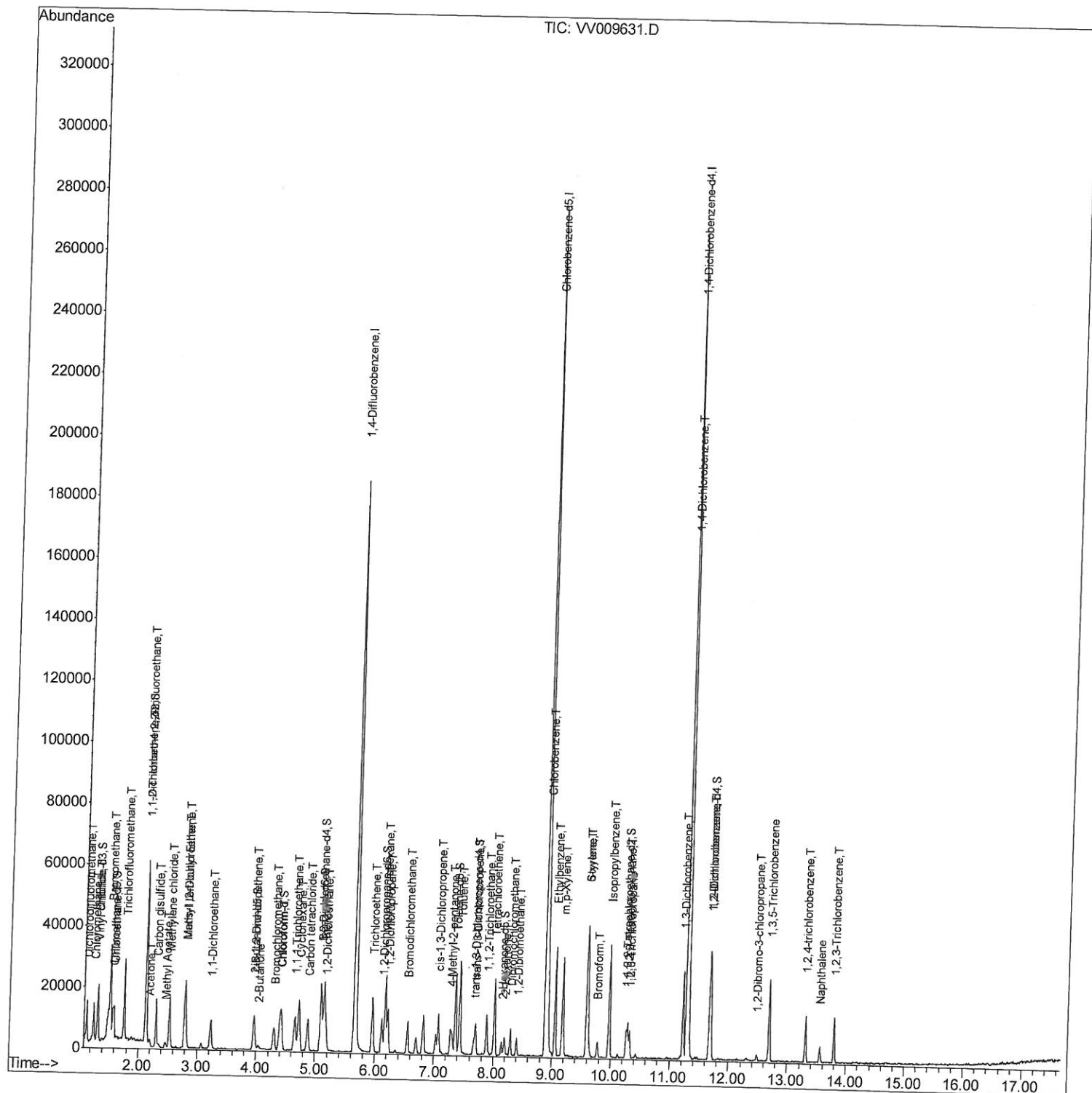


Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations APPROVED

MMDadoda
3/15/2019 7:53:44 AM



Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

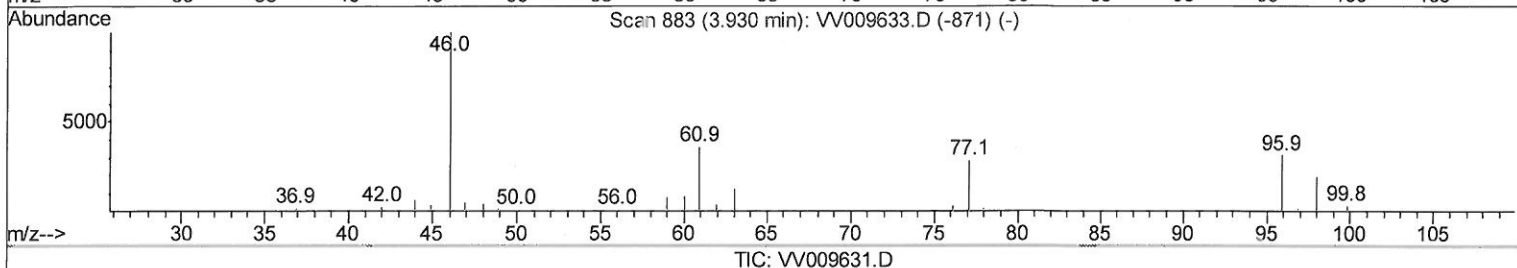
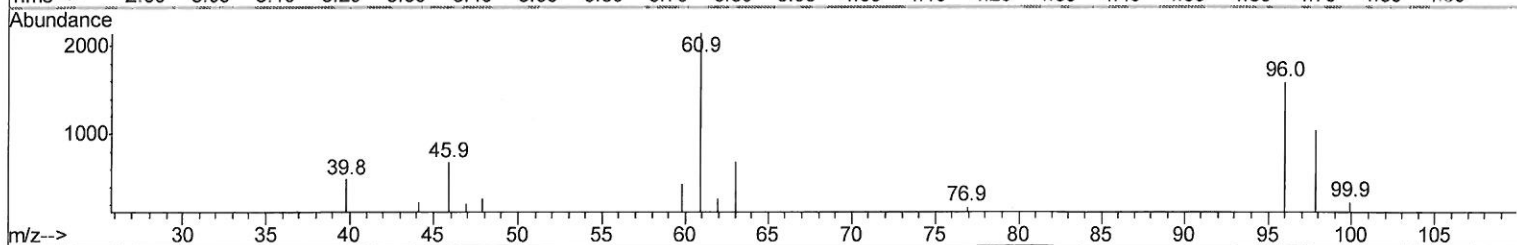
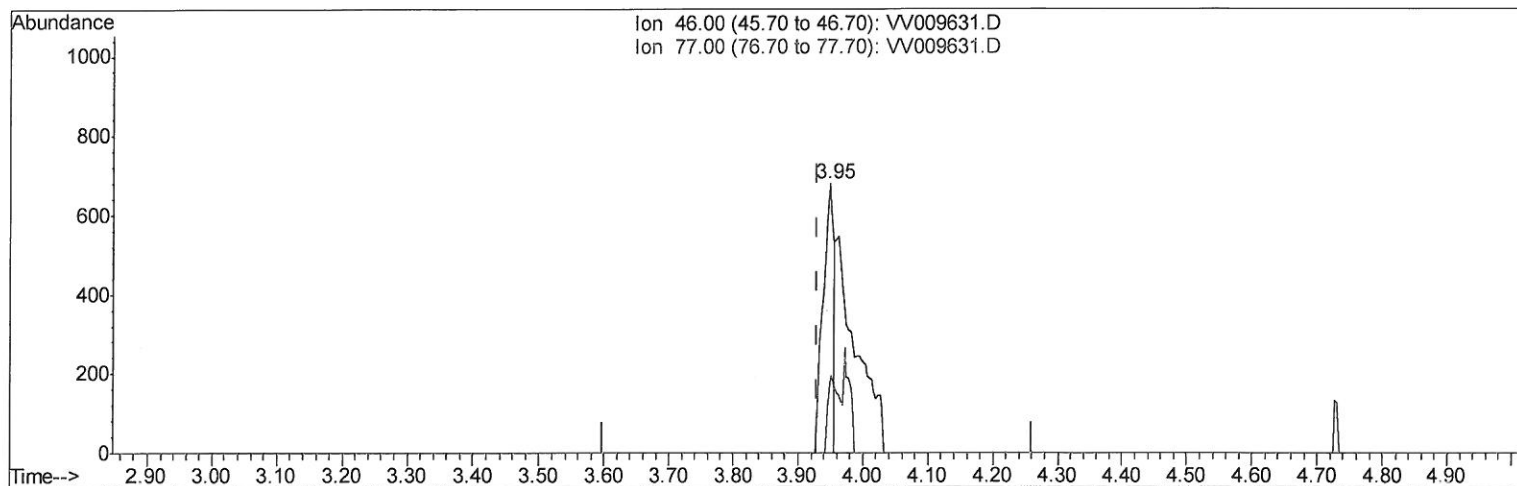
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(20) 2-Butanone-d5 (S)

3.949min (+0.019) 1.46ug/L

response 786

Ion	Exp%	Act%
46.00	100	100
77.00	27.00	29.77
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

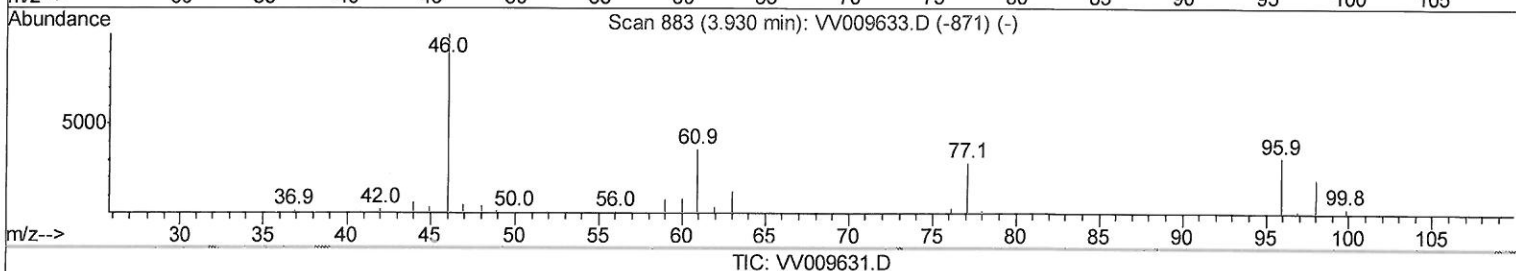
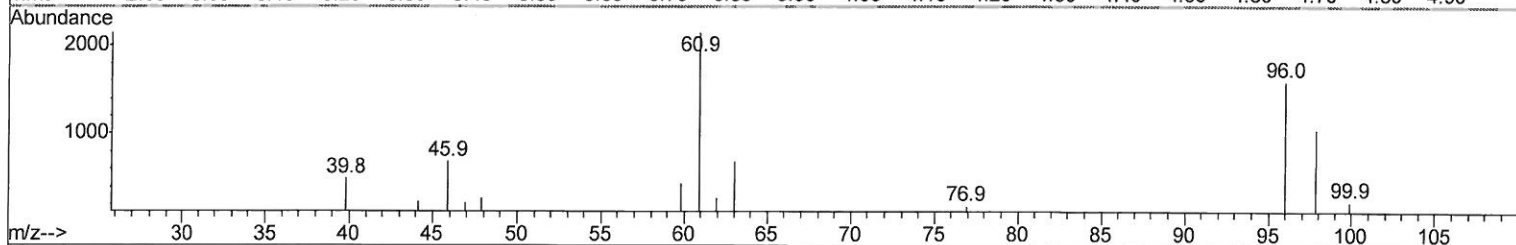
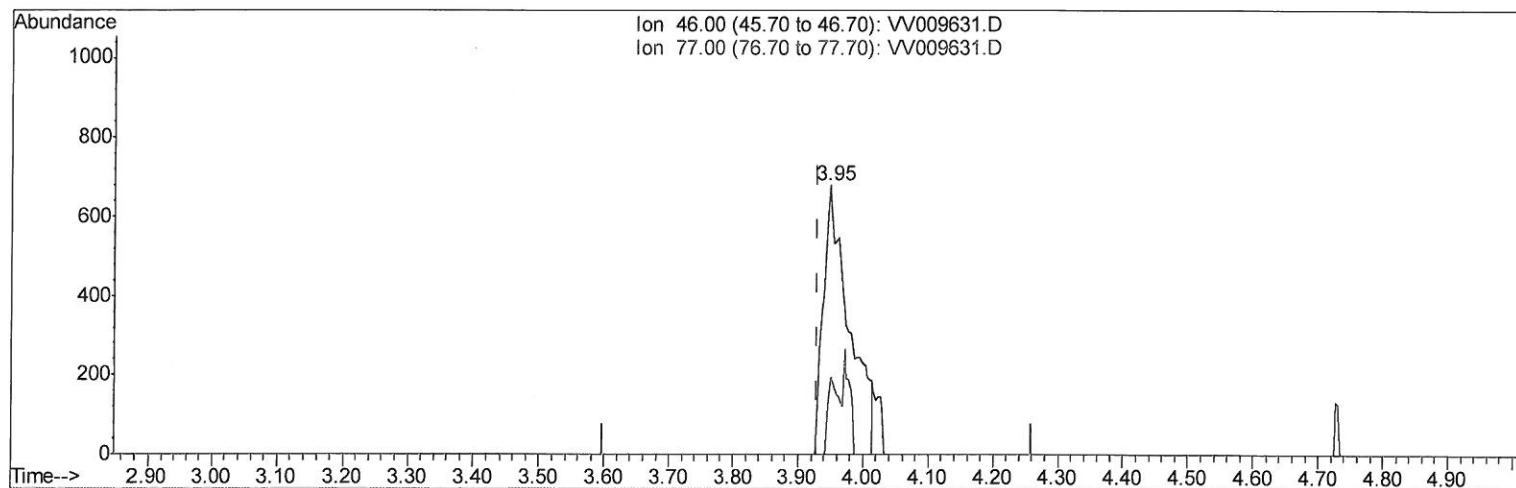
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(20) 2-Butanone-d5 (S)

3.949min (+0.019) 3.47ug/L m

response 1863

Ion	Exp%	Act%
46.00	100	100
77.00	27.00	12.56#
0.00	0.00	0.00
0.00	0.00	0.00

03/15/19 Sy

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

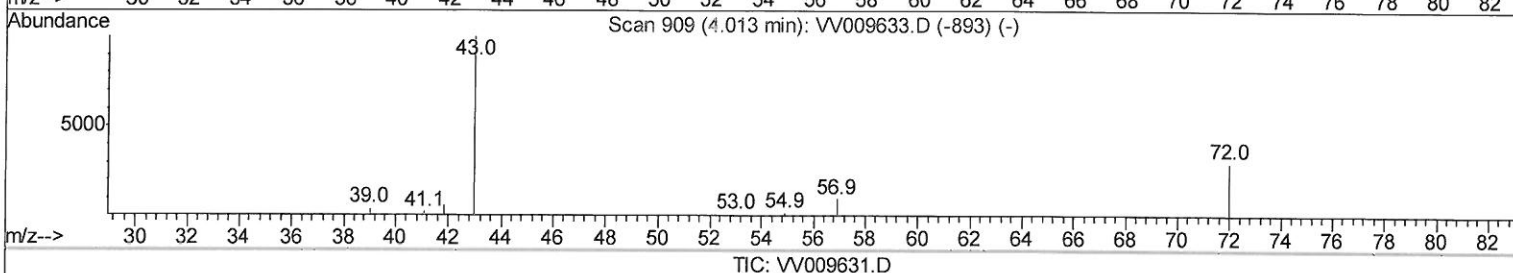
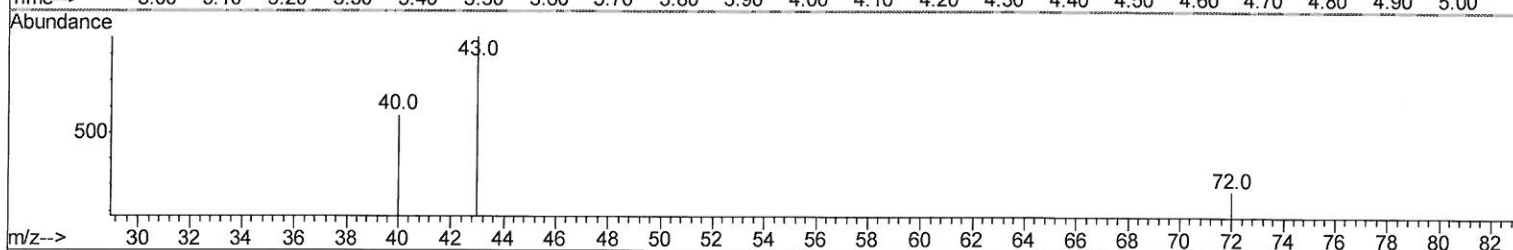
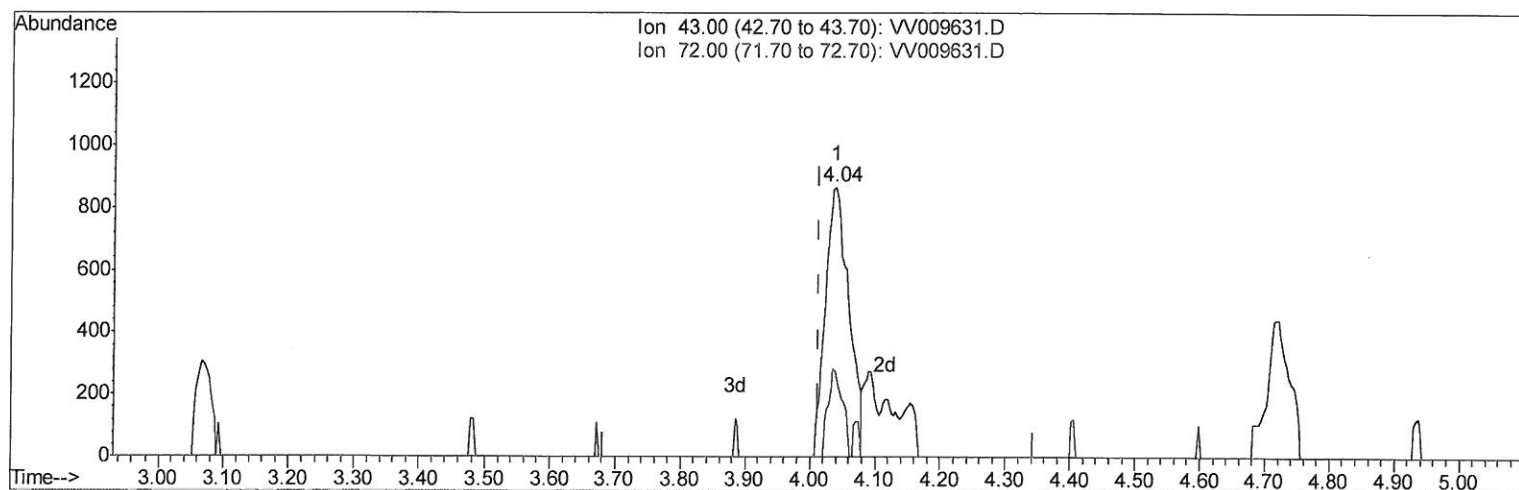
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(21) 2-Butanone

4.039min (+0.026) 2.76ug/L

response 2162

Ion	Exp%	Act%
43.00	100	100
72.00	29.00	20.44
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

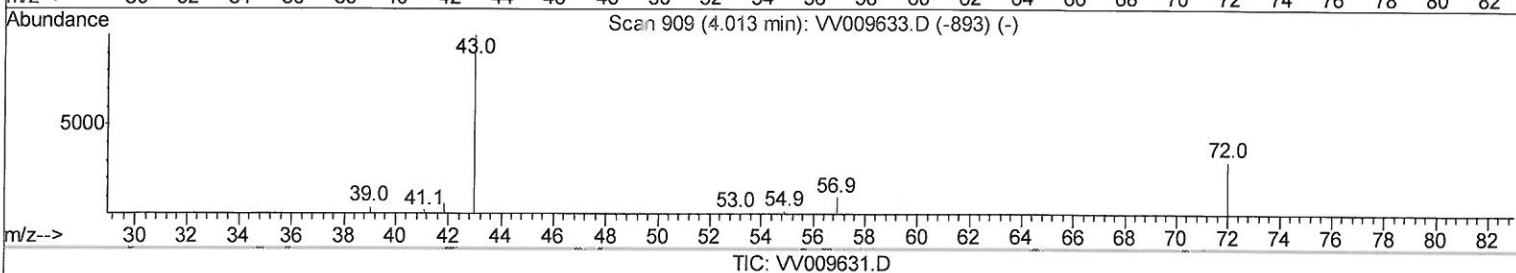
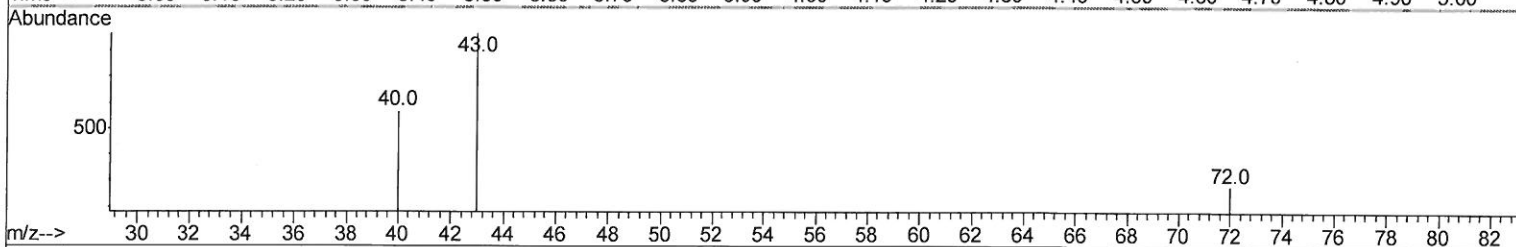
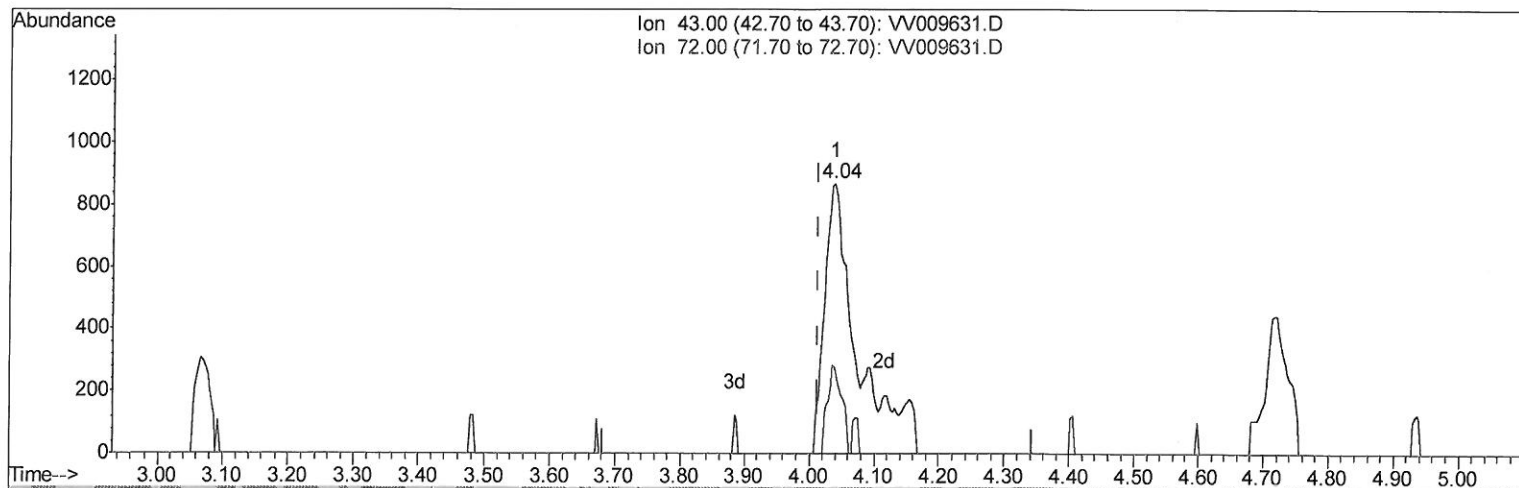
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(21) 2-Butanone

4.039min (+0.026) 3.92ug/L m

203/15/19 84

response 3068

Ion	Exp%	Act%
43.00	100	100
72.00	29.00	14.41#
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

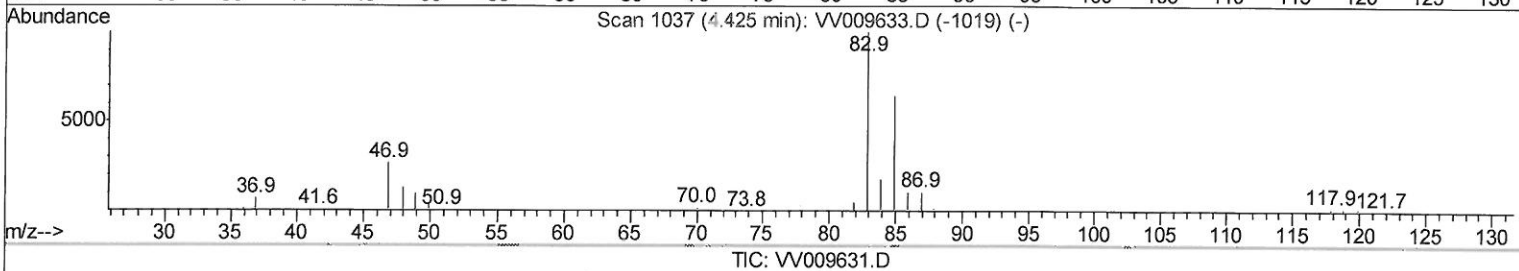
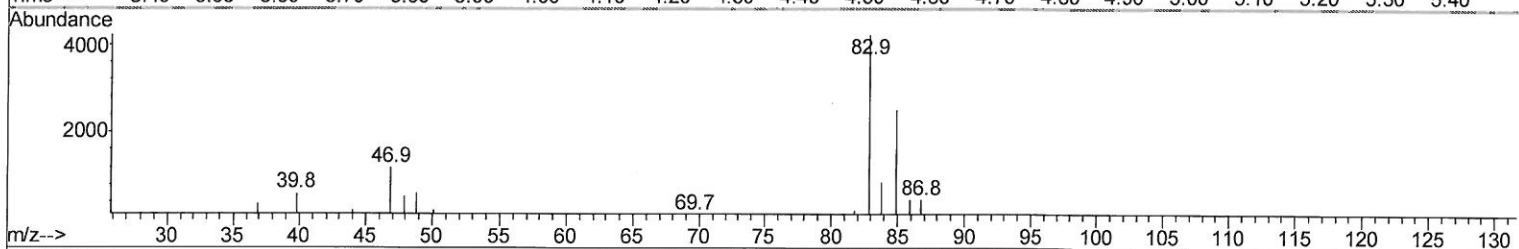
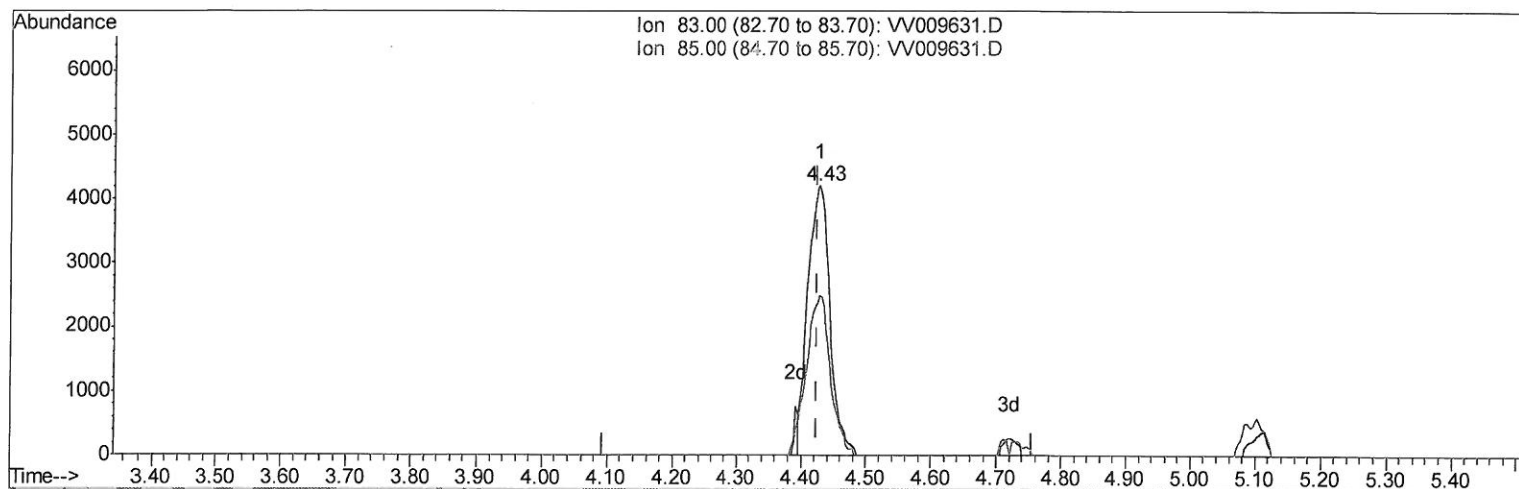
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



TIC: VV009631.D

(25) Chloroform (T)

4.428min (+0.003) 2.42ug/L

response 9932

Ion	Exp%	Act%
83.00	100	100
85.00	66.30	64.08
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

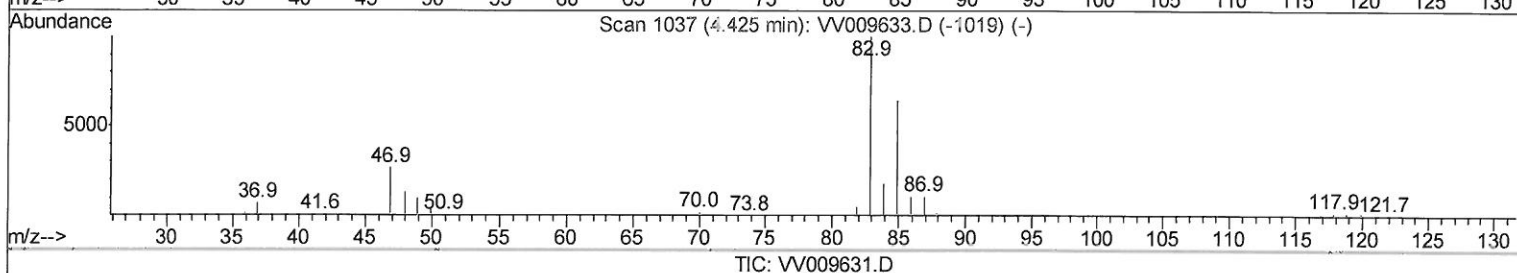
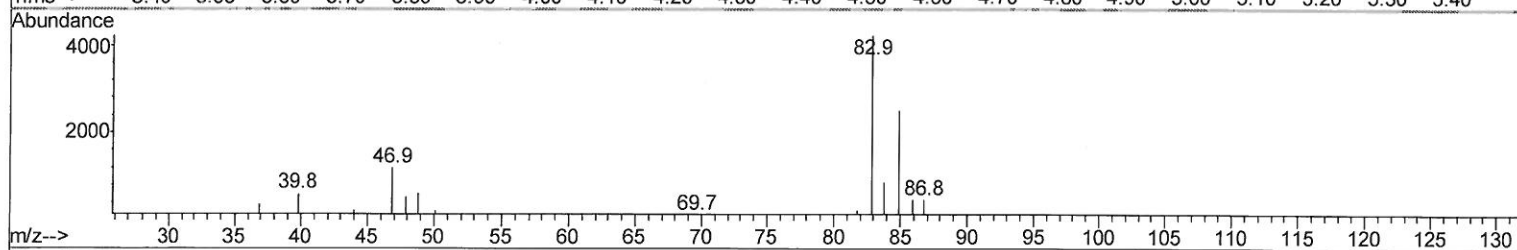
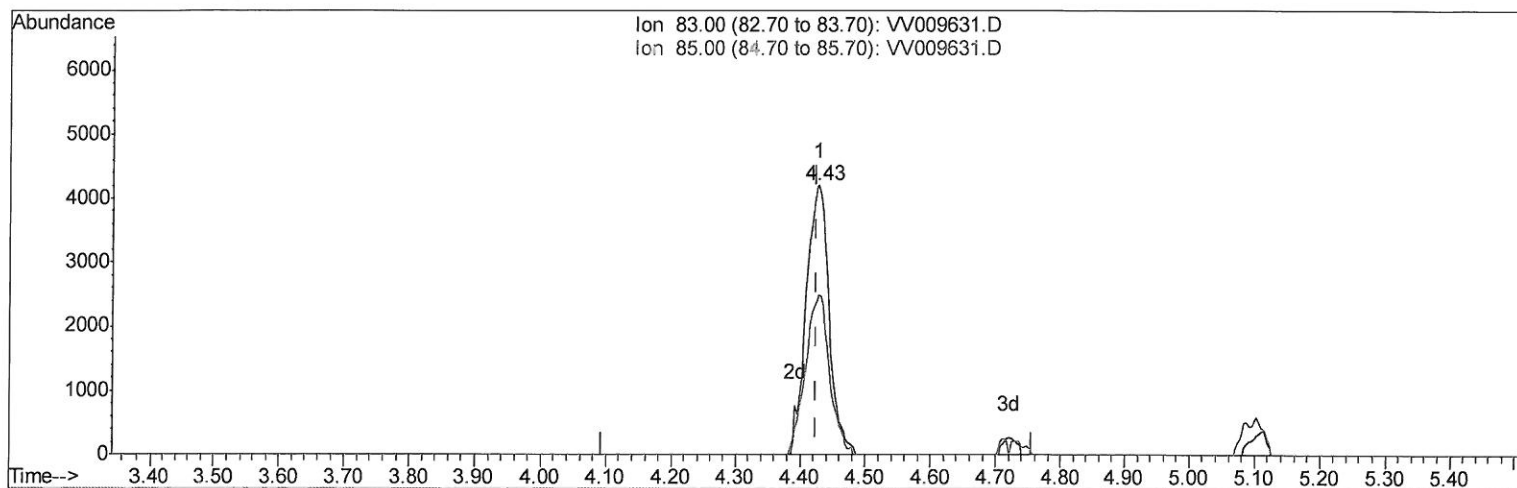
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(25) Chloroform (T)

4.428min (+0.003) 2.50ug/L m

703/15/19 SY

response 10245

Ion	Exp%	Act%
83.00	100	100
85.00	66.30	62.12
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

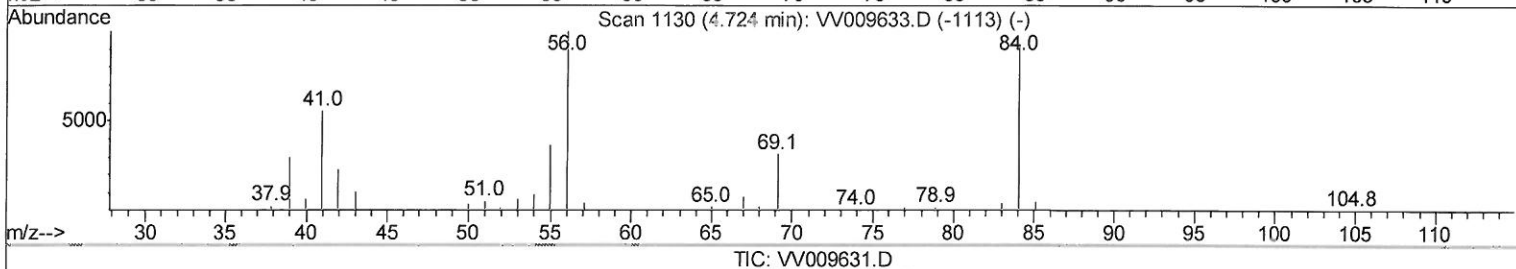
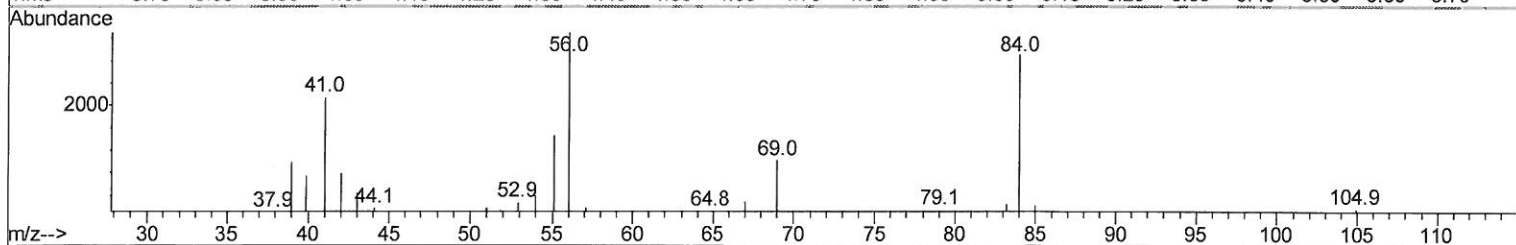
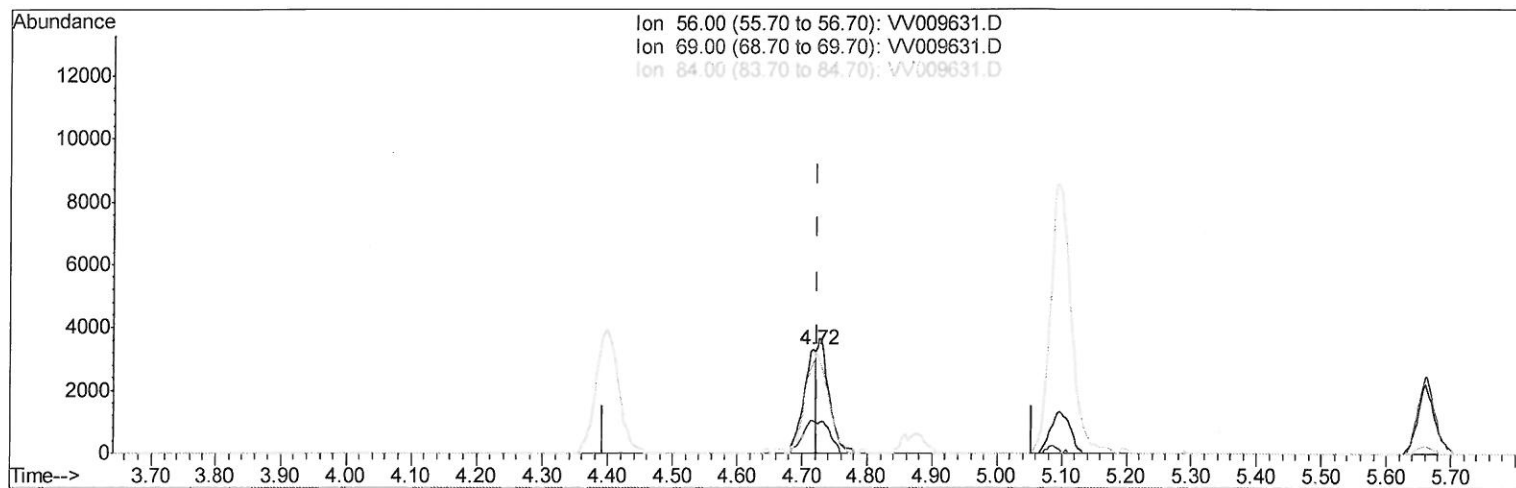
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(30) Cyclohexane (T)

4.717min (-0.007) 1.30ug/L

response 4322

Ion	Exp%	Act%
56.00	100	100
69.00	31.70	37.83
84.00	90.80	184.41#
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

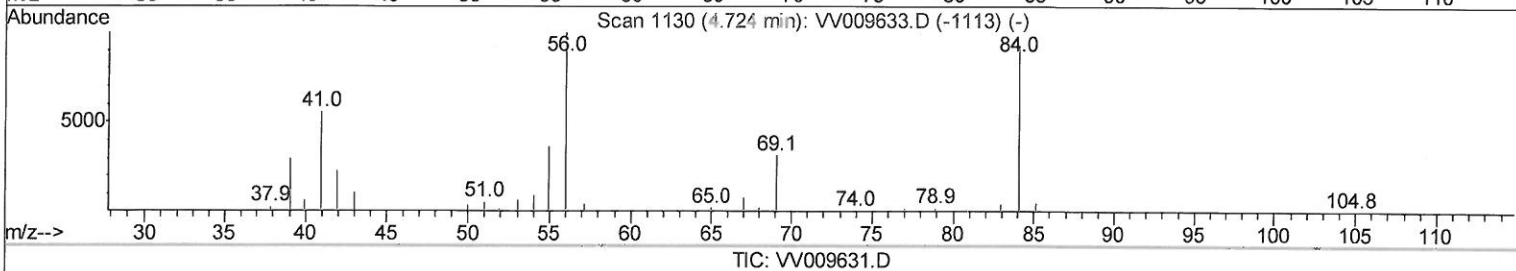
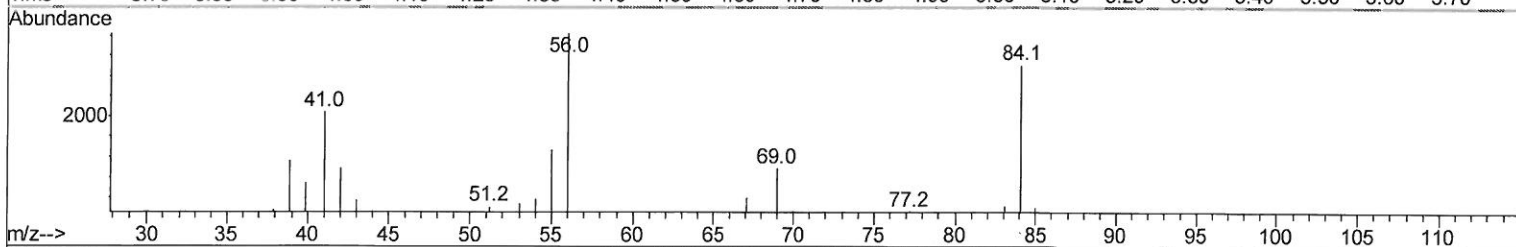
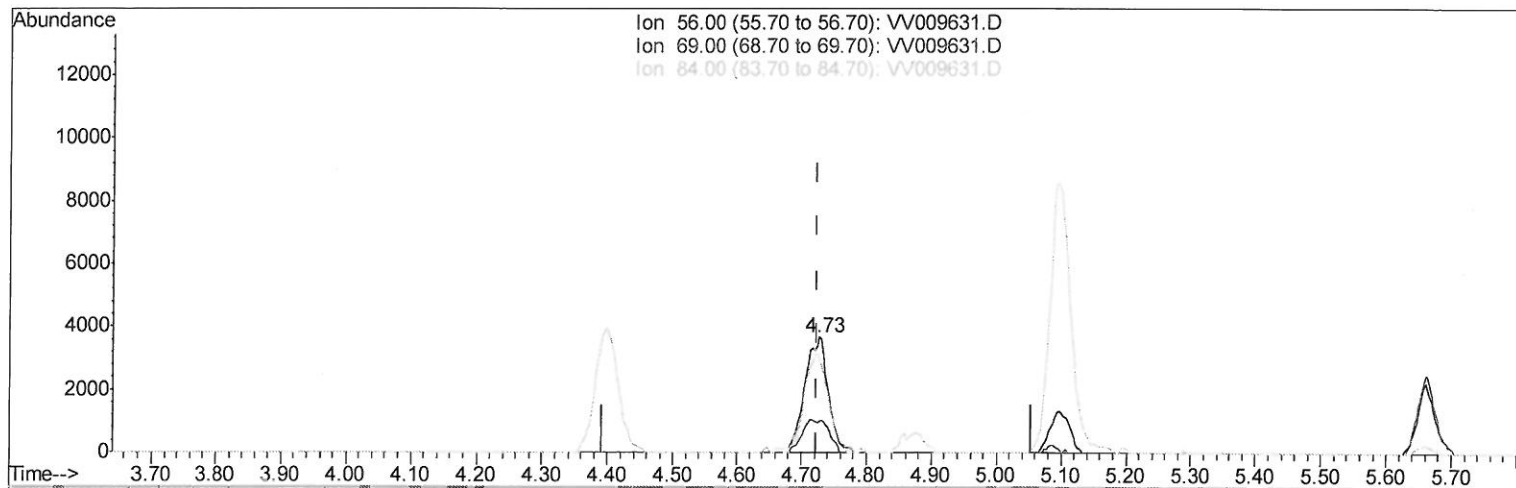
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(30) Cyclohexane (T)

4.727min (+0.003) 2.73ug/L m

> 03/15/19 Sy

response 9089

Ion	Exp%	Act%
56.00	100	100
69.00	31.70	17.99#
84.00	90.80	87.69
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

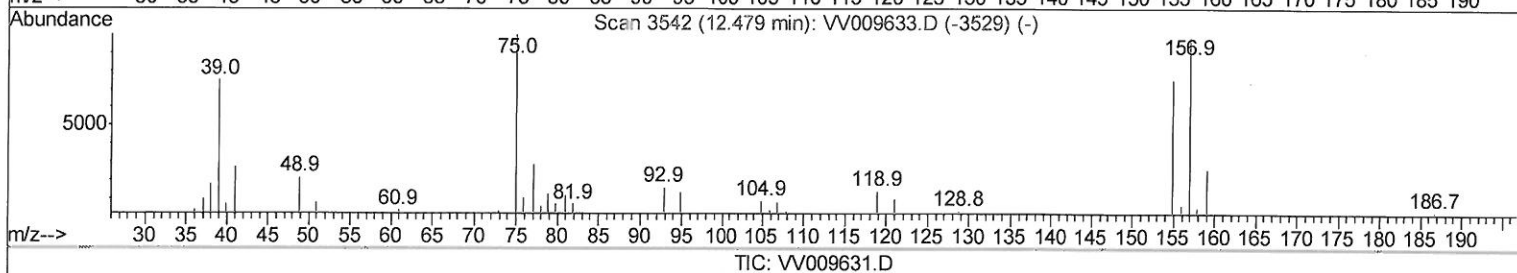
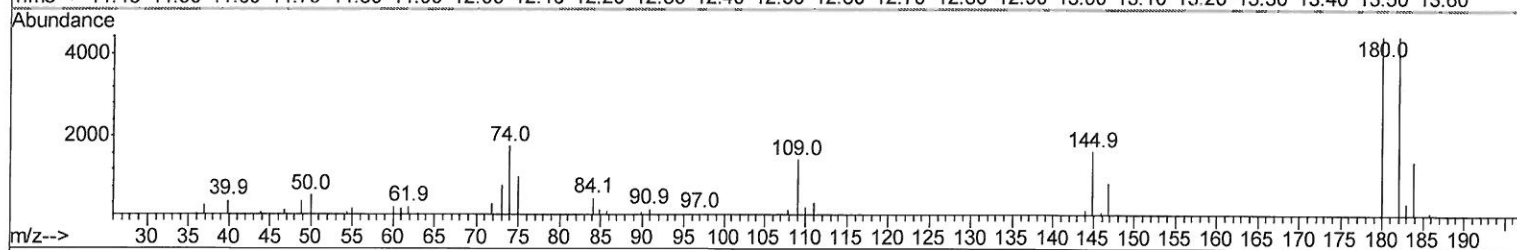
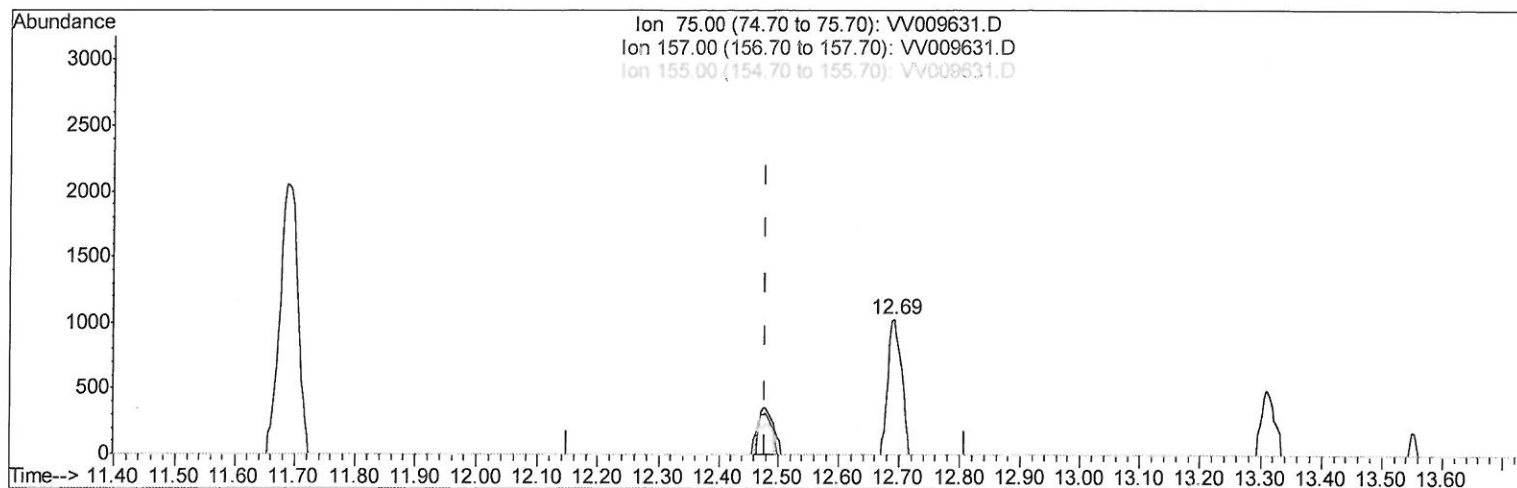
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



TIC: VV009631.D

(66) 1,2-Dibromo-3-chloropropane (T)

12.691min (+0.212) 5.23ug/L

response 1571

Ion	Exp%	Act%
75.00	100	100
157.00	98.30	0.00#
155.00	75.00	0.00#
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

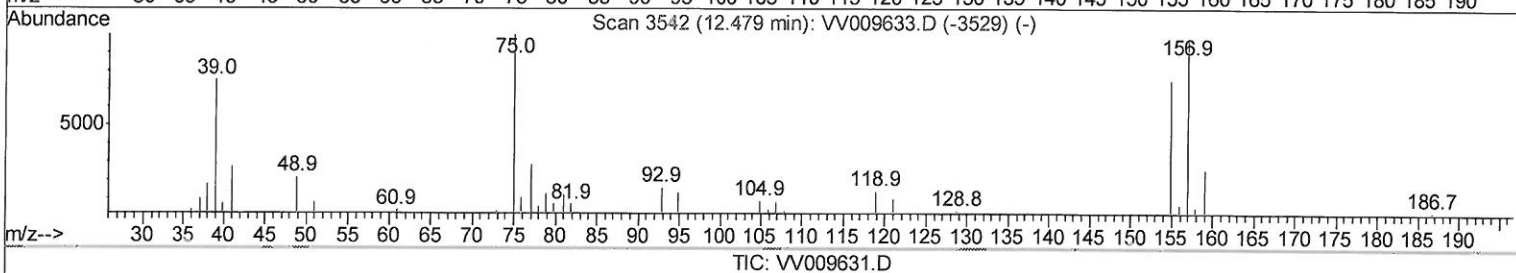
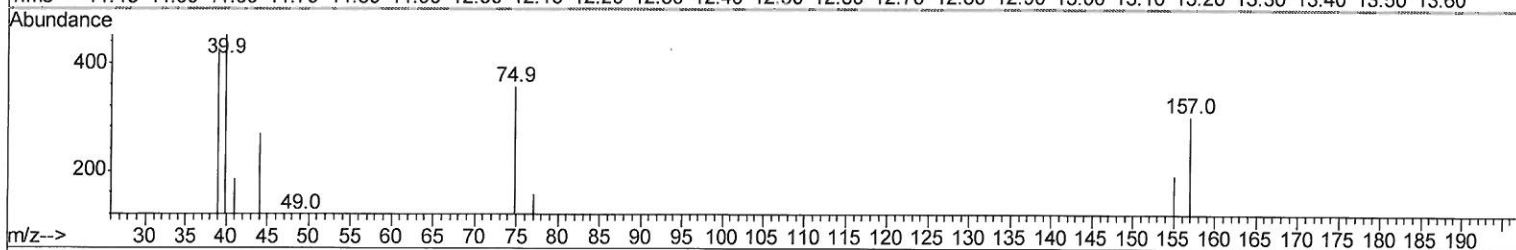
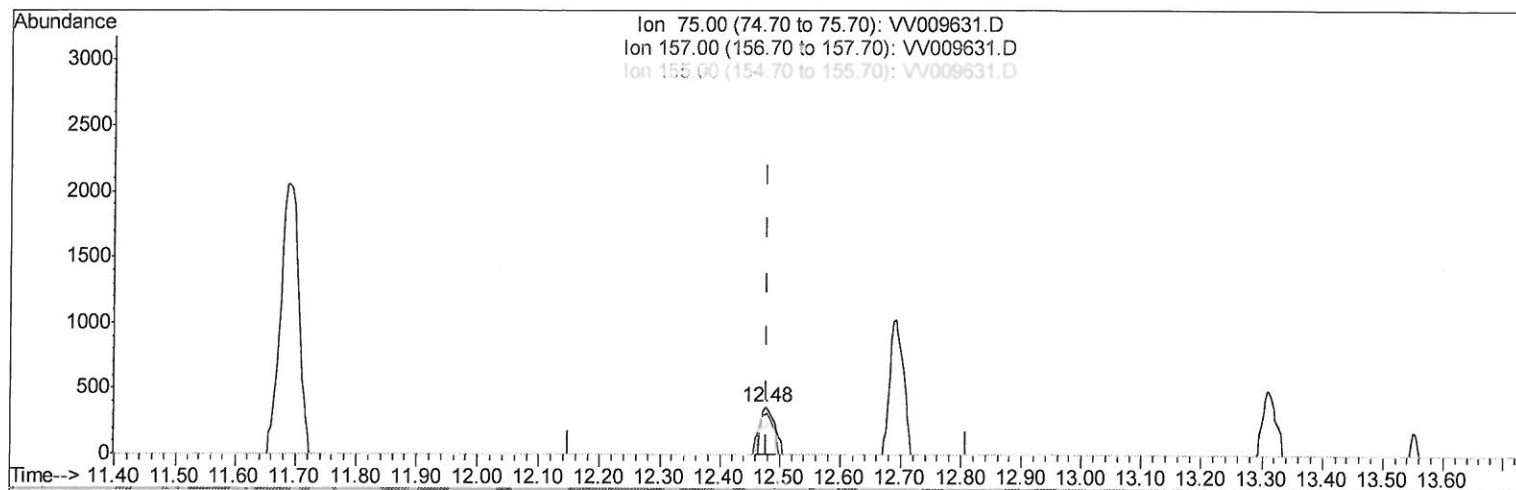
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 14:59:24 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(66) 1,2-Dibromo-3-chloropropane (T)

12.476min (-0.003) 1.95ug/L m

203/15/19 sy

response 584

Ion	Exp%	Act%
75.00	100	100
157.00	98.30	84.55
155.00	75.00	54.21#
0.00	0.00	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

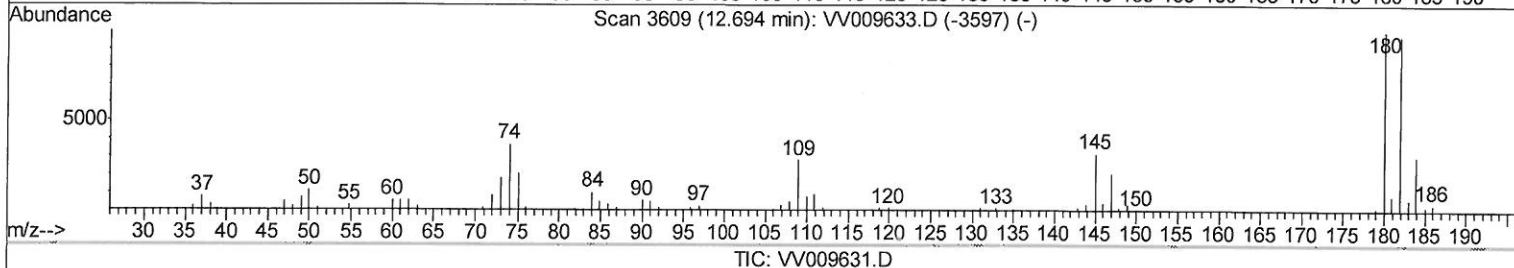
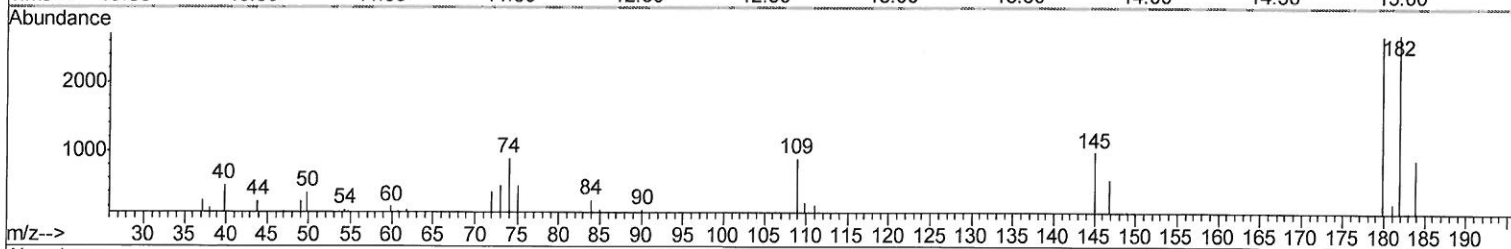
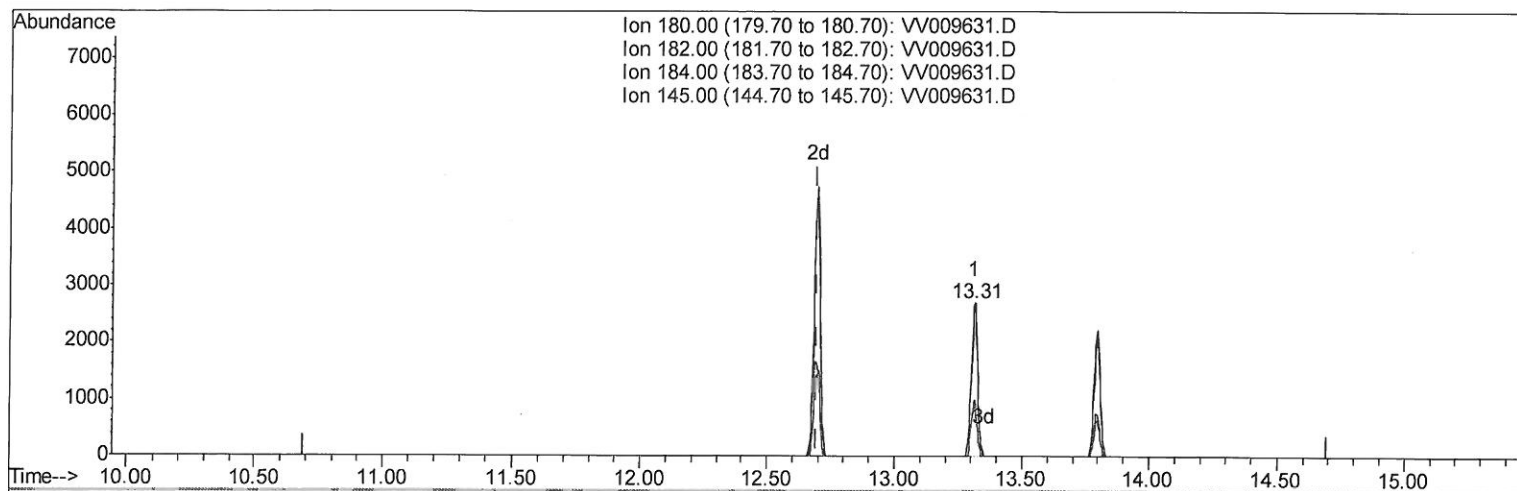
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 15:04:05 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(67) 1,3,5-Trichlorobenzene

13.312min (+0.617) 1.44ug/L

response 4314

Ion	Exp%	Act%
180.00	100	100
182.00	95.40	100.14
184.00	29.80	33.17
145.00	32.30	33.89

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (Qedit)

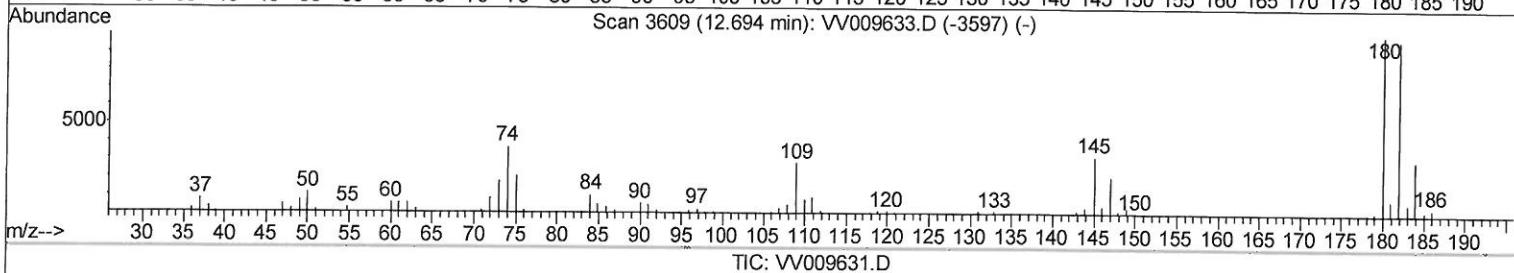
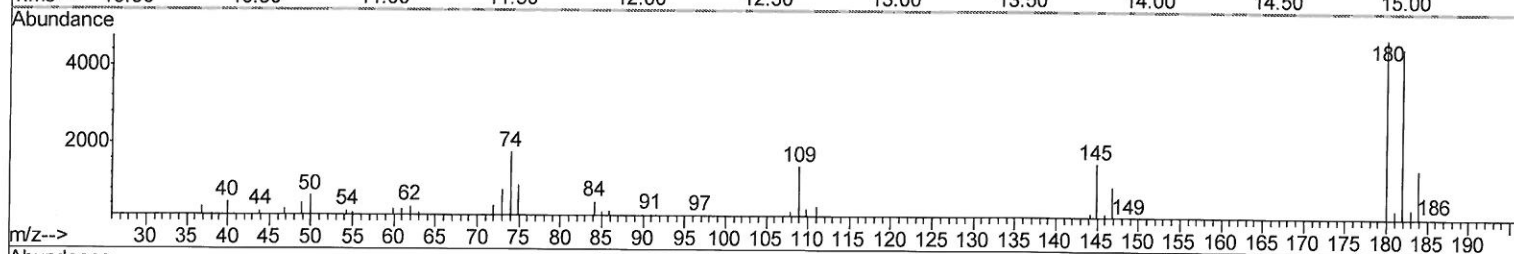
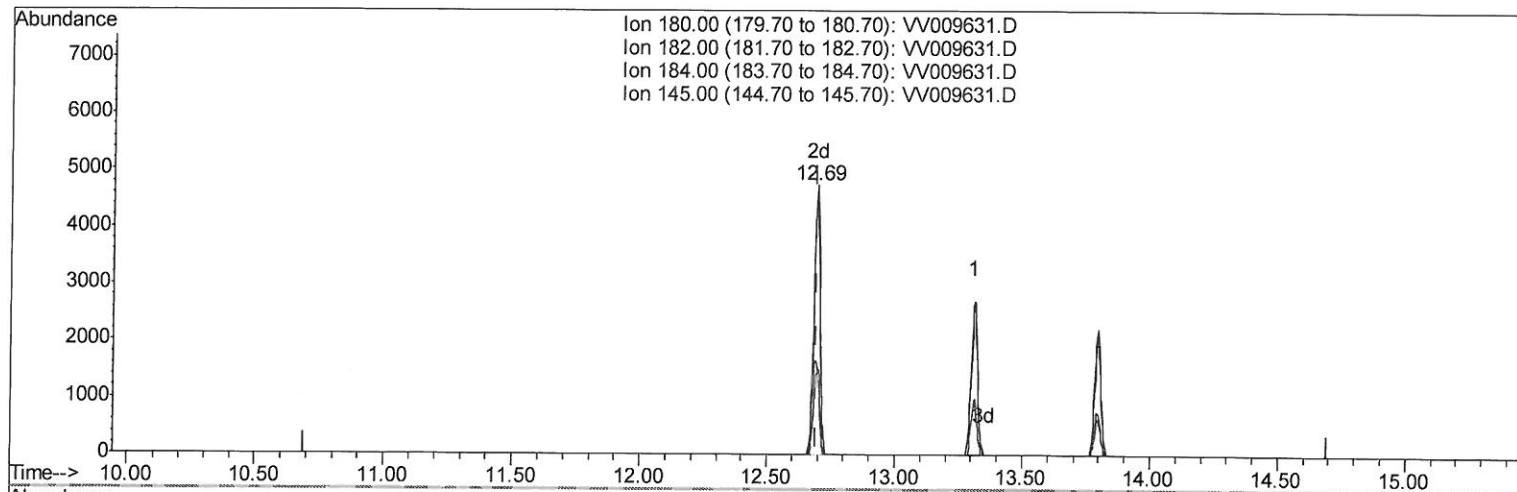
Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 13 15:04:05 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration



(67) 1,3,5-Trichlorobenzene

12.694min (-0.000) 2.54ug/L m

> 03/15/19 SY

response 7643

Ion	Exp%	Act%
180.00	100	100
182.00	95.40	56.52#
184.00	29.80	18.72#
145.00	32.30	19.13#

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (QT Reviewed)

Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA_V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
Client Sampled :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 14 07:21:09 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.66	114	157769	25.00	ug/L	0.00
28) Chlorobenzene-d5	8.90	117	147916	25.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.30	152	66065	25.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.32	65	5023	2.42	ug/L	0.00
7) Chloroethane-d5	1.57	69	4949	1.70	ug/L	0.00
10) 1,1-Dichloroethene-d2	2.13	63	14457	2.62	ug/L	0.00
20) 2-Butanone-d5	3.95	46	1863m	3.47	ug/L	0.02
24) Chloroform-d	4.40	84	9642	2.35	ug/L	0.00
26) 1,2-Dichloroethane-d4	5.08	65	5309	2.28	ug/L	0.00
29) Benzene-d6	5.09	84	19101	2.40	ug/L	0.00
33) 1,2-Dichloropropane-d6	6.12	67	5090	2.14	ug/L	0.00
37) Toluene-d8	7.36	98	17323	2.23	ug/L	0.00
38) trans-1,3-Dichloropropene-	7.67	79	2211	2.06	ug/L	0.00
39) 2-Hexanone-d5	8.14	63	1707	3.91	ug/L	0.01
48) 1,1,2,2-Tetrachloroethane-	10.26	84	4319	1.94	ug/L	0.00
61) 1,2-Dichlorobenzene-d4	11.68	152	6613	2.55	ug/L	0.00

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	1.14	85	6880	2.852 ug/L	98
3) Chloromethane	1.25	50	6137	2.804 ug/L	93
5) Vinyl chloride	1.32	62	6139	2.617 ug/L	92
6) Bromomethane	1.52	94	6944	2.482 ug/L	99
8) Chloroethane	1.59	64	4470	1.912 ug/L	100
9) Trichlorofluoromethane	1.76	101	13302	2.696 ug/L	100
11) 1,1,2-Trichloro-1,2,2-trif	2.13	101	7224	2.706 ug/L	97
12) 1,1-Dichloroethene	2.14	96	6223	2.631 ug/L	89
13) Acetone	2.19	43	2705	4.279 ug/L	97
14) Carbon disulfide	2.31	76	16431	2.786 ug/L #	92
15) Methyl Acetate	2.46	43	2313	2.445 ug/L #	82
16) Methylene chloride	2.53	84	7216	3.210 ug/L	90
17) Methyl tert-butyl Ether	2.81	73	11336	2.292 ug/L #	85
18) trans-1,2-Dichloroethene	2.79	96	5415	2.648 ug/L	98
19) 1,1-Dichloroethane	3.23	63	9237	2.584 ug/L	99
21) 2-Butanone	4.04	43	3068m	3.919 ug/L	
22) cis-1,2-Dichloroethene	3.96	96	5765	2.487 ug/L	95
23) Bromochloromethane	4.29	128	2688	2.495 ug/L	77
25) Chloroform	4.43	83	10245m	2.499 ug/L	
27) 1,2-Dichloroethane	5.18	62	6938	2.433 ug/L #	92
30) Cyclohexane	4.73	56	9089m	2.732 ug/L	
31) 1,1,1-Trichloroethane	4.65	97	9018	2.597 ug/L #	85
32) Carbon tetrachloride	4.87	117	6901	2.316 ug/L	94
34) Benzene	5.14	78	22250	2.685 ug/L	100
35) Trichloroethene	5.96	95	6219	2.684 ug/L	98
36) Methylcyclohexane	6.17	83	10442	2.683 ug/L	98
40) 1,2-Dichloropropane	6.22	63	5228	2.544 ug/L #	90
41) Bromodichloromethane	6.56	83	6606	2.355 ug/L	96
42) cis-1,3-Dichloropropene	7.07	75	7175	2.322 ug/L	98
43) 4-Methyl-2-pentanone	7.23	43	6481	4.516 ug/L #	96

03/15/19 Sy

03/15/19 Sy

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV031319\
Quantitation Report (QT Reviewed)

Data File : VV009631.D
Acq On : 13 Mar 2019 09:55
Operator : SY/MD
Sample : VSTD2.578
Misc : 5.00G/10ML/MSVOA V/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_V
Client Sample ID :
VSTD2.578

Manual Integrations
APPROVED

MMDadoda
3/15/2019 7:53:44 AM

Quant Time: Mar 14 07:21:09 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOM2VLM031319S.M
Quant Title : VOC Analysis
QLast Update : Wed Mar 13 14:55:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) Toluene	7.43	91	23434	2.499	ug/L	96
45) trans-1,3-Dichloropropene	7.70	75	5766	2.134	ug/L	98
46) 1,1,2-Trichloroethane	7.88	97	4299	2.511	ug/L	83
47) Tetrachloroethene	8.02	164	4920	2.625	ug/L	95
49) 2-Hexanone	8.19	43	3843	3.572	ug/L #	95
50) Dibromochloromethane	8.29	129	3879	1.999	ug/L	94
51) 1,2-Dibromoethane	8.40	107	3664	2.136	ug/L #	98
52) Chlorobenzene	8.93	112	15762	2.593	ug/L	99
53) Ethylbenzene	9.06	91	25334	2.434	ug/L	99
54) m,p-Xylene	9.18	106	8839	2.241	ug/L	91
55) o-xylene	9.59	106	8966	2.318	ug/L	99
56) Styrene	9.60	104	13873	2.252	ug/L	98
57) Isopropylbenzene	9.98	105	23742	2.321	ug/L	99
58) 1,1,2,2-Tetrachloroethane	10.29	83	4936	2.171	ug/L #	95
59) 1,2,3-Trichloropropane	10.32	75	3547	2.147	ug/L	98
62) Bromoform	9.77	173	2039	2.011	ug/L #	97
63) 1,3-Dichlorobenzene	11.23	146	10949	2.532	ug/L	96
64) 1,4-Dichlorobenzene	11.32	146	11750	2.702	ug/L	98
65) 1,2-Dichlorobenzene	11.69	146	9948	2.469	ug/L	97
66) 1,2-Dibromo-3-chloropropan	12.48	75	584m	1.946	ug/L	97
67) 1,3,5-Trichlorobenzene	12.69	180	7643m	2.544	ug/L	97
68) 1,2,4-trichlorobenzene	13.31	180	4314	2.003	ug/L	94
69) Naphthalene	13.55	128	4262	1.176	ug/L #	94
70) 1,2,3-Trichlorobenzene	13.80	180	3749	1.918	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

3/15/19 84