

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance

Contract: GENV01

Lab Code: ACE

SDG No.: Q3740

Instrument ID: BNA_F

Calibration Date(s): 11/05/2025 11/05/2025

Calibration Time(s): 12:50 16:49

LAB FILE ID:		RRF2.5 = BF144169.D			RRF005 = BF144170.D		RRF010 = BF144171.D	
		RRF020 = BF144172.D			RRF040 = BF144173.D		RRF050 = BF144174.D	
COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2-Fluorophenol		1.332	1.303	1.316	1.315	1.157	1.278	5.6
Benzaldehyde			1.033	0.917	0.816	0.672	0.818	17.0
Phenol-d6		1.566	1.518	1.511	1.460	1.281	1.448	7.1
Phenol		1.845	1.896	1.840	1.858	1.562	1.769	7.6
bis(2-Chloroethyl)ether		1.278	1.333	1.342	1.316	1.155	1.289	5.2
2-Chlorophenol		1.242	1.309	1.292	1.281	1.152	1.253	4.6
2-Methylphenol		1.031	1.054	1.007	1.033	0.895	0.997	5.4
2,2-oxybis(1-Chloropropane)		2.408	2.470	2.496	2.418	2.147	2.374	5.5
Acetophenone		0.479	0.464	0.434	0.434	0.380	0.429	8.3
3+4-Methylphenols			1.330	1.223	1.215	1.030	1.175	9.2
n-Nitroso-di-n-propylamine	0.998	1.010	1.023	0.996	0.950	0.813	0.953	7.4
Nitrobenzene-d5		0.343	0.352	0.349	0.360	0.321	0.346	4.1
Hexachloroethane		0.512	0.513	0.532	0.532	0.467	0.515	4.9
Nitrobenzene		0.370	0.390	0.376	0.388	0.342	0.376	4.9
Isophorone		0.659	0.668	0.669	0.673	0.581	0.655	5.1
2-Nitrophenol		0.167	0.187	0.191	0.197	0.174	0.186	6.5
2,4-Dimethylphenol		0.281	0.278	0.265	0.298	0.260	0.279	5.1
bis(2-Chloroethoxy)methane		0.426	0.417	0.412	0.423	0.372	0.409	5.0
2,4-Dichlorophenol		0.334	0.342	0.330	0.331	0.289	0.322	6.2
Naphthalene		1.019	1.008	0.982	0.969	0.850	0.951	6.7
4-Chloroaniline		0.358	0.364	0.355	0.362	0.309	0.347	6.1
Hexachlorobutadiene		0.256	0.250	0.252	0.259	0.232	0.249	4.0
Caprolactam			0.094	0.093	0.092	0.075	0.088	8.1
4-Chloro-3-methylphenol		0.283	0.307	0.304	0.297	0.259	0.288	5.8
2-Methylnaphthalene		0.702	0.672	0.665	0.647	0.559	0.636	8.0
Hexachlorocyclopentadiene			0.121	0.142	0.200	0.204	0.195	27.8
2,4,6-Trichlorophenol		0.440	0.449	0.449	0.456	0.409	0.446	5.5
2-Fluorobiphenyl		1.598	1.428	1.361	1.350	1.177	1.354	10.7
2,4,5-Trichlorophenol		0.497	0.489	0.497	0.489	0.438	0.481	5.1
1,1-Biphenyl		1.535	1.446	1.425	1.408	1.239	1.396	7.5
2-Chloronaphthalene		1.303	1.216	1.206	1.204	1.068	1.191	7.1
2-Nitroaniline		0.302	0.347	0.349	0.361	0.326	0.344	6.8
Dimethylphthalate		1.437	1.343	1.359	1.345	1.168	1.325	6.7
Acenaphthylene		1.727	1.686	1.677	1.645	1.440	1.623	6.6

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance

Contract: GENV01

Lab Code: ACE

SDG No.: Q3740

Instrument ID: BNA_F

Calibration Date(s): 11/05/2025 11/05/2025

Calibration Time(s): 12:50 16:49

LAB FILE ID:		RRF2.5 = BF144169.D			RRF005 = BF144170.D		RRF010 = BF144171.D	
		RRF020 = BF144172.D			RRF040 = BF144173.D		RRF050 = BF144174.D	
COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
2,6-Dinitrotoluene		0.251	0.271	0.271	0.276	0.252	0.268	5.2
3-Nitroaniline		0.271	0.301	0.302	0.315	0.264	0.293	7.1
Acenaphthene		1.138	1.162	1.120	1.096	0.956	1.085	6.9
2,4-Dinitrophenol			0.202	0.166	0.140	0.133	0.162	15.0
4-Nitrophenol			0.273	0.202	0.204	0.185	0.212	14.6
Dibenzofuran		1.644	1.600	1.586	1.551	1.337	1.520	8.0
2,4-Dinitrotoluene		0.322	0.377	0.372	0.385	0.328	0.359	7.1
Diethylphthalate		1.294	1.273	1.254	1.254	1.075	1.221	6.3
4-Chlorophenyl-phenylether		0.711	0.701	0.678	0.685	0.570	0.658	7.9
Fluorene		1.295	1.223	1.197	1.180	0.997	1.156	8.9
4-Nitroaniline		0.273	0.290	0.293	0.288	0.254	0.279	5.1
4,6-Dinitro-2-methylphenol			0.147	0.138	0.130	0.120	0.136	7.0
n-Nitrosodiphenylamine		0.695	0.676	0.635	0.646	0.577	0.643	6.1
2,4,6-Tribromophenol		0.242	0.257	0.257	0.265	0.227	0.251	5.3
4-Bromophenyl-phenylether		0.264	0.260	0.255	0.263	0.228	0.255	5.2
Hexachlorobenzene		0.306	0.306	0.305	0.300	0.273	0.301	4.7
Atrazine		0.215	0.211	0.215	0.206	0.180	0.205	6.3
Pentachlorophenol			0.135	0.144	0.156	0.137	0.150	8.8
Phenanthrene		1.103	1.042	0.986	1.009	0.892	0.996	6.9
Anthracene		1.120	1.059	1.027	1.022	0.897	1.013	7.4
Carbazole		0.938	0.917	0.882	0.878	0.762	0.861	7.4
Di-n-butylphthalate		1.075	1.101	1.077	1.070	0.917	1.041	6.3
Fluoranthene		1.117	1.066	1.053	1.054	0.910	1.029	6.8
Pyrene		1.763	1.745	1.631	1.704	1.372	1.613	8.8
Terphenyl-d14		1.403	1.415	1.274	1.317	1.042	1.259	10.7
Butylbenzylphthalate		0.565	0.590	0.550	0.590	0.499	0.559	5.6
3,3-Dichlorobenzidine			0.453	0.461	0.482	0.441	0.475	6.8
Benzo (a) anthracene		1.455	1.340	1.330	1.430	1.290	1.386	5.4
Chrysene		1.276	1.245	1.279	1.403	1.164	1.280	5.7
Bis (2-ethylhexyl) phthalate		0.773	0.739	0.755	0.816	0.705	0.765	4.9
Di-n-octyl phthalate			1.163	1.272	1.410	1.269	1.320	7.9
Benzo (b) fluoranthene		1.199	1.133	1.114	1.233	1.002	1.137	6.4
Benzo (k) fluoranthene		1.077	1.094	1.083	1.041	0.999	1.064	4.4
Benzo (a) pyrene		1.064	1.050	1.058	1.077	0.963	1.049	4.2
Indeno (1,2,3-cd) pyrene		1.450	1.411	1.447	1.485	1.311	1.436	4.6

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance

Contract: GENV01

Lab Code: ACE

SDG No.: Q3740

Instrument ID: BNA_F

Calibration Date(s): 11/05/2025 11/05/2025

Calibration Time(s): 12:50 16:49

LAB FILE ID:		RRF2.5 = BF144169.D		RRF005 = BF144170.D		RRF010 = BF144171.D		
		RRF020 = BF144172.D		RRF040 = BF144173.D		RRF050 = BF144174.D		
COMPOUND	RRF2.5	RRF005	RRF010	RRF020	RRF040	RRF050	RRF	% RSD
Dibenzo(a,h)anthracene		1.155	1.155	1.175	1.198	1.040	1.153	4.8
Benzo(g,h,i)perylene		1.095	1.125	1.153	1.191	1.028	1.139	5.7
1,2,4,5-Tetrachlorobenzene		0.677	0.662	0.659	0.675	0.588	0.655	6.6
2,3,4,6-Tetrachlorophenol		0.308	0.347	0.336	0.358	0.316	0.340	6.6

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF110525.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Wed Nov 05 18:37:33 2025
 Response Via : Initial Calibration

Calibration Files

2.5 =BF144169.D 5 =BF144170.D 10 =BF144171.D 20 =BF144172.D 40 =BF144173.D 50 =BF144174.D 60 =BF144175.D 80 =BF144176.D

	Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----									
2)	1,4-Dioxane		0.526	0.487	0.518	0.554	0.500	0.573	0.540	0.528	5.68
3)	Pyridine		1.374	1.406	1.491	1.520	1.378	1.607	1.543	1.474	6.12
4)	n-Nitrosodimet...			0.719	0.726	0.775	0.723	0.868	0.810	0.770	7.79
5) S	2-Fluorophenol		1.332	1.303	1.316	1.315	1.157	1.330	1.193	1.278	5.62
6)	Aniline		2.194	2.169	2.114	2.067	1.841	2.139	1.920	2.063	6.46
7) S	Phenol-d6		1.566	1.518	1.511	1.460	1.281	1.461	1.339	1.448	7.08
8)	2-Chlorophenol		1.242	1.309	1.292	1.281	1.152	1.293	1.204	1.253	4.59
9)	Benzaldehyde			1.033	0.917	0.816	0.672	0.786	0.683	0.818	16.99
10) C	Phenol		1.845	1.896	1.840	1.858	1.562	1.790	1.594	1.769	7.60
11)	bis(2-Chloroet...		1.278	1.333	1.342	1.316	1.155	1.341	1.259	1.289	5.22
12)	1,3-Dichlorobe...		1.677	1.573	1.583	1.541	1.397	1.586	1.468	1.547	5.86
13) C	1,4-Dichlorobe...		1.669	1.563	1.583	1.591	1.372	1.604	1.464	1.549	6.40
14)	1,2-Dichlorobe...		1.651	1.510	1.488	1.485	1.325	1.533	1.404	1.485	6.88
15)	Benzyl Alcohol			1.140	1.188	1.161	1.050	1.197	1.145	1.147	4.61
16)	2,2'-oxybis(1-...		2.408	2.470	2.496	2.418	2.147	2.442	2.238	2.374	5.50
17)	2-Methylphenol		1.031	1.054	1.007	1.033	0.895	1.002	0.958	0.997	5.44
18)	Hexachloroethane		0.512	0.513	0.532	0.532	0.467	0.543	0.504	0.515	4.90
19) P	n-Nitroso-di-n...	0.998	1.010	1.023	0.996	0.950	0.813	0.937	0.900	0.953	7.38
20)	3+4-Methylphenols			1.330	1.223	1.215	1.030	1.175	1.080	1.175	9.16
21) I	Naphthalene-d8	-----ISTD-----									
22)	Acetophenone		0.479	0.464	0.434	0.434	0.380	0.421	0.391	0.429	8.34
23) S	Nitrobenzene-d5		0.343	0.352	0.349	0.360	0.321	0.361	0.338	0.346	4.07
24)	Nitrobenzene		0.370	0.390	0.376	0.388	0.342	0.398	0.368	0.376	4.90
25)	Isophorone		0.659	0.668	0.669	0.673	0.581	0.675	0.659	0.655	5.05
26) C	2-Nitrophenol		0.167	0.187	0.191	0.197	0.174	0.200	0.186	0.186	6.47
27)	2,4-Dimethylph...		0.281	0.278	0.265	0.298	0.260	0.295	0.275	0.279	5.08
28)	bis(2-Chloroet...		0.426	0.417	0.412	0.423	0.372	0.423	0.390	0.409	5.02
29) C	2,4-Dichloroph...		0.334	0.342	0.330	0.331	0.289	0.326	0.297	0.322	6.20
30)	1,2,4-Trichlor...		0.350	0.349	0.332	0.337	0.296	0.335	0.312	0.330	5.96
31)	Naphthalene		1.019	1.008	0.982	0.969	0.850	0.952	0.880	0.951	6.71
32)	Benzoic acid			0.268	0.220	0.180	0.165	0.190	0.204	0.204	17.90
33)	4-Chloroaniline		0.358	0.364	0.355	0.362	0.309	0.355	0.326	0.347	6.07
34) C	Hexachlorobuta...		0.256	0.250	0.252	0.259	0.232	0.254	0.238	0.249	4.03
35)	Caprolactam			0.094	0.093	0.092	0.075	0.087	0.088	0.088	8.10
36) C	4-Chloro-3-met...		0.283	0.307	0.304	0.297	0.259	0.290	0.277	0.288	5.77
37)	2-Methylnaphth...		0.702	0.672	0.665	0.647	0.559	0.623	0.583	0.636	7.98
38)	1-Methylnaphth...		0.667	0.681	0.632	0.620	0.536	0.600	0.561	0.614	8.61

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF110525.M

39) I	Acenaphthene-d10	-----ISTD-----								
40)	1,2,4,5-Tetrac...	0.677	0.662	0.659	0.675	0.588	0.716	0.611	0.655	6.57
41) P	Hexachlorocycl...	0.121	0.142	0.200	0.204	0.253	0.248	0.195		27.78
42) S	2,4,6-Tribromo...	0.242	0.257	0.257	0.265	0.227	0.261	0.249	0.251	5.27
43) C	2,4,6-Trichlor...	0.440	0.449	0.449	0.456	0.409	0.489	0.431	0.446	5.49
44)	2,4,5-Trichlor...	0.497	0.489	0.497	0.489	0.438	0.502	0.456	0.481	5.05
45) S	2-Fluorobiphenyl	1.598	1.428	1.361	1.350	1.177	1.381	1.183	1.354	10.72
46)	1,1'-Biphenyl	1.535	1.446	1.425	1.408	1.239	1.450	1.270	1.396	7.52
47)	2-Chloronaphth...	1.303	1.216	1.206	1.204	1.068	1.252	1.087	1.191	7.12
48)	2-Nitroaniline	0.302	0.347	0.349	0.361	0.326	0.374	0.345	0.344	6.84
49)	Acenaphthylene	1.727	1.686	1.677	1.645	1.440	1.678	1.506	1.623	6.57
50)	Dimethylphthalate	1.437	1.343	1.359	1.345	1.168	1.375	1.247	1.325	6.71
51)	2,6-Dinitrotol...	0.251	0.271	0.271	0.276	0.252	0.290	0.266	0.268	5.16
52) C	Acenaphthene	1.138	1.162	1.120	1.096	0.956	1.117	1.007	1.085	6.90
53)	3-Nitroaniline	0.271	0.301	0.302	0.315	0.264	0.316	0.283	0.293	7.07
54) P	2,4-Dinitrophenol	0.202	0.166	0.140	0.133	0.168	0.164	0.162		14.99
55)	Dibenzofuran	1.644	1.600	1.586	1.551	1.337	1.562	1.359	1.520	7.99
56) P	4-Nitrophenol	0.273	0.202	0.204	0.185	0.211	0.198	0.212		14.64
57)	2,4-Dinitrotol...	0.322	0.377	0.372	0.385	0.328	0.377	0.353	0.359	7.07
58)	Fluorene	1.295	1.223	1.197	1.180	0.997	1.149	1.048	1.156	8.88
59)	2,3,4,6-Tetrac...	0.308	0.347	0.336	0.358	0.316	0.372	0.345	0.340	6.58
60)	Diethylphthalate	1.294	1.273	1.254	1.254	1.075	1.237	1.163	1.221	6.27
61)	4-Chlorophenyl...	0.711	0.701	0.678	0.685	0.570	0.659	0.605	0.658	7.92
62)	4-Nitroaniline	0.273	0.290	0.293	0.288	0.254	0.288	0.268	0.279	5.10
63)	Azobenzene	1.157	1.203	1.145	1.164	0.995	1.197	1.096	1.137	6.33
64) I	Phenanthrene-d10	-----ISTD-----								
65)	4,6-Dinitro-2-...	0.147	0.138	0.130	0.120	0.142	0.138	0.136		6.99
66) c	n-Nitrosodiphe...	0.695	0.676	0.635	0.646	0.577	0.660	0.614	0.643	6.12
67)	4-Bromophenyl-...	0.264	0.260	0.255	0.263	0.228	0.266	0.252	0.255	5.18
68)	Hexachlorobenzene	0.306	0.306	0.305	0.300	0.273	0.319	0.296	0.301	4.74
69)	Atrazine	0.215	0.211	0.215	0.206	0.180	0.210	0.196	0.205	6.26
70) C	Pentachlorophenol	0.135	0.144	0.156	0.137	0.162	0.165	0.150		8.76
71)	Phenanthrene	1.103	1.042	0.986	1.009	0.892	1.003	0.937	0.996	6.87
72)	Anthracene	1.120	1.059	1.027	1.022	0.897	1.027	0.936	1.013	7.37
73)	Carbazole	0.938	0.917	0.882	0.878	0.762	0.854	0.794	0.861	7.36
74)	Di-n-butylphth...	1.075	1.101	1.077	1.070	0.917	1.059	0.986	1.041	6.27
75) C	Fluoranthene	1.117	1.066	1.053	1.054	0.910	1.043	0.958	1.029	6.84
76) I	Chrysene-d12	-----ISTD-----								
77)	Benzidine	0.707	0.519	0.624	0.512	0.635	0.553	0.592		12.98
78)	Pyrene	1.763	1.745	1.631	1.704	1.372	1.569	1.504	1.613	8.79
79) S	Terphenyl-d14	1.403	1.415	1.274	1.317	1.042	1.208	1.155	1.259	10.71
80)	Butylbenzylpht...	0.565	0.590	0.550	0.590	0.499	0.570	0.549	0.559	5.60
81)	Butzo(a)anthra...	1.455	1.340	1.330	1.430	1.290	1.493	1.366	1.386	5.37
82)	3,3'-Dichlorob...	0.453	0.461	0.482	0.441	0.532	0.481	0.475		6.77
83)	Chrysene	1.276	1.245	1.279	1.403	1.164	1.326	1.263	1.280	5.72
84)	Bis(2-ethylhex...	0.773	0.739	0.755	0.816	0.705	0.803	0.764	0.765	4.92
85) c	Di-n-octyl pht...	1.163	1.272	1.410	1.269	1.442	1.364	1.320		7.91

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF110525.M

		-----ISTD-----								
86) I	Perylene-d12									
87)	Indeno(1,2,3-c...	1.450	1.411	1.447	1.485	1.311	1.521	1.425	1.436	4.62
88)	Benzo(b)fluora...	1.199	1.133	1.114	1.233	1.002	1.134	1.143	1.137	6.40
89)	Benzo(k)fluora...	1.077	1.094	1.083	1.041	0.999	1.134	1.021	1.064	4.36
90) C	Benzo(a)pyrene	1.064	1.050	1.058	1.077	0.963	1.103	1.029	1.049	4.23
91)	Dibenzo(a,h)an...	1.155	1.155	1.175	1.198	1.040	1.209	1.138	1.153	4.85
92)	Benzo(g,h,i)pe...	1.095	1.125	1.153	1.191	1.028	1.228	1.150	1.139	5.70

(#) = Out of Range