sn	118	1	No Gas	1.990	1.990	3.66	18697	0.01	2	
Sb	121	1	No Gas	2.029	2.029	1.96	25959	0.01	2	
Ba	137	1	No Gas	1.982	1.982	4.31	8426	0.02	2	
Tl	205	1	No Gas	1.946	1.946	4.22	67429	0.00	2	
Tl	203	1	No Gas	1.910	1.910	2.43	27738	0.01	2	
Pb	208	1	No Gas	1.946	1.946	2.61	94635	0.00	2	
U	238	1	No Gas	1.908	1.908	1.69	100390	0.00	2	
Ca	43	2	He	198.168	198.168	9.33	320	61.93	200	
Sb	121	2	He	2.009	2.009	0.87	11899	0.02	2	
Ti	47	2	He	2.206	2.206	24.36	347	0.64	200	
Cu	63	1	No Gas	2.031	2.031	2.21	20148	0.01	2	
Se	82	1	No Gas	1.976	1.976	26.08	234	0.85	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	944525	0.86	974206	96.95	70	120	
Ge	72	2	He	530808	1.55	536534	98.93	70	120	
Ge	72	1	No Gas	1846275	1.39	1897028	97.32	70	120	
In	115	1	No Gas	2447793	2.24	2503440	97.78	70	120	
Bi	209	1	No Gas	2999123	1.89	2946615	101.78	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	020LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:18:02-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.956	4.956	0.98	120755	0.00	5	
Be	9	1	No Gas	4.902	4.902	2.77	14985	0.03	5	
V	51	2	He	4.967	4.967	0.95	27405	0.02	5	
Cr	52	2	He	5.116	5.116	2.01	26523	0.02	5	
Fe	56	2	He	534.335	534.335	1.99	2436039	0.02	500	
Se	78	2	He	5.365	5.365	2.64	372	1.44	5	
As	75	2	He	5.199	5.199	4.15	3796	0.14	5	
Ca	44	2	He	501.384	501.384	1.35	13176	3.81	500	
Na	23	2	He	526.738	526.738	1.47	497778	0.11	500	
Mg	24	2	He	526.376	526.376	1.18	238796	0.22	500	
K	39	2	He	510.590	510.590	1.41	278202	0.18	500	
Mn	55	2	He	5.092	5.092	1.39	18593	0.03	5	
Co	59	2	He	5.000	5.000	1.51	37759	0.01	5	
Ni	60	2	He	5.107	5.107	4.80	9550	0.05	5	
Cu	63	2	He	5.232	5.232	1.67	26456	0.02	5	
Zn	66	2	He	5.274	5.274	8.43	5448	0.10	5	
Al	27	2	He	5.030	5.030	37.95	1977	0.25	5	
B	11	1	No Gas	26.324	26.324	0.78	63546	0.04	25	
Al	27	1	No Gas	5.102	5.102	3.40	84046	0.01	5	
Si	28	1	No Gas	27.429	27.429	4.41	520696	0.01	25	
Ag	107	1	No Gas	4.986	4.986	2.55	68179	0.01	5	
Cd	111	1	No Gas	4.973	4.973	2.43	13714	0.04	5	
Sr	88	1	No Gas	5.007	5.007	2.06	119259	0.00	5	
Mo	95	1	No Gas	4.870	4.870	1.48	24019	0.02	5	
Sn	118	1	No Gas	4.753	4.753	1.94	43245	0.01	5	
Sb	121	1	No Gas	4.904	4.904	1.02	61572	0.01	5	
Ba	137	1	No Gas	4.996	4.996	3.00	21288	0.02	5	
Tl	205	1	No Gas	4.855	4.855	1.80	166326	0.00	5	
Tl	203	1	No Gas	4.836	4.836	1.67	69423	0.01	5	
Pb	208	1	No Gas	4.867	4.867	2.57	232785	0.00	5	
U	238	1	No Gas	4.814	4.814	1.46	251770	0.00	5	
Ca	43	2	He	460.978	460.978	6.73	703	65.54	500	
Sb	121	2	He	4.964	4.964	3.18	28371	0.02	5	
Ti	47	2	He	4.652	4.652	12.00	723	0.64	5	
Cu	63	1	No Gas	5.080	5.080	2.11	47828	0.01	5	
Se	82	1	No Gas	5.340	5.340	4.31	733	0.73	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	958165	0.65	974206	98.35	70	120	
Ge	72	2	He	526456	0.52	536534	98.12	70	120	
Ge	72	1	No Gas	1855722	0.94	1897028	97.82	70	120	

Sample Report

In	115	1	No Gas	2487263	0.89	2503440	99.35	70	120	
Bi	209	1	No Gas	2982590	1.69	2946615	101.22	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	021ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:20:08-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.592	26.0	62518	0.6	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.002	-90.4	10	50.0	0	ICSA Main CR1 Failed
V	51	2	He	-0.153	-28.2	5950	3.3	0	ICSA Main CR1 Failed
Cr	52	2	He	2.043	2.3	10664	2.6	0	ICSA Main CR1 Failed
Fe	56	2	He	101549.612	0.9	438319447	1.3	0	
Se	78	2	He	0.221	25.2	57	5.3	0	ICSA Main CR1 Failed
As	75	2	He	0.011	389.1	267	10.9	0	ICSA Main CR1 Failed
Ca	44	2	He	103185.379	1.3	2470807	0.4	0	
Na	23	2	He	103339.286	1.1	74701416	1.4	0	
Mg	24	2	He	103032.201	1.1	44264613	0.2	0	
K	39	2	He	103236.570	1.2	44834291	0.4	0	
Mn	55	2	He	0.613	15.3	2390	13.4	0	ICSA Main CR1 Failed
Co	59	2	He	0.086	8.3	687	8.0	0	ICSA Main CR1 Failed
Ni	60	2	He	0.128	42.3	423	21.9	0	ICSA Main CR1 Failed
Cu	63	2	He	0.384	14.7	2450	11.5	0	ICSA Main CR1 Failed
Zn	66	2	He	1.336	0.8	1583	1.6	0	ICSA Main CR1 Failed
Al	27	2	He	99597.045	0.2	24201255	0.7	0	
B	11	1	No Gas	2.632	42.3	19447	6.6	0	
Al	27	1	No Gas	94706.320	1.1	998003345	0.1	0	
Si	28	1	No Gas	33.611	5.7	524240	1.0	0	
Ag	107	1	No Gas	0.287	4.7	3991	5.6	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.934	4.7	4878	5.9	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	1.085	0.6	24409	1.2	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2027.806	2.1	9117350	1.0	0	
Sn	118	1	No Gas	0.049	30.0	1804	5.0	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.118	9.6	2380	5.2	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.322	14.9	1420	11.6	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.016	30.3	1140	15.0	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.018	61.3	487	30.8	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.080	3.8	4991	3.6	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.004	24.0	297	17.0	0	ICSA Main CR1 Failed
Ca	43	2	He	100611.509	1.0	140238	1.7	0	
Sb	121	2	He	0.109	12.8	1090	6.9	0	ICSA Main CR1 Failed
Ti	47	2	He	2004.768	0.9	295784	0.1	0	
Se	82	1	No Gas	-0.275	-464.8	-95	-190.9	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	912857	3.62	974206	93.70	70	120	
Ge	72	2	He	499470	0.95	536534	93.09	70	120	
Ge	72	1	No Gas	1761766	1.08	1897028	92.87	70	120	
In	115	1	No Gas	2271224	1.49	2503440	90.72	70	120	
Bi	209	1	No Gas	2703346	2.05	2946615	91.74	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	022ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:22:09-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	100.646	2.583	1249607	0.53	100	100.6	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	98.678	2.357	283343	0.51	100	98.7	80	120	
V	51	2	He	100.639	0.443	403920	0.96	100	100.6	80	120	
Cr	52	2	He	100.876	1.589	480809	1.90	100	100.9	80	120	
Fe	56	2	He	111270.520	1.078	484114926	0.50	100	111270.5	80	120	
Se	78	2	He	103.246	4.021	6026	4.58	100	103.2	80	120	
As	75	2	He	101.724	0.258	66187	0.86	100	101.7	80	120	
Ca	44	2	He	113372.914	1.151	2736755	1.34	100	113372.9	80	120	
Na	23	2	He	112807.425	1.033	82189392	0.51	100	112807.4	80	120	
Mg	24	2	He	110658.936	0.617	47927401	1.15	100	110658.9	80	120	ICSB Main CR1 Failed
K	39	2	He	111659.113	1.379	48879708	0.94	100	111659.1	80	120	
Mn	55	2	He	100.224	0.104	344248	0.51	100	100.2	80	120	
Co	59	2	He	97.514	1.865	703022	1.64	100	97.5	80	120	
Ni	60	2	He	99.106	1.949	173509	1.53	100	99.1	80	120	
Cu	63	2	He	97.741	1.720	460977	1.77	100	97.7	80	120	
Zn	66	2	He	100.097	1.024	92273	0.95	100	100.1	80	120	
Al	27	2	He	96838.506	1.469	23719845	1.37	100	96838.5	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	491.058	3.460	854612	2.64	100	491.1	80	120	
Al	27	1	No Gas	94220.245	1.679	997196892	1.77	100	94220.2	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	544.240	3.209	3010046	2.97	100	544.2	80	120	
Ag	107	1	No Gas	96.635	1.964	1217642	0.75	100	96.6	80	120	
Cd	111	1	No Gas	99.745	1.952	254914	1.00	100	99.7	80	120	
Sr	88	1	No Gas	101.673	0.648	2225823	1.16	100	101.7	80	120	
Mo	95	1	No Gas	2076.457	2.710	9482734	0.99	100	2076.5	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	97.783	1.495	797136	0.83	100	97.8	80	120	
Sb	121	1	No Gas	96.399	0.285	1135276	0.37	100	96.4	80	120	
Ba	137	1	No Gas	100.396	0.717	393377	1.16	100	100.4	80	120	
Tl	205	1	No Gas	99.652	1.235	3103230	0.68	100	99.7	80	120	
Tl	203	1	No Gas	96.651	1.428	1261477	0.94	100	96.7	80	120	
Pb	208	1	No Gas	96.314	0.754	4176229	0.45	100	96.3	80	120	
U	238	1	No Gas	101.530	1.903	4844735	1.40	100	101.5	80	120	
Ca	43	2	He	110451.419	0.610	155180	0.47	100	110451.4	80	120	
Sb	121	2	He	96.907	0.190	520221	0.43	100	96.9	80	120	
Ti	47	2	He	2088.897	1.683	310688	1.70	100	2088.9	80	120	
Cu	63	1	No Gas	94.230	0.411	814266	0.40	100	94.2	80	120	
Se	82	1	No Gas	102.263	4.645	14394	4.48	100	102.3	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	901511	2.71	974206	92.54	70	120	
Ge	72	2	He	503484	0.60	536534	93.84	70	120	
Ge	72	1	No Gas	1769264	0.18	1897028	93.27	70	120	
In	115	1	No Gas	2307193	1.80	2503440	92.16	70	120	
Bi	209	1	No Gas	2722222	1.16	2946615	92.38	70	120	

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Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	024_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:27:27-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	103.515	2.117	1358309	1.56	100	103.5	90	110	
Be	9	1	No Gas	99.375	1.169	301946	1.07	100	99.4	90	110	
V	51	2	He	101.377	1.152	427494	0.60	100	101.4	90	110	
Cr	52	2	He	100.561	0.402	503659	0.21	100	100.6	90	110	
Fe	56	2	He	10189.461	1.551	46589849	0.97	10000	101.9	90	110	
Se	78	2	He	101.678	1.606	6236	1.96	100	101.7	90	110	
As	75	2	He	100.819	0.552	68934	0.73	100	100.8	90	110	
Ca	44	2	He	10168.843	1.695	258409	1.11	10000	101.7	90	110	
Na	23	2	He	10171.223	0.596	7876059	0.06	10000	101.7	90	110	
Mg	24	2	He	10309.125	1.351	4692020	0.82	10000	103.1	90	110	
K	39	2	He	10258.447	2.523	4759571	1.96	10000	102.6	90	110	
Mn	55	2	He	101.627	1.054	366795	0.54	100	101.6	90	110	
Co	59	2	He	99.041	1.424	750327	1.10	100	99.0	90	110	
Ni	60	2	He	102.249	0.659	188112	0.31	100	102.2	90	110	
Cu	63	2	He	102.113	0.929	506044	0.86	100	102.1	90	110	
Zn	66	2	He	101.170	0.409	98000	0.62	100	101.2	90	110	
Al	27	2	He	102.182	1.514	26993	1.20	100	102.2	90	110	
B	11	1	No Gas	484.450	2.029	892364	1.94	500	96.9	90	110	
Al	27	1	No Gas	104.058	0.763	1198192	2.25	100	104.1	90	110	
Si	28	1	No Gas	518.412	1.622	3064872	1.16	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.720	0.790	1363159	1.10	100	100.7	90	110	
Cd	111	1	No Gas	101.003	1.434	277235	0.47	100	101.0	90	110	
Sr	88	1	No Gas	103.885	2.954	2442053	2.22	100	103.9	90	110	
Mo	95	1	No Gas	100.107	1.245	491118	1.02	100	100.1	90	110	
Sn	118	1	No Gas	97.228	2.022	851182	0.39	100	97.2	90	110	
Sb	121	1	No Gas	97.622	0.317	1221875	2.39	100	97.6	90	110	
Ba	137	1	No Gas	100.343	0.302	422279	1.64	100	100.3	90	110	
Tl	205	1	No Gas	102.294	2.222	3447918	1.33	100	102.3	90	110	
Tl	203	1	No Gas	99.349	4.004	1403077	1.73	100	99.3	90	110	
Pb	208	1	No Gas	98.576	1.460	4626620	0.96	100	98.6	90	110	
U	238	1	No Gas	101.430	1.614	5239067	0.79	100	101.4	90	110	
Ca	43	2	He	10373.687	1.565	15339	1.11	10000	103.7	90	110	
Sb	121	2	He	98.281	0.707	554401	0.40	100	98.3	90	110	
Ti	47	2	He	101.331	3.702	15836	3.32	100	101.3	90	110	
Cu	63	1	No Gas	99.749	1.295	915784	0.82	100	99.7	90	110	
Se	82	1	No Gas	103.391	1.507	15469	3.29	100	103.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	953625	1.31	974206	97.89	70	120	
Ge	72	2	He	529079	0.59	536534	98.61	70	120	
Ge	72	1	No Gas	1880316	2.11	1897028	99.12	70	120	
In	115	1	No Gas	2477890	1.89	2503440	98.98	70	120	
Bi	209	1	No Gas	2947124	2.32	2946615	100.02	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	026_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:31:43-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.214	44.6	63025	1.1	0.5	
Be	9	1	No Gas	0.002	115.6	23	32.7	0.5	
V	51	2	He	0.509	10.1	9387	2.6	2.5	
Cr	52	2	He	-0.030	-75.8	970	11.9	2.5	
Fe	56	2	He	0.493	33.3	7829	9.6	100	
Se	78	2	He	-0.038	-166.8	47	8.9	2	
As	75	2	He	0.059	127.0	327	15.9	2.5	
Ca	44	2	He	-1.224	-66.8	513	4.1	100	
Na	23	2	He	-18.341	-3.5	86524	0.7	100	
Mg	24	2	He	0.155	20.2	523	2.9	100	
K	39	2	He	7.644	43.4	50235	3.4	100	
Mn	55	2	He	0.008	17.7	363	1.6	2.5	
Co	59	2	He	0.001	197.9	80	12.5	2.5	
Ni	60	2	He	-0.039	-27.4	147	14.2	2.5	
Cu	63	2	He	0.012	75.3	783	6.3	2	
Zn	66	2	He	0.181	37.4	583	11.7	2.5	
Al	27	2	He	0.152	292.4	760	16.0	5	
B	11	1	No Gas	3.576	13.3	22949	2.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	0.440	9.7	33177	1.3	5	
Si	28	1	No Gas	0.351	111.0	392930	0.9	10	
Ag	107	1	No Gas	-0.012	-24.4	310	14.1	2.5	
Cd	111	1	No Gas	0.001	452.3	13	114.6	1	
Sr	88	1	No Gas	0.008	53.9	1340	7.1	2.5	
Mo	95	1	No Gas	0.055	7.9	310	8.5	2.5	
Sn	118	1	No Gas	0.052	15.7	2030	5.1	5	
Sb	121	1	No Gas	0.023	74.0	1380	15.2	2.5	
Ba	137	1	No Gas	-0.009	-78.0	160	18.8	2.5	
Tl	205	1	No Gas	-0.001	-241.0	707	8.5	1	
Tl	203	1	No Gas	0.002	145.9	323	14.3	1	
Pb	208	1	No Gas	0.000	799.4	1743	4.9	2.5	
U	238	1	No Gas	0.002	71.5	210	31.2	2.5	
Ca	43	2	He	-0.449	-3649.6	27	94.4	100	
Sb	121	2	He	0.020	32.4	673	5.2	2.5	
Ti	47	2	He	0.021	173.2	3	173.2	2.5	
Cu	63	1	No Gas	0.017	58.3	2097	4.4	2.5	
Se	82	1	No Gas	0.064	665.4	-50	-131.2	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	992005	2.07	974206	101.83	70	120	
Ge	72	2	He	548830	0.33	536534	102.29	70	120	
Ge	72	1	No Gas	1905869	0.83	1897028	100.47	70	120	
In	115	1	No Gas	2512684	1.60	2503440	100.37	70	120	
Bi	209	1	No Gas	3043495	1.53	2946615	103.29	70	120	

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Sample Report

Sample Table

Sample Name	MBLK-167071
Data File Name	027SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:33:43-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 167071
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.199	0.199	54.10	63059	0.00	2000	
Be	9	1	No Gas	-0.003	-0.003	-74.96	7	-0.05	2000	
V	51	2	He	0.875	0.875	3.03	11087	0.01	2000	
Cr	52	2	He	-0.007	-0.007	-3.18	1100	0.00	2000	
Fe	56	2	He	0.452	0.452	16.38	7726	0.01	200000	
Se	78	2	He	0.089	0.089	62.52	55	0.16	2000	
As	75	2	He	0.055	0.055	72.71	328	0.02	2000	
Ca	44	2	He	3.701	3.701	84.90	650	0.57	200000	
Na	23	2	He	-21.664	-21.664	-7.68	84870	-0.03	200000	
Mg	24	2	He	0.533	0.533	21.51	710	0.08	200000	
K	39	2	He	5.475	5.475	22.91	49773	0.01	200000	
Mn	55	2	He	0.013	0.013	151.26	387	0.00	2000	
Co	59	2	He	-0.001	-0.001	-586.28	70	0.00	2000	
Ni	60	2	He	-0.026	-0.026	-110.99	173	-0.02	2000	
Cu	63	2	He	0.011	0.011	39.35	787	0.00	2000	
Zn	66	2	He	0.253	0.253	2.95	663	0.04	2000	
Al	27	2	He	1.367	1.367	20.32	1097	0.12	2000	
B	11	1	No Gas	1.077	1.077	13.88	18320	0.01	2000	
Al	27	1	No Gas	1.547	1.547	4.29	46398	0.00	2000	
Si	28	1	No Gas	0.467	0.467	372.97	398603	0.00	2000	
Ag	107	1	No Gas	-0.012	-0.012	-48.80	313	0.00	2000	
Cd	111	1	No Gas	-0.001	-0.001	-161.92	7	-0.02	2000	
Sr	88	1	No Gas	0.026	0.026	28.01	1790	0.00	2000	
Mo	95	1	No Gas	0.029	0.029	31.51	183	0.02	2000	
Sn	118	1	No Gas	0.073	0.073	38.23	2240	0.00	2000	
Sb	121	1	No Gas	0.004	0.004	10.40	1157	0.00	2000	
Ba	137	1	No Gas	0.020	0.020	51.52	287	0.01	2000	
Tl	205	1	No Gas	-0.006	-0.006	-32.54	540	0.00	2000	
Tl	203	1	No Gas	-0.003	-0.003	-143.19	243	0.00	2000	
Pb	208	1	No Gas	-0.002	-0.002	-54.86	1640	0.00	2000	
U	238	1	No Gas	-0.001	-0.001	-52.01	73	0.00	2000	
Ca	43	2	He	5.893	5.893	231.69	37	16.07	200000	
Sb	121	2	He	-0.005	-0.005	-302.30	537	0.00	2000	
Ti	47	2	He	0.000	0.000	#DIV/0!	0	#DIV/0!	2000	
Cu	63	1	No Gas	0.030	0.030	16.74	2247	0.00	2000	
Zn	66	1	No Gas	0.235	0.235	22.34	1767	0.01	2000	
Se	82	1	No Gas	0.026	0.026	694.44	-56	-0.05	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	995685	2.52	974206	102.20	70	120	
Ge	72	2	He	555280	0.94	536534	103.49	70	120	
Ge	72	1	No Gas	1930806	1.40	1897028	101.78	70	120	
In	115	1	No Gas	2545634	0.84	2503440	101.69	70	120	

Sample Report

Bi	209	1	No Gas	3041254	0.60	2946615	103.21	70	120	

Sample Report

Sample Table

Sample Name	LCS-167071
Data File Name	028SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:35:43-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 167071
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.274	0.274	33.05	64057	0.00	2000	
Be	9	1	No Gas	51.016	51.016	2.08	161847	0.03	2000	
V	51	2	He	53.360	53.360	1.38	235843	0.02	2000	
Cr	52	2	He	52.392	52.392	2.08	271589	0.02	2000	
Fe	56	2	He	5311.259	5311.259	2.60	25088238	0.02	200000	
Se	78	2	He	53.946	53.946	2.07	3440	1.57	2000	
As	75	2	He	50.531	50.531	0.88	35834	0.14	2000	
Ca	44	2	He	5151.679	5151.679	2.29	135509	3.80	200000	
Na	23	2	He	5329.330	5329.330	2.95	4310348	0.12	200000	
Mg	24	2	He	5343.137	5343.137	2.19	2512301	0.21	200000	
K	39	2	He	5425.316	5425.316	2.05	2622186	0.21	200000	
Mn	55	2	He	52.587	52.587	1.45	196231	0.03	2000	
Co	59	2	He	52.526	52.526	1.20	411128	0.01	2000	
Ni	60	2	He	54.723	54.723	0.87	104109	0.05	2000	
Cu	63	2	He	54.527	54.527	0.30	279512	0.02	2000	
Zn	66	2	He	55.436	55.436	1.57	55654	0.10	2000	
Al	27	2	He	117.703	117.703	2.84	32010	0.37	2000	
B	11	1	No Gas	-0.134	-0.134	-197.19	16031	0.00	2000	
Al	27	1	No Gas	118.652	118.652	3.49	1412367	0.01	2000	
Si	28	1	No Gas	91.337	91.337	5.47	889630	0.01	2000	
Ag	107	1	No Gas	52.777	52.777	0.40	744293	0.01	2000	
Cd	111	1	No Gas	53.554	53.554	0.25	153144	0.03	2000	
Sr	88	1	No Gas	0.056	0.056	25.48	2544	0.00	2000	
Mo	95	1	No Gas	52.195	52.195	0.58	266767	0.02	2000	
Sn	118	1	No Gas	-0.012	-0.012	-134.15	1493	0.00	2000	
Sb	121	1	No Gas	50.884	50.884	3.04	660819	0.01	2000	
Ba	137	1	No Gas	52.420	52.420	0.62	229880	0.02	2000	
Tl	205	1	No Gas	52.733	52.733	2.25	1855601	0.00	2000	
Tl	203	1	No Gas	49.621	49.621	2.06	731864	0.01	2000	
Pb	208	1	No Gas	51.389	51.389	1.33	2518471	0.00	2000	
U	238	1	No Gas	-0.001	-0.001	-27.89	50	0.00	2000	
Ca	43	2	He	5388.810	5388.810	4.41	8249	65.32	200000	
Sb	121	2	He	51.695	51.695	1.01	301517	0.02	2000	
Ti	47	2	He	49.899	49.899	2.69	8056	0.62	2000	
Cu	63	1	No Gas	52.733	52.733	2.81	503007	0.01	2000	
Zn	66	1	No Gas	55.454	55.454	4.15	145271	0.04	2000	
Se	82	1	No Gas	52.308	52.308	1.86	8086	0.65	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	995808	1.73	974206	102.22	70	120	
Ge	72	2	He	546619	1.49	536534	101.88	70	120	
Ge	72	1	No Gas	1950727	3.19	1897028	102.83	70	120	
In	115	1	No Gas	2581021	1.25	2503440	103.10	70	120	

Sample Report

Bi	209	1	No Gas	3076052	1.79	2946615	104.39	70	120	

Sample Report

Sample Table

Sample Name	HS21060495-07SD
Data File Name	030SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:39:38-05:00
Sample Type	Sample
Dilution	5
Comment	DOD TW 167071
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.455	7.274	3.42	80033	0.00	2000	
Be	9	1	No Gas	0.015	0.075	30.51	65	0.02	2000	
V	51	2	He	1.894	9.468	2.29	15510	0.01	2000	
Cr	52	2	He	4.832	24.161	1.85	26459	0.02	2000	
Fe	56	2	He	266.438	1332.190	3.72	1282727	0.02	200000	
Se	78	2	He	0.058	0.292	216.34	53	0.11	2000	
As	75	2	He	0.158	0.789	31.28	401	0.04	2000	
Ca	44	2	He	8685.949	43429.744	1.19	231536	3.75	200000	
Na	23	2	He	8791.579	43957.897	2.21	7152345	0.12	200000	
Mg	24	2	He	2336.123	11680.617	1.26	1115240	0.21	200000	
K	39	2	He	118.835	594.175	3.25	104357	0.11	200000	
Mn	55	2	He	50.412	252.059	1.37	190961	0.03	2000	
Co	59	2	He	2.254	11.271	1.09	17982	0.01	2000	
Ni	60	2	He	89.691	448.457	0.74	173049	0.05	2000	
Cu	63	2	He	0.869	4.343	5.99	5234	0.02	2000	
Zn	66	2	He	2.244	11.222	8.29	2677	0.08	2000	
Al	27	2	He	273.193	1365.967	6.01	74461	0.37	2000	
B	11	1	No Gas	1.337	6.684	15.08	18926	0.01	2000	
Al	27	1	No Gas	368.511	1842.553	32.54	4334729	0.01	2000	
Si	28	1	No Gas	3679.616	18398.079	10.99	20163826	0.02	2000	>LDR
Ag	107	1	No Gas	-0.013	-0.064	-30.58	303	0.00	2000	
Cd	111	1	No Gas	0.056	0.282	17.50	173	0.03	2000	
Sr	88	1	No Gas	88.474	442.372	0.57	2183009	0.00	2000	
Mo	95	1	No Gas	0.337	1.685	2.74	1773	0.02	2000	
Sn	118	1	No Gas	0.045	0.224	34.27	2030	0.00	2000	
Sb	121	1	No Gas	0.044	0.221	18.43	1687	0.00	2000	
Ba	137	1	No Gas	81.087	405.435	1.89	358042	0.02	2000	
Tl	205	1	No Gas	0.001	0.007	119.30	790	0.00	2000	
Tl	203	1	No Gas	0.002	0.011	213.75	323	0.00	2000	
Pb	208	1	No Gas	0.086	0.432	2.83	5967	0.00	2000	
U	238	1	No Gas	0.169	0.845	4.25	9204	0.00	2000	
Ca	43	2	He	8786.598	43932.992	2.08	13627	64.48	200000	
Sb	121	2	He	0.046	0.230	28.39	837	0.01	2000	
Ti	47	2	He	8.244	41.220	44.58	1351	0.61	2000	
Cu	63	1	No Gas	0.894	4.470	4.33	10498	0.01	2000	
Zn	66	1	No Gas	2.201	11.006	2.70	6912	0.03	2000	
Se	82	1	No Gas	0.436	2.180	164.54	7	6.26	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1001696	0.66	974206	102.82	70	120	
Ge	72	2	He	554756	0.41	536534	103.40	70	120	
Ge	72	1	No Gas	1953977	0.23	1897028	103.00	70	120	
In	115	1	No Gas	2600063	1.98	2503440	103.86	70	120	

Sample Report

Bi	209	1	No Gas	3068119	0.54	2946615	104.12	70	120	

Sample Report

Sample Table

Sample Name	HS21060495-07MS
Data File Name	031SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:41:37-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 167071
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	6.695	6.695	1.38	147079	0.00	2000	
Be	9	1	No Gas	50.573	50.573	1.04	159139	0.03	2000	
V	51	2	He	54.228	54.228	0.76	238887	0.02	2000	
Cr	52	2	He	75.579	75.579	1.53	390205	0.02	2000	
Fe	56	2	He	6391.609	6391.609	0.94	30107922	0.02	200000	
Se	78	2	He	52.506	52.506	2.93	3341	1.57	2000	
As	75	2	He	50.387	50.387	1.35	35630	0.14	2000	
Ca	44	2	He	50411.445	50411.445	0.35	1317580	3.83	200000	
Na	23	2	He	48142.914	48142.914	2.05	38025700	0.13	200000	
Mg	24	2	He	16722.989	16722.989	1.43	7840510	0.21	200000	
K	39	2	He	6064.831	6064.831	1.47	2917716	0.21	200000	
Mn	55	2	He	311.239	311.239	1.11	1156513	0.03	2000	
Co	59	2	He	61.795	61.795	0.19	482299	0.01	2000	
Ni	60	2	He	490.438	490.438	0.86	928614	0.05	2000	
Cu	63	2	He	55.973	55.973	1.36	286058	0.02	2000	
Zn	66	2	He	62.620	62.620	0.99	62638	0.10	2000	
Al	27	2	He	1729.373	1729.373	3.64	459182	0.38	2000	
B	11	1	No Gas	8.880	8.880	4.57	32795	0.03	2000	
Al	27	1	No Gas	1648.430	1648.430	5.58	18880863	0.01	2000	
Si	28	1	No Gas	18219.978	18219.978	2.47	96206499	0.02	2000	>LDR
Ag	107	1	No Gas	51.100	51.100	0.24	706012	0.01	2000	
Cd	111	1	No Gas	52.762	52.762	0.63	147804	0.04	2000	
Sr	88	1	No Gas	446.041	446.041	4.25	10696284	0.00	2000	
Mo	95	1	No Gas	53.226	53.226	1.25	266489	0.02	2000	
Sn	118	1	No Gas	0.125	0.125	10.79	2687	0.00	2000	
Sb	121	1	No Gas	50.293	50.293	1.60	640761	0.01	2000	
Ba	137	1	No Gas	484.367	484.367	1.99	2079130	0.02	2000	
Tl	205	1	No Gas	52.883	52.883	2.47	1789398	0.00	2000	
Tl	203	1	No Gas	49.606	49.606	2.13	703502	0.01	2000	
Pb	208	1	No Gas	51.168	51.168	1.57	2411051	0.00	2000	
U	238	1	No Gas	0.852	0.852	1.08	44287	0.00	2000	
Ca	43	2	He	49087.942	49087.942	3.02	74665	65.74	200000	
Sb	121	2	He	50.436	50.436	1.57	293339	0.02	2000	
Ti	47	2	He	80.128	80.128	9.84	12897	0.62	2000	
Cu	63	1	No Gas	54.607	54.607	1.63	510890	0.01	2000	
Zn	66	1	No Gas	63.175	63.175	1.49	162235	0.04	2000	
Se	82	1	No Gas	52.590	52.590	1.28	7973	0.66	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	987614	1.99	974206	101.38	70	120	
Ge	72	2	He	545016	0.62	536534	101.58	70	120	
Ge	72	1	No Gas	1912741	1.35	1897028	100.83	70	120	
In	115	1	No Gas	2528451	0.87	2503440	101.00	70	120	

Sample Report

Bi	209	1	No Gas	2957637	1.61	2946615	100.37	70	120	

Sample Report

Sample Table

Sample Name	HS21060495-07MSD
Data File Name	032SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:43:34-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 167071
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	6.778	6.778	4.77	148132	0.00	2000	
Be	9	1	No Gas	50.375	50.375	2.50	158504	0.03	2000	
V	51	2	He	53.909	53.909	0.84	236267	0.02	2000	
Cr	52	2	He	74.041	74.041	1.67	380263	0.02	2000	
Fe	56	2	He	6359.558	6359.558	0.69	29799142	0.02	200000	
Se	78	2	He	52.160	52.160	2.03	3302	1.58	2000	
As	75	2	He	50.902	50.902	1.00	35802	0.14	2000	
Ca	44	2	He	50111.369	50111.369	2.12	1302826	3.85	200000	
Na	23	2	He	47519.177	47519.177	0.76	37338118	0.13	200000	
Mg	24	2	He	16481.812	16481.812	3.61	7686004	0.21	200000	
K	39	2	He	5863.077	5863.077	0.45	2807379	0.21	200000	
Mn	55	2	He	312.436	312.436	2.37	1154740	0.03	2000	
Co	59	2	He	61.580	61.580	0.75	478072	0.01	2000	
Ni	60	2	He	491.263	491.263	0.33	925284	0.05	2000	
Cu	63	2	He	55.661	55.661	0.47	282977	0.02	2000	
Zn	66	2	He	62.702	62.702	0.98	62390	0.10	2000	
Al	27	2	He	1535.021	1535.021	2.59	405527	0.38	2000	
B	11	1	No Gas	8.792	8.792	6.15	32626	0.03	2000	
Al	27	1	No Gas	1572.262	1572.262	14.77	17986559	0.01	2000	
Si	28	1	No Gas	17557.413	17557.413	2.21	92494862	0.02	2000	>LDR
Ag	107	1	No Gas	51.447	51.447	1.34	701804	0.01	2000	
Cd	111	1	No Gas	53.267	53.267	1.48	147332	0.04	2000	
Sr	88	1	No Gas	435.520	435.520	1.45	10313785	0.00	2000	
Mo	95	1	No Gas	53.755	53.755	0.79	265760	0.02	2000	
Sn	118	1	No Gas	0.088	0.088	31.50	2334	0.00	2000	
Sb	121	1	No Gas	49.777	49.777	1.19	632877	0.01	2000	
Ba	137	1	No Gas	488.275	488.275	0.37	2069652	0.02	2000	
Tl	205	1	No Gas	52.105	52.105	0.68	1758625	0.00	2000	
Tl	203	1	No Gas	49.745	49.745	1.88	703600	0.01	2000	
Pb	208	1	No Gas	51.347	51.347	1.71	2413042	0.00	2000	
U	238	1	No Gas	0.850	0.850	1.26	44093	0.00	2000	
Ca	43	2	He	49226.558	49226.558	2.69	74485	66.09	200000	
Sb	121	2	He	50.242	50.242	1.17	290671	0.02	2000	
Ti	47	2	He	100.949	100.949	26.35	16174	0.62	2000	
Cu	63	1	No Gas	54.253	54.253	0.73	506553	0.01	2000	
Zn	66	1	No Gas	62.868	62.868	0.72	161118	0.04	2000	
Se	82	1	No Gas	51.068	51.068	3.56	7723	0.66	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	987841	2.61	974206	101.40	70	120	
Ge	72	2	He	542136	0.54	536534	101.04	70	120	
Ge	72	1	No Gas	1908664	1.22	1897028	100.61	70	120	
In	115	1	No Gas	2496666	1.17	2503440	99.73	70	120	

Sample Report

Bi	209	1	No Gas	2949852	1.77	2946615	100.11	70	120	

Sample Report

Sample Table

Sample Name	HS21060495-07PDS
Data File Name	033SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:45:30-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 167071
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	6.824	6.824	3.08	147106	0.00	2000	
Be	9	1	No Gas	115.889	115.889	1.11	360627	0.03	2000	
V	51	2	He	122.340	122.340	1.10	523572	0.02	2000	
Cr	52	2	He	142.205	142.205	0.95	724364	0.02	2000	
Fe	56	2	He	13044.515	13044.515	1.23	60697197	0.02	200000	
Se	78	2	He	120.191	120.191	3.00	7491	1.60	2000	
As	75	2	He	116.853	116.853	1.26	81261	0.14	2000	
Ca	44	2	He	56009.877	56009.877	0.62	1446342	3.87	200000	
Na	23	2	He	54397.859	54397.859	1.48	42435896	0.13	200000	
Mg	24	2	He	22826.118	22826.118	1.50	10572548	0.22	200000	
K	39	2	He	12534.930	12534.930	2.38	5907927	0.21	200000	
Mn	55	2	He	377.309	377.309	1.70	1385149	0.03	2000	
Co	59	2	He	126.891	126.891	0.53	978343	0.01	2000	
Ni	60	2	He	555.457	555.457	1.27	1039088	0.05	2000	
Cu	63	2	He	122.901	122.901	0.69	619699	0.02	2000	
Zn	66	2	He	132.437	132.437	1.24	130426	0.10	2000	
Al	27	2	He	1521.459	1521.459	2.17	399266	0.38	2000	
B	11	1	No Gas	8.698	8.698	5.13	32093	0.03	2000	
Al	27	1	No Gas	1457.343	1457.343	5.14	16527172	0.01	2000	
Si	28	1	No Gas	18018.343	18018.343	4.03	94139555	0.02	2000	>LDR
Ag	107	1	No Gas	114.407	114.407	2.75	1560158	0.01	2000	
Cd	111	1	No Gas	120.675	120.675	1.87	333800	0.04	2000	
Sr	88	1	No Gas	432.434	432.434	2.66	10240965	0.00	2000	
Mo	95	1	No Gas	120.082	120.082	2.15	593637	0.02	2000	
Sn	118	1	No Gas	0.122	0.122	25.68	2627	0.00	2000	
Sb	121	1	No Gas	117.662	117.662	2.07	1482439	0.01	2000	
Ba	137	1	No Gas	541.183	541.183	1.64	2294071	0.02	2000	
Tl	205	1	No Gas	119.227	119.227	2.05	4055329	0.00	2000	
Tl	203	1	No Gas	117.331	117.331	2.24	1672525	0.01	2000	
Pb	208	1	No Gas	117.814	117.814	1.70	5579605	0.00	2000	
U	238	1	No Gas	0.841	0.841	1.57	43950	0.00	2000	
Ca	43	2	He	54860.503	54860.503	0.58	82453	66.54	200000	
Sb	121	2	He	114.071	114.071	1.86	654695	0.02	2000	
Ti	47	2	He	146.255	146.255	0.91	23263	0.63	2000	
Cu	63	1	No Gas	119.849	119.849	1.34	1107665	0.01	2000	
Zn	66	1	No Gas	130.936	130.936	0.57	331639	0.04	2000	
Se	82	1	No Gas	120.100	120.100	1.10	18100	0.66	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	976683	1.28	974206	100.25	70	120	
Ge	72	2	He	538473	1.64	536534	100.36	70	120	
Ge	72	1	No Gas	1893325	1.03	1897028	99.80	70	120	
In	115	1	No Gas	2496662	0.48	2503440	99.73	70	120	

Sample Report

Bi	209	1	No Gas	2973842	1.97	2946615	100.92	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	037_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:53:32-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.616	3.273	1440159	1.44	100	99.6	90	110	
Be	9	1	No Gas	95.997	2.705	320831	1.14	100	96.0	90	110	
V	51	2	He	102.417	0.501	457724	0.25	100	102.4	90	110	
Cr	52	2	He	100.970	0.427	536042	0.46	100	101.0	90	110	
Fe	56	2	He	10306.939	1.764	49955823	1.63	10000	103.1	90	110	
Se	78	2	He	101.944	1.399	6627	1.17	100	101.9	90	110	
As	75	2	He	101.310	0.939	73423	0.81	100	101.3	90	110	
Ca	44	2	He	10174.032	0.587	274064	0.39	10000	101.7	90	110	
Na	23	2	He	10345.383	0.806	8489722	0.49	10000	103.5	90	110	
Mg	24	2	He	10233.864	1.194	4937420	1.27	10000	102.3	90	110	
K	39	2	He	10277.948	0.726	5055001	0.66	10000	102.8	90	110	
Mn	55	2	He	102.416	0.967	391828	1.14	100	102.4	90	110	
Co	59	2	He	100.201	0.899	804682	0.98	100	100.2	90	110	
Ni	60	2	He	103.982	1.345	202775	1.25	100	104.0	90	110	
Cu	63	2	He	103.593	0.923	544163	0.74	100	103.6	90	110	
Zn	66	2	He	100.980	0.490	103684	0.68	100	101.0	90	110	
Al	27	2	He	102.117	2.348	28597	2.52	100	102.1	90	110	
B	11	1	No Gas	481.561	3.248	975772	2.02	500	96.3	90	110	
Al	27	1	No Gas	105.735	0.343	1287766	0.51	100	105.7	90	110	
Si	28	1	No Gas	516.379	3.068	3231966	1.87	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.139	2.231	1447112	0.92	100	100.1	90	110	
Cd	111	1	No Gas	99.642	2.025	292056	0.53	100	99.6	90	110	
Sr	88	1	No Gas	102.631	3.416	2576111	1.91	100	102.6	90	110	
Mo	95	1	No Gas	99.358	1.930	520495	0.43	100	99.4	90	110	
Sn	118	1	No Gas	96.659	1.857	903711	0.71	100	96.7	90	110	
Sb	121	1	No Gas	99.566	1.107	1318508	0.76	100	99.6	90	110	
Ba	137	1	No Gas	98.938	2.570	444527	1.08	100	98.9	90	110	
Tl	205	1	No Gas	102.130	2.520	3597520	0.86	100	102.1	90	110	
Tl	203	1	No Gas	99.603	2.014	1470620	0.52	100	99.6	90	110	
Pb	208	1	No Gas	99.787	2.046	4894535	0.78	100	99.8	90	110	
U	238	1	No Gas	101.308	2.355	5468449	0.66	100	101.3	90	110	
Ca	43	2	He	10041.539	2.639	15739	2.35	10000	100.4	90	110	
Sb	121	2	He	97.183	0.099	581112	0.40	100	97.2	90	110	
Ti	47	2	He	99.395	1.110	16467	1.14	100	99.4	90	110	
Cu	63	1	No Gas	100.134	0.998	972894	0.99	100	100.1	90	110	
Se	82	1	No Gas	101.408	2.717	16050	2.61	100	101.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1049230	2.22	974206	107.70	70	120	
Ge	72	2	He	560815	0.33	536534	104.53	70	120	
Ge	72	1	No Gas	1989601	0.84	1897028	104.88	70	120	
In	115	1	No Gas	2646066	1.50	2503440	105.70	70	120	
Bi	209	1	No Gas	3079922	1.72	2946615	104.52	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	038_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T11:55:27-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	010CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.314	13.7	70758	0.6	0.5	
Be	9	1	No Gas	0.007	128.9	43	73.3	0.5	
V	51	2	He	0.765	8.0	11030	1.1	2.5	
Cr	52	2	He	-0.023	-98.5	1060	10.4	2.5	
Fe	56	2	He	0.904	17.6	10294	8.5	100	
Se	78	2	He	0.156	35.0	62	6.5	2	
As	75	2	He	0.089	78.1	366	12.6	2.5	
Ca	44	2	He	0.440	1116.4	587	23.9	100	
Na	23	2	He	32.808	9.8	133705	0.9	100	
Mg	24	2	He	1.089	21.6	1013	9.9	100	
K	39	2	He	3.198	71.7	50610	0.6	100	
Mn	55	2	He	0.000	-2865.1	350	15.9	2.5	
Co	59	2	He	0.000	-1062.8	77	30.1	2.5	
Ni	60	2	He	-0.018	-91.4	197	15.5	2.5	
Cu	63	2	He	0.024	11.6	887	2.3	2	
Zn	66	2	He	0.222	37.4	657	13.8	2.5	
Al	27	2	He	-0.322	-53.8	667	8.7	5	
B	11	1	No Gas	10.950	16.8	40522	9.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	0.321	32.2	34139	2.7	5	
Si	28	1	No Gas	-2.633	-48.6	404792	0.7	10	
Ag	107	1	No Gas	-0.008	-20.0	383	5.4	2.5	
Cd	111	1	No Gas	0.001	227.0	13	43.3	1	
Sr	88	1	No Gas	0.031	28.5	2020	11.6	2.5	
Mo	95	1	No Gas	0.066	31.3	393	27.9	2.5	
Sn	118	1	No Gas	0.102	37.1	2644	13.3	5	
Sb	121	1	No Gas	0.130	18.7	2927	11.1	2.5	
Ba	137	1	No Gas	0.041	67.3	400	32.5	2.5	
Tl	205	1	No Gas	0.100	73.9	4431	62.5	1	
Tl	203	1	No Gas	0.094	56.3	1744	47.8	1	
Pb	208	1	No Gas	0.033	38.1	3507	19.7	2.5	
U	238	1	No Gas	0.015	55.2	970	49.7	2.5	
Ca	43	2	He	2.892	329.2	33	45.8	100	
Sb	121	2	He	0.089	24.5	1137	11.7	2.5	
Ti	47	2	He	0.019	173.2	3	173.2	2.5	
Cu	63	1	No Gas	0.125	15.5	3327	5.0	2.5	
Se	82	1	No Gas	0.227	244.5	-27	-338.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1090820	1.27	974206	111.97	70	120	
Ge	72	2	He	577458	1.66	536534	107.63	70	120	
Ge	72	1	No Gas	2045026	1.16	1897028	107.80	70	120	
In	115	1	No Gas	2691398	0.94	2503440	107.51	70	120	
Bi	209	1	No Gas	3179926	1.41	2946615	107.92	70	120	

Sample Report

Sample Table

Sample Name	LCS-167071
Data File Name	044SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\062321A.b
Acq Date Time	2021-06-23T12:09:01-05:00
Sample Type	Sample
Dilution	1
Comment	DOD TW 167071
ISTD Ref FileName	010CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.736	0.736	12.50	81590	0.00	2000	
Be	9	1	No Gas	49.047	49.047	0.58	181069	0.03	2000	
V	51	2	He	50.724	50.724	1.68	257143	0.02	2000	
Cr	52	2	He	49.936	49.936	1.11	296520	0.02	2000	
Fe	56	2	He	4995.596	4995.596	1.63	27025430	0.02	200000	
Se	78	2	He	54.118	54.118	1.30	3953	1.37	2000	
As	75	2	He	49.751	49.751	1.29	40406	0.12	2000	
Ca	44	2	He	5025.285	5025.285	1.96	151392	3.32	200000	
Na	23	2	He	5244.581	5244.581	1.59	4860051	0.11	200000	
Mg	24	2	He	5266.908	5266.908	2.07	2836068	0.19	200000	
K	39	2	He	5325.708	5325.708	1.27	2948911	0.18	200000	
Mn	55	2	He	50.259	50.259	1.67	214788	0.02	2000	
Co	59	2	He	49.431	49.431	0.48	443083	0.01	2000	
Ni	60	2	He	51.385	51.385	0.51	111964	0.05	2000	
Cu	63	2	He	51.771	51.771	1.84	303913	0.02	2000	
Zn	66	2	He	54.022	54.022	1.83	62119	0.09	2000	
Al	27	2	He	107.371	107.371	3.02	33511	0.32	2000	
B	11	1	No Gas	1.387	1.387	80.49	22011	0.01	2000	
Al	27	1	No Gas	108.695	108.695	2.69	1448392	0.01	2000	
Si	28	1	No Gas	110.759	110.759	4.26	1110236	0.01	2000	
Ag	107	1	No Gas	50.969	50.969	1.00	795670	0.01	2000	
Cd	111	1	No Gas	52.126	52.126	0.97	164989	0.03	2000	
Sr	88	1	No Gas	0.244	0.244	3.03	7919	0.00	2000	
Mo	95	1	No Gas	49.634	49.634	1.28	280786	0.02	2000	
Sn	118	1	No Gas	-0.035	-0.035	-17.96	1430	0.00	2000	
Sb	121	1	No Gas	49.019	49.019	1.15	711425	0.01	2000	
Ba	137	1	No Gas	50.862	50.862	1.91	246878	0.02	2000	
Tl	205	1	No Gas	49.609	49.609	1.47	1933924	0.00	2000	
Tl	203	1	No Gas	46.186	46.186	4.02	754330	0.01	2000	
Pb	208	1	No Gas	47.970	47.970	1.96	2603672	0.00	2000	
U	238	1	No Gas	-0.002	-0.002	-46.22	40	0.00	2000	
Ca	43	2	He	5108.454	5108.454	2.01	8953	57.06	200000	
Sb	121	2	He	49.009	49.009	0.34	327380	0.01	2000	
Ti	47	2	He	49.064	49.064	5.72	9070	0.54	2000	
Cu	63	1	No Gas	51.769	51.769	1.51	551806	0.01	2000	
Zn	66	1	No Gas	53.491	53.491	2.72	156650	0.03	2000	
Se	82	1	No Gas	50.528	50.528	0.75	8723	0.58	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1158503	0.65	974206	118.92	70	120	
Ge	72	2	He	625920	0.70	536534	116.66	70	120	
Ge	72	1	No Gas	2178734	1.57	1897028	114.85	70	120	
In	115	1	No Gas	2856859	0.69	2503440	114.12	70	120	

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Sample Report

Bi	209	1	No Gas	3406978	1.96	2946615	115.62	70	120	