

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
 Data File : VU043964.D
 Acq On : 25 May 2021 15:44
 Operator : SY/MD
 Sample : VSTDCCC005EC
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD005144

Manual Integrations
 APPROVED

MMDadoda
 5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue May 25 07:46:23 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) 1,4-Difluorobenzene	6.260	114	234715	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.427	117	240000	5.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.819	152	134369	5.00	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	1.604	65	57917	4.43	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	88.60%
7) Chloroethane-d5	1.919	69	43047	4.57	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	91.40%
11) 1,1-Dichloroethene-d2	2.575	65	26395	4.15	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	83.00%
20) 2-Butanone-d5	4.645	46	173691m	41.93	ug/L	-0.05
Spiked Amount	50.000	Range	40 - 130	Recovery	=	83.86%
24) Chloroform-d	5.076	84	135638	4.50	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	90.00%
26) 1,2-Dichloroethane-d4	5.713	65	68679	4.45	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	89.00%
32) Benzene-d6	5.739	84	268678	4.41	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	88.20%
36) 1,2-Dichloropropane-d6	6.700	67	84469	4.35	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	87.00%
41) Toluene-d8	7.906	98	257400	4.59	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	91.80%
43) trans-1,3-Dichloroprop...	8.189	79	33281	4.49	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	89.80%
46) 2-Hexanone-d5	8.645	63	153461	47.30	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	94.60%
56) 1,1,2,2-Tetrachloroeth...	10.764	84	82261	4.61	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	92.20%
66) 1,2-Dichlorobenzene-d4	12.201	152	107210	4.39	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	87.80%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.388	85	82324	5.11	ug/L	97
3) Chloromethane	1.523	50	84549	5.04	ug/L	100
5) Vinyl chloride	1.610	62	90818	5.78	ug/L	99
6) Bromomethane	1.864	94	51457	5.38	ug/L	98
8) Chloroethane	1.941	64	48049	5.60	ug/L	96
9) Trichlorofluoromethane	2.147	101	111203	5.28	ug/L	99
10) 1,1,2-Trichloro-1,2,2-...	2.588	101	83818	5.41	ug/L	98
12) 1,1-Dichloroethene	2.588	96	81806	5.40	ug/L	97
13) Acetone	2.652	43	76905	35.20	ug/L	68
14) Carbon disulfide	2.803	76	242810	5.31	ug/L	100
15) Methyl Acetate	2.964	43	24384	3.98	ug/L #	74
16) Methylene chloride	3.054	84	94797	4.88	ug/L	99
17) Methyl tert-butyl Ether	3.375	73	159456	4.86	ug/L	99
18) trans-1,2-Dichloroethene	3.363	96	80473	5.19	ug/L	96
19) 1,1-Dichloroethane	3.880	63	140875	5.21	ug/L	100
21) 2-Butanone	4.726	43	188954m	43.58	ug/L	
22) cis-1,2-Dichloroethene	4.681	96	83760	4.97	ug/L	97
23) Bromochloromethane	4.983	128	44173	5.10	ug/L	96
25) Chloroform	5.099	83	151967	5.05	ug/L	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
 Data File : VU043964.D
 Acq On : 25 May 2021 15:44
 Operator : SY/MD
 Sample : VSTDCCC005EC
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD005144

Manual Integrations
 APPROVED

MMDadoda
 5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue May 25 07:46:23 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) 1,2-Dichloroethane	5.806	62	84766	4.76	ug/L	99
29) 1,1,1-Trichloroethane	5.327	97	126137	5.07	ug/L	99
30) Cyclohexane	5.401	56	112709	4.95	ug/L	97
31) Carbon tetrachloride	5.536	117	107448	5.05	ug/L	98
33) Benzene	5.784	78	333892	5.15	ug/L	100
34) Trichloroethene	6.552	95	86631	5.13	ug/L	99
35) Methylcyclohexane	6.774	83	124294	5.05	ug/L	99
37) 1,2-Dichloropropane	6.800	63	85124	4.95	ug/L	100
38) Bromodichloromethane	7.115	83	105580	5.11	ug/L	99
39) cis-1,3-Dichloropropene	7.616	75	109729	4.91	ug/L	100
40) 4-Methyl-2-pentanone	7.803	43	492432	50.86	ug/L	99
42) Toluene	7.977	91	372816	5.45	ug/L	99
44) trans-1,3-Dichloropropene	8.218	75	98183	5.12	ug/L	97
45) 1,1,2-Trichloroethane	8.407	97	68975	5.25	ug/L	97
47) Tetrachloroethene	8.562	164	76806	5.28	ug/L	98
48) 2-Hexanone	8.697	43	381779	52.81	ug/L	99
49) Dibromochloromethane	8.819	129	78900	5.18	ug/L	96
50) 1,2-Dibromoethane	8.931	107	63964	5.24	ug/L	98
51) Chlorobenzene	9.456	112	226489	5.07	ug/L	98
52) Ethylbenzene	9.578	91	348138	5.13	ug/L	99
53) m,p-Xylene	9.703	106	141102	5.26	ug/L	97
54) o-Xylene	10.108	106	136209	5.36	ug/L	99
55) Styrene	10.121	104	237799	5.43	ug/L	98
57) 1,1,2,2-Tetrachloroethane	10.790	83	82710	5.04	ug/L	100
59) Bromoform	10.298	173	46321	4.80	ug/L	99
60) Isopropylbenzene	10.491	105	345057	5.17	ug/L	99
61) 1,2,3-Trichloropropane	10.832	75	58959	4.78	ug/L	98
62) 1,3,5-Trimethylbenzene	11.095	105	268463	5.08	ug/L	99
63) 1,2,4-Trimethylbenzene	11.475	105	279104	5.16	ug/L	99
64) 1,3-Dichlorobenzene	11.755	146	187359	5.05	ug/L	98
65) 1,4-Dichlorobenzene	11.845	146	186988	5.04	ug/L	98
67) 1,2-Dichlorobenzene	12.221	146	178889	5.01	ug/L	99
68) 1,2-Dibromo-3-chloropr...	13.005	75	11343	4.81	ug/L	95
69) 1,3,5-Trichlorobenzene	13.227	180	142786	4.88	ug/L	99
70) 1,2,4-trichlorobenzene	13.848	180	107988	4.70	ug/L	100
71) Naphthalene	14.095	128	164459	4.47	ug/L	99
72) 1,2,3-Trichlorobenzene	14.336	180	107779	4.92	ug/L	99

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

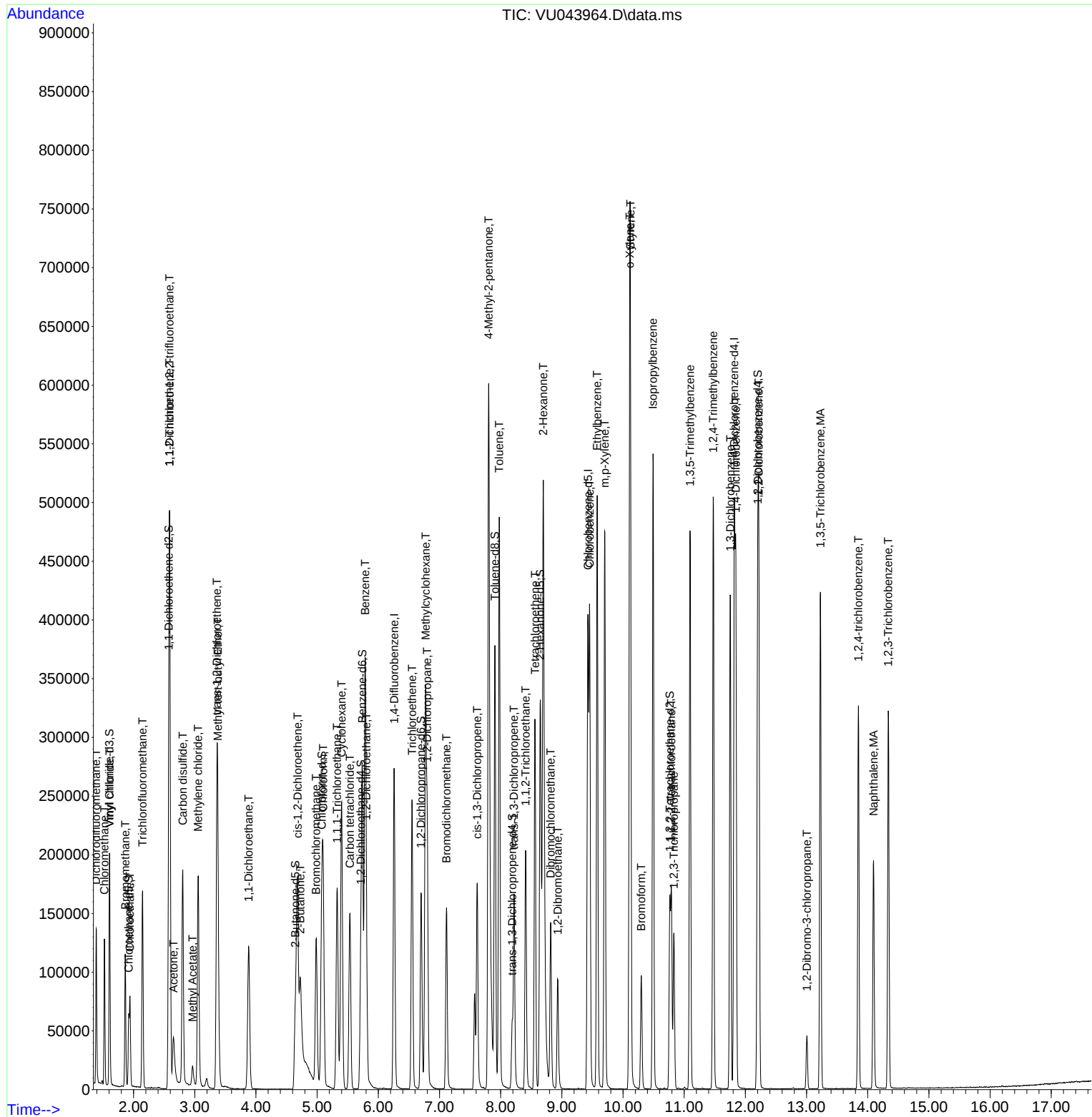
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
Data File : VU043964.D
Acq On : 25 May 2021 15:44
Operator : SY/MD
Sample : VSTDCCC005EC
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 64 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTD005144

Manual Integrations
APPROVED

MMDadoda
5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
Quant Title : TRACE VOA SFAM1.0
QLast Update : Tue May 25 07:46:23 2021
Response via : Initial Calibration



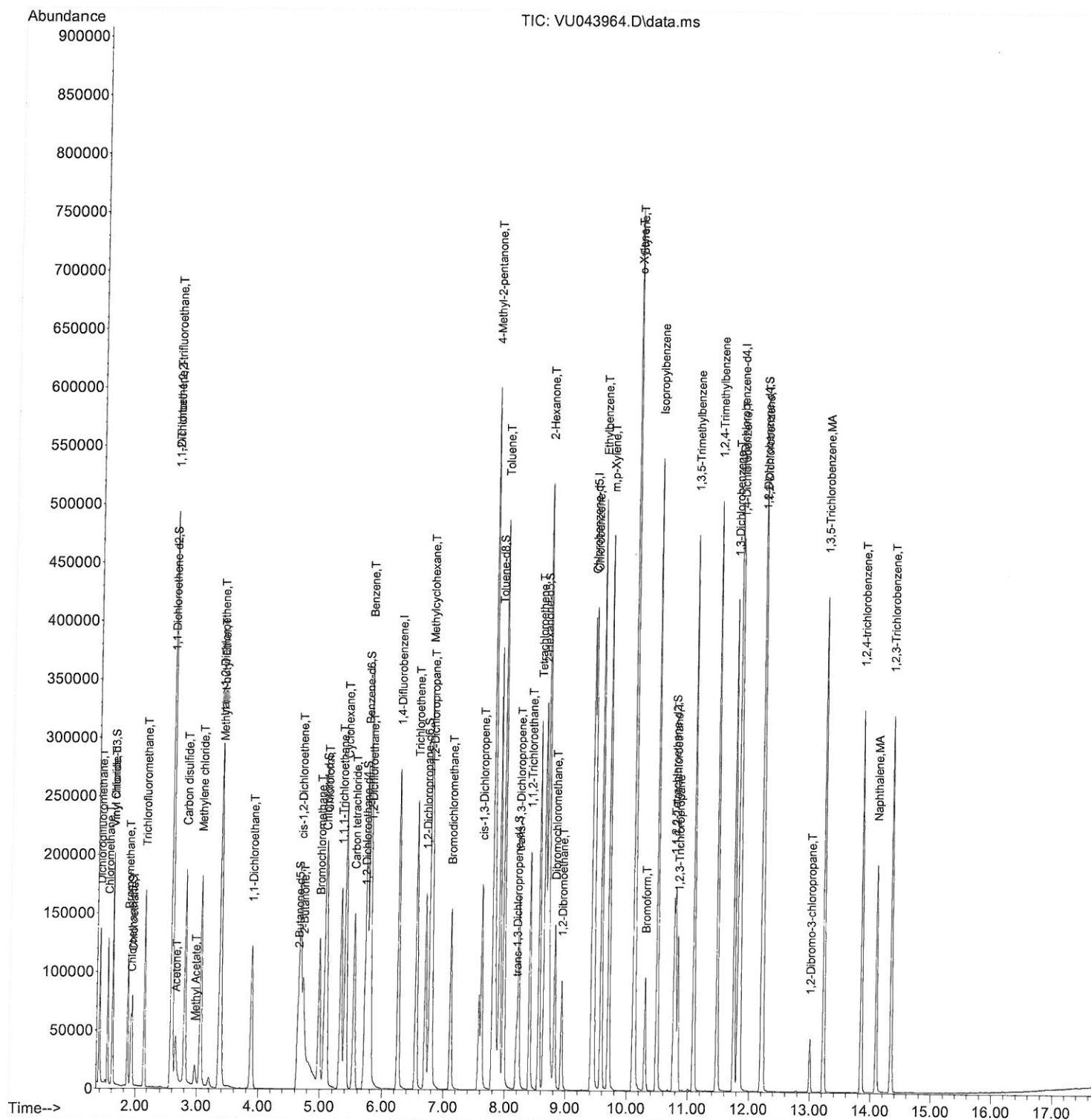
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
Data File : VU043964.D
Acq On : 25 May 2021 15:44
Operator : SY/MD
Sample : VSTDCCC005EC
Misc : 25.0mL/MSVOA_U/WATER
ALS Vial : 64 Sample Multiplier: 1

Instrument :
MSVOA_U
ClientSampleId :
VSTD005144

Manual Integrations
APPROVED

MMDadoda
5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
Quant Title : TRACE VOA SFAM1.0
QLast Update : Tue May 25 07:46:23 2021
Response via : Initial Calibration



Quantitation Report (Qedit)

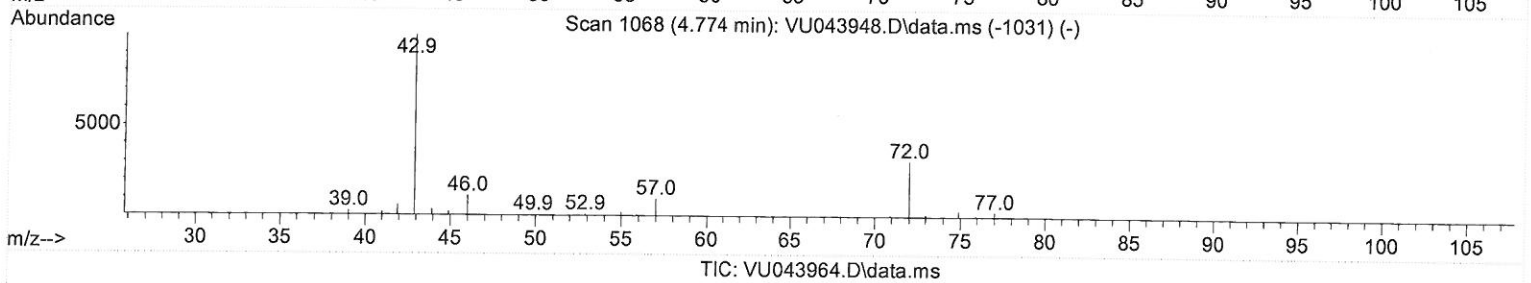
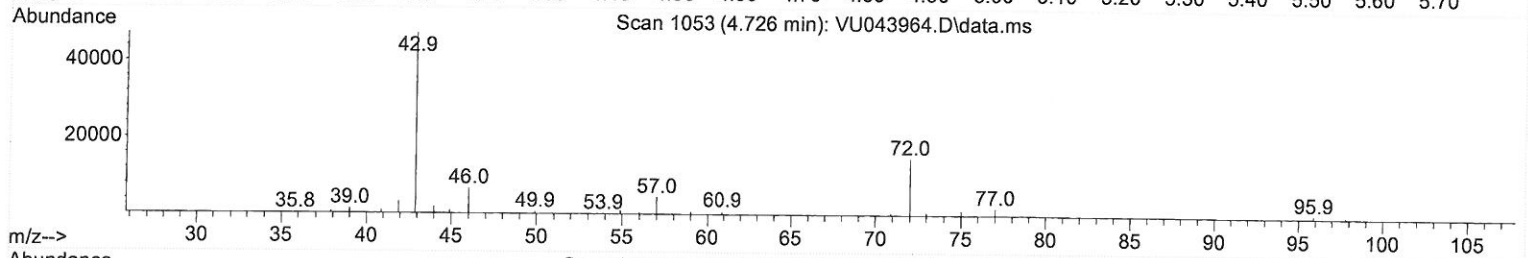
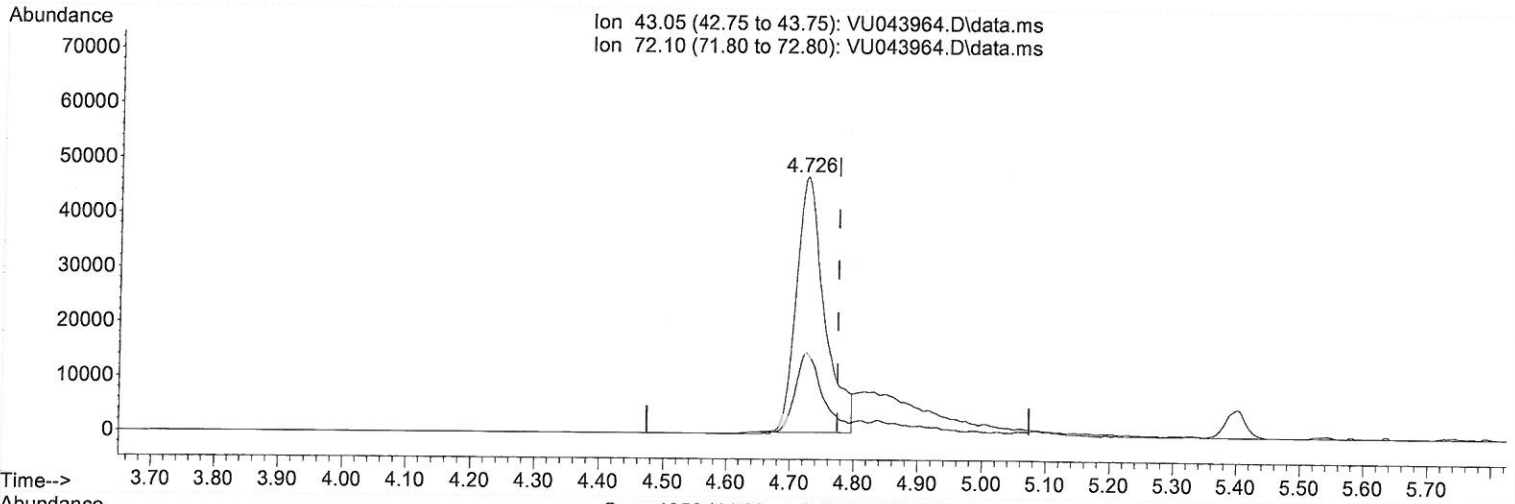
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
 Data File : VU043964.D
 Acq On : 25 May 2021 15:44
 Operator : SY/MD
 Sample : VSTDCCC005EC
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 MSVOA_U
ClientSampleId :
 VSTD005144

Manual Integrations
APPROVED

MMDadoda
 5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue May 25 07:46:23 2021
 Response via : Initial Calibration



(21) 2-Butanone (T)

4.726min (-0.048) 33.15 ug/L

response 143704

Ion	Exp%	Act%
43.05	100.00	100.00
72.10	29.40	31.58
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

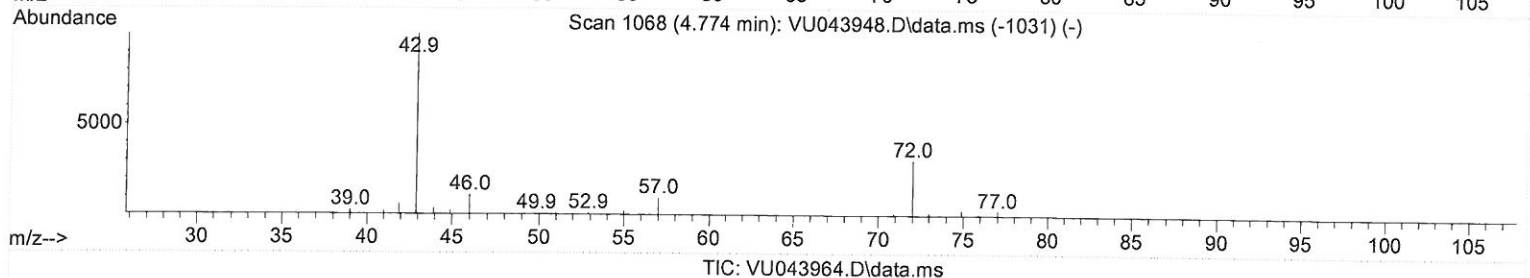
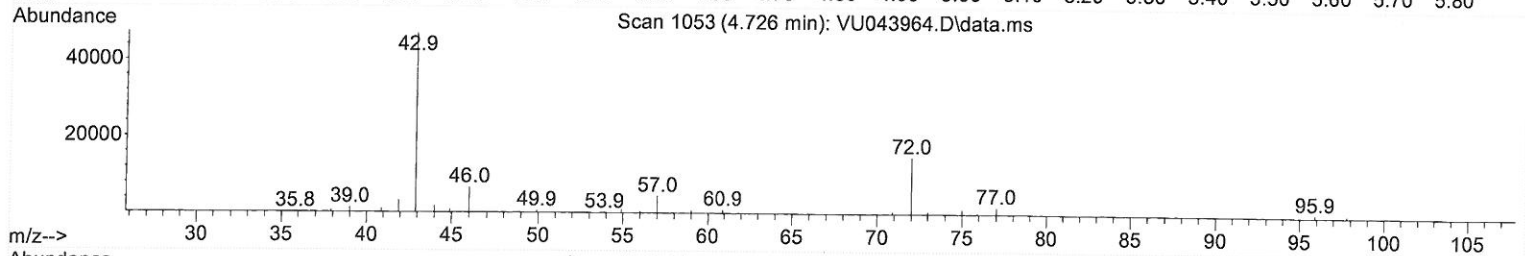
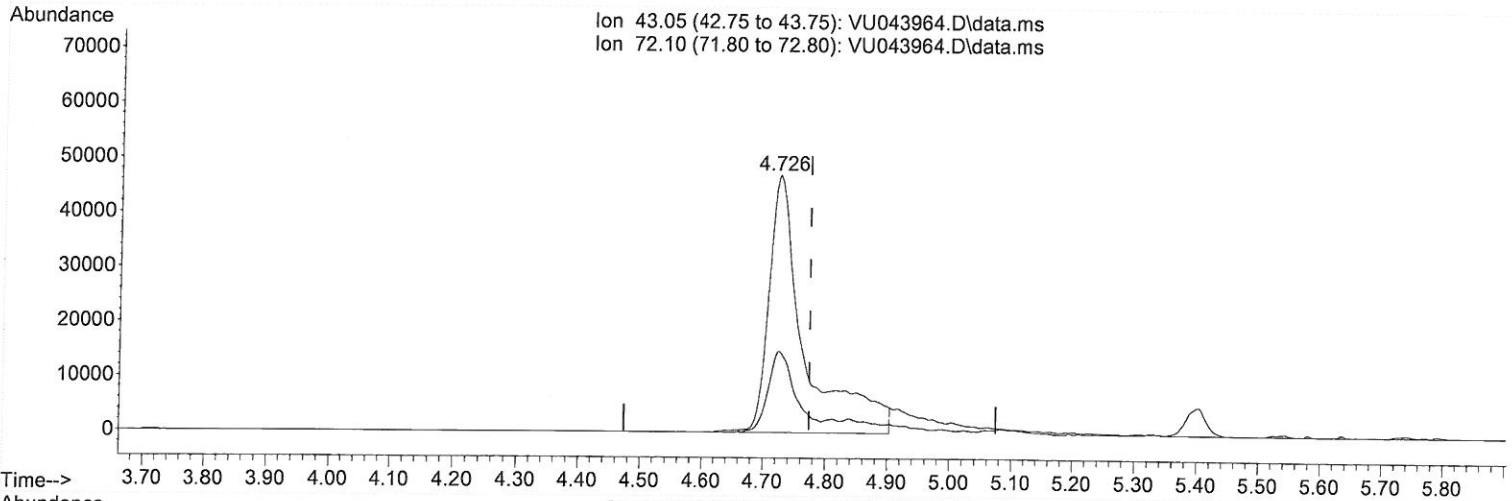
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
 Data File : VU043964.D
 Acq On : 25 May 2021 15:44
 Operator : SY/MD
 Sample : VSTDCCC005EC
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD005144

Manual Integrations
 APPROVED

MMDadoda
 5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue May 25 07:46:23 2021
 Response via : Initial Calibration



TIC: VU043964.D\data.ms

(21) 2-Butanone (T)

4.726min (-0.048) 43.58 ug/L m

response 188954

Ion	Exp%	Act%
43.05	100.00	100.00
72.10	29.40	24.02
0.00	0.00	0.00
0.00	0.00	0.00

7 MD
 6/2/21

Quantitation Report (Qedit)

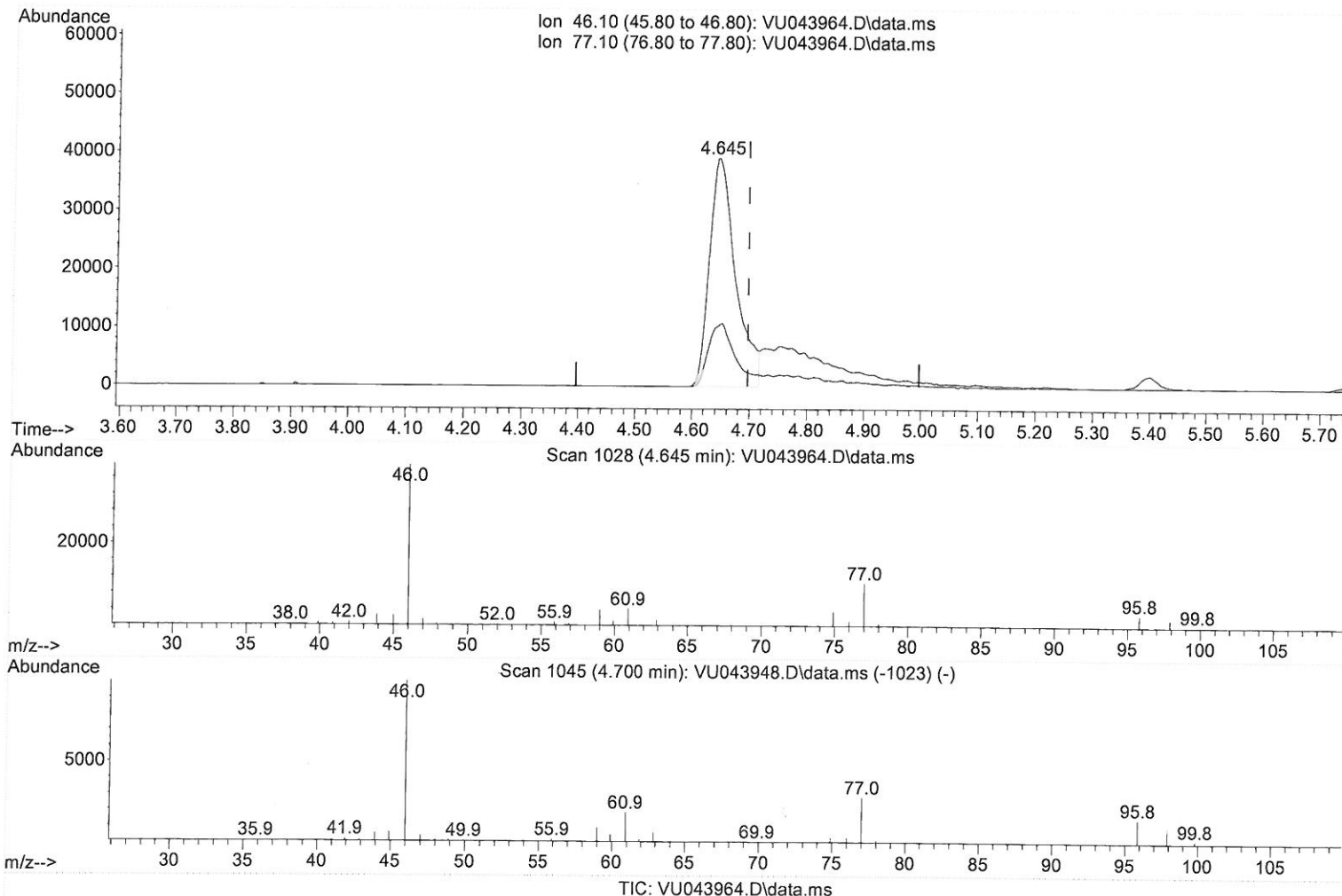
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
 Data File : VU043964.D
 Acq On : 25 May 2021 15:44
 Operator : SY/MD
 Sample : VSTDCCC005EC
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD005144

Manual Integrations
 APPROVED

MMDadoda
 5/26/2021 12:28:37 PM

Quant Time: May 29 07:18:17 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue May 25 07:46:23 2021
 Response via : Initial Calibration



(20) 2-Butanone-d5 (S)

4.645min (-0.051) 29.99 ug/L

response 124241

Ion	Exp%	Act%
46.10	100.00	100.00
77.10	27.00	29.14
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

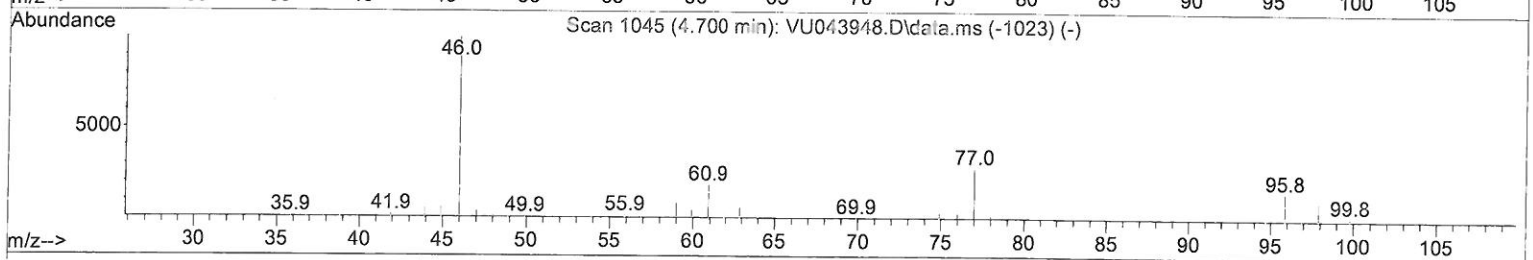
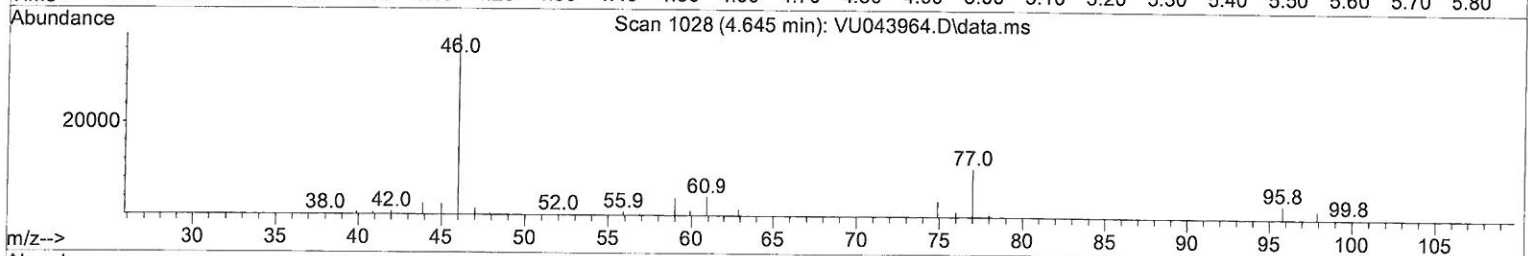
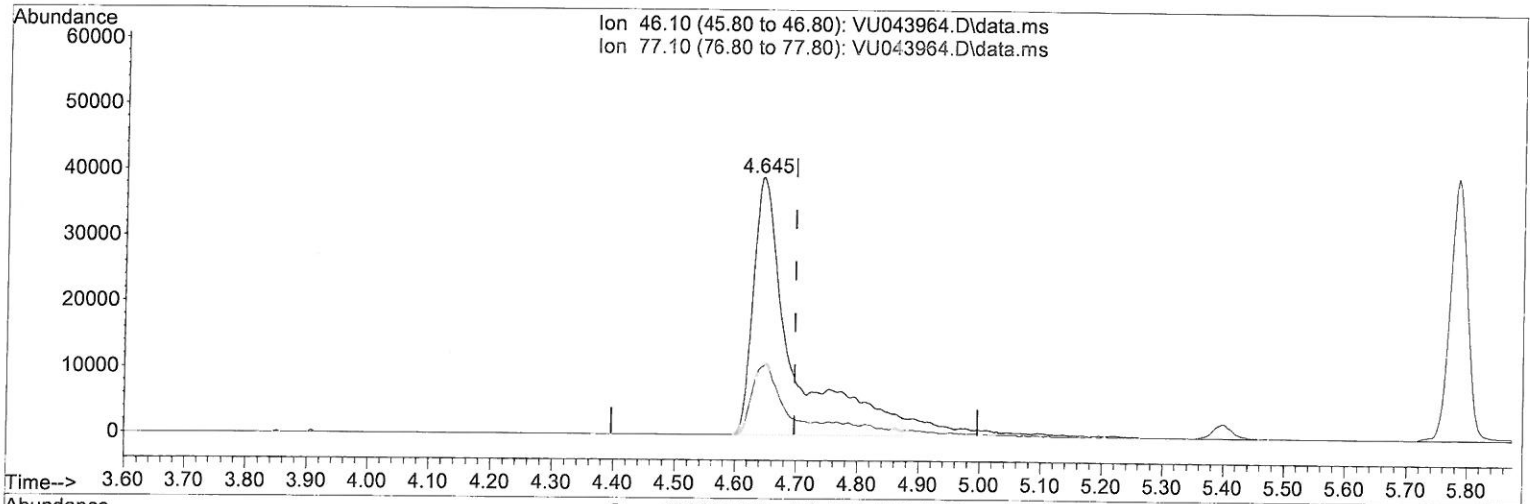
Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
 Data File : VU043964.D
 Acq On : 25 May 2021 15:44
 Operator : SY/MD
 Sample : VSTDCCC005EC
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD005144

Manual Integrations
 APPROVED

MMDadoda
 5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue May 25 07:46:23 2021
 Response via : Initial Calibration



TIC: VU043964.D\data.ms

(20) 2-Butanone-d5 (S)

4.645min (-0.051) 41.93 ug/L m

response 173691

Ion	Exp%	Act%
46.10	100.00	100.00
77.10	27.00	20.85
0.00	0.00	0.00
0.00	0.00	0.00

MD
 6/2/21

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
 Data File : VU043964.D
 Acq On : 25 May 2021 15:44
 Operator : SY/MD
 Sample : VSTDCCC005EC
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD005144

Manual Integrations
 APPROVED

MMDadoda
 5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue May 25 07:46:23 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) 1,4-Difluorobenzene	6.260	114	234715	5.00	ug/L	0.00
28) Chlorobenzene-d5	9.427	117	240000	5.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.819	152	134369	5.00	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	1.604	65	57917	4.43	ug/L	0.00
Spiked Amount 5.000	Range 40 - 130		Recovery =	88.60%		
7) Chloroethane-d5	1.919	69	43047	4.57	ug/L	0.00
Spiked Amount 5.000	Range 65 - 130		Recovery =	91.40%		
11) 1,1-Dichloroethene-d2	2.575	65	26395	4.15	ug/L	0.00
Spiked Amount 5.000	Range 60 - 125		Recovery =	83.00%		
20) 2-Butanone-d5	4.645	46	173691m	41.93	ug/L	-0.05
Spiked Amount 50.000	Range 40 - 130		Recovery =	83.86%		
24) Chloroform-d	5.076	84	135638	4.50	ug/L	0.00
Spiked Amount 5.000	Range 70 - 125		Recovery =	90.00%		
26) 1,2-Dichloroethane-d4	5.713	65	68679	4.45	ug/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery =	89.00%		
32) Benzene-d6	5.739	84	268678	4.41	ug/L	0.00
Spiked Amount 5.000	Range 70 - 125		Recovery =	88.20%		
36) 1,2-Dichloropropane-d6	6.700	67	84469	4.35	ug/L	0.00
Spiked Amount 5.000	Range 60 - 140		Recovery =	87.00%		
41) Toluene-d8	7.906	98	257400	4.59	ug/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery =	91.80%		
43) trans-1,3-Dichloroprop...	8.189	79	33281	4.49	ug/L	0.00
Spiked Amount 5.000	Range 55 - 130		Recovery =	89.80%		
46) 2-Hexanone-d5	8.645	63	153461	47.30	ug/L	0.00
Spiked Amount 50.000	Range 45 - 130		Recovery =	94.60%		
56) 1,1,2,2-Tetrachloroeth...	10.764	84	82261	4.61	ug/L	0.00
Spiked Amount 5.000	Range 65 - 120		Recovery =	92.20%		
66) 1,2-Dichlorobenzene-d4	12.201	152	107210	4.39	ug/L	0.00
Spiked Amount 5.000	Range 80 - 120		Recovery =	87.80%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.388	85	82324	5.11	ug/L	97
3) Chloromethane	1.523	50	84549	5.04	ug/L	100
5) Vinyl chloride	1.610	62	90818	5.78	ug/L	99
6) Bromomethane	1.864	94	51457	5.38	ug/L	98
8) Chloroethane	1.941	64	48049	5.60	ug/L	96
9) Trichlorofluoromethane	2.147	101	111203	5.28	ug/L	99
10) 1,1,2-Trichloro-1,2,2-...	2.588	101	83818	5.41	ug/L	98
12) 1,1-Dichloroethene	2.588	96	81806	5.40	ug/L	97
13) Acetone	2.652	43	76905	35.20	ug/L	68
14) Carbon disulfide	2.803	76	242810	5.31	ug/L	100
15) Methyl Acetate	2.964	43	24384	3.98	ug/L #	74
16) Methylene chloride	3.054	84	94797	4.88	ug/L	99
17) Methyl tert-butyl Ether	3.375	73	159456	4.86	ug/L	99
18) trans-1,2-Dichloroethene	3.363	96	80473	5.19	ug/L	96
19) 1,1-Dichloroethane	3.880	63	140875	5.21	ug/L	100
21) 2-Butanone	4.726	43	188954m	43.58	ug/L	97
22) cis-1,2-Dichloroethene	4.681	96	83760	4.97	ug/L	97
23) Bromochloromethane	4.983	128	44173	5.10	ug/L	96
25) Chloroform	5.099	83	151967	5.05	ug/L	99

MD
 6/2/21

MD
 6/2/21

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU052421\
 Data File : VU043964.D
 Acq On : 25 May 2021 15:44
 Operator : SY/MD
 Sample : VSTDCCC005EC
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 VSTD005144

Manual Integrations
 APPROVED

MMDadoda
 5/26/2021 12:28:37 PM

Quant Time: May 25 16:05:56 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR052421WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue May 25 07:46:23 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) 1,2-Dichloroethane	5.806	62	84766	4.76	ug/L	99
29) 1,1,1-Trichloroethane	5.327	97	126137	5.07	ug/L	99
30) Cyclohexane	5.401	56	112709	4.95	ug/L	97
31) Carbon tetrachloride	5.536	117	107448	5.05	ug/L	98
33) Benzene	5.784	78	333892	5.15	ug/L	100
34) Trichloroethene	6.552	95	86631	5.13	ug/L	99
35) Methylcyclohexane	6.774	83	124294	5.05	ug/L	99
37) 1,2-Dichloropropane	6.800	63	85124	4.95	ug/L	100
38) Bromodichloromethane	7.115	83	105580	5.11	ug/L	99
39) cis-1,3-Dichloropropene	7.616	75	109729	4.91	ug/L	100
40) 4-Methyl-2-pentanone	7.803	43	492432	50.86	ug/L	99
42) Toluene	7.977	91	372816	5.45	ug/L	99
44) trans-1,3-Dichloropropene	8.218	75	98183	5.12	ug/L	97
45) 1,1,2-Trichloroethane	8.407	97	68975	5.25	ug/L	97
47) Tetrachloroethene	8.562	164	76806	5.28	ug/L	98
48) 2-Hexanone	8.697	43	381779	52.81	ug/L	99
49) Dibromochloromethane	8.819	129	78900	5.18	ug/L	96
50) 1,2-Dibromoethane	8.931	107	63964	5.24	ug/L	98
51) Chlorobenzene	9.456	112	226489	5.07	ug/L	98
52) Ethylbenzene	9.578	91	348138	5.13	ug/L	99
53) m,p-Xylene	9.703	106	141102	5.26	ug/L	97
54) o-Xylene	10.108	106	136209	5.36	ug/L	99
55) Styrene	10.121	104	237799	5.43	ug/L	98
57) 1,1,2,2-Tetrachloroethane	10.790	83	82710	5.04	ug/L	100
59) Bromoform	10.298	173	46321	4.80	ug/L	99
60) Isopropylbenzene	10.491	105	345057	5.17	ug/L	99
61) 1,2,3-Trichloropropane	10.832	75	58959	4.78	ug/L	98
62) 1,3,5-Trimethylbenzene	11.095	105	268463	5.08	ug/L	99
63) 1,2,4-Trimethylbenzene	11.475	105	279104	5.16	ug/L	99
64) 1,3-Dichlorobenzene	11.755	146	187359	5.05	ug/L	98
65) 1,4-Dichlorobenzene	11.845	146	186988	5.04	ug/L	98
67) 1,2-Dichlorobenzene	12.221	146	178889	5.01	ug/L	99
68) 1,2-Dibromo-3-chloropr...	13.005	75	11343	4.81	ug/L	95
69) 1,3,5-Trichlorobenzene	13.227	180	142786	4.88	ug/L	99
70) 1,2,4-trichlorobenzene	13.848	180	107988	4.70	ug/L	100
71) Naphthalene	14.095	128	164459	4.47	ug/L	99
72) 1,2,3-Trichlorobenzene	14.336	180	107779	4.92	ug/L	99

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