

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:	Alliance	Contract:	ALLI03
Lab Code:	ACE	SDG No.:	Q2552
Instrument ID:	MSVOA_U	Calibration Date(s):	07/16/2025
Heated Purge:	(Y/N) N	Calibration Time(s):	09:24 12:11
GC Column:	DB-624UI	ID:	0.18 (mm)

LAB FILE ID:	RRF0.5 = VU063511.D	RRF001 = VU063512.D	RRF002 = VU063513.D	RRF005 = VU063514.D	RRF010 = VU063515.D	RRF015 = VU063516.D	RRF	% RSD
COMPOUND	RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015		
Dichlorodifluoromethane	0.297	0.288	0.281	0.290	0.296	0.317	0.295	4.1
Chloromethane	0.269	0.291	0.261	0.270	0.268	0.285	0.274	4.1
Vinyl Chloride	0.338	0.353	0.333	0.340	0.355	0.376	0.349	4.5
Bromomethane	0.275	0.289	0.267	0.252	0.244	0.254	0.263	6.4
Chloroethane	0.208	0.212	0.199	0.207	0.214	0.226	0.211	4.3
Tetrahydrofuran	0.079	0.054	0.054	0.050	0.052	0.055	0.057	18.6
Trichlorofluoromethane	0.493	0.508	0.471	0.494	0.509	0.532	0.501	4.1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.248	0.267	0.252	0.261	0.266	0.278	0.262	4.1
tert-Butyl Alcohol		0.025	0.022	0.023	0.024	0.025	0.024	5.8
Diethyl Ether	0.172	0.202	0.194	0.199	0.206	0.213	0.198	7.2
1,1-Dichloroethene	0.260	0.262	0.241	0.256	0.265	0.274	0.260	4.3
Acrylonitrile	0.067	0.069	0.064	0.062	0.063	0.063	0.065	4.3
Acetone	0.055	0.049	0.053	0.045	0.050	0.061	0.052	10.7
Carbon Disulfide	0.817	0.848	0.786	0.819	0.861	0.900	0.839	4.8
Methyl tert-Butyl Ether	0.635	0.700	0.646	0.666	0.693	0.727	0.678	5.2
Methyl acrylate	0.162	0.161	0.140	0.152	0.168	0.174	0.160	7.7
Methylene Chloride	0.327	0.328	0.287	0.290	0.293	0.308	0.306	6.1
trans-1,2-Dichloroethene	0.287	0.312	0.278	0.284	0.298	0.310	0.295	4.7
1,1-Dichloroethane	0.530	0.569	0.520	0.539	0.549	0.572	0.546	3.8
Cyclohexane	0.451	0.495	0.435	0.449	0.462	0.484	0.463	4.9
2-Butanone	0.080	0.081	0.079	0.074	0.080	0.090	0.081	6.4
Carbon Tetrachloride	0.333	0.383	0.362	0.381	0.392	0.435	0.381	8.8
2,2-Dichloropropane	0.482	0.487	0.447	0.433	0.454	0.489	0.465	5.1
cis-1,2-Dichloroethene	0.310	0.347	0.298	0.309	0.320	0.335	0.320	5.6
Bromochloromethane	0.128	0.131	0.127	0.132	0.138	0.145	0.134	5.1
Chloroform	0.551	0.584	0.537	0.543	0.547	0.583	0.558	3.7
1,1,1-Trichloroethane	0.457	0.477	0.449	0.471	0.482	0.505	0.473	4.2
Methylcyclohexane	0.442	0.440	0.402	0.406	0.490	0.519	0.450	10.3
1,1-Dichloropropene	0.413	0.455	0.432	0.430	0.434	0.468	0.438	4.5
Propionitrile	0.025	0.026	0.024	0.025	0.023	0.024	0.025	3.8

* Compounds with required minimum RRF and maximum %RSD values.

All other compounds must meet a minimum RRF of 0.010.

RRF of 1,4-Dioxane = Value should be divide by 1000.

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COMPOUND	RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015	RRF	% RSD
Benzene	1.218	1.011	1.165	1.205	1.202	1.269	1.178	7.5
1,2-Dichloroethane	0.360	0.332	0.363	0.371	0.376	0.394	0.366	5.7
Trichloroethene	0.314	0.283	0.269	0.271	0.323	0.345	0.301	10.3
1,2-Dichloropropane	0.235	0.261	0.251	0.258	0.315	0.334	0.276	14.4
1-Chlorobutane	0.575	0.575	0.553	0.583	0.591	0.621	0.583	3.9
Dibromomethane	0.132	0.134	0.131	0.138	0.154	0.168	0.143	10.4
Bromodichloromethane	0.304	0.304	0.300	0.310	0.328	0.388	0.322	10.4
4-Methyl-2-Pentanone	0.136	0.147	0.136	0.146	0.152	0.166	0.147	7.8
Toluene	0.582	0.650	0.596	0.642	0.671	0.718	0.643	7.8
t-1,3-Dichloropropene	0.213	0.231	0.223	0.250	0.285	0.313	0.253	15.5
cis-1,3-Dichloropropene	0.284	0.311	0.292	0.334	0.362	0.452	0.339	18.4
1,1,2-Trichloroethane	0.173	0.197	0.180	0.191	0.202	0.211	0.192	7.4
1,3-Dichloropropane	0.310	0.327	0.318	0.330	0.344	0.364	0.332	5.8
2-Hexanone	0.090	0.097	0.087	0.096	0.103	0.114	0.098	10
Dibromochloromethane	0.165	0.184	0.185	0.206	0.232	0.248	0.203	15.5
1,2-Dibromoethane	0.164	0.169	0.161	0.171	0.179	0.189	0.172	5.9
Tetrachloroethene	0.254	0.279	0.266	0.270	0.285	0.295	0.275	5.4
Chlorobenzene	0.680	0.735	0.686	0.732	0.771	0.828	0.739	7.5
1,1,1,2-Tetrachloroethane	0.211	0.236	0.218	0.233	0.254	0.273	0.238	9.6
Hexachloroethane	0.134	0.146	0.143	0.170	0.192	0.213	0.166	18.7
Ethyl Benzene	1.195	1.261	1.191	1.259	1.314	1.408	1.271	6.4
m/p-Xylenes	0.459	0.470	0.464	0.488	0.519	0.564	0.494	8.2
o-Xylene	0.428	0.462	0.432	0.473	0.504	0.550	0.475	9.8
Styrene	0.649	0.715	0.690	0.764	0.823	0.900	0.757	12.2
Bromoform	0.096	0.085	0.092	0.105	0.118	0.131	0.104	16.8
Isopropylbenzene	1.016	1.118	1.057	1.148	1.230	1.318	1.148	9.7
1,1,2,2-Tetrachloroethane	0.222	0.229	0.217	0.230	0.243	0.264	0.234	7.3
1,2,3-Trichloropropane	0.171	0.198	0.182	0.177	0.208	0.204	0.190	8
Bromobenzene	0.284	0.283	0.265	0.293	0.309	0.343	0.296	9.1
n-propylbenzene	0.303	0.327	0.323	0.344	0.375	0.402	0.346	10.6

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COMPOUND	RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015	RRF	% RSD
2-Chlorotoluene	0.278	0.298	0.285	0.301	0.322	0.349	0.305	8.6
1,3,5-Trimethylbenzene	0.966	1.036	1.013	1.102	1.182	1.280	1.097	10.7
4-Chlorotoluene	0.269	0.300	0.296	0.311	0.330	0.355	0.310	9.5
tert-Butylbenzene	0.954	0.987	0.975	1.042	1.123	1.207	1.048	9.4
1,2,4-Trimethylbenzene	0.953	1.029	1.004	1.096	1.178	1.268	1.088	10.8
sec-Butylbenzene	1.226	1.376	1.304	1.417	1.516	1.641	1.413	10.5
p-Isopropyltoluene	1.023	1.104	1.091	1.202	1.275	1.384	1.180	11.3
1,3-Dichlorobenzene	0.539	0.571	0.543	0.594	0.629	0.681	0.593	9.2
1,4-Dichlorobenzene	0.512	0.572	0.539	0.590	0.635	0.711	0.593	12.1
n-Butylbenzene	0.933	1.004	0.985	1.113	1.211	1.319	1.094	13.6
1,2-Dichlorobenzene	0.504	0.538	0.502	0.552	0.597	0.649	0.557	10.2
1,2-Dibromo-3-Chloropropane	0.024	0.027	0.031	0.034	0.040	0.044	0.033	23.1
1,2,4-Trichlorobenzene	0.304	0.313	0.310	0.341	0.385	0.425	0.346	14.1
Hexachlorobutadiene	0.179	0.185	0.180	0.195	0.211	0.231	0.197	10.5
Naphthalene		0.533	0.520	0.587	0.679	0.785	0.621	17.9
1,2,3-Trichlorobenzene	0.269	0.294	0.283	0.321	0.352	0.400	0.320	15.3
1,2-Dichlorobenzene-d4	0.318	0.364	0.326	0.342	0.359	0.392	0.350	7.7
4-Bromofluorobenzene	0.373	0.410	0.361	0.361	0.369	0.398	0.379	5.4
Iodomethane		0.238	0.241	0.306	0.369	0.413	0.314	24.7
Allyl Chloride	0.346	0.373	0.389	0.359	0.382	0.401	0.375	5.4
Methacrylonitrile	0.139	0.105	0.107	0.096	0.101	0.106	0.109	13.9
Methyl methacrylate	0.107	0.107	0.108	0.117	0.127	0.154	0.120	15.3

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