

Process Report

Order ID : q3797

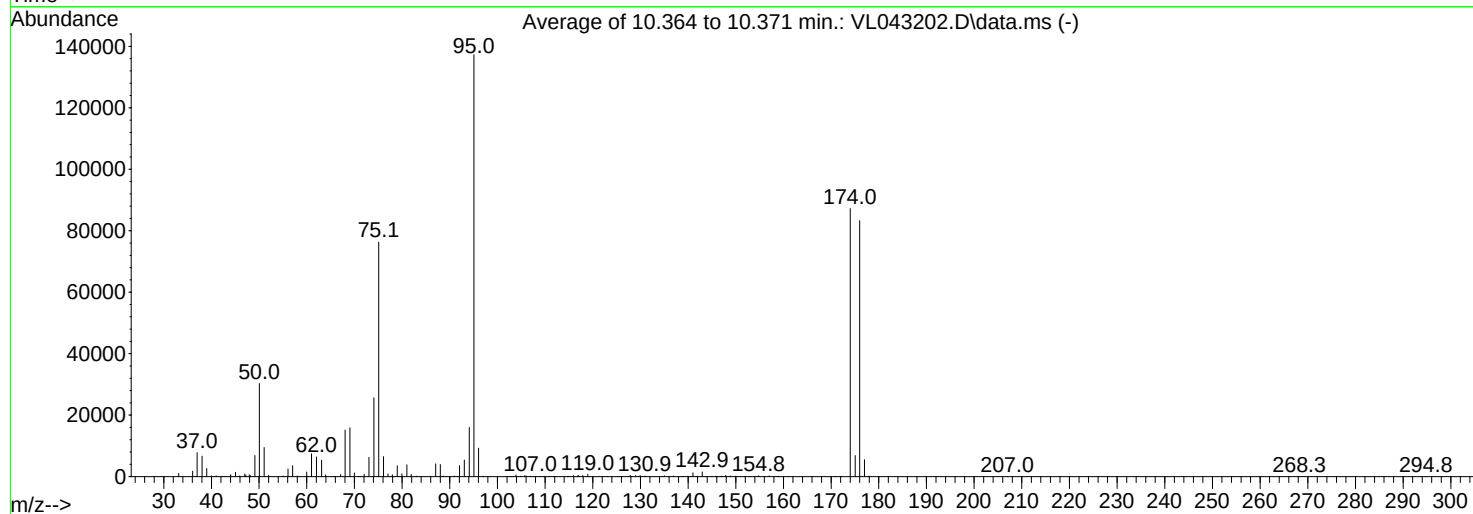
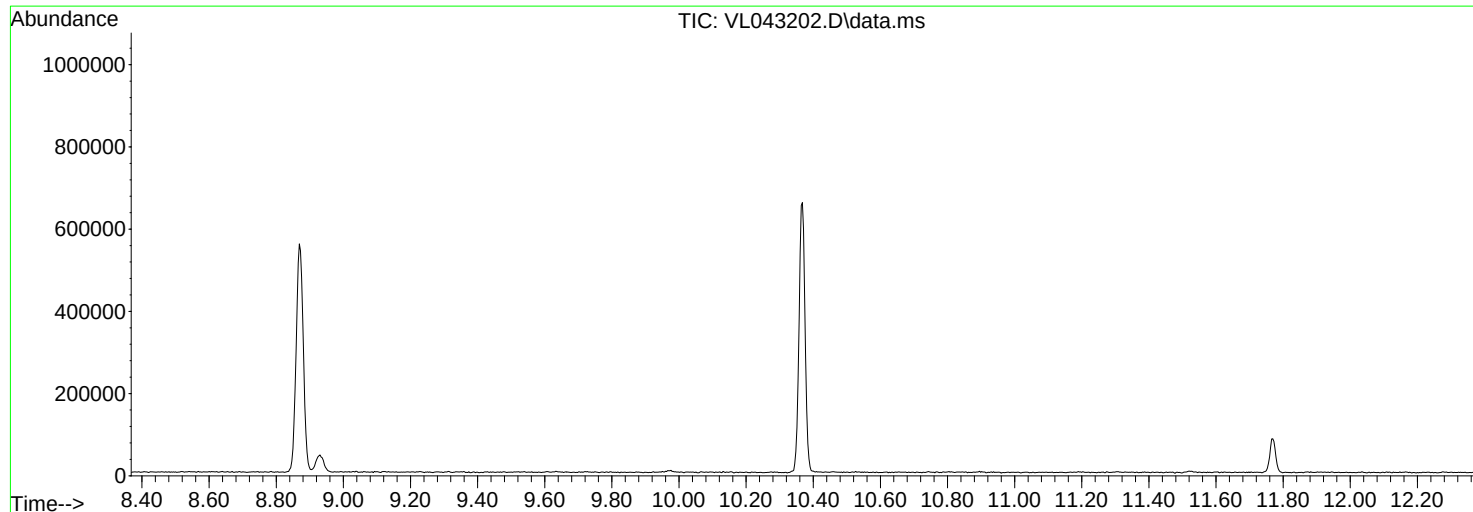
Date	Bottle ID	Lab Sample Number	InComing Vacuum	Canister ID	Can Size	Reg ID	Reg Size	Batch Code	Certification ID
12/08/2025	B2511059	Q3797-04	-4.3	10332	6 L	10547		C2510004	VL043135.D Seq :VL101725 TUNE : VL043130.D ICAL : VL043110.D CCAL : VL043131.D MB : VL043132.D
12/08/2025	B2511059	Q3797-05	-2.2	10300	6 L	10479		C2511002	VL043259.D Seq :VL112025 TUNE : VL043256.D ICAL : VL043209.D CCAL : VL043257.D MB : VL043258.D
12/08/2025	B2511059	Q3797-03	-4.7	10296	6 L	10585		C2511002	VL043259.D Seq :VL112025 TUNE : VL043256.D ICAL : VL043209.D CCAL : VL043257.D MB : VL043258.D
12/08/2025	B2511059	Q3797-01	-4.3	10153	6 L	10218		C2511002	VL043259.D Seq :VL112025 TUNE : VL043256.D ICAL : VL043209.D CCAL : VL043257.D MB : VL043258.D
12/08/2025	B2511059	Q3797-02	-4.3	10060	6 L	10503		C2511002	VL043259.D Seq :VL112025 TUNE : VL043256.D ICAL : VL043209.D CCAL : VL043257.D MB : VL043258.D

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
Data File : VL043202.D
Acq On : 18 Nov 2025 08:46
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
Last Update : Wed Nov 19 01:11:25 2025



AutoFind: Scans 3175, 3176, 3177; Background Corrected with Scan 3156

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	8	40	22.1	30285	PASS
75	95	30	66	55.6	76296	PASS
95	95	100	100	100.0	137266	PASS
96	95	5	9	6.7	9227	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	63.6	87269	PASS
175	174	4	9	7.8	6847	PASS
176	174	93	101	95.5	83301	PASS
177	176	5	9	6.6	5509	PASS

Average of 10.364 to 10.371 min.: VL043202.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
33.15	1017	45.05	1373	56.05	2485	67.10	650
33.80	90	45.95	190	57.05	3511	68.05	1515
36.05	1728	47.00	799	58.00	209	69.05	1587
37.00	7775	47.20	474	60.00	1493	70.00	1182
38.05	6647	47.95	600	61.00	7430	70.90	18
39.00	2637	48.20	316	62.05	6404	71.20	48
40.05	176	49.10	6876	63.10	5348	72.05	772
41.00	228	50.05	30285	63.95	548	73.05	6279
42.20	99	51.05	9432	65.10	18	74.10	25637
43.00	63	52.00	422	65.75	54	75.10	76296
44.05	598	55.05	162	66.10	23	76.10	6470

Average of 10.364 to 10.371 min.: VL043202.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
77.05	853	88.00	3931	102.80	24	109.85	96
77.95	601	88.70	128	103.10	20	110.85	101
79.00	3536	90.95	202	103.90	564	111.80	44
79.95	911	92.05	3581	104.90	156	112.20	28
81.00	3819	93.05	5411	105.75	294	114.70	70
81.90	690	94.10	15989	106.00	240	114.95	67
82.90	77	95.05	137266	106.95	132	115.95	360
83.10	136	96.05	9227	107.65	48	116.80	153
84.15	40	97.00	116	108.10	27	116.95	414
86.00	131	97.90	24	109.00	61	117.90	356
87.05	4162	102.10	22	109.70	38	118.95	710

Average of 10.364 to 10.371 min.: VL043202.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.10	19	135.05	222	145.80	142	157.00	250
123.90	99	135.90	30	146.10	100	158.60	28
125.20	19	136.95	182	146.80	34	159.00	120
125.70	56	138.90	65	147.10	127	161.00	78
126.10	58	139.90	157	147.90	406	170.90	87
127.85	394	141.00	1242	148.90	165	172.20	73
128.10	59	141.90	141	149.95	156	174.00	87269
129.00	325	142.95	1524	151.00	22	175.05	6847
129.95	344	143.70	75	151.80	76	176.00	83301
130.95	175	144.00	78	152.90	62	177.00	5509
134.60	21	145.00	87	154.80	296	177.95	166

Average of 10.364 to 10.371 min.: VL043202.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
207.00	28						
268.30	20						
294.80	17						

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043203.D
 Acq On : 18 Nov 2025 09:29
 Operator : SY/MD
 Sample : VSTDICC0.5
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.5

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:48:47 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	110490	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	296493	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	247761	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.371 95 180529 9.941 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 99.400%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.496	85	7723	0.496	ppbv	99
3) Chlorodifluoromethane	1.473	51	8538	0.557	ppbv #	82
4) Chloromethane	1.531	50	2881	0.494	ppbv	94
5) Vinyl Chloride	1.580	62	2947	0.462	ppbv #	87
6) Bromomethane	1.667	94	1656	0.536	ppbv	97
7) Chloroethane	1.703	64	1357	0.547	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	6386	0.493	ppbv	100
9) Propene	1.483	41	3739	0.526	ppbv #	1
10) Heptane	4.972	43	11637m	0.597	ppbv	
11) Trichlorofluoromethane	1.878	101	6841	0.453	ppbv	92
12) 1,1,2-Trichlorotrifluo...	2.140	101	5863	0.497	ppbv	99
13) Ethanol	1.719	45	1190	0.520	ppbv	64
14) Bromoethene	1.781	108	2476	0.548	ppbv #	75
15) Acetone	1.836	43	9506	0.619	ppbv #	88
16) 1,3-Butadiene	1.606	39	4115	0.601	ppbv	95
17) tert-Butyl alcohol	2.043	59	9854	0.489	ppbv #	68
18) 1,1-Dichloroethene	2.033	96	3068	0.559	ppbv	96
19) Isopropyl Alcohol	1.887	45	4687	0.540	ppbv #	51
20) Methylene Chloride	2.059	84	5006	0.349	ppbv	92
21) Allyl Chloride	2.095	41	6291	0.609	ppbv	95
22) trans-1,2-Dichloroethene	2.337	96	3343	0.533	ppbv	80
23) Vinyl Acetate	2.464	43	10414	0.562	ppbv #	92
24) 1,1-Dichloroethane	2.409	63	5803	0.479	ppbv #	96
25) Ethyl Acetate	2.839	43	18625m	0.562	ppbv	
26) Hexane	2.823	57	7589	0.523	ppbv #	91
27) Carbon Disulfide	2.150	76	7198	0.486	ppbv #	1
28) Methyl tert-Butyl Ether	2.441	73	3545	0.498	ppbv #	15
29) Chloroform	2.849	83	10800	0.523	ppbv	95
30) Cyclohexane	3.849	84	6271	0.515	ppbv	85
31) cis-1,2-Dichloroethene	2.719	61	7728	0.536	ppbv	87
32) 1,1,1-Trichloroethane	3.363	97	10886	0.490	ppbv	98
34) 2-Butanone	2.557	43	11026	0.527	ppbv	95
35) Carbon Tetrachloride	3.761	117	11551	0.513	ppbv	94
36) Benzene	3.655	78	14759	0.520	ppbv #	91
37) 1,2-Dichloroethane	3.218	62	8477	0.510	ppbv #	93
38) Trichloroethene	4.542	130	5775	0.519	ppbv #	87
39) 1,2-Dichloropropane	4.312	63	5510	0.530	ppbv #	80
40) 1,4-Dioxane	4.597	88	2675m	0.573	ppbv	
41) Tetrahydrofuran	3.059	42	6193	0.536	ppbv	95
42) Bromodichloromethane	4.490	83	11597	0.506	ppbv #	84
43) Methyl Methacrylate	4.881	69	8534m	0.566	ppbv	
44) 2,2,4-Trimethylpentane	4.642	57	25890	0.531	ppbv	95
45) t-1,3-Dichloropropene	6.412	75	7343	0.523	ppbv	94

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043203.D
 Acq On : 18 Nov 2025 09:29
 Operator : SY/MD
 Sample : VSTDICC0.5
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.5

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:48:47 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	8886m	0.539	ppbv	
47) 1,1,2-Trichloroethane	6.581	97	6280m	0.567	ppbv	
48) Dibromochloromethane	7.380	129	9327	0.492	ppbv	97
49) Bromoform	9.481	173	8636	0.514	ppbv	100
50) 4-Methyl-2-Pentanone	5.755	43	15190	0.515	ppbv	92
51) 2-Hexanone	7.442	43	11594	0.506	ppbv #	93
52) Tetrachloroethene	8.218	164	5097	0.483	ppbv #	82
53) Toluene	6.924	91	17755m	0.525	ppbv	
54) 1,2-Dibromoethane	7.649	107	8708	0.537	ppbv	90
56) 1,1,1,2-Tetrachloroethane	8.917	131	9793m	0.538	ppbv	
57) Chlorobenzene	8.917	112	12818	0.504	ppbv	98
58) Ethyl Benzene	9.351	91	23866	0.500	ppbv	96
59) m/p-Xylene	9.526	91	40076m	1.044	ppbv	
60) o-Xylene	9.956	91	19621	0.514	ppbv	100
61) Styrene	9.869	104	8287	0.496	ppbv	96
62) Isopropylbenzene	10.536	105	34773	0.509	ppbv	98
63) 1,1,2,2-Tetrachloroethane	9.960	83	12591	0.519	ppbv	100
64) n-propylbenzene	10.986	120	8945	0.509	ppbv	100
65) tert-Butylbenzene	11.526	119	31998	0.524	ppbv	99
66) Benzyl Chloride	11.610	91	3403	0.550	ppbv	98
67) sec-Butylbenzene	11.766	105	44448	0.522	ppbv	97
69) p-Isopropyltoluene	11.921	119	37087	0.514	ppbv	100
70) n-Butylbenzene	12.277	91	33153	0.474	ppbv	94
71) 2-Chlorotoluene	10.895	91	27224	0.518	ppbv	99
72) 4-Ethyltoluene	11.122	105	23963	0.515	ppbv	97
73) 1,3,5-Trimethylbenzene	11.199	105	20104	0.515	ppbv	99
74) 1,2,4-Trimethylbenzene	11.533	105	22254	0.522	ppbv	91
75) 1,3-Dichlorobenzene	11.604	146	12926	0.520	ppbv	98
76) 1,4-Dichlorobenzene	11.672	146	13076	0.526	ppbv	98
77) 1,2-Dichlorobenzene	11.947	146	12069	0.505	ppbv	97
78) Hexachloro-1,3-Butadiene	13.879	225	10578	0.530	ppbv	98
79) Naphthalene	13.513	128	18377	0.486	ppbv	97
80) Naphthalene,2-methyl-	14.462	142	4917	0.495	ppbv	91
81) 1,2,4-Trichlorobenzene	13.439	180	6798	0.402	ppbv	97

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

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\

Method File : VL111825AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022

Last Update : Wed Nov 19 01:11:25 2025

Response Via : Initial Calibration

Calibration Files

0.03=VL043209.D 0.1 =VL043208.D 0.5 =VL043203.D 1 =VL043206.D 2 =VL043205.D 10 =VL043204.D 15 =VL043210.D

Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD

1) I Bromochloromethane	-----ISTD-----								
2) T Dichlorodifluo...			1.398	1.505	1.476	1.340	1.334	1.410	5.53
3) Chlorodifluoro...			1.545	1.404	1.437	1.317	1.231	1.387	8.60
4) Chloromethane			0.521	0.559	0.568	0.498	0.489	0.527	6.72
5) T Vinyl Chloride	0.724	0.655	0.533	0.580	0.575	0.486	0.483	0.577	15.33
6) T Bromomethane			0.300	0.302	0.286	0.253	0.258	0.280	8.30
7) Chloroethane			0.246	0.248	0.236	0.194	0.199	0.225	11.59
8) T Dichlorotetra...			1.156	1.241	1.262	1.091	1.116	1.173	6.43
9) T Propene			0.677	0.598	0.621	0.501	0.548	0.589	11.44
10) T Heptane			2.106	1.804	1.728	1.604	1.522	1.753	12.87
11) T Trichlorofluor...			1.238	1.515	1.487	1.240	1.352	1.367	9.62
12) T 1,1,2-Trichlor...			1.061	1.142	1.115	0.987	1.029	1.067	5.92
13) Ethanol			0.215	0.231	0.252	0.166	0.172	0.207	17.99
14) T Bromoethene			0.448	0.423	0.436	0.362	0.376	0.409	9.29
15) T Acetone			1.721	1.591	1.519	1.032	1.085	1.389	22.41
16) T 1,3-Butadiene			0.745	0.629	0.626	0.551	0.546	0.619	13.01
17) tert-Butyl alc...			1.784	2.014	1.880	1.705	1.735	1.824	6.87
18) T 1,1-Dichloroet...			0.555	0.530	0.515	0.441	0.443	0.497	10.52
19) T Isopropyl Alcohol			0.848	0.861	0.823	0.684	0.709	0.785	10.51
20) T Methylene Chlo...			0.906	0.710	0.585	0.398	0.403	0.600	35.87
21) T Allyl Chloride			1.139	0.895	0.936	0.849	0.855	0.935	12.75
22) T trans-1,2-Dich...			0.605	0.614	0.599	0.499	0.521	0.568	9.39
23) T Vinyl Acetate			1.885	1.632	1.682	1.622	1.565	1.677	7.36
24) T 1,1-Dichloroet...			1.050	1.173	1.194	1.018	1.044	1.096	7.42
25) T Ethyl Acetate			3.371	3.123	3.074	2.759	2.655	2.996	9.68
26) T Hexane			1.374	1.424	1.375	1.235	1.161	1.314	8.44
27) T Carbon Disulfide			1.303	1.424	1.432	1.257	1.291	1.341	6.03
28) T Methyl tert-Bu...			0.642	0.704	0.674	0.591	0.614	0.645	7.02
29) T Chloroform			1.955	1.898	1.928	1.785	1.770	1.867	4.52
30) T Cyclohexane			1.135	1.194	1.130	1.024	1.024	1.101	6.80
31) T cis-1,2-Dichlo...			1.399	1.351	1.322	1.240	1.217	1.306	5.83
32) T 1,1,1-Trichlor...	2.116	2.046	1.970	2.018	2.033	1.884	1.865	1.990	4.52

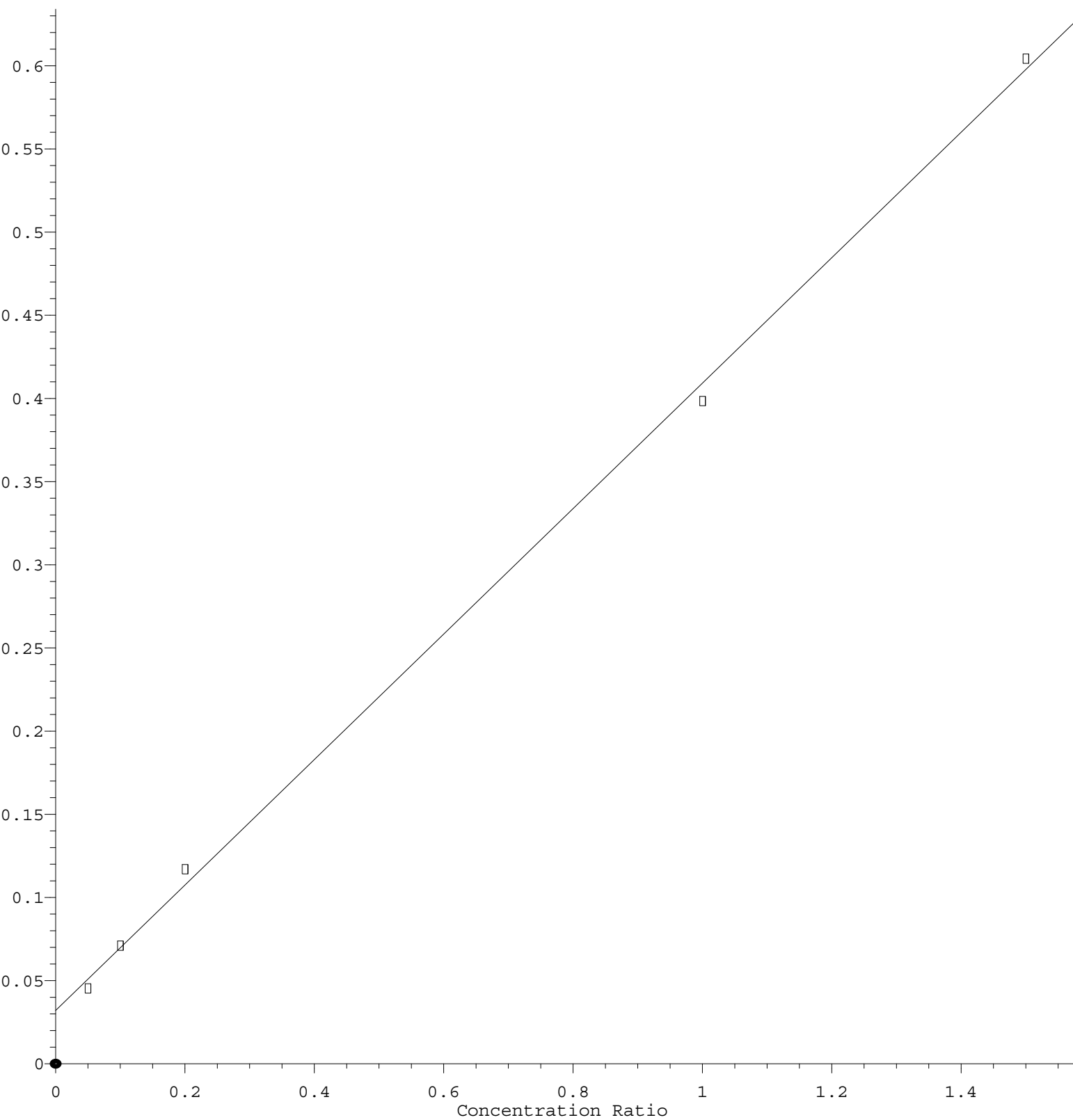
33) I 1,4-Difluorobenzene	-----ISTD-----								
34) T 2-Butanone			0.744	0.751	0.736	0.644	0.655	0.706	7.38
35) T Carbon Tetrach...	0.832	0.765	0.779	0.771	0.737	0.708	0.721	0.759	5.51
36) T Benzene			0.996	1.001	0.986	0.905	0.900	0.958	5.28
37) T 1,2-Dichloroet...			0.572	0.580	0.565	0.531	0.553	0.560	3.39
38) T Trichloroethene	0.293	0.475	0.390	0.388	0.371	0.353	0.353	0.375	14.65
39) T 1,2-Dichloropr...			0.372	0.364	0.350	0.335	0.332	0.351	4.97

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\											
Method File : VL111825AIR.M											
40)	T	1,4-Dioxane			0.180	0.166	0.155	0.142	0.144	0.158	10.04
41)	T	Tetrahydrofuran			0.418	0.401	0.402	0.367	0.360	0.390	6.32
42)	T	Bromodichlorom...			0.782	0.795	0.783	0.745	0.758	0.773	2.63
43)		Methyl Methacr...			0.576	0.532	0.511	0.462	0.462	0.508	9.55
44)	T	2,2,4-Trimethy...			1.746	1.765	1.621	1.555	1.537	1.645	6.47
45)	T	t-1,3-Dichloro...			0.495	0.472	0.489	0.455	0.458	0.474	3.79
46)	T	cis-1,3-Dichlo...			0.599	0.557	0.562	0.534	0.529	0.556	5.00
47)	T	1,1,2-Trichlor...			0.424	0.372	0.378	0.344	0.342	0.372	8.91
48)	T	Dibromochlorom...			0.629	0.666	0.663	0.618	0.621	0.640	3.63
49)	T	Bromoform			0.583	0.569	0.581	0.555	0.545	0.566	2.86
50)	T	4-Methyl-2-Pen...			1.025	1.061	1.027	0.946	0.914	0.994	6.19
51)	T	2-Hexanone			0.782	0.805	0.816	0.734	0.724	0.772	5.37
52)	T	Tetrachloroethene	0.363	0.424	0.344	0.362	0.349	0.329	0.323	0.356	9.37
53)	T	Toluene			1.198	1.182	1.146	1.075	1.069	1.134	5.26
54)	T	1,2-Dibromoethane		0.528	0.587	0.569	0.549	0.525	0.526	0.547	4.79
-----ISTD-----											
55)	I	Chlorobenzene-d5									
56)		1,1,1,2-Tetrac...			0.791	0.769	0.761	0.677	0.677	0.735	7.34
57)	T	Chlorobenzene			1.035	1.088	1.089	0.969	0.953	1.027	6.24
58)	T	Ethyl Benzene			1.927	2.038	2.008	1.821	1.830	1.925	5.16
59)	T	m/p-Xylene			1.618	1.611	1.607	1.434	1.446	1.543	6.12
60)	T	o-Xylene			1.584	1.625	1.659	1.419	1.421	1.542	7.42
61)	T	Styrene			0.669	0.690	0.719	0.648	0.647	0.675	4.54
62)		Isopropylbenzene			2.807	2.946	2.945	2.556	2.536	2.758	7.31
63)	T	1,1,2,2-Tetrac...	0.999	1.034	1.016	1.012	1.028	0.891	0.884	0.981	6.58
64)		n-propylbenzene			0.722	0.758	0.757	0.657	0.649	0.709	7.47
65)		tert-Butylbenzene			2.583	2.687	2.646	2.224	2.176	2.463	9.90
66)	T	Benzyl Chloride			0.275	0.251	0.257	0.241	0.225	0.250	7.36
67)		sec-Butylbenzene			3.588	3.728	3.697	3.108	3.070	3.438	9.40
68)	S	1-Bromo-4-Fluo...	0.712	0.725	0.729	0.733	0.741	0.735	0.757	0.733	1.90
69)		p-Isopropyltol...			2.994	3.070	3.197	2.660	2.641	2.912	8.58
70)		n-Butylbenzene			2.676	3.041	3.125	2.639	2.647	2.825	8.39
71)		2-Chlorotoluene			2.198	2.257	2.210	1.960	1.975	2.120	6.65
72)	T	4-Ethyltoluene			1.934	1.948	2.009	1.749	1.747	1.877	6.46
73)	T	1,3,5-Trimethy...			1.623	1.682	1.662	1.456	1.454	1.575	7.09
74)	T	1,2,4-Trimethy...			1.796	1.844	1.871	1.548	1.537	1.719	9.51
75)	T	1,3-Dichlorobe...			1.043	1.053	1.061	0.937	0.922	1.003	6.78
76)	T	1,4-Dichlorobe...			1.056	1.033	1.060	0.940	0.930	1.003	6.34
77)	T	1,2-Dichlorobe...			0.974	1.064	1.050	0.872	0.863	0.965	9.83
78)	T	Hexachloro-1,3...			0.854	0.899	0.920	0.686	0.666	0.805	14.94
79)	T	Naphthalene		1.230	1.483	1.599	1.860	1.496	1.493	1.527	13.35
80)	T	Naphthalene,2-...			0.397	0.323	0.448	0.397	0.439	0.401	12.30
81)	T	1,2,4-Trichlor...			0.549	0.692	0.813	0.678	0.682	0.683	13.72

(#) = Out of Range

Methylene Chloride

Response Ratio



$$\text{Response} = 3.773\text{e-}001 * \text{Amt} + 3.213\text{e-}002$$

Coef of Det (r^2) = 0.998825 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL11825AIR.M

Calibration Table Last Updated: Wed Nov 19 01:11:25 2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043204.D
 Acq On : 18 Nov 2025 10:02
 Operator : SY/MD
 Sample : VSTDICCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:49:32 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.781	49	105095	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.949	114	283830	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.872	117	234772	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.367 95 172524 10.025 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.300%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.496	85	140789	9.498	ppbv	100
3) Chlorodifluoromethane	1.473	51	138443	9.497	ppbv	100
4) Chloromethane	1.531	50	52372	9.450	ppbv	100
5) Vinyl Chloride	1.577	62	51045	8.422	ppbv	100
6) Bromomethane	1.664	94	26542	9.034	ppbv	100
7) Chloroethane	1.700	64	20375	8.632	ppbv	100
8) Dichlorotetrafluoroethane	1.551	85	114670	9.300	ppbv	100
9) Propene	1.480	41	52671	7.789	ppbv #	1
10) Heptane	4.965	43	168611	9.090	ppbv	100
11) Trichlorofluoromethane	1.875	101	130362	9.077	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	103679	9.247	ppbv	100
13) Ethanol	1.716	45	17464	8.023	ppbv	100
14) Bromoethene	1.777	108	38037	8.849	ppbv	100
15) Acetone	1.832	43	108422	7.426	ppbv	100
16) 1,3-Butadiene	1.606	39	57871	8.890	ppbv	100
17) tert-Butyl alcohol	2.036	59	179201	9.350	ppbv	100
18) 1,1-Dichloroethene	2.030	96	46313	8.871	ppbv	100
19) Isopropyl Alcohol	1.881	45	71862	8.710	ppbv	100
20) Methylene Chloride	2.056	84	41868	9.708	ppbv	100
21) Allyl Chloride	2.091	41	89266	9.087	ppbv	100
22) trans-1,2-Dichloroethene	2.334	96	52470	8.793	ppbv	100
23) Vinyl Acetate	2.457	43	170459	9.670	ppbv	100
24) 1,1-Dichloroethane	2.405	63	106970	9.287	ppbv	100
25) Ethyl Acetate	2.829	43	289921	9.190	ppbv	100
26) Hexane	2.820	57	129809	9.402	ppbv	100
27) Carbon Disulfide	2.146	76	132086	9.371	ppbv	100
28) Methyl tert-Butyl Ether	2.434	73	62115	9.165	ppbv	100
29) Chloroform	2.842	83	187620	9.561	ppbv	100
30) Cyclohexane	3.846	84	107621	9.297	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	130357	9.499	ppbv	100
32) 1,1,1-Trichloroethane	3.360	97	198036	9.381	ppbv	100
34) 2-Butanone	2.551	43	182749	9.121	ppbv	100
35) Carbon Tetrachloride	3.755	117	200831	9.322	ppbv	100
36) Benzene	3.648	78	256954	9.453	ppbv	100
37) 1,2-Dichloroethane	3.211	62	150769	9.483	ppbv	100
38) Trichloroethene	4.535	130	100136	9.398	ppbv	100
39) 1,2-Dichloropropane	4.302	63	95097	9.559	ppbv	100
40) 1,4-Dioxane	4.567	88	40441	9.043	ppbv #	100
41) Tetrahydrofuran	3.046	42	104294	9.426	ppbv	100
42) Bromodichloromethane	4.477	83	211504	9.643	ppbv	100
43) Methyl Methacrylate	4.865	69	131003	9.080	ppbv	100
44) 2,2,4-Trimethylpentane	4.626	57	441234	9.451	ppbv	100
45) t-1,3-Dichloropropene	6.399	75	129122	9.601	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043204.D
 Acq On : 18 Nov 2025 10:02
 Operator : SY/MD
 Sample : VSTDICCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:49:32 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.584	75	151655	9.603	ppbv	100
47) 1,1,2-Trichloroethane	6.564	97	97512	9.193	ppbv	100
48) Dibromochloromethane	7.377	129	175529	9.670	ppbv	100
49) Bromoform	9.474	173	157563	9.800	ppbv	100
50) 4-Methyl-2-Pentanone	5.733	43	268369	9.509	ppbv	100
51) 2-Hexanone	7.419	43	208268	9.503	ppbv #	100
52) Tetrachloroethene	8.212	164	93518	9.249	ppbv	100
53) Toluene	6.920	91	305169	9.422	ppbv	100
54) 1,2-Dibromoethane	7.639	107	148973	9.588	ppbv	100
56) 1,1,1,2-Tetrachloroethane	8.914	131	158856	9.207	ppbv	100
57) Chlorobenzene	8.911	112	227490	9.438	ppbv	100
58) Ethyl Benzene	9.345	91	427530	9.461	ppbv	100
59) m/p-Xylene	9.542	91	673371m	18.519	ppbv	
60) o-Xylene	9.956	91	333044	9.202	ppbv	100
61) Styrene	9.863	104	152172	9.607	ppbv	100
62) Isopropylbenzene	10.533	105	600155	9.269	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.953	83	209272	9.109	ppbv	100
64) n-propylbenzene	10.982	120	154239	9.271	ppbv	100
65) tert-Butylbenzene	11.523	119	522106	9.029	ppbv	100
66) Benzyl Chloride	11.607	91	56620	9.649	ppbv	100
67) sec-Butylbenzene	11.762	105	729573	9.039	ppbv	100
69) p-Isopropyltoluene	11.918	119	624586	9.135	ppbv	100
70) n-Butylbenzene	12.274	91	619610	9.341	ppbv	100
71) 2-Chlorotoluene	10.895	91	460118	9.245	ppbv	100
72) 4-Ethyltoluene	11.118	105	410587	9.316	ppbv	100
73) 1,3,5-Trimethylbenzene	11.196	105	341900	9.244	ppbv	100
74) 1,2,4-Trimethylbenzene	11.529	105	363476	9.005	ppbv	100
75) 1,3-Dichlorobenzene	11.601	146	219894	9.335	ppbv	100
76) 1,4-Dichlorobenzene	11.665	146	220576	9.363	ppbv	100
77) 1,2-Dichlorobenzene	11.940	146	204826	9.044	ppbv	100
78) Hexachloro-1,3-Butadiene	13.876	225	161034	8.520	ppbv	100
79) Naphthalene	13.507	128	351148	9.795	ppbv	100
80) Naphthalene,2-methyl-	14.452	142	93113	9.895	ppbv	100
81) 1,2,4-Trichlorobenzene	13.436	180	159091	9.923	ppbv	100

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043205.D
 Acq On : 18 Nov 2025 10:37
 Operator : SY/MD
 Sample : VSTDICC002
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC002

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:50:19 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	104644	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	284629	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	230646	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.374 95 171009 10.115 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.200%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	30881	2.092	ppbv	98
3) Chlorodifluoromethane	1.476	51	30069	2.072	ppbv	98
4) Chloromethane	1.534	50	11890	2.155	ppbv	96
5) Vinyl Chloride	1.580	62	12040	1.995	ppbv	96
6) Bromomethane	1.670	94	5981	2.044	ppbv	99
7) Chloroethane	1.706	64	4943	2.103	ppbv	95
8) Dichlorotetrafluoroethane	1.554	85	26409	2.151	ppbv	98
9) Propene	1.486	41	12993	1.930	ppbv #	1
10) Heptane	4.972	43	36171m	1.958	ppbv	
11) Trichlorofluoromethane	1.878	101	31124	2.177	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	23336	2.090	ppbv	100
13) Ethanol	1.722	45	5266	2.430	ppbv	86
14) Bromoethene	1.784	108	9129	2.133	ppbv	95
15) Acetone	1.835	43	31785	2.186	ppbv	91
16) 1,3-Butadiene	1.609	39	13101	2.021	ppbv	89
17) tert-Butyl alcohol	2.039	59	39348	2.062	ppbv	95
18) 1,1-Dichloroethene	2.036	96	10780	2.074	ppbv	94
19) Isopropyl Alcohol	1.887	45	17229	2.097	ppbv #	71
20) Methylene Chloride	2.062	84	12238	2.248	ppbv	96
21) Allyl Chloride	2.098	41	19580	2.002	ppbv	95
22) trans-1,2-Dichloroethene	2.340	96	12537	2.110	ppbv	94
23) Vinyl Acetate	2.460	43	35205	2.006	ppbv #	97
24) 1,1-Dichloroethane	2.408	63	24987	2.179	ppbv	99
25) Ethyl Acetate	2.832	43	64343	2.048	ppbv	99
26) Hexane	2.826	57	28776	2.093	ppbv	97
27) Carbon Disulfide	2.149	76	29964	2.135	ppbv #	91
28) Methyl tert-Butyl Ether	2.438	73	14101	2.090	ppbv #	85
29) Chloroform	2.849	83	40355	2.065	ppbv	98
30) Cyclohexane	3.855	84	23659	2.053	ppbv	98
31) cis-1,2-Dichloroethene	2.722	61	27663	2.024	ppbv	98
32) 1,1,1-Trichloroethane	3.366	97	42547	2.024	ppbv	99
34) 2-Butanone	2.557	43	41884	2.085	ppbv	99
35) Carbon Tetrachloride	3.765	117	41949	1.942	ppbv	96
36) Benzene	3.654	78	56141m	2.060	ppbv	
37) 1,2-Dichloroethane	3.218	62	32188	2.019	ppbv	100
38) Trichloroethene	4.548	130	21105m	1.975	ppbv	
39) 1,2-Dichloropropane	4.312	63	19913	1.996	ppbv	93
40) 1,4-Dioxane	4.580	88	8829m	1.969	ppbv	
41) Tetrahydrofuran	3.056	42	22912	2.065	ppbv	99
42) Bromodichloromethane	4.490	83	44584	2.027	ppbv	98
43) Methyl Methacrylate	4.875	69	29071	2.009	ppbv	99
44) 2,2,4-Trimethylpentane	4.635	57	92261	1.971	ppbv	96
45) t-1,3-Dichloropropene	6.406	75	27833m	2.064	ppbv	

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043205.D
 Acq On : 18 Nov 2025 10:37
 Operator : SY/MD
 Sample : VSTDICC002
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC002

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:50:19 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	31986	2.020	ppbv	91
47) 1,1,2-Trichloroethane	6.577	97	21542m	2.025	ppbv	
48) Dibromochloromethane	7.386	129	37758m	2.074	ppbv	
49) Bromoform	9.480	173	33057	2.050	ppbv	98
50) 4-Methyl-2-Pentanone	5.745	43	58461	2.066	ppbv	98
51) 2-Hexanone	7.432	43	46444	2.113	ppbv #	99
52) Tetrachloroethene	8.218	164	19856	1.958	ppbv	96
53) Toluene	6.927	91	65238	2.008	ppbv	97
54) 1,2-Dibromoethane	7.648	107	31266	2.007	ppbv	98
56) 1,1,1,2-Tetrachloroethane	8.920	131	35099	2.071	ppbv	99
57) Chlorobenzene	8.917	112	50228	2.121	ppbv	97
58) Ethyl Benzene	9.351	91	92649	2.087	ppbv	98
59) m/p-Xylene	9.529	91	148300m	4.151	ppbv	
60) o-Xylene	9.959	91	76540	2.153	ppbv	100
61) Styrene	9.866	104	33188	2.133	ppbv	98
62) Isopropylbenzene	10.536	105	135853	2.136	ppbv	98
63) 1,1,2,2-Tetrachloroethane	9.963	83	47439	2.102	ppbv	99
64) n-propylbenzene	10.985	120	34915	2.136	ppbv	99
65) tert-Butylbenzene	11.529	119	122064	2.149	ppbv	99
66) Benzyl Chloride	11.610	91	11870	2.059	ppbv	99
67) sec-Butylbenzene	11.765	105	170529	2.151	ppbv	100
69) p-Isopropyltoluene	11.921	119	147482	2.195	ppbv	98
70) n-Butylbenzene	12.280	91	144148	2.212	ppbv	99
71) 2-Chlorotoluene	10.898	91	101951	2.085	ppbv	100
72) 4-Ethyltoluene	11.121	105	92654	2.140	ppbv	99
73) 1,3,5-Trimethylbenzene	11.202	105	76655	2.110	ppbv	96
74) 1,2,4-Trimethylbenzene	11.532	105	86286	2.176	ppbv	98
75) 1,3-Dichlorobenzene	11.604	146	48961	2.116	ppbv	98
76) 1,4-Dichlorobenzene	11.668	146	48881	2.112	ppbv	98
77) 1,2-Dichlorobenzene	11.944	146	48431	2.177	ppbv	99
78) Hexachloro-1,3-Butadiene	13.879	225	42456	2.287	ppbv	99
79) Naphthalene	13.510	128	85788	2.436	ppbv	97
80) Naphthalene,2-methyl-	14.458	142	20685	2.237	ppbv	98
81) 1,2,4-Trichlorobenzene	13.439	180	37521	2.382	ppbv	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043206.D
 Acq On : 18 Nov 2025 11:10
 Operator : SY/MD
 Sample : VSTDICC001
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:51:06 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	102795	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	278732	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.872	117	227998	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.370 95 167061 9.996 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.000%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	15474	1.067	ppbv	100
3) Chlorodifluoromethane	1.476	51	14437	1.013	ppbv #	92
4) Chloromethane	1.531	50	5751	1.061	ppbv	92
5) Vinyl Chloride	1.580	62	5967	1.007	ppbv	95
6) Bromomethane	1.667	94	3104	1.080	ppbv	94
7) Chloroethane	1.706	64	2550	1.104	ppbv	97
8) Dichlorotetrafluoroethane	1.554	85	12759	1.058	ppbv	98
9) Propene	1.483	41	6147	0.929	ppbv #	1
10) Heptane	4.972	43	18544	1.022	ppbv	100
11) Trichlorofluoromethane	1.877	101	15571	1.108	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	11743	1.071	ppbv	99
13) Ethanol	1.719	45	2373	1.115	ppbv	67
14) Bromoethene	1.780	108	4345	1.033	ppbv #	91
15) Acetone	1.835	43	16353	1.145	ppbv	90
16) 1,3-Butadiene	1.609	39	6469	1.016	ppbv	96
17) tert-Butyl alcohol	2.039	59	20703	1.104	ppbv #	92
18) 1,1-Dichloroethene	2.033	96	5447	1.067	ppbv	97
19) Isopropyl Alcohol	1.884	45	8849	1.097	ppbv #	43
20) Methylene Chloride	2.059	84	7297	1.030	ppbv	85
21) Allyl Chloride	2.094	41	9198	0.957	ppbv #	84
22) trans-1,2-Dichloroethene	2.340	96	6313	1.082	ppbv	94
23) Vinyl Acetate	2.460	43	16779	0.973	ppbv	98
24) 1,1-Dichloroethane	2.405	63	12062	1.071	ppbv	94
25) Ethyl Acetate	2.832	43	32108	1.041	ppbv	98
26) Hexane	2.819	57	14639	1.084	ppbv	99
27) Carbon Disulfide	2.149	76	14637	1.062	ppbv #	30
28) Methyl tert-Butyl Ether	2.441	73	7236	1.092	ppbv #	83
29) Chloroform	2.845	83	19509	1.016	ppbv	91
30) Cyclohexane	3.852	84	12269	1.084	ppbv	96
31) cis-1,2-Dichloroethene	2.716	61	13889	1.035	ppbv	97
32) 1,1,1-Trichloroethane	3.363	97	20745	1.005	ppbv	99
34) 2-Butanone	2.554	43	20940	1.064	ppbv	96
35) Carbon Tetrachloride	3.758	117	21497	1.016	ppbv	96
36) Benzene	3.648	78	27911	1.046	ppbv	99
37) 1,2-Dichloroethane	3.214	62	16159	1.035	ppbv	99
38) Trichloroethene	4.538	130	10809m	1.033	ppbv	
39) 1,2-Dichloropropane	4.311	63	10147	1.039	ppbv	91
40) 1,4-Dioxane	4.577	88	4616m	1.051	ppbv	
41) Tetrahydrofuran	3.052	42	11176	1.029	ppbv	96
42) Bromodichloromethane	4.480	83	22150	1.028	ppbv #	98
43) Methyl Methacrylate	4.871	69	14821	1.046	ppbv	94
44) 2,2,4-Trimethylpentane	4.632	57	49203m	1.073	ppbv	
45) t-1,3-Dichloropropene	6.402	75	13149m	0.996	ppbv	

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043206.D
 Acq On : 18 Nov 2025 11:10
 Operator : SY/MD
 Sample : VSTDIC001
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:51:06 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.590	75	15527	1.001	ppbv #	95
47) 1,1,2-Trichloroethane	6.577	97	10369	0.995	ppbv #	85
48) Dibromochloromethane	7.377	129	18560	1.041	ppbv	93
49) Bromoform	9.477	173	15858	1.004	ppbv	98
50) 4-Methyl-2-Pentanone	5.745	43	29560	1.067	ppbv	99
51) 2-Hexanone	7.428	43	22438	1.043	ppbv #	98
52) Tetrachloroethene	8.215	164	10080	1.015	ppbv	90
53) Toluene	6.923	91	32951	1.036	ppbv	100
54) 1,2-Dibromoethane	7.645	107	15865	1.040	ppbv	97
56) 1,1,1,2-Tetrachloroethane	8.917	131	17535	1.046	ppbv	99
57) Chlorobenzene	8.914	112	24806	1.060	ppbv	98
58) Ethyl Benzene	9.344	91	46455	1.059	ppbv	96
59) m/p-Xylene	9.545	91	73461m	2.080	ppbv	
60) o-Xylene	9.956	91	37054	1.054	ppbv	97
61) Styrene	9.866	104	15730	1.023	ppbv	95
62) Isopropylbenzene	10.532	105	67163	1.068	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.956	83	23083	1.035	ppbv	97
64) n-propylbenzene	10.985	120	17289	1.070	ppbv	100
65) tert-Butylbenzene	11.526	119	61258	1.091	ppbv	99
66) Benzyl Chloride	11.610	91	5729	1.005	ppbv	96
67) sec-Butylbenzene	11.762	105	84989	1.084	ppbv	99
69) p-Isopropyltoluene	11.921	119	69993	1.054	ppbv	99
70) n-Butylbenzene	12.277	91	69323	1.076	ppbv	99
71) 2-Chlorotoluene	10.895	91	51452	1.065	ppbv	100
72) 4-Ethyltoluene	11.118	105	44403	1.037	ppbv	99
73) 1,3,5-Trimethylbenzene	11.199	105	38350	1.068	ppbv	91
74) 1,2,4-Trimethylbenzene	11.532	105	42051	1.073	ppbv #	81
75) 1,3-Dichlorobenzene	11.600	146	24011	1.050	ppbv	98
76) 1,4-Dichlorobenzene	11.665	146	23543	1.029	ppbv	97
77) 1,2-Dichlorobenzene	11.940	146	24248	1.103	ppbv	98
78) Hexachloro-1,3-Butadiene	13.879	225	20489	1.116	ppbv	99
79) Naphthalene	13.507	128	36462	1.047	ppbv	95
80) Naphthalene,2-methyl-	14.455	142	7375	0.807	ppbv	95
81) 1,2,4-Trichlorobenzene	13.436	180	15785	1.014	ppbv	98

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043208.D
 Acq On : 18 Nov 2025 12:16
 Operator : SY/MD
 Sample : VSTDICC0.1
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.1

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:51:52 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	101366	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	273996	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	222034	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	160968	9.890	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.900%
Target Compounds						
						Qvalue
5) Vinyl Chloride	1.580	62	664	0.114	ppbv	97
32) 1,1,1-Trichloroethane	3.360	97	2074m	0.102	ppbv	
35) Carbon Tetrachloride	3.761	117	2097m	0.101	ppbv	
38) Trichloroethene	4.541	130	1302m	0.127	ppbv	
52) Tetrachloroethene	8.218	164	1161m	0.119	ppbv	
54) 1,2-Dibromoethane	7.648	107	1446m	0.096	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.953	83	2296m	0.106	ppbv	
79) Naphthalene	13.510	128	2732m	0.081	ppbv	

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

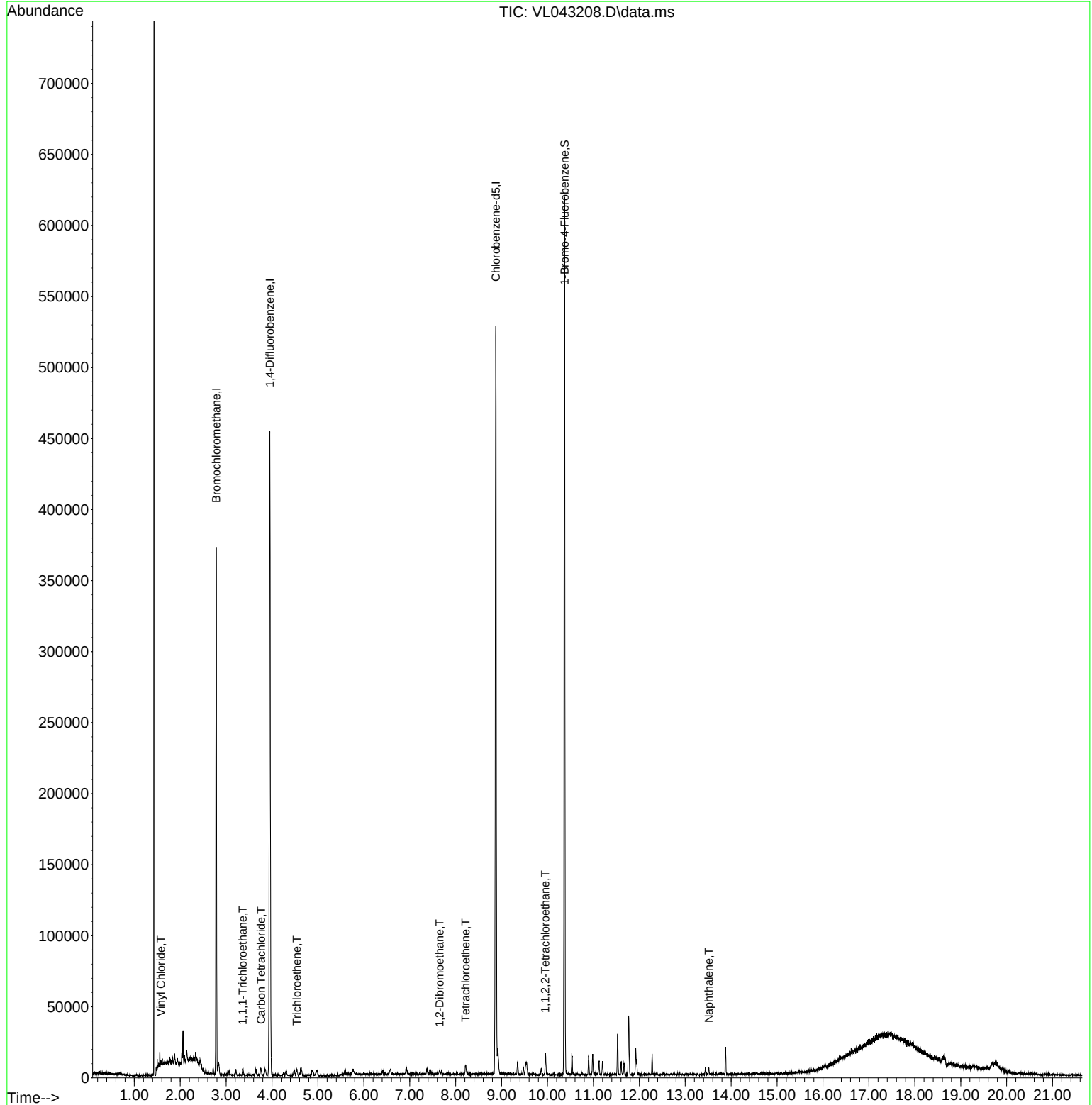
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
Data File : VL043208.D
Acq On : 18 Nov 2025 12:16
Operator : SY/MD
Sample : VSTDIC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

Quant Time: Nov 19 00:51:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Wed Nov 19 00:48:15 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043209.D
 Acq On : 18 Nov 2025 12:49
 Operator : SY/MD
 Sample : VSTDICC0.03
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.03

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:52:39 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Wed Nov 19 00:48:15 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	98952	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	266012	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	213547	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	152015	9.712	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.100%
Target Compounds						
					Qvalue	
5) Vinyl Chloride	1.580	62	215m	0.038	ppbv	
32) 1,1,1-Trichloroethane	3.357	97	628m	0.032	ppbv	
35) Carbon Tetrachloride	3.758	117	664m	0.033	ppbv	
38) Trichloroethene	4.542	130	234m	0.023	ppbv	
52) Tetrachloroethene	8.222	164	290m	0.031	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.963	83	640m	0.031	ppbv	

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

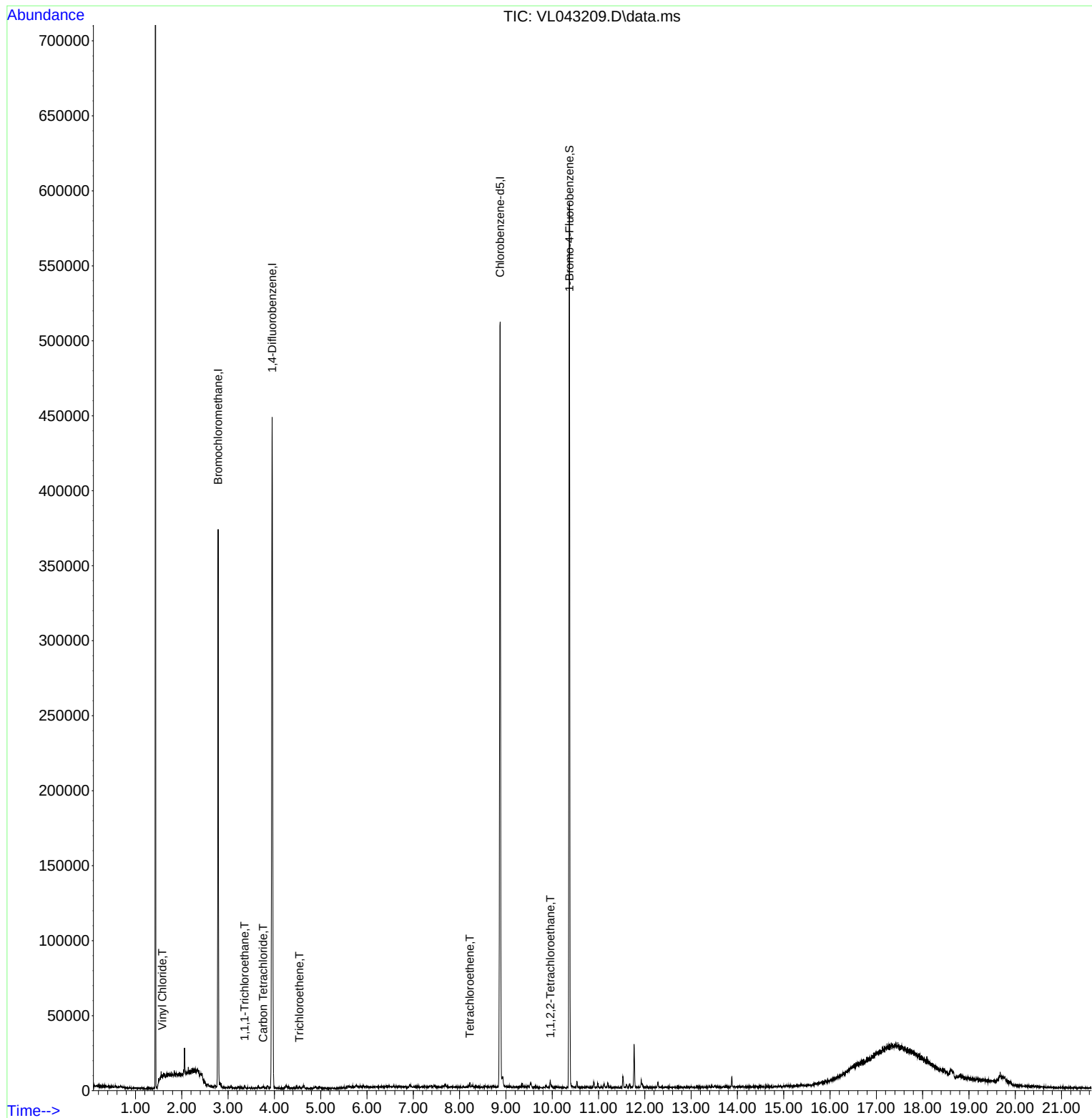
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
Data File : VL043209.D
Acq On : 18 Nov 2025 12:49
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Nov 19 00:52:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Wed Nov 19 00:48:15 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 11/19/2025
Supervised By : Mahesh Dadoda 11/19/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043210.D
 Acq On : 18 Nov 2025 13:24
 Operator : SY/MD
 Sample : VSTDICC015
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC015

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:53:26 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	98968	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	258461	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.872	117	211247	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.367	95	159814	10.321	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	= 103.200%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	197987	14.184	ppbv	99
3) Chlorodifluoromethane	1.476	51	182813	13.317	ppbv	98
4) Chloromethane	1.531	50	72636	13.918	ppbv	97
5) Vinyl Chloride	1.580	62	71671	12.557	ppbv	96
6) Bromomethane	1.667	94	38265	13.830	ppbv	98
7) Chloroethane	1.703	64	29584	13.309	ppbv	98
8) Dichlorotetrafluoroethane	1.554	85	165709	14.271	ppbv	97
9) Propene	1.483	41	81393m	12.782	ppbv	
10) Heptane	4.972	43	225935	12.934	ppbv	100
11) Trichlorofluoromethane	1.874	101	200703	14.840	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.137	101	152772	14.469	ppbv	98
13) Ethanol	1.719	45	25468	12.425	ppbv	99
14) Bromoethene	1.781	108	55813	13.789	ppbv	96
15) Acetone	1.832	43	161036	11.712	ppbv	99
16) 1,3-Butadiene	1.609	39	81077	13.226	ppbv	99
17) tert-Butyl alcohol	2.036	59	257617	14.274	ppbv	99
18) 1,1-Dichloroethene	2.033	96	65731	13.370	ppbv	96
19) Isopropyl Alcohol	1.881	45	105271	13.549	ppbv	99
20) Methylene Chloride	2.059	84	59798	15.164	ppbv	93
21) Allyl Chloride	2.094	41	126959	13.724	ppbv	96
22) trans-1,2-Dichloroethene	2.337	96	77386	13.772	ppbv	94
23) Vinyl Acetate	2.457	43	232315	13.995	ppbv	99
24) 1,1-Dichloroethane	2.405	63	155017	14.292	ppbv	98
25) Ethyl Acetate	2.829	43	394074	13.265	ppbv	99
26) Hexane	2.823	57	172303	13.252	ppbv	97
27) Carbon Disulfide	2.150	76	191612	14.435	ppbv	97
28) Methyl tert-Butyl Ether	2.434	73	91132	14.279	ppbv	97
29) Chloroform	2.845	83	262803	14.221	ppbv	100
30) Cyclohexane	3.852	84	152015	13.946	ppbv	94
31) cis-1,2-Dichloroethene	2.716	61	180647	13.978	ppbv	98
32) 1,1,1-Trichloroethane	3.363	97	276915	13.930	ppbv	98
34) 2-Butanone	2.551	43	253855	13.914	ppbv	100
35) Carbon Tetrachloride	3.755	117	279560	14.250	ppbv	96
36) Benzene	3.651	78	348892	14.096	ppbv	99
37) 1,2-Dichloroethane	3.214	62	214248	14.798	ppbv	98
38) Trichloroethene	4.541	130	137027	14.123	ppbv	93
39) 1,2-Dichloropropane	4.302	63	128700	14.206	ppbv	98
40) 1,4-Dioxane	4.571	88	55905	13.728	ppbv #	95
41) Tetrahydrofuran	3.043	42	139722	13.868	ppbv	99
42) Bromodichloromethane	4.480	83	294008	14.721	ppbv	97
43) Methyl Methacrylate	4.872	69	179110	13.633	ppbv	100
44) 2,2,4-Trimethylpentane	4.632	57	595778	14.014	ppbv	99
45) t-1,3-Dichloropropene	6.406	75	177678	14.508	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043210.D
 Acq On : 18 Nov 2025 13:24
 Operator : SY/MD
 Sample : VSTDIC015
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 00:53:26 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 00:48:15 2025

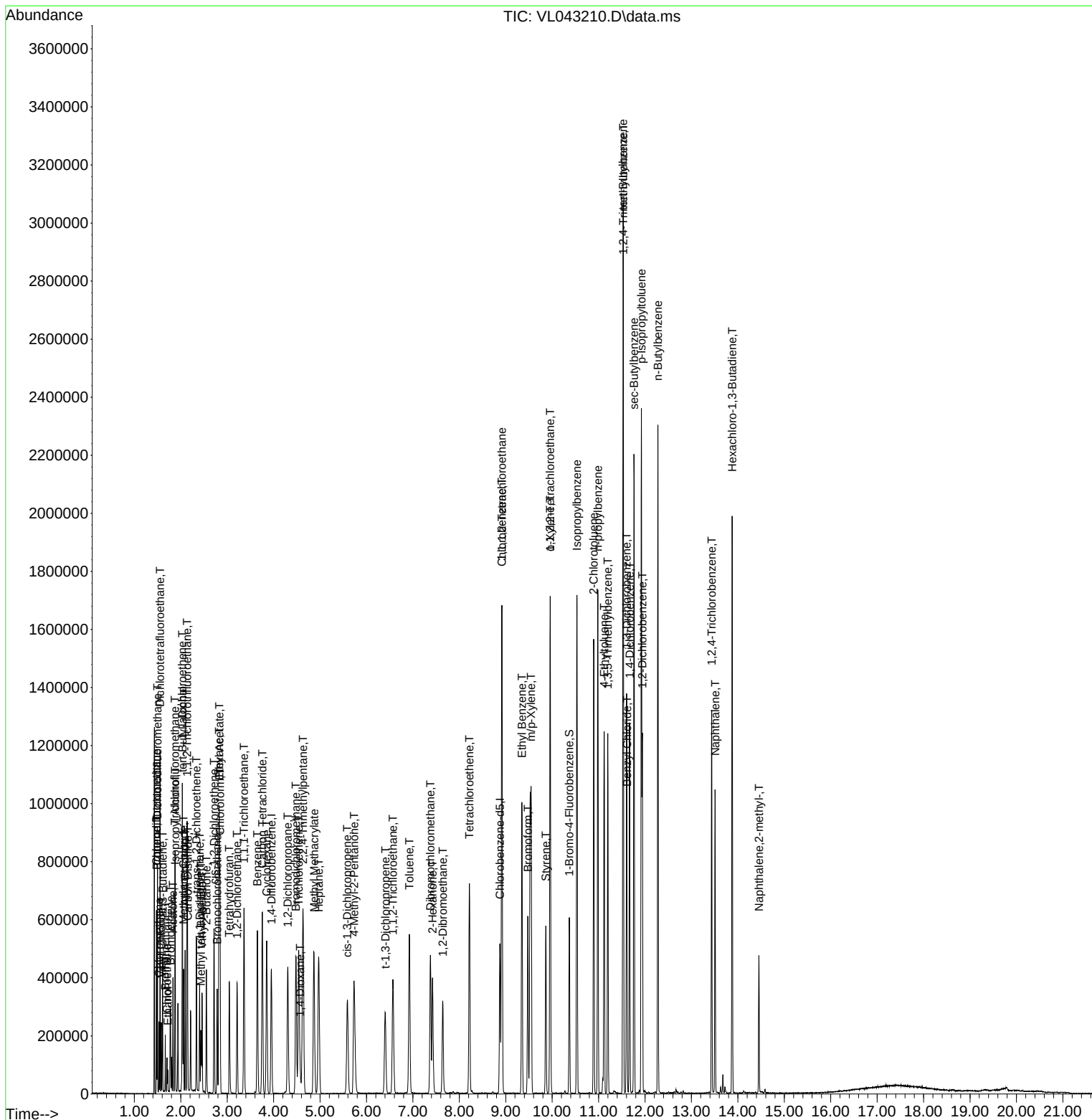
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.587	75	205226	14.270	ppbv	100
47) 1,1,2-Trichloroethane	6.571	97	132701	13.738	ppbv	92
48) Dibromochloromethane	7.377	129	240736	14.564	ppbv	99
49) Bromoform	9.477	173	211325	14.434	ppbv	99
50) 4-Methyl-2-Pentanone	5.732	43	354421	13.790	ppbv	99
51) 2-Hexanone	7.422	43	280742	14.067	ppbv #	100
52) Tetrachloroethene	8.218	164	125132	13.591	ppbv	93
53) Toluene	6.924	91	414411	14.050	ppbv	99
54) 1,2-Dibromoethane	7.642	107	203913	14.413	ppbv	99
56) 1,1,1,2-Tetrachloroethane	8.917	131	214673	13.827	ppbv	99
57) Chlorobenzene	8.914	112	301986	13.923	ppbv	98
58) Ethyl Benzene	9.348	91	579890	14.262	ppbv	99
59) m/p-Xylene	9.545	91	916113m	28.000	ppbv	
60) o-Xylene	9.956	91	450260	13.826	ppbv	99
61) Styrene	9.862	104	204972	14.382	ppbv	99
62) Isopropylbenzene	10.532	105	803487	13.791	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.956	83	280254	13.557	ppbv	99
64) n-propylbenzene	10.986	120	205637	13.737	ppbv	100
65) tert-Butylbenzene	11.526	119	689352	13.249	ppbv	98
66) Benzyl Chloride	11.610	91	71386	13.520	ppbv	100
67) sec-Butylbenzene	11.762	105	972780	13.394	ppbv	100
69) p-Isopropyltoluene	11.921	119	836888	13.602	ppbv	99
70) n-Butylbenzene	12.277	91	838598	14.050	ppbv	99
71) 2-Chlorotoluene	10.895	91	625884	13.976	ppbv	100
72) 4-Ethyltoluene	11.121	105	553654	13.961	ppbv	99
73) 1,3,5-Trimethylbenzene	11.199	105	460783	13.846	ppbv	97
74) 1,2,4-Trimethylbenzene	11.533	105	486995	13.409	ppbv	97
75) 1,3-Dichlorobenzene	11.604	146	292143	13.784	ppbv	99
76) 1,4-Dichlorobenzene	11.668	146	294723	13.903	ppbv	99
77) 1,2-Dichlorobenzene	11.944	146	273467	13.420	ppbv	98
78) Hexachloro-1,3-Butadiene	13.876	225	211153	12.416	ppbv	99
79) Naphthalene	13.510	128	473229	14.670	ppbv	99
80) Naphthalene,2-methyl-	14.452	142	139019	16.418	ppbv	99
81) 1,2,4-Trichlorobenzene	13.436	180	216260	14.990	ppbv	99

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

Manual Integrations

Quant Time: Nov 19 00:53:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL11825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Nov 19 00:48:15 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043211.D
 Acq On : 18 Nov 2025 13:56
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL111825

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 01:34:00 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	97854	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	261914	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.879	117	216212	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.374 95 159242 10.048 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.500%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	133374	9.664	ppbv	98
3) Chlorodifluoromethane	1.476	51	124858	9.199	ppbv	98
4) Chloromethane	1.535	50	46906	9.090	ppbv	95
5) Vinyl Chloride	1.580	62	47932	8.493	ppbv	95
6) Bromomethane	1.667	94	22230	8.126	ppbv	99
7) Chloroethane	1.703	64	19854	9.033	ppbv	98
8) Dichlorotetrafluoroethane	1.554	85	110587	9.632	ppbv	97
9) Propene	1.483	41	54006m	9.370	ppbv	
10) Heptane	4.975	43	149202	8.698	ppbv	99
11) Trichlorofluoromethane	1.878	101	134746	10.077	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	100984	9.673	ppbv	99
13) Ethanol	1.719	45	15371	7.584	ppbv	92
14) Bromoethene	1.781	108	36979	9.240	ppbv	98
15) Acetone	1.832	43	104830	7.711	ppbv	99
16) 1,3-Butadiene	1.609	39	54795	9.041	ppbv	96
17) tert-Butyl alcohol	2.036	59	164987	9.245	ppbv	99
18) 1,1-Dichloroethene	2.033	96	43833	9.017	ppbv	99
19) Isopropyl Alcohol	1.884	45	64772	8.431	ppbv	97
20) Methylene Chloride	2.062	84	41254	10.323	ppbv	95
21) Allyl Chloride	2.095	41	75516	8.256	ppbv	97
22) trans-1,2-Dichloroethene	2.341	96	50228	9.041	ppbv	92
23) Vinyl Acetate	2.460	43	140156	8.539	ppbv	98
24) 1,1-Dichloroethane	2.409	63	103187	9.622	ppbv	97
25) Ethyl Acetate	2.829	43	258609	8.820	ppbv	99
26) Hexane	2.826	57	114312	8.892	ppbv	98
27) Carbon Disulfide	2.150	76	125048	9.528	ppbv	97
28) Methyl tert-Butyl Ether	2.438	73	64183	10.171	ppbv	98
29) Chloroform	2.846	83	173977	9.521	ppbv	99
30) Cyclohexane	3.852	84	98598	9.148	ppbv	97
31) cis-1,2-Dichloroethene	2.719	61	119843	9.379	ppbv	98
32) 1,1,1-Trichloroethane	3.363	97	182262	9.358	ppbv	98
34) 2-Butanone	2.551	43	160977	8.707	ppbv	98
35) Carbon Tetrachloride	3.761	117	182902	9.200	ppbv	98
36) Benzene	3.655	78	233094	9.293	ppbv	99
37) 1,2-Dichloroethane	3.214	62	143363	9.772	ppbv	98
38) Trichloroethene	4.542	130	90993	9.272	ppbv	95
39) 1,2-Dichloropropane	4.305	63	83416	9.086	ppbv	95
40) 1,4-Dioxane	4.571	88	32109	7.780	ppbv #	95
41) Tetrahydrofuran	3.046	42	90769	8.891	ppbv	98
42) Bromodichloromethane	4.486	83	195442	9.657	ppbv	96
43) Methyl Methacrylate	4.872	69	116325	8.737	ppbv	98
44) 2,2,4-Trimethylpentane	4.635	57	393438	9.133	ppbv	99
45) t-1,3-Dichloropropene	6.409	75	97587	7.863	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043211.D
 Acq On : 18 Nov 2025 13:56
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL111825

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 01:34:00 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	115476	7.924	ppbv	97
47) 1,1,2-Trichloroethane	6.577	97	88525	9.086	ppbv	95
48) Dibromochloromethane	7.380	129	159365	9.514	ppbv	99
49) Bromoform	9.477	173	134790	9.085	ppbv	99
50) 4-Methyl-2-Pentanone	5.742	43	224791	8.631	ppbv	99
51) 2-Hexanone	7.429	43	166506	8.233	ppbv #	100
52) Tetrachloroethene	8.222	164	82890	8.884	ppbv	98
53) Toluene	6.924	91	273172	9.197	ppbv	99
54) 1,2-Dibromoethane	7.645	107	124804	8.705	ppbv	99
56) 1,1,1,2-Tetrachloroethane	8.921	131	142512	8.969	ppbv	98
57) Chlorobenzene	8.917	112	199373	8.981	ppbv	96
58) Ethyl Benzene	9.351	91	381474	9.167	ppbv	97
59) m/p-Xylene	9.549	91	604165m	18.108	ppbv	
60) o-Xylene	9.960	91	295836	8.876	ppbv	99
61) Styrene	9.866	104	127117	8.714	ppbv	97
62) Isopropylbenzene	10.536	105	525717	8.816	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.960	83	178591	8.421	ppbv	100
64) n-propylbenzene	10.986	120	131634	8.591	ppbv	96
65) tert-Butylbenzene	11.529	119	450819	8.465	ppbv	99
66) Benzyl Chloride	11.614	91	27878	5.159	ppbv	99
67) sec-Butylbenzene	11.766	105	623520	8.388	ppbv	100
69) p-Isopropyltoluene	11.924	119	520880	8.272	ppbv	99
70) n-Butylbenzene	12.280	91	513027	8.398	ppbv	99
71) 2-Chlorotoluene	10.898	91	396434	8.649	ppbv	99
72) 4-Ethyltoluene	11.122	105	356325	8.779	ppbv	99
73) 1,3,5-Trimethylbenzene	11.199	105	294977	8.660	ppbv	95
74) 1,2,4-Trimethylbenzene	11.533	105	314606	8.463	ppbv	94
75) 1,3-Dichlorobenzene	11.604	146	180491	8.320	ppbv	99
76) 1,4-Dichlorobenzene	11.669	146	179491	8.273	ppbv	99
77) 1,2-Dichlorobenzene	11.944	146	166137	7.966	ppbv	99
78) Hexachloro-1,3-Butadiene	13.879	225	125707	7.222	ppbv	100
79) Naphthalene	13.510	128	273029	8.270	ppbv	99
80) Naphthalene,2-methyl-	14.455	142	74802	8.631	ppbv	97
81) 1,2,4-Trichlorobenzene	13.436	180	125470	8.497	ppbv	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043211.D
 Acq On : 18 Nov 2025 13:56
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL111825

Quant Time: Nov 19 01:34:00 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	93	0.00
2 T	Dichlorodifluoromethane	1.410	1.363	3.3	95	0.00
3	Chlorodifluoromethane	1.387	1.276	8.0	90	0.00
4	Chloromethane	0.527	0.479	9.1	90	0.00
5 T	Vinyl Chloride	0.577	0.490	15.1	94	0.00
6 T	Bromomethane	0.280	0.227	18.9	84	0.00
7	Chloroethane	0.225	0.203	9.8	97	0.00
8 T	Dichlorotetrafluoroethane	1.173	1.130	3.7	96	0.00
9 T	Propene	0.589	0.552	6.3	103	0.00
10 T	Heptane	1.753	1.525	13.0	88	0.00
11 T	Trichlorofluoromethane	1.367	1.377	-0.7	103	0.00
12 T	1,1,2-Trichlorotrifluoroeth	1.067	1.032	3.3	97	0.00
13	Ethanol	0.207	0.157	24.2	88	0.00
14 T	Bromoethene	0.409	0.378	7.6	97	0.00
15 T	Acetone	1.389	1.071	22.9	97	0.00
16 T	1,3-Butadiene	0.619	0.560	9.5	95	0.00
17	tert-Butyl alcohol	1.824	1.686	7.6	92	0.00
18 T	1,1-Dichloroethene	0.497	0.448	9.9	95	0.00
19 T	Isopropyl Alcohol	0.785	0.662	15.7	90	0.00
20 T	Methylene Chloride	0.600	0.422	29.7	99	0.00
21 T	Allyl Chloride	0.935	0.772	17.4	85	0.00
22 T	trans-1,2-Dichloroethene	0.568	0.513	9.7	96	0.00
23 T	Vinyl Acetate	1.677	1.432	14.6	82	0.00
24 T	1,1-Dichloroethane	1.096	1.054	3.8	96	0.00
25 T	Ethyl Acetate	2.996	2.643	11.8	89	0.00
26 T	Hexane	1.314	1.168	11.1	88	0.00
27 T	Carbon Disulfide	1.341	1.278	4.7	95	0.00
28 T	Methyl tert-Butyl Ether	0.645	0.656	-1.7	103	0.00
29 T	Chloroform	1.867	1.778	4.8	93	0.00
30 T	Cyclohexane	1.101	1.008	8.4	92	0.00
31 T	cis-1,2-Dichloroethene	1.306	1.225	6.2	92	0.00
32 T	1,1,1-Trichloroethane	1.990	1.863	6.4	92	0.00
33 I	1,4-Difluorobenzene	1.000	1.000	0.0	92	0.00
34 T	2-Butanone	0.706	0.615	12.9	88	0.00
35 T	Carbon Tetrachloride	0.759	0.698	8.0	91	0.00
36 T	Benzene	0.958	0.890	7.1	91	0.00
37 T	1,2-Dichloroethane	0.560	0.547	2.3	95	0.00
38 T	Trichloroethene	0.375	0.347	7.5	91	0.00
39 T	1,2-Dichloropropane	0.351	0.318	9.4	88	0.00
40 T	1,4-Dioxane	0.158	0.123	22.2	79	0.00
41 T	Tetrahydrofuran	0.390	0.347	11.0	87	0.00
42 T	Bromodichloromethane	0.773	0.746	3.5	92	0.00
43	Methyl Methacrylate	0.508	0.444	12.6	89	0.00
44 T	2,2,4-Trimethylpentane	1.645	1.502	8.7	89	0.00
45 T	t-1,3-Dichloropropene	0.474	0.373	21.3	76	0.00
46 T	cis-1,3-Dichloropropene	0.556	0.441	20.7	76	0.00
47 T	1,1,2-Trichloroethane	0.372	0.338	9.1	91	0.01
48 T	Dibromochloromethane	0.640	0.608	5.0	91	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043211.D
 Acq On : 18 Nov 2025 13:56
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL111825

Quant Time: Nov 19 01:34:00 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	Bromoform	0.566	0.515	9.0	86	0.00
50 T	4-Methyl-2-Pentanone	0.994	0.858	13.7	84	0.00
51 T	2-Hexanone	0.772	0.636	17.6	80	0.00
52 T	Tetrachloroethene	0.356	0.316	11.2	89	0.00
53 T	Toluene	1.134	1.043	8.0	90	0.00
54 T	1,2-Dibromoethane	0.547	0.477	12.8	84	0.00
55 I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
56	1,1,1,2-Tetrachloroethane	0.735	0.659	10.3	90	0.00
57 T	Chlorobenzene	1.027	0.922	10.2	88	0.00
58 T	Ethyl Benzene	1.925	1.764	8.4	89	0.00
59 T	m/p-Xylene	1.543	1.397	9.5	90	0.00
60 T	o-Xylene	1.542	1.368	11.3	89	0.00
61 T	Styrene	0.675	0.588	12.9	84	0.00
62	Isopropylbenzene	2.758	2.431	11.9	88	0.00
63 T	1,1,2,2-Tetrachloroethane	0.981	0.826	15.8	85	0.00
64	n-propylbenzene	0.709	0.609	14.1	85	0.00
65	tert-Butylbenzene	2.463	2.085	15.3	86	0.00
66 T	Benzyl Chloride	0.250	0.129	48.4#	49	0.00
67	sec-Butylbenzene	3.438	2.884	16.1	85	0.00
68 S	1-Bromo-4-Fluorobenzene	0.733	0.737	-0.5	92	0.00
69	p-Isopropyltoluene	2.912	2.409	17.3	83	0.00
70	n-Butylbenzene	2.825	2.373	16.0	83	0.00
71	2-Chlorotoluene	2.120	1.834	13.5	86	0.00
72 T	4-Ethyltoluene	1.877	1.648	12.2	87	0.00
73 T	1,3,5-Trimethylbenzene	1.575	1.364	13.4	86	0.00
74 T	1,2,4-Trimethylbenzene	1.719	1.455	15.4	87	0.00
75 T	1,3-Dichlorobenzene	1.003	0.835	16.7	82	0.00
76 T	1,4-Dichlorobenzene	1.003	0.830	17.2	81	0.00
77 T	1,2-Dichlorobenzene	0.965	0.768	20.4	81	0.00
78 T	Hexachloro-1,3-Butadiene	0.805	0.581	27.8	78	0.00
79 T	Naphthalene	1.527	1.263	17.3	78	0.00
80 T	Naphthalene,2-methyl-	0.401	0.346	13.7	80	0.00
81 T	1,2,4-Trichlorobenzene	0.683	0.580	15.1	79	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043211.D
 Acq On : 18 Nov 2025 13:56
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL111825

Quant Time: Nov 19 01:34:00 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	10.000	10.000	0.0	93	0.00
2 T	Dichlorodifluoromethane	10.000	9.664	3.4	95	0.00
3	Chlorodifluoromethane	10.000	9.199	8.0	90	0.00
4	Chloromethane	10.000	9.090	9.1	90	0.00
5 T	Vinyl Chloride	10.000	8.493	15.1	94	0.00
6 T	Bromomethane	10.000	8.126	18.7	84	0.00
7	Chloroethane	10.000	9.033	9.7	97	0.00
8 T	Dichlorotetrafluoroethane	10.000	9.632	3.7	96	0.00
9 T	Propene	10.000	9.370	6.3	103	0.00
10 T	Heptane	10.000	8.698	13.0	88	0.00
11 T	Trichlorofluoromethane	10.000	10.077	-0.8	103	0.00
12 T	1,1,2-Trichlorotrifluoroeth	10.000	9.673	3.3	97	0.00
13	Ethanol	10.000	7.584	24.2	88	0.00
14 T	Bromoethene	10.000	9.240	7.6	97	0.00
15 T	Acetone	10.000	7.711	22.9	97	0.00
16 T	1,3-Butadiene	10.000	9.041	9.6	95	0.00
17	tert-Butyl alcohol	10.000	9.245	7.6	92	0.00
18 T	1,1-Dichloroethene	10.000	9.017	9.8	95	0.00
19 T	Isopropyl Alcohol	10.000	8.431	15.7	90	0.00
20 T	Methylene Chloride	10.000	10.323	-3.2	99	0.00
21 T	Allyl Chloride	10.000	8.256	17.4	85	0.00
22 T	trans-1,2-Dichloroethene	10.000	9.041	9.6	96	0.00
23 T	Vinyl Acetate	10.000	8.539	14.6	82	0.00
24 T	1,1-Dichloroethane	10.000	9.622	3.8	96	0.00
25 T	Ethyl Acetate	10.000	8.820	11.8	89	0.00
26 T	Hexane	10.000	8.892	11.1	88	0.00
27 T	Carbon Disulfide	10.000	9.528	4.7	95	0.00
28 T	Methyl tert-Butyl Ether	10.000	10.171	-1.7	103	0.00
29 T	Chloroform	10.000	9.521	4.8	93	0.00
30 T	Cyclohexane	10.000	9.148	8.5	92	0.00
31 T	cis-1,2-Dichloroethene	10.000	9.379	6.2	92	0.00
32 T	1,1,1-Trichloroethane	10.000	9.358	6.4	92	0.00
33 I	1,4-Difluorobenzene	10.000	10.000	0.0	92	0.00
34 T	2-Butanone	10.000	8.707	12.9	88	0.00
35 T	Carbon Tetrachloride	10.000	9.200	8.0	91	0.00
36 T	Benzene	10.000	9.293	7.1	91	0.00
37 T	1,2-Dichloroethane	10.000	9.772	2.3	95	0.00
38 T	Trichloroethene	10.000	9.272	7.3	91	0.00
39 T	1,2-Dichloropropane	10.000	9.086	9.1	88	0.00
40 T	1,4-Dioxane	10.000	7.780	22.2	79	0.00
41 T	Tetrahydrofuran	10.000	8.891	11.1	87	0.00
42 T	Bromodichloromethane	10.000	9.657	3.4	92	0.00
43	Methyl Methacrylate	10.000	8.737	12.6	89	0.00
44 T	2,2,4-Trimethylpentane	10.000	9.133	8.7	89	0.00
45 T	t-1,3-Dichloropropene	10.000	7.863	21.4	76	0.00
46 T	cis-1,3-Dichloropropene	10.000	7.924	20.8	76	0.00
47 T	1,1,2-Trichloroethane	10.000	9.086	9.1	91	0.01
48 T	Dibromochloromethane	10.000	9.514	4.9	91	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043211.D
 Acq On : 18 Nov 2025 13:56
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL111825

Quant Time: Nov 19 01:34:00 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	Bromoform	10.000	9.085	9.1	86	0.00
50 T	4-Methyl-2-Pentanone	10.000	8.631	13.7	84	0.00
51 T	2-Hexanone	10.000	8.233	17.7	80	0.00
52 T	Tetrachloroethene	10.000	8.884	11.2	89	0.00
53 T	Toluene	10.000	9.197	8.0	90	0.00
54 T	1,2-Dibromoethane	10.000	8.705	13.0	84	0.00
55 I	Chlorobenzene-d5	10.000	10.000	0.0	92	0.00
56	1,1,1,2-Tetrachloroethane	10.000	8.969	10.3	90	0.00
57 T	Chlorobenzene	10.000	8.981	10.2	88	0.00
58 T	Ethyl Benzene	10.000	9.167	8.3	89	0.00
59 T	m/p-Xylene	20.000	18.108	9.5	90	0.00
60 T	o-Xylene	10.000	8.876	11.2	89	0.00
61 T	Styrene	10.000	8.714	12.9	84	0.00
62	Isopropylbenzene	10.000	8.816	11.8	88	0.00
63 T	1,1,2,2-Tetrachloroethane	10.000	8.421	15.8	85	0.00
64	n-propylbenzene	10.000	8.591	14.1	85	0.00
65	tert-Butylbenzene	10.000	8.465	15.4	86	0.00
66 T	Benzyl Chloride	10.000	5.159	48.4#	49	0.00
67	sec-Butylbenzene	10.000	8.388	16.1	85	0.00
68 S	1-Bromo-4-Fluorobenzene	10.000	10.048	-0.5	92	0.00
69	p-Isopropyltoluene	10.000	8.272	17.3	83	0.00
70	n-Butylbenzene	10.000	8.398	16.0	83	0.00
71	2-Chlorotoluene	10.000	8.649	13.5	86	0.00
72 T	4-Ethyltoluene	10.000	8.779	12.2	87	0.00
73 T	1,3,5-Trimethylbenzene	10.000	8.660	13.4	86	0.00
74 T	1,2,4-Trimethylbenzene	10.000	8.463	15.4	87	0.00
75 T	1,3-Dichlorobenzene	10.000	8.320	16.8	82	0.00
76 T	1,4-Dichlorobenzene	10.000	8.273	17.3	81	0.00
77 T	1,2-Dichlorobenzene	10.000	7.966	20.3	81	0.00
78 T	Hexachloro-1,3-Butadiene	10.000	7.222	27.8	78	0.00
79 T	Naphthalene	10.000	8.270	17.3	78	0.00
80 T	Naphthalene,2-methyl-	10.000	8.631	13.7	80	0.00
81 T	1,2,4-Trichlorobenzene	10.000	8.497	15.0	79	0.00

(#) = Out of Range

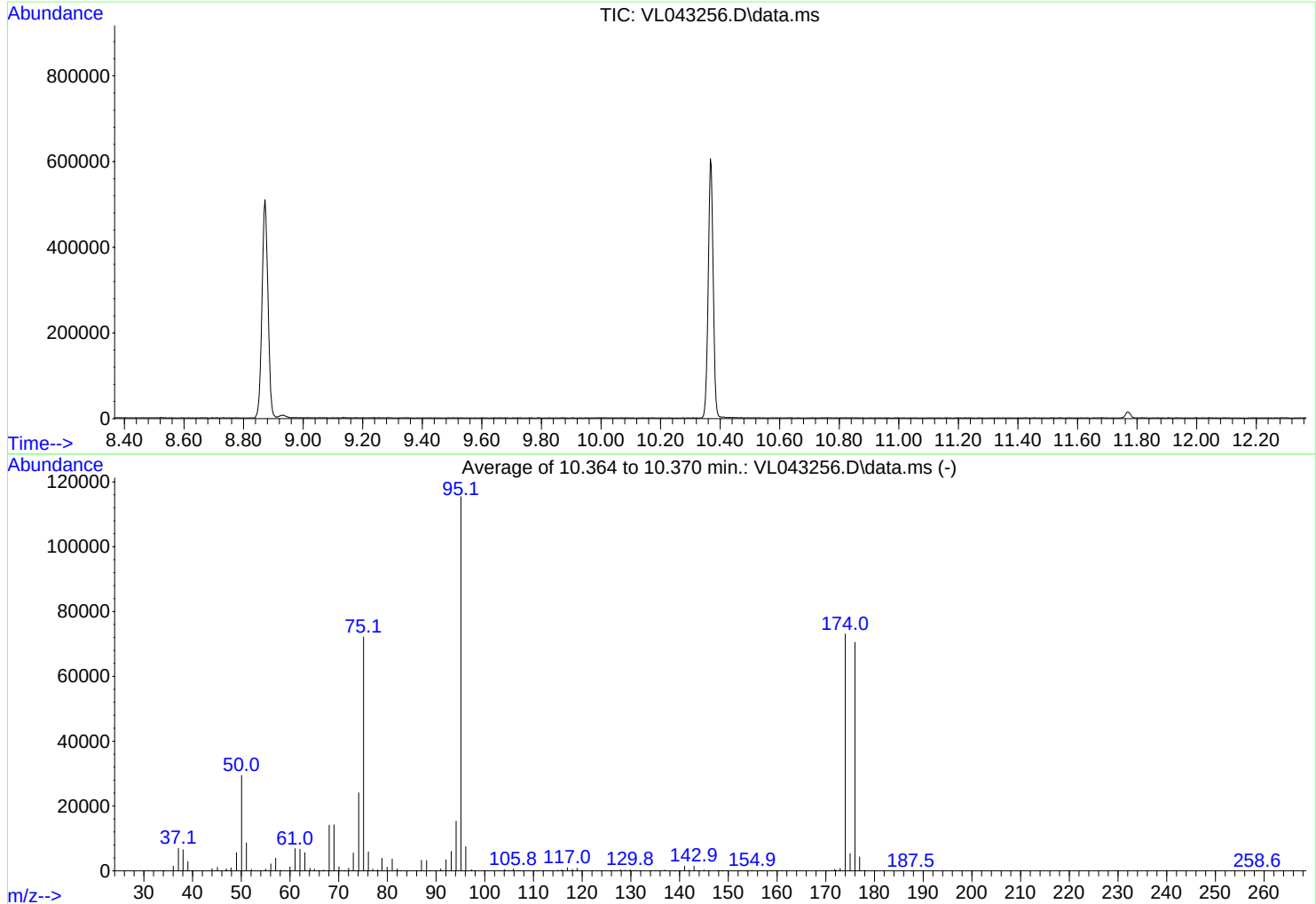
SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
Data File : VL043256.D
Acq On : 20 Nov 2025 08:41
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
Last Update : Wed Nov 19 01:11:25 2025



AutoFind: Scans 3175, 3176, 3177; Background Corrected with Scan 3162

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	8	40	25.5	29432	PASS
75	95	30	66	62.5	72149	PASS
95	95	100	100	100.0	115432	PASS
96	95	5	9	6.5	7511	PASS
173	174	0.00	2	1.0	742	PASS
174	95	50	120	63.3	73064	PASS
175	174	4	9	7.3	5336	PASS
176	174	93	101	96.5	70507	PASS
177	176	5	9	6.1	4312	PASS

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
34.00	20	47.90	904	61.05	6896	71.10	1
36.05	1455	49.00	5622	62.05	6671	72.05	83
37.10	6956	50.05	29432	63.05	5612	73.00	550
38.05	6536	51.05	8642	64.10	779	74.10	2409
39.05	2877	52.10	434	65.00	576	75.10	72149
40.00	140	52.85	60	65.95	127	76.10	5882
43.20	31	55.00	567	66.70	81	77.00	535
44.00	643	56.05	2149	66.95	251	77.80	53
45.10	1087	57.05	3886	68.05	14086	78.00	328
46.80	184	58.10	194	69.05	14206	78.90	3882
46.95	633	60.00	1256	70.05	1290	79.95	1138

Average of 10.364 to 10.370 min.: VL043256.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.00	3680	95.10	115432	111.95	122	125.00	44
82.00	630	96.10	7511	113.05	70	125.80	24
82.80	85	97.25	341	114.95	171	126.90	41
86.10	116	102.90	56	115.75	361	127.85	344
87.00	3248	103.80	126	116.20	106	128.85	210
88.05	3213	104.10	445	116.95	947	129.85	378
88.80	64	104.85	112	117.95	441	130.70	55
90.95	600	105.85	595	118.95	769	130.95	123
92.05	3431	106.90	107	122.15	52	131.85	51
93.10	6011	107.80	38	123.10	31	133.90	19
94.10	15340	110.80	70	123.95	107	135.05	146

Average of 10.364 to 10.370 min.: VL043256.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.65	73	147.90	53	158.70	55	176.95	4312
136.70	46	148.10	113	159.00	94	178.05	185
136.95	261	148.70	20	160.95	142	187.50	19
138.90	18	149.10	87	169.50	44	258.60	30
140.00	18	149.70	85	170.40	76		
141.00	1471	152.70	26	171.85	502		
141.95	230	153.70	19	172.10	181		
142.95	1510	154.00	44	172.95	742		
144.00	120	154.80	101	174.00	73064		
145.00	268	154.95	163	175.00	5336		
146.00	131	156.95	144	176.00	70507		

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043257.D
 Acq On : 20 Nov 2025 10:14
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2025
 Supervised By :Mahesh Dadoda 11/21/2025

Quant Time: Nov 21 00:33:53 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.777	49	102759	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.943	114	275595	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.866	117	222776	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.364 95 166532 10.198 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 102.000%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.496	85	161177	11.121	ppbv	98
3) Chlorodifluoromethane	1.473	51	146232	10.259	ppbv	95
4) Chloromethane	1.531	50	54380	10.035	ppbv	95
5) Vinyl Chloride	1.577	62	55244	9.322	ppbv	95
6) Bromomethane	1.664	94	27639	9.621	ppbv	99
7) Chloroethane	1.700	64	22384	9.698	ppbv	100
8) Dichlorotetrafluoroethane	1.551	85	129834	10.769	ppbv	99
9) Propene	1.480	41	55697m	9.202	ppbv	
10) Heptane	4.959	43	156253	8.674	ppbv	95
11) Trichlorofluoromethane	1.874	101	169670	12.083	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.133	101	126654	11.553	ppbv	97
13) Ethanol	1.716	45	16970	7.973	ppbv	95
14) Bromoethene	1.777	108	45797	10.897	ppbv	96
15) Acetone	1.829	43	122027	8.547	ppbv	99
16) 1,3-Butadiene	1.606	39	62334	9.794	ppbv	97
17) tert-Butyl alcohol	2.033	59	175626	9.372	ppbv	100
18) 1,1-Dichloroethene	2.030	96	55419	10.857	ppbv	88
19) Isopropyl Alcohol	1.881	45	72573	8.996	ppbv	94
20) Methylene Chloride	2.056	84	48499	11.659	ppbv	95
21) Allyl Chloride	2.091	41	83761	8.720	ppbv	93
22) trans-1,2-Dichloroethene	2.334	96	62490	10.711	ppbv	90
23) Vinyl Acetate	2.454	43	157670	9.148	ppbv	99
24) 1,1-Dichloroethane	2.402	63	119663	10.625	ppbv	97
25) Ethyl Acetate	2.823	43	285972	9.287	ppbv	99
26) Hexane	2.819	57	130004	9.630	ppbv	98
27) Carbon Disulfide	2.146	76	150498	10.920	ppbv	99
28) Methyl tert-Butyl Ether	2.431	73	68600	10.352	ppbv	95
29) Chloroform	2.839	83	219297	11.429	ppbv	99
30) Cyclohexane	3.845	84	109617	9.685	ppbv	95
31) cis-1,2-Dichloroethene	2.713	61	137895	10.277	ppbv	93
32) 1,1,1-Trichloroethane	3.357	97	226600	11.079	ppbv	99
34) 2-Butanone	2.548	43	180979	9.303	ppbv	100
35) Carbon Tetrachloride	3.752	117	237548	11.356	ppbv	98
36) Benzene	3.645	78	265981	10.078	ppbv	99
37) 1,2-Dichloroethane	3.208	62	173345	11.229	ppbv	98
38) Trichloroethene	4.528	130	107877	10.447	ppbv	94
39) 1,2-Dichloropropane	4.299	63	92453	9.571	ppbv	95
40) 1,4-Dioxane	4.558	88	36555	8.418	ppbv #	91
41) Tetrahydrofuran	3.040	42	94776	8.822	ppbv	98
42) Bromodichloromethane	4.470	83	237498	11.152	ppbv	99
43) Methyl Methacrylate	4.862	69	125480	8.957	ppbv	96
44) 2,2,4-Trimethylpentane	4.622	57	437108	9.643	ppbv	99
45) t-1,3-Dichloropropene	6.389	75	100231	7.675	ppbv	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043257.D
 Acq On : 20 Nov 2025 10:14
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2025
 Supervised By :Mahesh Dadoda 11/21/2025

Quant Time: Nov 21 00:33:53 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.577	75	122504	7.989	ppbv	98
47) 1,1,2-Trichloroethane	6.561	97	104460m	10.190	ppbv	
48) Dibromochloromethane	7.370	129	193819	10.997	ppbv	99
49) Bromoform	9.471	173	171644	10.994	ppbv	100
50) 4-Methyl-2-Pentanone	5.723	43	238084	8.688	ppbv	99
51) 2-Hexanone	7.415	43	172317	8.097	ppbv #	99
52) Tetrachloroethene	8.208	164	99129	10.097	ppbv	94
53) Toluene	6.914	91	300158	9.604	ppbv	99
54) 1,2-Dibromoethane	7.636	107	146099	9.684	ppbv	95
56) 1,1,1,2-Tetrachloroethane	8.911	131	176606	10.787	ppbv	98
57) Chlorobenzene	8.908	112	236347	10.333	ppbv	98
58) Ethyl Benzene	9.341	91	430385	10.037	ppbv	99
59) m/p-Xylene	9.539	91	709378m	20.635	ppbv	
60) o-Xylene	9.950	91	353166	10.284	ppbv	100
61) Styrene	9.859	104	140574	9.353	ppbv	99
62) Isopropylbenzene	10.529	105	637682	10.379	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.950	83	214523	9.817	ppbv	100
64) n-propylbenzene	10.979	120	158685	10.052	ppbv	97
65) tert-Butylbenzene	11.520	119	544959	9.932	ppbv	98
66) Benzyl Chloride	11.604	91	23441	4.210	ppbv	99
67) sec-Butylbenzene	11.756	105	764527	9.982	ppbv	100
69) p-Isopropyltoluene	11.914	119	641411	9.886	ppbv	100
70) n-Butylbenzene	12.270	91	626151	9.948	ppbv	99
71) 2-Chlorotoluene	10.888	91	466353	9.875	ppbv	99
72) 4-Ethyltoluene	11.115	105	424355	10.147	ppbv	98
73) 1,3,5-Trimethylbenzene	11.193	105	355138	10.119	ppbv	96
74) 1,2,4-Trimethylbenzene	11.526	105	386671	10.095	ppbv	99
75) 1,3-Dichlorobenzene	11.597	146	227896	10.196	ppbv	99
76) 1,4-Dichlorobenzene	11.662	146	226164	10.117	ppbv	100
77) 1,2-Dichlorobenzene	11.937	146	215578	10.032	ppbv	98
78) Hexachloro-1,3-Butadiene	13.873	225	172235	9.604	ppbv	100
79) Naphthalene	13.504	128	324391	9.536	ppbv	98
80) Naphthalene,2-methyl-	14.449	142	78637	8.806	ppbv	98
81) 1,2,4-Trichlorobenzene	13.429	180	160725	10.564	ppbv	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043257.D
 Acq On : 20 Nov 2025 10:14
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 LabSampleId :
 VSTDCCC010

Quant Time: Nov 21 00:33:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	98	0.00
2 T	Dichlorodifluoromethane	1.410	1.568	-11.2	114	0.00
3	Chlorodifluoromethane	1.387	1.423	-2.6	106	0.00
4	Chloromethane	0.527	0.529	-0.4	104	0.00
5 T	Vinyl Chloride	0.577	0.538	6.8	108	0.00
6 T	Bromomethane	0.280	0.269	3.9	104	0.00
7	Chloroethane	0.225	0.218	3.1	110	0.00
8 T	Dichlorotetrafluoroethane	1.173	1.263	-7.7	113	0.00
9 T	Propene	0.589	0.542	8.0	106	0.00
10 T	Heptane	1.753	1.521	13.2	93	0.00
11 T	Trichlorofluoromethane	1.367	1.651	-20.8	130	0.00
12 T	1,1,2-Trichlorotrifluoroeth	1.067	1.233	-15.6	122	0.00
13	Ethanol	0.207	0.165	20.3	97	0.00
14 T	Bromoethene	0.409	0.446	-9.0	120	0.00
15 T	Acetone	1.389	1.188	14.5	113	0.00
16 T	1,3-Butadiene	0.619	0.607	1.9	108	0.00
17	tert-Butyl alcohol	1.824	1.709	6.3	98	0.00
18 T	1,1-Dichloroethene	0.497	0.539	-8.5	120	0.00
19 T	Isopropyl Alcohol	0.785	0.706	10.1	101	0.00
20 T	Methylene Chloride	0.600	0.472	21.3	116	0.00
21 T	Allyl Chloride	0.935	0.815	12.8	94	0.00
22 T	trans-1,2-Dichloroethene	0.568	0.608	-7.0	119	0.00
23 T	Vinyl Acetate	1.677	1.534	8.5	92	0.00
24 T	1,1-Dichloroethane	1.096	1.165	-6.3	112	0.00
25 T	Ethyl Acetate	2.996	2.783	7.1	99	0.00
26 T	Hexane	1.314	1.265	3.7	100	0.00
27 T	Carbon Disulfide	1.341	1.465	-9.2	114	0.00
28 T	Methyl tert-Butyl Ether	0.645	0.668	-3.6	110	0.00
29 T	Chloroform	1.867	2.134	-14.3	117	0.00
30 T	Cyclohexane	1.101	1.067	3.1	102	0.00
31 T	cis-1,2-Dichloroethene	1.306	1.342	-2.8	106	0.00
32 T	1,1,1-Trichloroethane	1.990	2.205	-10.8	114	0.00
33 I	1,4-Difluorobenzene	1.000	1.000	0.0	97	0.00
34 T	2-Butanone	0.706	0.657	6.9	99	0.00
35 T	Carbon Tetrachloride	0.759	0.862	-13.6	118	0.00
36 T	Benzene	0.958	0.965	-0.7	104	0.00
37 T	1,2-Dichloroethane	0.560	0.629	-12.3	115	0.00
38 T	Trichloroethene	0.375	0.391	-4.3	108	0.00
39 T	1,2-Dichloropropane	0.351	0.335	4.6	97	0.00
40 T	1,4-Dioxane	0.158	0.133	15.8	90	0.00
41 T	Tetrahydrofuran	0.390	0.344	11.8	91	0.00
42 T	Bromodichloromethane	0.773	0.862	-11.5	112	0.00
43	Methyl Methacrylate	0.508	0.455	10.4	96	0.00
44 T	2,2,4-Trimethylpentane	1.645	1.586	3.6	99	0.00
45 T	t-1,3-Dichloropropene	0.474	0.364	23.2	78	0.00
46 T	cis-1,3-Dichloropropene	0.556	0.445	20.0	81	0.00
47 T	1,1,2-Trichloroethane	0.372	0.379	-1.9	107	0.00
48 T	Dibromochloromethane	0.640	0.703	-9.8	110	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043257.D
 Acq On : 20 Nov 2025 10:14
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 LabSampleId :
 VSTDCCC010

Quant Time: Nov 21 00:33:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	Bromoform	0.566	0.623	-10.1	109	0.00
50 T	4-Methyl-2-Pentanone	0.994	0.864	13.1	89	0.00
51 T	2-Hexanone	0.772	0.625	19.0	83	0.00
52 T	Tetrachloroethene	0.356	0.360	-1.1	106	0.00
53 T	Toluene	1.134	1.089	4.0	98	0.00
54 T	1,2-Dibromoethane	0.547	0.530	3.1	98	0.00
55 I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
56	1,1,1,2-Tetrachloroethane	0.735	0.793	-7.9	111	0.00
57 T	Chlorobenzene	1.027	1.061	-3.3	104	0.00
58 T	Ethyl Benzene	1.925	1.932	-0.4	101	0.00
59 T	m/p-Xylene	1.543	1.592	-3.2	105	0.00
60 T	o-Xylene	1.542	1.585	-2.8	106	0.00
61 T	Styrene	0.675	0.631	6.5	92	0.00
62	Isopropylbenzene	2.758	2.862	-3.8	106	0.00
63 T	1,1,2,2-Tetrachloroethane	0.981	0.963	1.8	103	0.00
64	n-propylbenzene	0.709	0.712	-0.4	103	0.00
65	tert-Butylbenzene	2.463	2.446	0.7	104	0.00
66 T	Benzyl Chloride	0.250	0.105	58.0#	41	0.00
67	sec-Butylbenzene	3.438	3.432	0.2	105	0.00
68 S	1-Bromo-4-Fluorobenzene	0.733	0.748	-2.0	97	0.00
69	p-Isopropyltoluene	2.912	2.879	1.1	103	0.00
70	n-Butylbenzene	2.825	2.811	0.5	101	0.00
71	2-Chlorotoluene	2.120	2.093	1.3	101	0.00
72 T	4-Ethyltoluene	1.877	1.905	-1.5	103	0.00
73 T	1,3,5-Trimethylbenzene	1.575	1.594	-1.2	104	0.00
74 T	1,2,4-Trimethylbenzene	1.719	1.736	-1.0	106	0.00
75 T	1,3-Dichlorobenzene	1.003	1.023	-2.0	104	0.00
76 T	1,4-Dichlorobenzene	1.003	1.015	-1.2	103	0.00
77 T	1,2-Dichlorobenzene	0.965	0.968	-0.3	105	0.00
78 T	Hexachloro-1,3-Butadiene	0.805	0.773	4.0	107	0.00
79 T	Naphthalene	1.527	1.456	4.6	92	0.00
80 T	Naphthalene,2-methyl-	0.401	0.353	12.0	84	0.00
81 T	1,2,4-Trichlorobenzene	0.683	0.721	-5.6	101	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043257.D
 Acq On : 20 Nov 2025 10:14
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 LabSampleId :
 VSTDCCC010

Quant Time: Nov 21 00:33:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	10.000	10.000	0.0	98	0.00
2 T	Dichlorodifluoromethane	10.000	11.121	-11.2	114	0.00
3	Chlorodifluoromethane	10.000	10.259	-2.6	106	0.00
4	Chloromethane	10.000	10.035	-0.4	104	0.00
5 T	Vinyl Chloride	10.000	9.322	6.8	108	0.00
6 T	Bromomethane	10.000	9.621	3.8	104	0.00
7	Chloroethane	10.000	9.698	3.0	110	0.00
8 T	Dichlorotetrafluoroethane	10.000	10.769	-7.7	113	0.00
9 T	Propene	10.000	9.202	8.0	106	0.00
10 T	Heptane	10.000	8.674	13.3	93	0.00
11 T	Trichlorofluoromethane	10.000	12.083	-20.8	130	0.00
12 T	1,1,2-Trichlorotrifluoroeth	10.000	11.553	-15.5	122	0.00
13	Ethanol	10.000	7.973	20.3	97	0.00
14 T	Bromoethene	10.000	10.897	-9.0	120	0.00
15 T	Acetone	10.000	8.547	14.5	113	0.00
16 T	1,3-Butadiene	10.000	9.794	2.1	108	0.00
17	tert-Butyl alcohol	10.000	9.372	6.3	98	0.00
18 T	1,1-Dichloroethene	10.000	10.857	-8.6	120	0.00
19 T	Isopropyl Alcohol	10.000	8.996	10.0	101	0.00
20 T	Methylene Chloride	10.000	11.659	-16.6	116	0.00
21 T	Allyl Chloride	10.000	8.720	12.8	94	0.00
22 T	trans-1,2-Dichloroethene	10.000	10.711	-7.1	119	0.00
23 T	Vinyl Acetate	10.000	9.148	8.5	92	0.00
24 T	1,1-Dichloroethane	10.000	10.625	-6.3	112	0.00
25 T	Ethyl Acetate	10.000	9.287	7.1	99	0.00
26 T	Hexane	10.000	9.630	3.7	100	0.00
27 T	Carbon Disulfide	10.000	10.920	-9.2	114	0.00
28 T	Methyl tert-Butyl Ether	10.000	10.352	-3.5	110	0.00
29 T	Chloroform	10.000	11.429	-14.3	117	0.00
30 T	Cyclohexane	10.000	9.685	3.1	102	0.00
31 T	cis-1,2-Dichloroethene	10.000	10.277	-2.8	106	0.00
32 T	1,1,1-Trichloroethane	10.000	11.079	-10.8	114	0.00
33 I	1,4-Difluorobenzene	10.000	10.000	0.0	97	0.00
34 T	2-Butanone	10.000	9.303	7.0	99	0.00
35 T	Carbon Tetrachloride	10.000	11.356	-13.6	118	0.00
36 T	Benzene	10.000	10.078	-0.8	104	0.00
37 T	1,2-Dichloroethane	10.000	11.229	-12.3	115	0.00
38 T	Trichloroethene	10.000	10.447	-4.5	108	0.00
39 T	1,2-Dichloropropane	10.000	9.571	4.3	97	0.00
40 T	1,4-Dioxane	10.000	8.418	15.8	90	0.00
41 T	Tetrahydrofuran	10.000	8.822	11.8	91	0.00
42 T	Bromodichloromethane	10.000	11.152	-11.5	112	0.00
43	Methyl Methacrylate	10.000	8.957	10.4	96	0.00
44 T	2,2,4-Trimethylpentane	10.000	9.643	3.6	99	0.00
45 T	t-1,3-Dichloropropene	10.000	7.675	23.3	78	0.00
46 T	cis-1,3-Dichloropropene	10.000	7.989	20.1	81	0.00
47 T	1,1,2-Trichloroethane	10.000	10.190	-1.9	107	0.00
48 T	Dibromochloromethane	10.000	10.997	-10.0	110	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043257.D
 Acq On : 20 Nov 2025 10:14
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 LabSampleId :
 VSTDCCC010

Quant Time: Nov 21 00:33:53 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	Bromoform	10.000	10.994	-9.9	109	0.00
50 T	4-Methyl-2-Pentanone	10.000	8.688	13.1	89	0.00
51 T	2-Hexanone	10.000	8.097	19.0	83	0.00
52 T	Tetrachloroethene	10.000	10.097	-1.0	106	0.00
53 T	Toluene	10.000	9.604	4.0	98	0.00
54 T	1,2-Dibromoethane	10.000	9.684	3.2	98	0.00
55 I	Chlorobenzene-d5	10.000	10.000	0.0	95	0.00
56	1,1,1,2-Tetrachloroethane	10.000	10.787	-7.9	111	0.00
57 T	Chlorobenzene	10.000	10.333	-3.3	104	0.00
58 T	Ethyl Benzene	10.000	10.037	-0.4	101	0.00
59 T	m/p-Xylene	20.000	20.635	-3.2	105	0.00
60 T	o-Xylene	10.000	10.284	-2.8	106	0.00
61 T	Styrene	10.000	9.353	6.5	92	0.00
62	Isopropylbenzene	10.000	10.379	-3.8	106	0.00
63 T	1,1,2,2-Tetrachloroethane	10.000	9.817	1.8	103	0.00
64	n-propylbenzene	10.000	10.052	-0.5	103	0.00
65	tert-Butylbenzene	10.000	9.932	0.7	104	0.00
66 T	Benzyl Chloride	10.000	4.210	57.9#	41	0.00
67	sec-Butylbenzene	10.000	9.982	0.2	105	0.00
68 S	1-Bromo-4-Fluorobenzene	10.000	10.198	-2.0	97	0.00
69	p-Isopropyltoluene	10.000	9.886	1.1	103	0.00
70	n-Butylbenzene	10.000	9.948	0.5	101	0.00
71	2-Chlorotoluene	10.000	9.875	1.3	101	0.00
72 T	4-Ethyltoluene	10.000	10.147	-1.5	103	0.00
73 T	1,3,5-Trimethylbenzene	10.000	10.119	-1.2	104	0.00
74 T	1,2,4-Trimethylbenzene	10.000	10.095	-1.0	106	0.00
75 T	1,3-Dichlorobenzene	10.000	10.196	-2.0	104	0.00
76 T	1,4-Dichlorobenzene	10.000	10.117	-1.2	103	0.00
77 T	1,2-Dichlorobenzene	10.000	10.032	-0.3	105	0.00
78 T	Hexachloro-1,3-Butadiene	10.000	9.604	4.0	107	0.00
79 T	Naphthalene	10.000	9.536	4.6	92	0.00
80 T	Naphthalene,2-methyl-	10.000	8.806	11.9	84	0.00
81 T	1,2,4-Trichlorobenzene	10.000	10.564	-5.6	101	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043259.D
 Acq On : 20 Nov 2025 11:34
 Operator : SY/MD
 Sample : QC111725 CAN 10588
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 QC111725 CAN 10588

Quant Time: Nov 21 00:35:29 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	97406	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	258018	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.872	117	201755	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	144519	9.772	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.700%

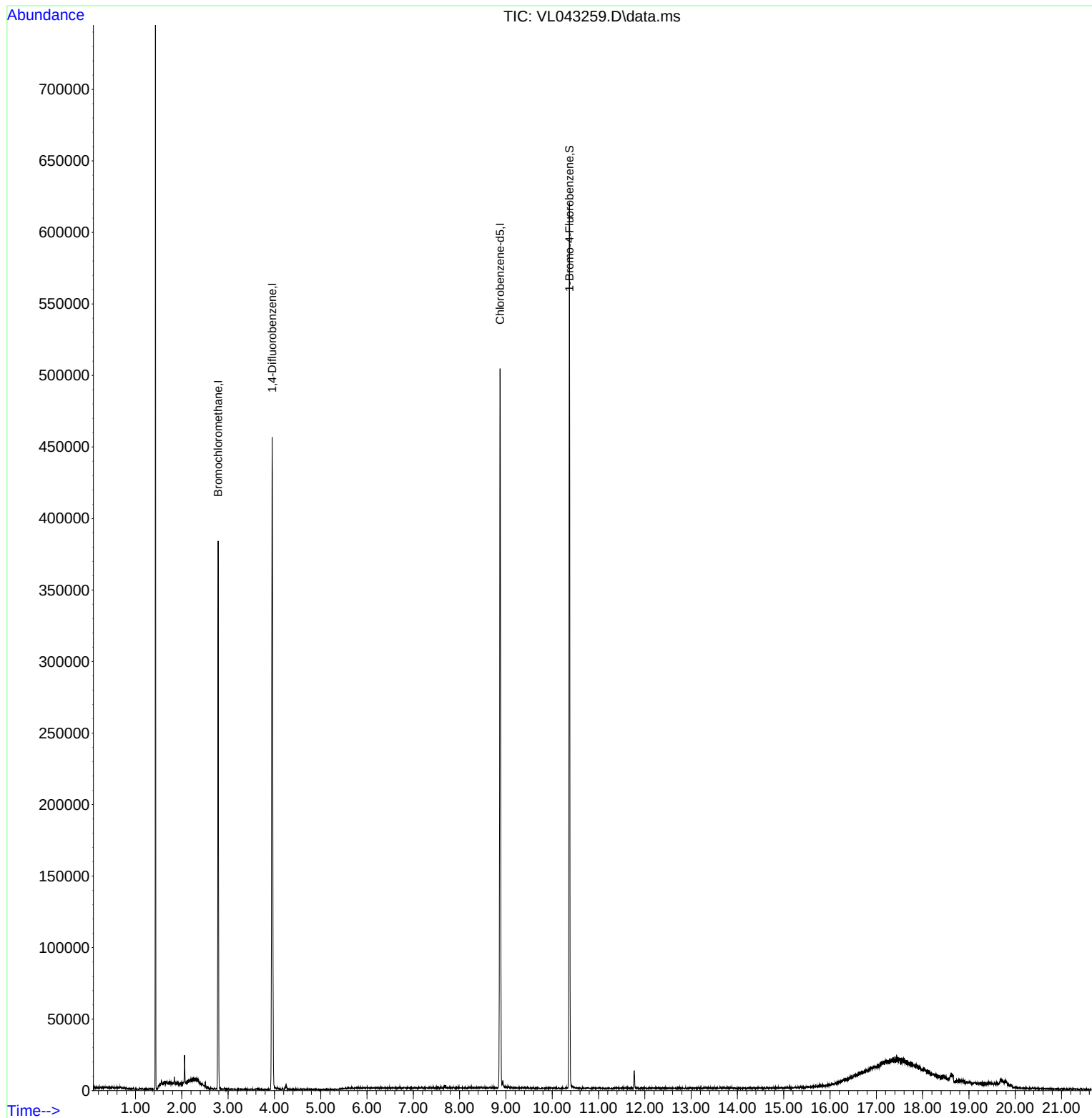
Target Compounds	Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
Data File : VL043259.D
Acq On : 20 Nov 2025 11:34
Operator : SY/MD
Sample : QC111725 CAN 10588
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC111725 CAN 10588

Quant Time: Nov 21 00:35:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Wed Nov 19 01:11:25 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043260.D
 Acq On : 20 Nov 2025 12:07
 Operator : SY/MD
 Sample : VL1120ABS01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL1120ABS01

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 11/21/2025
 Supervised By : Mahesh Dadoda 11/21/2025

Quant Time: Nov 21 00:36:06 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	101372	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	270113	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	214473	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.371 95 164533 10.466 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 104.700%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	164798	11.526	ppbv	99
3) Chlorodifluoromethane	1.476	51	142815	10.157	ppbv	95
4) Chloromethane	1.534	50	55072	10.302	ppbv	96
5) Vinyl Chloride	1.580	62	55657	9.520	ppbv	93
6) Bromomethane	1.667	94	25862	9.126	ppbv	82
7) Chloroethane	1.703	64	22017	9.670	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	131076	11.021	ppbv	98
9) Propene	1.483	41	53732m	8.999	ppbv	
10) Heptane	4.972	43	158256	8.906	ppbv	99
11) Trichlorofluoromethane	1.878	101	171548	12.384	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.140	101	126812	11.726	ppbv	99
13) Ethanol	1.719	45	17475	8.323	ppbv	99
14) Bromoethene	1.780	108	44833	10.813	ppbv	97
15) Acetone	1.832	43	119678	8.497	ppbv	100
16) 1,3-Butadiene	1.609	39	61711	9.828	ppbv	95
17) tert-Butyl alcohol	2.036	59	171332	9.268	ppbv	100
18) 1,1-Dichloroethene	2.033	96	53337	10.592	ppbv	98
19) Isopropyl Alcohol	1.884	45	68773	8.642	ppbv	90
20) Methylene Chloride	2.062	84	48243	11.763	ppbv	93
21) Allyl Chloride	2.094	41	83462	8.808	ppbv	92
22) trans-1,2-Dichloroethene	2.340	96	61279	10.647	ppbv	93
23) Vinyl Acetate	2.460	43	142709	8.393	ppbv	98
24) 1,1-Dichloroethane	2.408	63	121792	10.962	ppbv	98
25) Ethyl Acetate	2.829	43	281330	9.262	ppbv	99
26) Hexane	2.823	57	126532	9.501	ppbv	99
27) Carbon Disulfide	2.149	76	148765	10.942	ppbv	100
28) Methyl tert-Butyl Ether	2.434	73	64675	9.894	ppbv	98
29) Chloroform	2.845	83	220567	11.652	ppbv	96
30) Cyclohexane	3.852	84	107088	9.591	ppbv	95
31) cis-1,2-Dichloroethene	2.719	61	131746	9.953	ppbv	96
32) 1,1,1-Trichloroethane	3.363	97	225329	11.168	ppbv	99
34) 2-Butanone	2.551	43	177069	9.287	ppbv	100
35) Carbon Tetrachloride	3.758	117	236089	11.515	ppbv	98
36) Benzene	3.651	78	257481	9.954	ppbv	98
37) 1,2-Dichloroethane	3.214	62	171416	11.329	ppbv	97
38) Trichloroethene	4.541	130	107097	10.582	ppbv	93
39) 1,2-Dichloropropane	4.308	63	92063	9.724	ppbv	87
40) 1,4-Dioxane	4.570	88	35055	8.236	ppbv #	93
41) Tetrahydrofuran	3.046	42	92013	8.739	ppbv	100
42) Bromodichloromethane	4.480	83	232959	11.161	ppbv	100
43) Methyl Methacrylate	4.865	69	122481	8.920	ppbv	96
44) 2,2,4-Trimethylpentane	4.632	57	428558	9.646	ppbv	98
45) t-1,3-Dichloropropene	6.402	75	96138	7.511	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043260.D
 Acq On : 20 Nov 2025 12:07
 Operator : SY/MD
 Sample : VL1120ABS01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL1120ABS01

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2025
 Supervised By :Mahesh Dadoda 11/21/2025

Quant Time: Nov 21 00:36:06 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.590	75	117380	7.810	ppbv	98
47) 1,1,2-Trichloroethane	6.571	97	104185	10.369	ppbv	97
48) Dibromochloromethane	7.377	129	188165	10.892	ppbv	99
49) Bromoform	9.474	173	168175	10.991	ppbv	99
50) 4-Methyl-2-Pentanone	5.736	43	237956	8.859	ppbv	99
51) 2-Hexanone	7.425	43	170769	8.187	ppbv #	99
52) Tetrachloroethene	8.218	164	99982	10.391	ppbv	98
53) Toluene	6.927	91	294482	9.614	ppbv	100
54) 1,2-Dibromoethane	7.642	107	143721	9.720	ppbv	100
56) 1,1,1,2-Tetrachloroethane	8.917	131	176862	11.221	ppbv	99
57) Chlorobenzene	8.914	112	234816	10.664	ppbv	99
58) Ethyl Benzene	9.348	91	427546	10.357	ppbv	99
59) m/p-Xylene	9.542	91	708974m	21.422	ppbv	
60) o-Xylene	9.956	91	353595	10.695	ppbv	99
61) Styrene	9.862	104	135477	9.363	ppbv	98
62) Isopropylbenzene	10.532	105	634112	10.720	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.953	83	218173	10.371	ppbv	99
64) n-propylbenzene	10.982	120	159286	10.480	ppbv	97
65) tert-Butylbenzene	11.526	119	552915	10.467	ppbv	98
66) Benzyl Chloride	11.610	91	22396	4.178	ppbv	98
67) sec-Butylbenzene	11.762	105	779369	10.570	ppbv	99
69) p-Isopropyltoluene	11.921	119	649941	10.405	ppbv	100
70) n-Butylbenzene	12.277	91	622858	10.278	ppbv	100
71) 2-Chlorotoluene	10.895	91	469961	10.337	ppbv	100
72) 4-Ethyltoluene	11.118	105	423927	10.529	ppbv	98
73) 1,3,5-Trimethylbenzene	11.199	105	358599	10.613	ppbv	95
74) 1,2,4-Trimethylbenzene	11.532	105	392516	10.645	ppbv	94
75) 1,3-Dichlorobenzene	11.604	146	231654	10.765	ppbv	99
76) 1,4-Dichlorobenzene	11.665	146	229039	10.642	ppbv	100
77) 1,2-Dichlorobenzene	11.944	146	220159	10.642	ppbv	99
78) Hexachloro-1,3-Butadiene	13.879	225	171979	9.961	ppbv	100
79) Naphthalene	13.507	128	319763	9.764	ppbv	99
80) Naphthalene,2-methyl-	14.455	142	75079	8.734	ppbv	97
81) 1,2,4-Trichlorobenzene	13.436	180	157618	10.761	ppbv	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
Data File : VL043260.D
Acq On : 20 Nov 2025 12:07
Operator : SY/MD
Sample : VL1120ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL1120ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2025
Supervised By :Mahesh Dadoda 11/21/2025

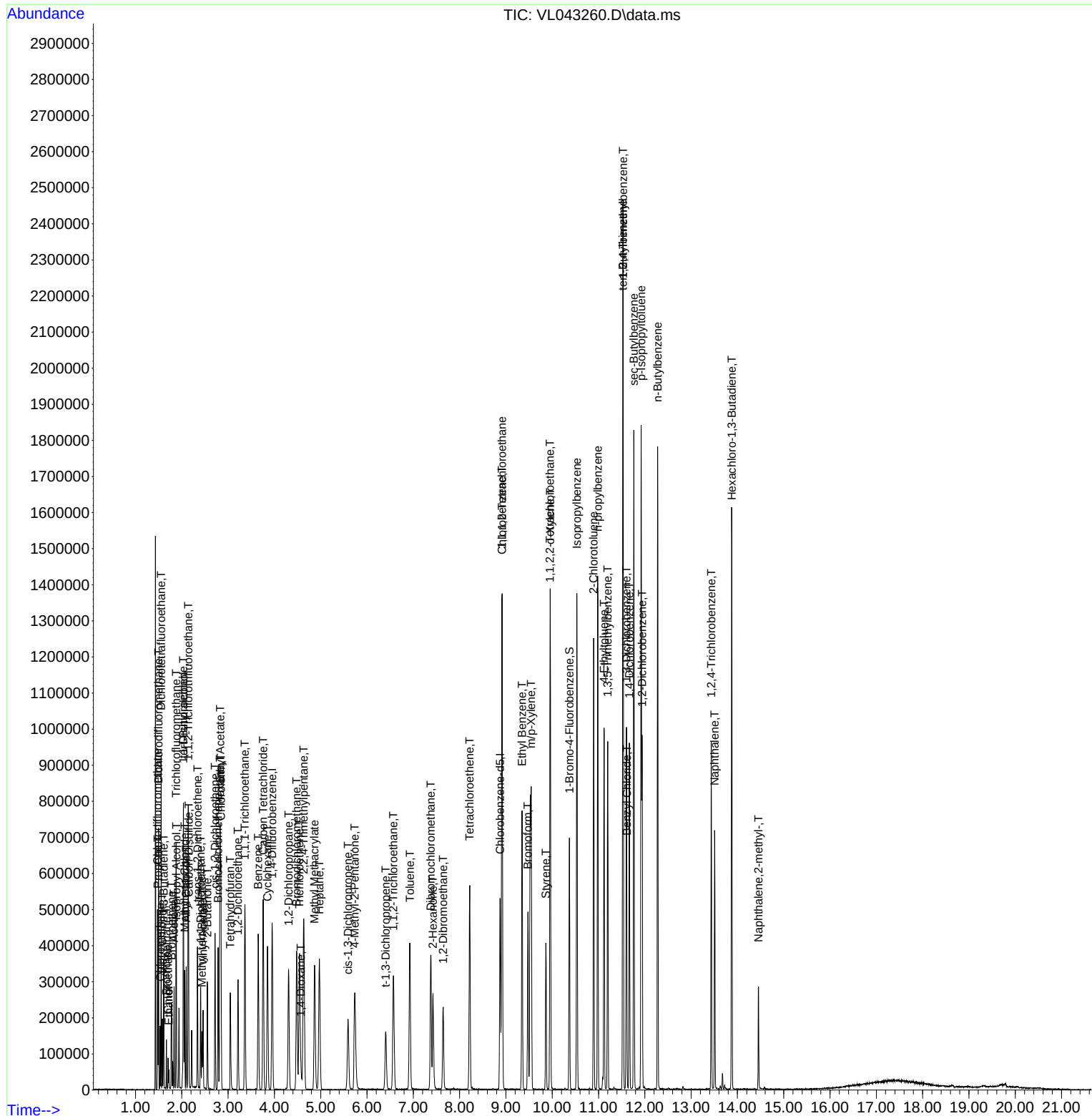
Quant Time: Nov 21 00:36:06 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration



Instrument ID: **MSVOA_L**

Daily Analysis Runlog For Sequence/QC Batch ID # VL111825

Review By	Semsettin Yesilyurt	Review On	11/19/2025 8:33:42 AM
Supervise By	Maresh Dadoda	Supervise On	11/19/2025 9:44:32 AM
SubDirectory	VL111825	HP Acquire Method	TO15AIR
		HP Processing Method	VL111825AIR.M
STD. NAME	STD REF.#		
Tune/Reschk	AP2691		
Initial Calibration Stds	AP2694,AP2695,AP2696		
CCC	AP2694		
Internal Standard/PEM	AP2691		
ICV/I.BLK	AP2697		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL043202.D	18 Nov 2025 08:46	SY/MD	Ok
2	VSTDIC0.5	VL043203.D	18 Nov 2025 09:29	SY/MD	Ok,M
3	VSTDICCC010	VL043204.D	18 Nov 2025 10:02	SY/MD	Ok,M
4	VSTDIC002	VL043205.D	18 Nov 2025 10:37	SY/MD	Ok,M
5	VSTDIC001	VL043206.D	18 Nov 2025 11:10	SY/MD	Ok,M
6	VSTDIC0.5	VL043207.D	18 Nov 2025 11:43	SY/MD	Not Ok
7	VSTDIC0.1	VL043208.D	18 Nov 2025 12:16	SY/MD	Ok,M
8	VSTDIC0.03	VL043209.D	18 Nov 2025 12:49	SY/MD	Ok,M
9	VSTDIC015	VL043210.D	18 Nov 2025 13:24	SY/MD	Ok,M
10	VSTDICV010	VL043211.D	18 Nov 2025 13:56	SY/MD	Ok,M
11	VL1118ABL01	VL043212.D	18 Nov 2025 14:41	SY/MD	Ok
12	VL1118ABS01	VL043213.D	18 Nov 2025 15:24	SY/MD	Ok,M
13	Q3651-03	VL043214.D	18 Nov 2025 15:57	SY/MD	Dilution
14	Q3651-03DUP	VL043215.D	18 Nov 2025 16:31	SY/MD	Ok,M
15	Q3651-04	VL043216.D	18 Nov 2025 17:06	SY/MD	Dilution
16	Q3651-06	VL043217.D	18 Nov 2025 17:40	SY/MD	Dilution
17	Q3650-03	VL043218.D	18 Nov 2025 18:15	SY/MD	Ok,M
18	Q3650-04	VL043219.D	18 Nov 2025 18:49	SY/MD	Ok,M
19	Q3650-05	VL043220.D	18 Nov 2025 19:23	SY/MD	Ok,M
20	Q3650-06	VL043221.D	18 Nov 2025 19:58	SY/MD	Ok,M
21	Q3651-01	VL043222.D	18 Nov 2025 20:29	SY/MD	Ok,M

Instrument ID: **MSVOA_L**

Daily Analysis Runlog For Sequence/QC Batch ID # VL111825

Review By	Semsettin Yesilyurt	Review On	11/19/2025 8:33:42 AM		
Supervise By	Mahesh Dadoda	Supervise On	11/19/2025 9:44:32 AM		
SubDirectory	VL111825	HP Acquire Method	TO15AIR	HP Processing Method	VL111825AIR.M
STD. NAME		STD REF.#			
Tune/Reschk		AP2691			
Initial Calibration Stds		AP2694,AP2695,AP2696			
CCC		AP2694			
Internal Standard/PEM		AP2691			
ICV/I.BLK		AP2697			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q3651-02	VL043223.D	18 Nov 2025 21:01	SY/MD	Ok,M
23	Q3651-05	VL043224.D	18 Nov 2025 21:33	SY/MD	Ok,M
24	Q3650-01	VL043225.D	18 Nov 2025 22:05	SY/MD	Ok,M
25	Q3650-02	VL043226.D	18 Nov 2025 22:37	SY/MD	Ok,M
26	Q3651-03DL	VL043227.D	18 Nov 2025 23:09	SY/MD	Ok,M
27	Q3651-03DL	VL043228.D	18 Nov 2025 23:41	SY/MD	Not Ok
28	Q3651-04DL	VL043229.D	19 Nov 2025 00:13	SY/MD	Ok,M
29	Q3651-06DL	VL043230.D	19 Nov 2025 00:44	SY/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_L**

Daily Analysis Runlog For Sequence/QC Batch ID # VL112025

Review By	Amit Patel	Review On	11/21/2025 11:53:43 AM		
Supervise By	Maresh Dadoda	Supervise On	11/21/2025 12:23:05 PM		
SubDirectory	VL112025	HP Acquire Method	TO15AIR	HP Processing Method	VL111825AIR.M
STD. NAME		STD REF.#			
Tune/Reschk	AP2691				
Initial Calibration Stds	AP2694,AP2695,AP2696				
CCC	AP2694				
Internal Standard/PEM	AP2691				
ICV/I.BLK	AP2697				
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL043256.D	20 Nov 2025 08:41	SY/MD	Ok
2	VSTDCCC010	VL043257.D	20 Nov 2025 10:14	SY/MD	Ok,M
3	VL1120ABL01	VL043258.D	20 Nov 2025 11:01	SY/MD	Ok
4	QC111725 CAN 10588	VL043259.D	20 Nov 2025 11:34	SY/MD	Ok
5	VL1120ABS01	VL043260.D	20 Nov 2025 12:07	SY/MD	Ok,M
6	Q3655-01	VL043261.D	20 Nov 2025 12:49	SY/MD	Ok,M
7	Q3655-02	VL043262.D	20 Nov 2025 13:24	SY/MD	Dilution
8	Q3655-03	VL043263.D	20 Nov 2025 13:58	SY/MD	Dilution
9	Q3655-04	VL043264.D	20 Nov 2025 14:32	SY/MD	Ok,M
10	Q3655-05	VL043265.D	20 Nov 2025 15:06	SY/MD	Ok,M
11	Q3655-06	VL043266.D	20 Nov 2025 15:40	SY/MD	Ok,M
12	Q3655-01DUP	VL043267.D	20 Nov 2025 16:20	SY/MD	Ok,M
13	Q3655-02DL	VL043268.D	20 Nov 2025 16:54	SY/MD	Ok,M
14	Q3655-03DL	VL043269.D	20 Nov 2025 17:27	SY/MD	Ok,M
15	Q3698-03	VL043270.D	20 Nov 2025 18:02	SY/MD	Dilution
16	Q3698-04	VL043271.D	20 Nov 2025 18:38	SY/MD	Ok,M
17	Q3698-01	VL043272.D	20 Nov 2025 19:11	SY/MD	Ok,M
18	Q3698-02	VL043273.D	20 Nov 2025 19:44	SY/MD	Ok,M
19	Q3698-03DL	VL043274.D	20 Nov 2025 20:43	SY/MD	Ok,M
20	Q3626-09DL	VL043275.D	21 Nov 2025 07:53	SY/MD	Ok,M
21	Q3698-04DUP	VL043276.D	21 Nov 2025 08:28	SY/MD	Ok,M

M : Manual Integration