284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

LAB CHRONICLE

OrderID:	Q1215	**OrderDate:**	1/29/2025 11:20:00 AM
Client:	RU2 Engineering, LLC	**Project:**	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	**Location:**	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1215-03	**JPP-29.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			SVOC-TCL BNA -20	8270E		01/30/25	02/11/25	
Q1215-04	**JPP-29.1-012825**	**TCLP**			**01/28/25**			**01/29/25**
			TCLP BNA	8270E		01/31/25	02/05/25	
Q1215-07	**JPP-29.2-012825**	**SOIL**			**01/28/25**			**01/29/25**
			SVOC-TCL BNA -20	8270E		01/30/25	02/07/25	
Q1215-07DL	**JPP-29.2-012825DL**	**SOIL**			**01/28/25**			**01/29/25**
			SVOC-TCL BNA -20	8270E		01/30/25	02/10/25	
Q1215-08	**JPP-29.2-012825**	**TCLP**			**01/28/25**			**01/29/25**
			TCLP BNA	8270E		01/31/25	02/05/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID :	**JPP-29.1-012825**								
Q1215-03	JPP-29.1-012825	SOIL	Acenaphthene		110.000	J	91.2	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Phenanthrene		1,100.000		94.4	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Anthracene		260.000		94.9	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Fluoranthene		2,100.000		91.9	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Pyrene		1,700.000		93.3	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Benzo(a)anthracene		1,200.000		90.7	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Chrysene		1,000.000		89.4	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Benzo(b)fluoranthene		1,400.000		91.2	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Benzo(k)fluoranthene		530.000		92.9	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Benzo(a)pyrene		1,300.000		100	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Indeno(1,2,3-cd)pyrene		550.000		87.8	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Dibenzo(a,h)anthracene		180.000	J	91.3	190	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Benzo(g,h,i)perylene		620.000		90.1	190	ug/Kg
			Total Svoc :		**12,050.00**				
Q1215-03	JPP-29.1-012825	SOIL	11H-Benzo[b]fluorene	*	110.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Anthracene, 2-methyl-	*	150.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Benzaldehyde, 3,5-dichloro-2-hyd	*	440.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Benzo[e]pyrene	*	200.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Benzophenone	*	300.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Dibenzothiophene	*	130.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Dodecane, 2-methyl-	*	150.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Dodecane, 2-methyl-6-propyl-	*	210.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Naphthalene, 2-phenyl-	*	120.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	n-Hexadecanoic acid	*	530.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Nonadecane	*	120.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Pentadecane	*	130.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Perylene	*	930.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Cyclopenta(def)phenanthrenone	*	120.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Decane, 2-methyl-	*	98.600	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Phenanthrene, 2,5-dimethyl-	*	110.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Phenanthrene, 2-methyl-	*	100.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Pyrene, 1-methyl-	*	96.700	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	Tridecane	*	230.000	J	0	0	ug/Kg
Q1215-03	JPP-29.1-012825	SOIL	unknown12.398	*	150.000	J	0	0	ug/Kg
			Total Tics :		**4,425.30**				
			Total Concentration:		**16,475.30**				

Client ID : JPP-29.2-012825

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Hit Summary Sheet
SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1215-07	JPP-29.2-012825	SOIL	Acenaphthene		230.000		91.2	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Dibenzofuran		120.000	J	95	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Fluorene		200.000		96.2	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Phenanthrene		2,300.000		94.5	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Anthracene		570.000		95	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Carbazole		160.000	J	90.3	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Fluoranthene		3,100.000	E	91.9	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Pyrene		3,100.000	E	93.4	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzo(a)anthracene		1,800.000		90.8	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Chrysene		1,600.000		89.4	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzo(b)fluoranthene		2,100.000		91.2	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzo(k)fluoranthene		1,000.000		92.9	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzo(a)pyrene		1,900.000		100	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Indeno(1,2,3-cd)pyrene		960.000		87.9	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Dibenzo(a,h)anthracene		300.000		91.4	190	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzo(g,h,i)perylene		1,100.000		90.1	190	ug/Kg
			Total Svoc :		**20,540.00**				
Q1215-07	JPP-29.2-012825	SOIL	Pyrene, 1-methyl-	*	130.000	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Pyrene, 2-methyl-	*	120.000	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Retene	*	80.300	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Phenanthrene, 1-methyl-	*	160.000	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Phenanthrene, 2-methyl-	*	75.800	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzaldehyde, 3,5-dichloro-2-hyd	*	200.000	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzene, [1-(2,4-cyclopentadien-1	*	76.900	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	11H-Benzo[b]fluorene	*	100.000	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzo[e]pyrene	*	1,400.000	J	0	0	ug/Kg
Q1215-07	JPP-29.2-012825	SOIL	Benzophenone	*	200.000	J	0	0	ug/Kg
			Total Tics :		**2,543.00**				
			Total Concentration:		**23,083.00**				
Client ID :	**JPP-29.2-012825DL**								
Q1215-07DL	JPP-29.2-012825DL	SOIL	Acenaphthene		230.000	JD	180	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Fluorene		200.000	JD	190	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Phenanthrene		2,400.000	D	190	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Anthracene		570.000	D	190	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Fluoranthene		3,000.000	D	180	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Pyrene		2,700.000	D	190	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Benzo(a)anthracene		1,800.000	D	180	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Chrysene		1,600.000	D	180	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Benzo(b)fluoranthene		2,300.000	D	180	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Benzo(k)fluoranthene		790.000	D	190	380	ug/Kg

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Hit Summary Sheet
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SDG No.: Q1215

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q1215-07DL	JPP-29.2-012825DL	SOIL	Benzo(a)pyrene	1,900.000	D	210	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Indeno(1,2,3-cd)pyrene	840.000	D	180	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Dibenzo(a,h)anthracene	260.000	JD	180	380	ug/Kg
Q1215-07DL	JPP-29.2-012825DL	SOIL	Benzo(g,h,i)perylene	990.000	D	180	380	ug/Kg
			Total Svoc :	**19,580.00**				
			Total Concentration:	**19,580.00**				

SAMPLE DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141572.D	1	01/30/25 09:15	02/11/25 19:45	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	370	U	200	370	ug/Kg
108-95-2	Phenol	190	U	93.2	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	190	U	94.1	190	ug/Kg
95-57-8	2-Chlorophenol	190	U	93.9	190	ug/Kg
95-48-7	2-Methylphenol	190	U	90.6	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	190	U	100	190	ug/Kg
98-86-2	Acetophenone	190	U	97.7	190	ug/Kg
65794-96-9	3+4-Methylphenols	370	U	89.7	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	89.9	U	45.3	89.9	ug/Kg
67-72-1	Hexachloroethane	190	U	93.3	190	ug/Kg
98-95-3	Nitrobenzene	190	U	100	190	ug/Kg
78-59-1	Isophorone	190	U	95.1	190	ug/Kg
88-75-5	2-Nitrophenol	190	U	110	190	ug/Kg
105-67-9	2,4-Dimethylphenol	190	U	100	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	190	U	96.5	190	ug/Kg
120-83-2	2,4-Dichlorophenol	190	U	84.9	190	ug/Kg
91-20-3	Naphthalene	190	U	92.9	190	ug/Kg
106-47-8	4-Chloroaniline	190	U	92.9	190	ug/Kg
87-68-3	Hexachlorobutadiene	190	U	93.7	190	ug/Kg
105-60-2	Caprolactam	370	U	97.6	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	190	U	87.1	190	ug/Kg
91-57-6	2-Methylnaphthalene	190	U	92.8	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	370	UQ	180	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	190	U	80.3	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	190	U	83.2	190	ug/Kg
92-52-4	1,1-Biphenyl	190	U	98.3	190	ug/Kg
91-58-7	2-Chloronaphthalene	190	U	93.7	190	ug/Kg
88-74-4	2-Nitroaniline	190	U	110	190	ug/Kg
131-11-3	Dimethylphthalate	190	U	91.9	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141572.D	1	01/30/25 09:15	02/11/25 19:45	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	190	U	97.2	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	190	U	93.5	190	ug/Kg
99-09-2	3-Nitroaniline	190	U	100	190	ug/Kg
83-32-9	Acenaphthene	110	J	91.2	190	ug/Kg
51-28-5	2,4-Dinitrophenol	370	U	270	370	ug/Kg
100-02-7	4-Nitrophenol	370	U	130	370	ug/Kg
132-64-9	Dibenzofuran	190	U	94.9	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	190	U	96.9	190	ug/Kg
84-66-2	Diethylphthalate	190	U	90.1	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	190	U	96.2	190	ug/Kg
86-73-7	Fluorene	190	U	96.1	190	ug/Kg
100-01-6	4-Nitroaniline	190	U	120	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	370	U	130	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	190	U	91.7	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	190	U	88.7	190	ug/Kg
118-74-1	Hexachlorobenzene	190	U	95.6	190	ug/Kg
1912-24-9	Atrazine	190	U	100	190	ug/Kg
87-86-5	Pentachlorophenol	370	U	86.9	370	ug/Kg
85-01-8	Phenanthrene	1100		94.4	190	ug/Kg
120-12-7	Anthracene	260		94.9	190	ug/Kg
86-74-8	Carbazole	190	U	90.3	190	ug/Kg
84-74-2	Di-n-butylphthalate	190	U	94.8	190	ug/Kg
206-44-0	Fluoranthene	2100		91.9	190	ug/Kg
129-00-0	Pyrene	1700		93.3	190	ug/Kg
85-68-7	Butylbenzylphthalate	190	U	110	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	370	UQ	110	370	ug/Kg
56-55-3	Benzo(a)anthracene	1200		90.7	190	ug/Kg
218-01-9	Chrysene	1000		89.4	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	190	U	100	190	ug/Kg
117-84-0	Di-n-octyl phthalate	370	U	120	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	1400		91.2	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141572.D	1	01/30/25 09:15	02/11/25 19:45	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	530		92.9	190	ug/Kg
50-32-8	Benzo(a)pyrene	1300		100	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	550		87.8	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	180	J	91.3	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	620		90.1	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	97.6	190	ug/Kg
123-91-1	1,4-Dioxane	190	U	120	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	190	U	84.0	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	112		18 - 112	75%	SPK: 150
13127-88-3	Phenol-d6	110		15 - 107	73%	SPK: 150
4165-60-0	Nitrobenzene-d5	80.3		18 - 107	80%	SPK: 100
321-60-8	2-Fluorobiphenyl	82.2		20 - 109	82%	SPK: 100
118-79-6	2,4,6-Tribromophenol	98.8		10 - 116	66%	SPK: 150
1718-51-0	Terphenyl-d14	63.3		10 - 105	63%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	70200	6.787			
1146-65-2	Naphthalene-d8	274000	8.069			
15067-26-2	Acenaphthene-d10	136000	9.822			
1517-22-2	Phenanthrene-d10	200000	11.304			
1719-03-5	Chrysene-d12	172000	13.951			
1520-96-3	Perylene-d12	170000	15.398			
TENTATIVE IDENTIFIED COMPOUNDS						
000629-92-5	Nonadecane	120	J		10.3	ug/Kg
006975-98-0	Decane, 2-methyl-	98.6	J		10.5	ug/Kg
000119-61-9	Benzophenone	300	J		10.5	ug/Kg
000629-50-5	Tridecane	230	J		10.7	ug/Kg
055045-08-4	Dodecane, 2-methyl-6-propyl-	210	J		11.2	ug/Kg
000132-65-0	Dibenzothiophene	130	J		11.2	ug/Kg
001560-97-0	Dodecane, 2-methyl-	150	J		11.6	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141572.D	1	01/30/25 09:15	02/11/25 19:45	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000613-12-7	Anthracene, 2-methyl-	150	J		11.8	ug/Kg
000057-10-3	n-Hexadecanoic acid	530	J		11.8	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	100	J		11.9	ug/Kg
000090-60-8	Benzaldehyde, 3,5-dichloro-2-hydro	440	J		11.9	ug/Kg
000629-62-9	Pentadecane	130	J		12.0	ug/Kg
000612-94-2	Naphthalene, 2-phenyl-	120	J		12.1	ug/Kg
003674-66-6	Phenanthrene, 2,5-dimethyl-	110	J		12.4	ug/Kg
	unknown12.398	150	J		12.4	ug/Kg
005737-13-3	Cyclopenta(def)phenanthrenone	120	J		12.4	ug/Kg
000243-17-4	11H-Benzo[b]fluorene	110	J		13.1	ug/Kg
002381-21-7	Pyrene, 1-methyl-	96.7	J		13.2	ug/Kg
000192-97-2	Benzo[e]pyrene	200	J		15.1	ug/Kg
000198-55-0	Perylene	930	J		15.3	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.2-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141515.D	1	01/30/25 09:15	02/07/25 18:35	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	370	U	200	370	ug/Kg
108-95-2	Phenol	190	U	93.3	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	190	U	94.2	190	ug/Kg
95-57-8	2-Chlorophenol	190	U	93.9	190	ug/Kg
95-48-7	2-Methylphenol	190	U	90.7	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	190	U	100	190	ug/Kg
98-86-2	Acetophenone	190	U	97.8	190	ug/Kg
65794-96-9	3+4-Methylphenols	370	U	89.8	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	90.0	U	45.3	90.0	ug/Kg
67-72-1	Hexachloroethane	190	U	93.4	190	ug/Kg
98-95-3	Nitrobenzene	190	U	100	190	ug/Kg
78-59-1	Isophorone	190	U	95.2	190	ug/Kg
88-75-5	2-Nitrophenol	190	U	110	190	ug/Kg
105-67-9	2,4-Dimethylphenol	190	U	100	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	190	U	96.5	190	ug/Kg
120-83-2	2,4-Dichlorophenol	190	U	84.9	190	ug/Kg
91-20-3	Naphthalene	190	U	92.9	190	ug/Kg
106-47-8	4-Chloroaniline	190	U	92.9	190	ug/Kg
87-68-3	Hexachlorobutadiene	190	U	93.7	190	ug/Kg
105-60-2	Caprolactam	370	U	97.7	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	190	U	87.2	190	ug/Kg
91-57-6	2-Methylnaphthalene	190	U	92.8	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	370	UQ	180	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	190	U	80.3	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	190	U	83.3	190	ug/Kg
92-52-4	1,1-Biphenyl	190	U	98.3	190	ug/Kg
91-58-7	2-Chloronaphthalene	190	U	93.7	190	ug/Kg
88-74-4	2-Nitroaniline	190	U	110	190	ug/Kg
131-11-3	Dimethylphthalate	190	U	91.9	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.2-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141515.D	1	01/30/25 09:15	02/07/25 18:35	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	190	U	97.3	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	190	U	93.6	190	ug/Kg
99-09-2	3-Nitroaniline	190	U	100	190	ug/Kg
83-32-9	Acenaphthene	230		91.2	190	ug/Kg
51-28-5	2,4-Dinitrophenol	370	U	270	370	ug/Kg
100-02-7	4-Nitrophenol	370	U	130	370	ug/Kg
132-64-9	Dibenzofuran	120	J	95.0	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	190	U	97.0	190	ug/Kg
84-66-2	Diethylphthalate	190	U	90.1	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	190	U	96.3	190	ug/Kg
86-73-7	Fluorene	200		96.2	190	ug/Kg
100-01-6	4-Nitroaniline	190	U	120	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	370	U	130	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	190	U	91.8	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	190	U	88.8	190	ug/Kg
118-74-1	Hexachlorobenzene	190	U	95.6	190	ug/Kg
1912-24-9	Atrazine	190	U	100	190	ug/Kg
87-86-5	Pentachlorophenol	370	U	87.0	370	ug/Kg
85-01-8	Phenanthrene	2300		94.5	190	ug/Kg
120-12-7	Anthracene	570		95.0	190	ug/Kg
86-74-8	Carbazole	160	J	90.3	190	ug/Kg
84-74-2	Di-n-butylphthalate	190	U	94.8	190	ug/Kg
206-44-0	Fluoranthene	3100	E	91.9	190	ug/Kg
129-00-0	Pyrene	3100	E	93.4	190	ug/Kg
85-68-7	Butylbenzylphthalate	190	U	110	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	370	UQ	110	370	ug/Kg
56-55-3	Benzo(a)anthracene	1800		90.8	190	ug/Kg
218-01-9	Chrysene	1600		89.4	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	190	U	100	190	ug/Kg
117-84-0	Di-n-octyl phthalate	370	U	120	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	2100		91.2	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.2-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141515.D	1	01/30/25 09:15	02/07/25 18:35	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1000		92.9	190	ug/Kg
50-32-8	Benzo(a)pyrene	1900		100	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	960		87.9	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	300		91.4	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1100		90.1	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	97.7	190	ug/Kg
123-91-1	1,4-Dioxane	190	U	120	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	190	U	84.0	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	84.4		18 - 112	56%	SPK: 150
13127-88-3	Phenol-d6	82.6		15 - 107	55%	SPK: 150
4165-60-0	Nitrobenzene-d5	59.4		18 - 107	59%	SPK: 100
321-60-8	2-Fluorobiphenyl	62.2		20 - 109	62%	SPK: 100
118-79-6	2,4,6-Tribromophenol	73.4		10 - 116	49%	SPK: 150
1718-51-0	Terphenyl-d14	56.3		10 - 105	56%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	81200	6.787			
1146-65-2	Naphthalene-d8	314000	8.069			
15067-26-2	Acenaphthene-d10	155000	9.828			
1517-22-2	Phenanthrene-d10	228000	11.316			
1719-03-5	Chrysene-d12	154000	13.963			
1520-96-3	Perylene-d12	118000	15.421			
TENTATIVE IDENTIFIED COMPOUNDS						
002320-32-3	Benzene, [1-(2,4-cyclopentadien-1-	76.9	J		10.4	ug/Kg
000119-61-9	Benzophenone	200	J		10.5	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	75.8	J		11.8	ug/Kg
000832-69-9	Phenanthrene, 1-methyl-	160	J		11.8	ug/Kg
000090-60-8	Benzaldehyde, 3,5-dichloro-2-hydro	200	J		11.9	ug/Kg
002381-21-7	Pyrene, 1-methyl-	130	J		13.0	ug/Kg
000483-65-8	Retene	80.3	J		13.0	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.2-012825	SDG No.:	Q1215
Lab Sample ID:	Q1215-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141515.D	1	01/30/25 09:15	02/07/25 18:35	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000243-17-4	11H-Benzo[b]fluorene	100	J		13.1	ug/Kg
003442-78-2	Pyrene, 2-methyl-	120	J		13.2	ug/Kg
000192-97-2	Benzo[e]pyrene	1400	J		15.3	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.2-012825DL	SDG No.:	Q1215
Lab Sample ID:	Q1215-07DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141545.D	2	01/30/25 09:15	02/10/25 19:53	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	740	UD	410	740	ug/Kg
108-95-2	Phenol	380	UD	190	380	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	380	UD	190	380	ug/Kg
95-57-8	2-Chlorophenol	380	UD	190	380	ug/Kg
95-48-7	2-Methylphenol	380	UD	180	380	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	380	UD	200	380	ug/Kg
98-86-2	Acetophenone	380	UD	200	380	ug/Kg
65794-96-9	3+4-Methylphenols	740	UD	180	740	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	180	UD	90.7	180	ug/Kg
67-72-1	Hexachloroethane	380	UD	190	380	ug/Kg
98-95-3	Nitrobenzene	380	UD	200	380	ug/Kg
78-59-1	Isophorone	380	UD	190	380	ug/Kg
88-75-5	2-Nitrophenol	380	UD	210	380	ug/Kg
105-67-9	2,4-Dimethylphenol	380	UD	210	380	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	380	UD	190	380	ug/Kg
120-83-2	2,4-Dichlorophenol	380	UD	170	380	ug/Kg
91-20-3	Naphthalene	380	UD	190	380	ug/Kg
106-47-8	4-Chloroaniline	380	UD	190	380	ug/Kg
87-68-3	Hexachlorobutadiene	380	UD	190	380	ug/Kg
105-60-2	Caprolactam	740	UD	200	740	ug/Kg
59-50-7	4-Chloro-3-methylphenol	380	UD	170	380	ug/Kg
91-57-6	2-Methylnaphthalene	380	UD	190	380	ug/Kg
77-47-4	Hexachlorocyclopentadiene	740	UDQ	350	740	ug/Kg
88-06-2	2,4,6-Trichlorophenol	380	UD	160	380	ug/Kg
95-95-4	2,4,5-Trichlorophenol	380	UD	170	380	ug/Kg
92-52-4	1,1-Biphenyl	380	UD	200	380	ug/Kg
91-58-7	2-Chloronaphthalene	380	UD	190	380	ug/Kg
88-74-4	2-Nitroaniline	380	UD	210	380	ug/Kg
131-11-3	Dimethylphthalate	380	UD	180	380	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.2-012825DL	SDG No.:	Q1215
Lab Sample ID:	Q1215-07DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141545.D	2	01/30/25 09:15	02/10/25 19:53	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	380	UD	190	380	ug/Kg
606-20-2	2,6-Dinitrotoluene	380	UD	190	380	ug/Kg
99-09-2	3-Nitroaniline	380	UD	200	380	ug/Kg
83-32-9	Acenaphthene	230	JD	180	380	ug/Kg
51-28-5	2,4-Dinitrophenol	740	UD	550	740	ug/Kg
100-02-7	4-Nitrophenol	740	UD	260	740	ug/Kg
132-64-9	Dibenzofuran	380	UD	190	380	ug/Kg
121-14-2	2,4-Dinitrotoluene	380	UD	190	380	ug/Kg
84-66-2	Diethylphthalate	380	UD	180	380	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	380	UD	190	380	ug/Kg
86-73-7	Fluorene	200	JD	190	380	ug/Kg
100-01-6	4-Nitroaniline	380	UD	240	380	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	740	UD	260	740	ug/Kg
86-30-6	n-Nitrosodiphenylamine	380	UD	180	380	ug/Kg
101-55-3	4-Bromophenyl-phenylether	380	UD	180	380	ug/Kg
118-74-1	Hexachlorobenzene	380	UD	190	380	ug/Kg
1912-24-9	Atrazine	380	UD	210	380	ug/Kg
87-86-5	Pentachlorophenol	740	UD	170	740	ug/Kg
85-01-8	Phenanthrene	2400	D	190	380	ug/Kg
120-12-7	Anthracene	570	D	190	380	ug/Kg
86-74-8	Carbazole	380	UD	180	380	ug/Kg
84-74-2	Di-n-butylphthalate	380	UD	190	380	ug/Kg
206-44-0	Fluoranthene	3000	D	180	380	ug/Kg
129-00-0	Pyrene	2700	D	190	380	ug/Kg
85-68-7	Butylbenzylphthalate	380	UD	220	380	ug/Kg
91-94-1	3,3-Dichlorobenzidine	740	UDQ	220	740	ug/Kg
56-55-3	Benzo(a)anthracene	1800	D	180	380	ug/Kg
218-01-9	Chrysene	1600	D	180	380	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	380	UD	200	380	ug/Kg
117-84-0	Di-n-octyl phthalate	740	UD	250	740	ug/Kg
205-99-2	Benzo(b)fluoranthene	2300	D	180	380	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.2-012825DL	SDG No.:	Q1215
Lab Sample ID:	Q1215-07DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141545.D	2	01/30/25 09:15	02/10/25 19:53	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	790	D	190	380	ug/Kg
50-32-8	Benzo(a)pyrene	1900	D	210	380	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	840	D	180	380	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	260	JD	180	380	ug/Kg
191-24-2	Benzo(g,h,i)perylene	990	D	180	380	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	380	UD	200	380	ug/Kg
123-91-1	1,4-Dioxane	380	UD	250	380	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	380	UD	170	380	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	85.8		18 - 112	57%	SPK: 150
13127-88-3	Phenol-d6	85.7		15 - 107	57%	SPK: 150
4165-60-0	Nitrobenzene-d5	59.3		18 - 107	59%	SPK: 100
321-60-8	2-Fluorobiphenyl	60.4		20 - 109	60%	SPK: 100
118-79-6	2,4,6-Tribromophenol	73.5		10 - 116	49%	SPK: 150
1718-51-0	Terphenyl-d14	48.7		10 - 105	49%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	77300	6.787			
1146-65-2	Naphthalene-d8	310000	8.069			
15067-26-2	Acenaphthene-d10	166000	9.822			
1517-22-2	Phenanthrene-d10	241000	11.31			
1719-03-5	Chrysene-d12	180000	13.951			
1520-96-3	Perylene-d12	169000	15.404			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

QC SUMMARY

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Surrogate Summary

SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB166360BL	PB166360BL	2-Fluorophenol	150	147	98		18	112
		Phenol-d6	150	142	95		15	107
		Nitrobenzene-d5	100	101	101		18	107
		2-Fluorobiphenyl	100	100.0	100		20	109
		2,4,6-Tribromophenol	150	158	105		10	116
		Terphenyl-d14	100	93.3	93		10	105
PB166360BS	PB166360BS	2-Fluorophenol	150	134	89		18	112
		Phenol-d6	150	128	85		15	107
		Nitrobenzene-d5	100	92.7	93		18	107
		2-Fluorobiphenyl	100	94.8	95		20	109
		2,4,6-Tribromophenol	150	154	103		10	116
		Terphenyl-d14	100	85.1	85		10	105
Q1215-03	JPP-29.1-012825	2-Fluorophenol	150	112	75		18	112
		Phenol-d6	150	110	73		15	107
		Nitrobenzene-d5	100	80.3	80		18	107
		2-Fluorobiphenyl	100	82.2	82		20	109
		2,4,6-Tribromophenol	150	98.8	66		10	116
		Terphenyl-d14	100	63.3	63		10	105
Q1215-03MS	JPP-29.1-012825MS	2-Fluorophenol	150	96.4	64		18	112
		Phenol-d6	150	92.7	62		15	107
		Nitrobenzene-d5	100	72.2	72		18	107
		2-Fluorobiphenyl	100	73.2	73		20	109
		2,4,6-Tribromophenol	150	90.2	60		10	116
		Terphenyl-d14	100	59.0	59		10	105
Q1215-03MSD	JPP-29.1-012825MSD	2-Fluorophenol	150	94.8	63		18	112
		Phenol-d6	150	92.1	61		15	107
		Nitrobenzene-d5	100	68.4	68		18	107
		2-Fluorobiphenyl	100	70.6	71		20	109
		2,4,6-Tribromophenol	150	82.2	55		10	116
		Terphenyl-d14	100	56.0	56		10	105
Q1215-07	JPP-29.2-012825	2-Fluorophenol	150	84.4	56		18	112
		Phenol-d6	150	82.6	55		15	107
		Nitrobenzene-d5	100	59.4	59		18	107
		2-Fluorobiphenyl	100	62.2	62		20	109
		2,4,6-Tribromophenol	150	73.4	49		10	116
		Terphenyl-d14	100	56.3	56		10	105
Q1215-07DL	JPP-29.2-012825DL	2-Fluorophenol	150	85.8	57		18	112
		Phenol-d6	150	85.7	57		15	107
		Nitrobenzene-d5	100	59.3	59		18	107
		2-Fluorobiphenyl	100	60.4	60		20	109
		2,4,6-Tribromophenol	150	73.5	49		10	116
		Terphenyl-d14	100	48.7	49		10	105

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q1215-03MS		**Client Sample ID: JPP-29.1-012825MS**						**DataFile: BF141573.D**			
Benzaldehyde	1900	0	2200	ug/Kg	116	*			10	86	
Phenol	1900	0	1700	ug/Kg	89				67	126	
bis(2-Chloroethyl)ether	1900	0	1800	ug/Kg	95				54	125	
2-Chlorophenol	1900	0	1700	ug/Kg	89				79	107	
2-Methylphenol	1900	0	1700	ug/Kg	89				66	122	
2,2-oxybis(1-Chloropropane)	1900	0	1700	ug/Kg	89				65	110	
Acetophenone	1900	0	2000	ug/Kg	105				75	111	
3+4-Methylphenols	1900	0	1700	ug/Kg	89				66	104	
N-Nitroso-di-n-propylamine	1900	0	1700	ug/Kg	89				59	119	
Hexachloroethane	1900	0	1700	ug/Kg	89				65	117	
Nitrobenzene	1900	0	1700	ug/Kg	89				70	119	
Isophorone	1900	0	1900	ug/Kg	100				76	122	
2-Nitrophenol	1900	0	1800	ug/Kg	95				54	145	
2,4-Dimethylphenol	1900	0	2200	ug/Kg	116				44	135	
bis(2-Chloroethoxy)methane	1900	0	1800	ug/Kg	95				68	112	
2,4-Dichlorophenol	1900	0	1700	ug/Kg	89				72	118	
Naphthalene	1900	0	1800	ug/Kg	95				72	110	
4-Chloroaniline	1900	0	380	ug/Kg	20				10	91	
Hexachlorobutadiene	1900	0	1900	ug/Kg	100				66	114	
Caprolactam	1900	0	1900	ug/Kg	100				51	134	
4-Chloro-3-methylphenol	1900	0	1600	ug/Kg	84				57	132	
2-Methylnaphthalene	1900	0	1700	ug/Kg	89				59	123	
Hexachlorocyclopentadiene	3700	0	2100	ug/Kg	57				10	175	
2,4,6-Trichlorophenol	1900	0	1800	ug/Kg	95				72	117	
2,4,5-Trichlorophenol	1900	0	1700	ug/Kg	89				72	117	
1,1-Biphenyl	1900	0	2000	ug/Kg	105				75	113	
2-Chloronaphthalene	1900	0	1800	ug/Kg	95				67	118	
2-Nitroaniline	1900	0	1800	ug/Kg	95				69	127	
Dimethylphthalate	1900	0	1800	ug/Kg	95				70	113	
Acenaphthylene	1900	0	1800	ug/Kg	95				79	118	
2,6-Dinitrotoluene	1900	0	1800	ug/Kg	95				70	125	
3-Nitroaniline	1900	0	820	ug/Kg	43				30	99	
Acenaphthene	1900	110	1800	ug/Kg	89				70	121	
2,4-Dinitrophenol	3700	0	1900	ug/Kg	51				10	155	
4-Nitrophenol	3700	0	3200	ug/Kg	86				45	133	
Dibenzofuran	1900	0	1700	ug/Kg	89				72	110	
2,4-Dinitrotoluene	1900	0	1700	ug/Kg	89				55	128	
Diethylphthalate	1900	0	1700	ug/Kg	89				70	112	
4-Chlorophenyl-phenylether	1900	0	1700	ug/Kg	89				71	108	
Fluorene	1900	0	1700	ug/Kg	89				68	116	
4-Nitroaniline	1900	0	1300	ug/Kg	68				55	120	
4,6-Dinitro-2-methylphenol	1900	0	1200	ug/Kg	63				10	160	
N-Nitrosodiphenylamine	1900	0	2000	ug/Kg	105				73	118	
4-Bromophenyl-phenylether	1900	0	1900	ug/Kg	100				65	121	
Hexachlorobenzene	1900	0	1900	ug/Kg	100				67	118	
Atrazine	1900	0	2500	ug/Kg	132	*			79	127	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Pentachlorophenol	3700	0	3100	ug/Kg	84				47	128	
Phenanthrene	1900	1100	2700	ug/Kg	84				52	128	
Anthracene	1900	260	2000	ug/Kg	92				62	124	
Carbazole	1900	0	1800	ug/Kg	95				59	119	
Di-n-butylphthalate	1900	0	1900	ug/Kg	100				69	118	
Fluoranthene	1900	2100	3300	ug/Kg	63				44	125	
Pyrene	1900	1700	2900	ug/Kg	63				26	142	
Butylbenzylphthalate	1900	0	1900	ug/Kg	100				64	126	
3,3-Dichlorobenzidine	1900	0	1200	ug/Kg	63				33	116	
Benzo(a)anthracene	1900	1200	2800	ug/Kg	84				71	114	
Chrysene	1900	1000	2600	ug/Kg	84				57	121	
bis(2-Ethylhexyl)phthalate	1900	0	2200	ug/Kg	116				42	169	
Di-n-octyl phthalate	1900	0	2700	ug/Kg	142				23	175	
Benzo(b)fluoranthene	1900	1400	2900	ug/Kg	79				67	121	
Benzo(k)fluoranthene	1900	530	2200	ug/Kg	88				57	134	
Benzo(a)pyrene	1900	1300	2800	ug/Kg	79				70	142	
Indeno(1,2,3-cd)pyrene	1900	550	1900	ug/Kg	71				40	129	
Dibenz(a,h)anthracene	1900	180	1600	ug/Kg	75				43	123	
Benzo(g,h,i)perylene	1900	620	1800	ug/Kg	62				24	125	
1,2,4,5-Tetrachlorobenzene	1900	0	2000	ug/Kg	105				69	124	
1,4-Dioxane	1900	0	1800	ug/Kg	95				46	112	
2,3,4,6-Tetrachlorophenol	1900	0	1600	ug/Kg	84				69	112	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q1215-03MSD		**Client Sample ID: JPP-29.1-012825MSD**						**DataFile: BF141574.D**			
Benzaldehyde	1900	0	2200	ug/Kg	116	*	0		10	86	20
Phenol	1900	0	1600	ug/Kg	84		6		67	126	20
bis(2-Chloroethyl)ether	1900	0	1800	ug/Kg	95		0		54	125	20
2-Chlorophenol	1900	0	1700	ug/Kg	89		0		79	107	20
2-Methylphenol	1900	0	1600	ug/Kg	84		6		66	122	20
2,2-oxybis(1-Chloropropane)	1900	0	1700	ug/Kg	89		0		65	110	20
Acetophenone	1900	0	1800	ug/Kg	95		10		75	111	20
3+4-Methylphenols	1900	0	1600	ug/Kg	84		6		66	104	20
N-Nitroso-di-n-propylamine	1900	0	1700	ug/Kg	89		0		59	119	20
Hexachloroethane	1900	0	1700	ug/Kg	89		0		65	117	20
Nitrobenzene	1900	0	1700	ug/Kg	89		0		70	119	20
Isophorone	1900	0	1700	ug/Kg	89		12		76	122	20
2-Nitrophenol	1900	0	1700	ug/Kg	89		7		54	145	20
2,4-Dimethylphenol	1900	0	2100	ug/Kg	111		4		44	135	20
bis(2-Chloroethoxy)methane	1900	0	1700	ug/Kg	89		7		68	112	20
2,4-Dichlorophenol	1900	0	1600	ug/Kg	84		6		72	118	20
Naphthalene	1900	0	1700	ug/Kg	89		7		72	110	20
4-Chloroaniline	1900	0	350	ug/Kg	18		11		10	91	20
Hexachlorobutadiene	1900	0	1700	ug/Kg	89		12		66	114	20
Caprolactam	1900	0	1800	ug/Kg	95		5		51	134	20
4-Chloro-3-methylphenol	1900	0	1500	ug/Kg	79		6		57	132	20
2-Methylnaphthalene	1900	0	1600	ug/Kg	84		6		59	123	20
Hexachlorocyclopentadiene	3700	0	1800	ug/Kg	49		15		10	175	20
2,4,6-Trichlorophenol	1900	0	1700	ug/Kg	89		7		72	117	20
2,4,5-Trichlorophenol	1900	0	1600	ug/Kg	84		6		72	117	20
1,1-Biphenyl	1900	0	1900	ug/Kg	100		5		75	113	20
2-Chloronaphthalene	1900	0	1700	ug/Kg	89		7		67	118	20
2-Nitroaniline	1900	0	1700	ug/Kg	89		7		69	127	20
Dimethylphthalate	1900	0	1700	ug/Kg	89		7		70	113	20
Acenaphthylene	1900	0	1700	ug/Kg	89		7		79	118	20
2,6-Dinitrotoluene	1900	0	1600	ug/Kg	84		12		70	125	20
3-Nitroaniline	1900	0	800	ug/Kg	42		2		30	99	20
Acenaphthene	1900	110	1700	ug/Kg	84		6		70	121	20
2,4-Dinitrophenol	3700	0	1600	ug/Kg	43		17		10	155	20
4-Nitrophenol	3700	0	3000	ug/Kg	81		6		45	133	20
Dibenzofuran	1900	0	1600	ug/Kg	84		6		72	110	20
2,4-Dinitrotoluene	1900	0	1600	ug/Kg	84		6		55	128	20
Diethylphthalate	1900	0	1600	ug/Kg	84		6		70	112	20
4-Chlorophenyl-phenylether	1900	0	1600	ug/Kg	84		6		71	108	20
Fluorene	1900	0	1600	ug/Kg	84		6		68	116	20
4-Nitroaniline	1900	0	1200	ug/Kg	63		8		55	120	20
4,6-Dinitro-2-methylphenol	1900	0	1000	ug/Kg	53		17		10	160	20
N-Nitrosodiphenylamine	1900	0	1900	ug/Kg	100		5		73	118	20
4-Bromophenyl-phenylether	1900	0	1800	ug/Kg	95		5		65	121	20
Hexachlorobenzene	1900	0	1700	ug/Kg	89		12		67	118	20
Atrazine	1900	0	2300	ug/Kg	121		9		79	127	20

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Pentachlorophenol	3700	0	3000	ug/Kg	81		4		47	128	20
Phenanthrene	1900	1100	2500	ug/Kg	74		13		52	128	20
Anthracene	1900	260	1900	ug/Kg	86		7		62	124	20
Carbazole	1900	0	1700	ug/Kg	89		7		59	119	20
Di-n-butylphthalate	1900	0	1800	ug/Kg	95		5		69	118	20
Fluoranthene	1900	2100	3100	ug/Kg	53		17		44	125	20
Pyrene	1900	1700	2700	ug/Kg	53		17		26	142	20
Butylbenzylphthalate	1900	0	1700	ug/Kg	89		12		64	126	20
3,3-Dichlorobenzidine	1900	0	1300	ug/Kg	68		8		33	116	20
Benzo(a)anthracene	1900	1200	2700	ug/Kg	79		6		71	114	20
Chrysene	1900	1000	2500	ug/Kg	79		6		57	121	20
bis(2-Ethylhexyl)phthalate	1900	0	2100	ug/Kg	111		4		42	169	20
Di-n-octyl phthalate	1900	0	2500	ug/Kg	132		7		23	175	20
Benzo(b)fluoranthene	1900	1400	2800	ug/Kg	74		7		67	121	20
Benzo(k)fluoranthene	1900	530	1900	ug/Kg	72		20		57	134	20
Benzo(a)pyrene	1900	1300	2700	ug/Kg	74		7		70	142	20
Indeno(1,2,3-cd)pyrene	1900	550	1800	ug/Kg	66		7		40	129	20
Dibenz(a,h)anthracene	1900	180	1500	ug/Kg	69		8		43	123	20
Benzo(g,h,i)perylene	1900	620	1700	ug/Kg	57		8		24	125	20
1,2,4,5-Tetrachlorobenzene	1900	0	1900	ug/Kg	100		5		69	124	20
1,4-Dioxane	1900	0	1900	ug/Kg	100		5		46	112	20
2,3,4,6-Tetrachlorophenol	1900	0	1500	ug/Kg	79		6		69	112	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Analytical Method: 8270E **DataFile:** BF141405.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB166360BS	Benzaldehyde	1700	1600	ug/Kg	94				10	133	
	Phenol	1700	1300	ug/Kg	76				62	112	
	bis(2-Chloroethyl)ether	1700	1300	ug/Kg	76				60	101	
	2-Chlorophenol	1700	1400	ug/Kg	82				65	112	
	2-Methylphenol	1700	1400	ug/Kg	82				61	108	
	2,2-oxybis(1-Chloropropane)	1700	1300	ug/Kg	76				51	100	
	Acetophenone	1700	1600	ug/Kg	94				66	98	
	3+4-Methylphenols	1700	1400	ug/Kg	82				58	111	
	N-Nitroso-di-n-propylamine	1700	1400	ug/Kg	82				63	95	
	Hexachloroethane	1700	1400	ug/Kg	82				72	108	
	Nitrobenzene	1700	1300	ug/Kg	76				57	101	
	Isophorone	1700	1400	ug/Kg	82				59	99	
	2-Nitrophenol	1700	1400	ug/Kg	82				61	111	
	2,4-Dimethylphenol	1700	1700	ug/Kg	100				46	141	
	bis(2-Chloroethoxy)methane	1700	1300	ug/Kg	76				66	97	
	2,4-Dichlorophenol	1700	1400	ug/Kg	82				62	107	
	Naphthalene	1700	1400	ug/Kg	82				62	100	
	4-Chloroaniline	1700	610	ug/Kg	36				16	100	
	Hexachlorobutadiene	1700	1400	ug/Kg	82				53	98	
	Caprolactam	1700	1500	ug/Kg	88				67	110	
	4-Chloro-3-methylphenol	1700	1500	ug/Kg	88				58	112	
	2-Methylnaphthalene	1700	1300	ug/Kg	76				60	104	
	Hexachlorocyclopentadiene	3300	6300	ug/Kg	191		*		45	165	
	2,4,6-Trichlorophenol	1700	1500	ug/Kg	88				59	102	
	2,4,5-Trichlorophenol	1700	1400	ug/Kg	82				61	98	
	1,1-Biphenyl	1700	1600	ug/Kg	94				57	103	
	2-Chloronaphthalene	1700	1400	ug/Kg	82				58	99	
	2-Nitroaniline	1700	1500	ug/Kg	88				66	101	
	Dimethylphthalate	1700	1400	ug/Kg	82				61	99	
	Acenaphthylene	1700	1500	ug/Kg	88				63	101	
	2,6-Dinitrotoluene	1700	1400	ug/Kg	82				61	104	
	3-Nitroaniline	1700	770	ug/Kg	45				28	100	
	Acenaphthene	1700	1600	ug/Kg	94				57	104	
	2,4-Dinitrophenol	3300	3700	ug/Kg	112				37	128	
	4-Nitrophenol	3300	3300	ug/Kg	100				48	119	
	Dibenzofuran	1700	1400	ug/Kg	82				63	99	
	2,4-Dinitrotoluene	1700	1500	ug/Kg	88				60	106	
	Diethylphthalate	1700	1400	ug/Kg	82				60	101	
	4-Chlorophenyl-phenylether	1700	1400	ug/Kg	82				58	98	
	Fluorene	1700	1500	ug/Kg	88				61	101	
	4-Nitroaniline	1700	1400	ug/Kg	82				64	103	
	4,6-Dinitro-2-methylphenol	1700	1700	ug/Kg	100				76	113	
	N-Nitrosodiphenylamine	1700	1500	ug/Kg	88				71	99	
	4-Bromophenyl-phenylether	1700	1400	ug/Kg	82				66	102	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1215

Client: RU2 Engineering, LLC

Analytical Method: 8270E **DataFile:** BF141405.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB166360BS	Hexachlorobenzene	1700	1400	ug/Kg	82				64	98	
	Atrazine	1700	1700	ug/Kg	100				47	152	
	Pentachlorophenol	3300	3200	ug/Kg	97				67	105	
	Phenanthrene	1700	1500	ug/Kg	88				59	103	
	Anthracene	1700	1600	ug/Kg	94				61	105	
	Carbazole	1700	1500	ug/Kg	88				61	99	
	Di-n-butylphthalate	1700	1500	ug/Kg	88				58	104	
	Fluoranthene	1700	1600	ug/Kg	94				57	107	
	Pyrene	1700	1200	ug/Kg	71				59	103	
	Butylbenzylphthalate	1700	1400	ug/Kg	82				55	103	
	3,3-Dichlorobenzidine	1700	690	ug/Kg	41		*		42	91	
	Benzo(a)anthracene	1700	1300	ug/Kg	76				60	102	
	Chrysene	1700	1400	ug/Kg	82				59	101	
	bis(2-Ethylhexyl)phthalate	1700	1500	ug/Kg	88				54	135	
	Di-n-octyl phthalate	1700	1500	ug/Kg	88				52	137	
	Benzo(b)fluoranthene	1700	1500	ug/Kg	88				62	109	
	Benzo(k)fluoranthene	1700	1500	ug/Kg	88				62	109	
	Benzo(a)pyrene	1700	1600	ug/Kg	94				63	103	
	Indeno(1,2,3-cd)pyrene	1700	1400	ug/Kg	82				63	101	
	Dibenz(a,h)anthracene	1700	1400	ug/Kg	82				61	112	
	Benzo(g,h,i)perylene	1700	1300	ug/Kg	76				70	108	
	1,2,4,5-Tetrachlorobenzene	1700	1600	ug/Kg	94				53	101	
	1,4-Dioxane	1700	1300	ug/Kg	76				50	96	
	2,3,4,6-Tetrachlorophenol	1700	1600	ug/Kg	94				59	108	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166360BL

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

Lab File ID: BF141404.D Lab Sample ID: PB166360BL

Instrument ID: BNA_F Date Extracted: 01/30/2025

Matrix: (soil/water) SOIL Date Analyzed: 02/04/2025

Level: (low/med) LOW Time Analyzed: 13:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166360BS	PB166360BS	BF141405.D	02/04/2025
JPP-29.2-012825	Q1215-07	BF141515.D	02/07/2025
JPP-29.1-012825	Q1215-03	BF141572.D	02/11/2025
JPP-29.1-012825MS	Q1215-03MS	BF141573.D	02/11/2025
JPP-29.1-012825MSD	Q1215-03MSD	BF141574.D	02/11/2025

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1215 SDG NO.: Q1215

Lab File ID: BF141289.D DFTPP Injection Date: 01/29/2025

Instrument ID: BNA_F DFTPP Injection Time: 10:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	41.1
68	Less than 2.0% of mass 69	0.6 (1.7) 1
69	Mass 69 relative abundance	35.1
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	47.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	26.5
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	13.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.2 (19.4) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BF141290.D	01/29/2025	10:30
SSTDICC005	SSTDICC005	BF141291.D	01/29/2025	10:56
SSTDICC010	SSTDICC010	BF141292.D	01/29/2025	11:49
SSTDICC020	SSTDICC020	BF141293.D	01/29/2025	15:17
SSTDICCC040	SSTDICCC040	BF141294.D	01/29/2025	15:45
SSTDICC050	SSTDICC050	BF141295.D	01/29/2025	16:11
SSTDICC060	SSTDICC060	BF141296.D	01/29/2025	16:38
SSTDICC080	SSTDICC080	BF141297.D	01/29/2025	17:05

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1215 SDG NO.: Q1215

Lab File ID: BF141397.D DFTPP Injection Date: 02/04/2025

Instrument ID: BNA_F DFTPP Injection Time: 10:16

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.3
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	38.1
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	49.4
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	26.5
365	Greater than 1% of mass 198	3
441	Present, but less than mass 443	12.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.4 (19.7) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141398.D	02/04/2025	10:42
PB166360BL	PB166360BL	BF141404.D	02/04/2025	13:21
PB166360BS	PB166360BS	BF141405.D	02/04/2025	13:47

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1215 SDG NO.: Q1215

Lab File ID: BF141471.D DFTPP Injection Date: 02/06/2025

Instrument ID: BNA_F DFTPP Injection Time: 10:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.2
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	36.7
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	49.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	25.6
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	12.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.4 (18.9) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BF141472.D	02/06/2025	11:07
SSTDICC005	SSTDICC005	BF141473.D	02/06/2025	11:34
SSTDICC010	SSTDICC010	BF141474.D	02/06/2025	12:00
SSTDICC020	SSTDICC020	BF141475.D	02/06/2025	12:26
SSTDICCC040	SSTDICCC040	BF141476.D	02/06/2025	12:55
SSTDICC050	SSTDICC050	BF141477.D	02/06/2025	13:21
SSTDICC060	SSTDICC060	BF141478.D	02/06/2025	13:47
SSTDICC080	SSTDICC080	BF141479.D	02/06/2025	14:14

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1215 SDG NO.: Q1215

Lab File ID: BF141505.D DFTPP Injection Date: 02/07/2025

Instrument ID: BNA_F DFTPP Injection Time: 14:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	40.6
68	Less than 2.0% of mass 69	0.6 (1.7) 1
69	Mass 69 relative abundance	35.7
70	Less than 2.0% of mass 69	0.2 (0.7) 1
127	10.0 - 80.0% of mass 198	47.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	27.1
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	13.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.3 (18.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141506.D	02/07/2025	14:33
JPP-29.2-012825	Q1215-07	BF141515.D	02/07/2025	18:35

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1215 SDG NO.: Q1215

Lab File ID: BF141530.D DFTPP Injection Date: 02/10/2025

Instrument ID: BNA_F DFTPP Injection Time: 11:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.6
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	37.3
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	49.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	27.1
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	12.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.4 (19.5) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141531.D	02/10/2025	11:34
JPP-29.2-012825DL	Q1215-07DL	BF141545.D	02/10/2025	19:53

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1215 SDG NO.: Q1215

Lab File ID: BF141550.D DFTPP Injection Date: 02/11/2025

Instrument ID: BNA_F DFTPP Injection Time: 10:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	41.7
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	36.4
70	Less than 2.0% of mass 69	0.2 (0.7) 1
127	10.0 - 80.0% of mass 198	48.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	28.2
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	13.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.6 (19.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141551.D	02/11/2025	10:28
JPP-29.1-012825	Q1215-03	BF141572.D	02/11/2025	19:45
JPP-29.1-012825MS	Q1215-03MS	BF141573.D	02/11/2025	20:11
JPP-29.1-012825MSD	Q1215-03MSD	BF141574.D	02/11/2025	20:38

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/04/2025

Lab File ID: BF141398.D Time Analyzed: 10:42

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	87552	6.793	331835	8.08	180473	9.83
	UPPER LIMIT	175104	7.293	663670	8.575	360946	10.328
	LOWER LIMIT	43776	6.293	165918	7.575	90236.5	9.328
	EPA SAMPLE NO.						
01	PB166360BL	87808	6.79	356027	8.07	197186	9.83
02	PB166360BS	88432	6.79	354444	8.08	192238	9.83

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/04/2025

Lab File ID: BF141398.D Time Analyzed: 10:42

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	318826	11.316	235294	13.963	201713	15.421
	UPPER LIMIT	637652	11.816	470588	14.463	403426	15.921
	LOWER LIMIT	159413	10.816	117647	13.463	100857	14.921
	EPA SAMPLE NO.						
01	PB166360BL	341529	11.32	264448	13.96	208461	15.41
02	PB166360BS	331523	11.32	256577	13.96	210910	15.42

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/07/2025

Lab File ID: BF141506.D Time Analyzed: 14:33

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	91880	6.787	360290	8.08	198348	9.83
	UPPER LIMIT	183760	7.287	720580	8.575	396696	10.328
	LOWER LIMIT	45940	6.287	180145	7.575	99174	9.328
	EPA SAMPLE NO.						
01	JPP-29.2-012825	81240	6.79	314496	8.07	155473	9.83

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/07/2025

Lab File ID: BF141506.D Time Analyzed: 14:33

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	340922	11.316	238177	13.957	192868	15.416
	UPPER LIMIT	681844	11.816	476354	14.457	385736	15.916
	LOWER LIMIT	170461	10.816	119089	13.457	96434	14.916
	EPA SAMPLE NO.						
01	JPP-29.2-012825	227834	11.32	153947	13.96	117798	15.42

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/10/2025

Lab File ID: BF141531.D Time Analyzed: 11:34

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	91504	6.792	356056	8.08	192109	9.83
	UPPER LIMIT	183008	7.292	712112	8.575	384218	10.327
	LOWER LIMIT	45752	6.292	178028	7.575	96054.5	9.327
	EPA SAMPLE NO.						
01	JPP-29.2-012825DL	77252	6.79	310103	8.07	166362	9.82

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/10/2025

Lab File ID: BF141531.D Time Analyzed: 11:34

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	313129	11.316	193608	13.963	177316	15.439
	UPPER LIMIT	626258	11.816	387216	14.463	354632	15.939
	LOWER LIMIT	156565	10.816	96804	13.463	88658	14.939
	EPA SAMPLE NO.						
01	JPP-29.2-012825DL	240844	11.31	179683	13.95	169289	15.40

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/11/2025

Lab File ID: BF141551.D Time Analyzed: 10:28

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	100982	6.793	399334	8.08	220290	9.83
	UPPER LIMIT	201964	7.293	798668	8.575	440580	10.328
	LOWER LIMIT	50491	6.293	199667	7.575	110145	9.328
	EPA SAMPLE NO.						
01	JPP-29.1-012825	70182	6.79	273856	8.07	136474	9.82
02	JPP-29.1-012825MS	77607	6.79	287166	8.07	145781	9.82
03	JPP-29.1-012825MSD	77684	6.79	297197	8.07	147170	9.82

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG NO.: Q1215

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/11/2025

Lab File ID: BF141551.D Time Analyzed: 10:28

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	380364	11.31	221485	13.957	189149	15.41
	UPPER LIMIT	760728	11.81	442970	14.457	378298	15.91
	LOWER LIMIT	190182	10.81	110743	13.457	94574.5	14.91
	EPA SAMPLE NO.						
01	JPP-29.1-012825	200429	11.30	171735	13.95	170191	15.40
02	JPP-29.1-012825MS	213944	11.31	166810	13.96	163116	15.40
03	JPP-29.1-012825MSD	213794	11.31	172116	13.96	164980	15.41

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

QC SAMPLE DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166360BL	SDG No.:	Q1215
Lab Sample ID:	PB166360BL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141404.D	1	01/30/25 09:15	02/04/25 13:21	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	330	U	180	330	ug/Kg
108-95-2	Phenol	170	U	82.8	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	170	U	83.6	170	ug/Kg
95-57-8	2-Chlorophenol	170	U	83.4	170	ug/Kg
95-48-7	2-Methylphenol	170	U	80.5	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	170	U	90.8	170	ug/Kg
98-86-2	Acetophenone	170	U	86.8	170	ug/Kg
65794-96-9	3+4-Methylphenols	330	U	79.7	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	79.9	U	40.3	79.9	ug/Kg
67-72-1	Hexachloroethane	170	U	82.9	170	ug/Kg
98-95-3	Nitrobenzene	170	U	90.7	170	ug/Kg
78-59-1	Isophorone	170	U	84.5	170	ug/Kg
88-75-5	2-Nitrophenol	170	U	94.4	170	ug/Kg
105-67-9	2,4-Dimethylphenol	170	U	93.1	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	170	U	85.7	170	ug/Kg
120-83-2	2,4-Dichlorophenol	170	U	75.4	170	ug/Kg
91-20-3	Naphthalene	170	U	82.5	170	ug/Kg
106-47-8	4-Chloroaniline	170	U	82.5	170	ug/Kg
87-68-3	Hexachlorobutadiene	170	U	83.2	170	ug/Kg
105-60-2	Caprolactam	330	U	86.7	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	170	U	77.4	170	ug/Kg
91-57-6	2-Methylnaphthalene	170	U	82.4	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	330	U	160	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	170	U	71.4	170	ug/Kg
95-95-4	2,4,5-Trichlorophenol	170	U	74.0	170	ug/Kg
92-52-4	1,1-Biphenyl	170	U	87.3	170	ug/Kg
91-58-7	2-Chloronaphthalene	170	U	83.2	170	ug/Kg
88-74-4	2-Nitroaniline	170	U	94.9	170	ug/Kg
131-11-3	Dimethylphthalate	170	U	81.6	170	ug/Kg

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Report of Analysis

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Client Sample ID:	PB166360BL	SDG No.:	Q1215
Lab Sample ID:	PB166360BL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141404.D	1	01/30/25 09:15	02/04/25 13:21	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	170	U	86.4	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	170	U	83.1	170	ug/Kg
99-09-2	3-Nitroaniline	170	U	89.1	170	ug/Kg
83-32-9	Acenaphthene	170	U	81.0	170	ug/Kg
51-28-5	2,4-Dinitrophenol	330	U	240	330	ug/Kg
100-02-7	4-Nitrophenol	330	U	120	330	ug/Kg
132-64-9	Dibenzofuran	170	U	84.3	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	170	U	86.1	170	ug/Kg
84-66-2	Diethylphthalate	170	U	80.0	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	170	U	85.5	170	ug/Kg
86-73-7	Fluorene	170	U	85.4	170	ug/Kg
100-01-6	4-Nitroaniline	170	U	110	170	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	330	U	120	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	170	U	81.5	170	ug/Kg
101-55-3	4-Bromophenyl-phenylether	170	U	78.8	170	ug/Kg
118-74-1	Hexachlorobenzene	170	U	84.9	170	ug/Kg
1912-24-9	Atrazine	170	U	91.3	170	ug/Kg
87-86-5	Pentachlorophenol	330	U	77.2	330	ug/Kg
85-01-8	Phenanthrene	170	U	83.9	170	ug/Kg
120-12-7	Anthracene	170	U	84.3	170	ug/Kg
86-74-8	Carbazole	170	U	80.2	170	ug/Kg
84-74-2	Di-n-butylphthalate	170	U	84.2	170	ug/Kg
206-44-0	Fluoranthene	170	U	81.6	170	ug/Kg
129-00-0	Pyrene	170	U	82.9	170	ug/Kg
85-68-7	Butylbenzylphthalate	170	U	96.7	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	330	U	98.5	330	ug/Kg
56-55-3	Benzo(a)anthracene	170	U	80.6	170	ug/Kg
218-01-9	Chrysene	170	U	79.4	170	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	170	U	90.9	170	ug/Kg
117-84-0	Di-n-octyl phthalate	330	U	110	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	170	U	81.0	170	ug/Kg

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Client Sample ID:	PB166360BL	SDG No.:	Q1215
Lab Sample ID:	PB166360BL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141404.D	1	01/30/25 09:15	02/04/25 13:21	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	170	U	82.5	170	ug/Kg
50-32-8	Benzo(a)pyrene	170	U	92.9	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	170	U	78.0	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	170	U	81.1	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	170	U	80.0	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	170	U	86.7	170	ug/Kg
123-91-1	1,4-Dioxane	170	U	110	170	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	170	U	74.7	170	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	147		18 - 112	98%	SPK: 150
13127-88-3	Phenol-d6	142		15 - 107	95%	SPK: 150
4165-60-0	Nitrobenzene-d5	101		18 - 107	101%	SPK: 100
321-60-8	2-Fluorobiphenyl	100.0		20 - 109	100%	SPK: 100
118-79-6	2,4,6-Tribromophenol	158		10 - 116	105%	SPK: 150
1718-51-0	Terphenyl-d14	93.3		10 - 105	93%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	87800	6.786			
1146-65-2	Naphthalene-d8	356000	8.069			
15067-26-2	Acenaphthene-d10	197000	9.827			
1517-22-2	Phenanthrene-d10	342000	11.316			
1719-03-5	Chrysene-d12	264000	13.957			
1520-96-3	Perylene-d12	208000	15.409			
TENTATIVE IDENTIFIED COMPOUNDS						
004744-10-9	Propane, 1,1-dimethoxy-	170	J		2.16	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	83.9	A		5.01	ug/Kg

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Client Sample ID:	PB166360BL			SDG No.:	Q1215
Lab Sample ID:	PB166360BL			Matrix:	SOIL
Analytical Method:	SW8270			% Solid:	100
Sample Wt/Vol:	30.02	Units:	g	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	SVOC-TCL BNA -20
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141404.D	1	01/30/25 09:15	02/04/25 13:21	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

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Client Sample ID:	PB166360BS	SDG No.:	Q1215
Lab Sample ID:	PB166360BS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141405.D	1	01/30/25 09:15	02/04/25 13:47	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1600		180	330	ug/Kg
108-95-2	Phenol	1300		82.9	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1300		83.7	170	ug/Kg
95-57-8	2-Chlorophenol	1400		83.5	170	ug/Kg
95-48-7	2-Methylphenol	1400		80.6	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1300		90.9	170	ug/Kg
98-86-2	Acetophenone	1600		86.9	170	ug/Kg
65794-96-9	3+4-Methylphenols	1400		79.8	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1400		40.3	80.0	ug/Kg
67-72-1	Hexachloroethane	1400		83.0	170	ug/Kg
98-95-3	Nitrobenzene	1300		90.8	170	ug/Kg
78-59-1	Isophorone	1400		84.6	170	ug/Kg
88-75-5	2-Nitrophenol	1400		94.5	170	ug/Kg
105-67-9	2,4-Dimethylphenol	1700		93.2	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1300		85.8	170	ug/Kg
120-83-2	2,4-Dichlorophenol	1400		75.5	170	ug/Kg
91-20-3	Naphthalene	1400		82.6	170	ug/Kg
106-47-8	4-Chloroaniline	610		82.6	170	ug/Kg
87-68-3	Hexachlorobutadiene	1400		83.3	170	ug/Kg
105-60-2	Caprolactam	1500		86.8	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1500		77.5	170	ug/Kg
91-57-6	2-Methylnaphthalene	1300		82.5	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	6300	E	160	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1500		71.4	170	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1400		74.0	170	ug/Kg
92-52-4	1,1-Biphenyl	1600		87.4	170	ug/Kg
91-58-7	2-Chloronaphthalene	1400		83.3	170	ug/Kg
88-74-4	2-Nitroaniline	1500		95.0	170	ug/Kg
131-11-3	Dimethylphthalate	1400		81.7	170	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166360BS	SDG No.:	Q1215
Lab Sample ID:	PB166360BS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141405.D	1	01/30/25 09:15	02/04/25 13:47	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1500		86.5	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	1400		83.2	170	ug/Kg
99-09-2	3-Nitroaniline	770		89.2	170	ug/Kg
83-32-9	Acenaphthene	1600		81.1	170	ug/Kg
51-28-5	2,4-Dinitrophenol	3700	E	240	330	ug/Kg
100-02-7	4-Nitrophenol	3300	E	120	330	ug/Kg
132-64-9	Dibenzofuran	1400		84.4	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	1500		86.2	170	ug/Kg
84-66-2	Diethylphthalate	1400		80.1	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1400		85.6	170	ug/Kg
86-73-7	Fluorene	1500		85.5	170	ug/Kg
100-01-6	4-Nitroaniline	1400		110	170	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1700		120	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1500		81.6	170	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1400		78.9	170	ug/Kg
118-74-1	Hexachlorobenzene	1400		85.0	170	ug/Kg
1912-24-9	Atrazine	1700		91.4	170	ug/Kg
87-86-5	Pentachlorophenol	3200	E	77.3	330	ug/Kg
85-01-8	Phenanthrene	1500		84.0	170	ug/Kg
120-12-7	Anthracene	1600		84.4	170	ug/Kg
86-74-8	Carbazole	1500		80.3	170	ug/Kg
84-74-2	Di-n-butylphthalate	1500		84.3	170	ug/Kg
206-44-0	Fluoranthene	1600		81.7	170	ug/Kg
129-00-0	Pyrene	1200		83.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	1400		96.8	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	690		98.6	330	ug/Kg
56-55-3	Benzo(a)anthracene	1300		80.7	170	ug/Kg
218-01-9	Chrysene	1400		79.5	170	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1500		91.0	170	ug/Kg
117-84-0	Di-n-octyl phthalate	1500		110	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	1500		81.1	170	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166360BS	SDG No.:	Q1215
Lab Sample ID:	PB166360BS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141405.D	1	01/30/25 09:15	02/04/25 13:47	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1500		82.6	170	ug/Kg
50-32-8	Benzo(a)pyrene	1600		93.0	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1400		78.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1400		81.2	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1300		80.1	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1600		86.8	170	ug/Kg
123-91-1	1,4-Dioxane	1300		110	170	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1600		74.7	170	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	134		18 - 112	89%	SPK: 150
13127-88-3	Phenol-d6	128		15 - 107	85%	SPK: 150
4165-60-0	Nitrobenzene-d5	92.7		18 - 107	93%	SPK: 100
321-60-8	2-Fluorobiphenyl	94.8		20 - 109	95%	SPK: 100
118-79-6	2,4,6-Tribromophenol	154		10 - 116	103%	SPK: 150
1718-51-0	Terphenyl-d14	85.1		10 - 105	85%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	88400	6.787			
1146-65-2	Naphthalene-d8	354000	8.075			
15067-26-2	Acenaphthene-d10	192000	9.828			
1517-22-2	Phenanthrene-d10	332000	11.316			
1719-03-5	Chrysene-d12	257000	13.963			
1520-96-3	Perylene-d12	211000	15.421			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MS	SDG No.:	Q1215
Lab Sample ID:	Q1215-03MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141573.D	1	01/30/25 09:15	02/11/25 20:11	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	2200		200	370	ug/Kg
108-95-2	Phenol	1700		93.2	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1800		94.1	190	ug/Kg
95-57-8	2-Chlorophenol	1700		93.8	190	ug/Kg
95-48-7	2-Methylphenol	1700		90.6	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1700		100	190	ug/Kg
98-86-2	Acetophenone	2000		97.7	190	ug/Kg
65794-96-9	3+4-Methylphenols	1700		89.7	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1700		45.3	89.9	ug/Kg
67-72-1	Hexachloroethane	1700		93.3	190	ug/Kg
98-95-3	Nitrobenzene	1700		100	190	ug/Kg
78-59-1	Isophorone	1900		95.1	190	ug/Kg
88-75-5	2-Nitrophenol	1800		110	190	ug/Kg
105-67-9	2,4-Dimethylphenol	2200		100	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1800		96.4	190	ug/Kg
120-83-2	2,4-Dichlorophenol	1700		84.9	190	ug/Kg
91-20-3	Naphthalene	1800		92.8	190	ug/Kg
106-47-8	4-Chloroaniline	380		92.8	190	ug/Kg
87-68-3	Hexachlorobutadiene	1900		93.6	190	ug/Kg
105-60-2	Caprolactam	1900		97.6	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1600		87.1	190	ug/Kg
91-57-6	2-Methylnaphthalene	1700		92.7	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	2100		180	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1800		80.2	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1700		83.2	190	ug/Kg
92-52-4	1,1-Biphenyl	2000		98.2	190	ug/Kg
91-58-7	2-Chloronaphthalene	1800		93.6	190	ug/Kg
88-74-4	2-Nitroaniline	1800		110	190	ug/Kg
131-11-3	Dimethylphthalate	1800		91.8	190	ug/Kg

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MS	SDG No.:	Q1215
Lab Sample ID:	Q1215-03MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141573.D	1	01/30/25 09:15	02/11/25 20:11	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1800		97.2	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	1800		93.5	190	ug/Kg
99-09-2	3-Nitroaniline	820		100	190	ug/Kg
83-32-9	Acenaphthene	1800		91.1	190	ug/Kg
51-28-5	2,4-Dinitrophenol	1900		270	370	ug/Kg
100-02-7	4-Nitrophenol	3200	E	130	370	ug/Kg
132-64-9	Dibenzofuran	1700		94.9	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	1700		96.9	190	ug/Kg
84-66-2	Diethylphthalate	1700		90.0	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1700		96.2	190	ug/Kg
86-73-7	Fluorene	1700		96.1	190	ug/Kg
100-01-6	4-Nitroaniline	1300		120	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1200		130	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	2000		91.7	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1900		88.7	190	ug/Kg
118-74-1	Hexachlorobenzene	1900		95.5	190	ug/Kg
1912-24-9	Atrazine	2500		100	190	ug/Kg
87-86-5	Pentachlorophenol	3100	E	86.9	370	ug/Kg
85-01-8	Phenanthrene	2700		94.4	190	ug/Kg
120-12-7	Anthracene	2000		94.9	190	ug/Kg
86-74-8	Carbazole	1800		90.2	190	ug/Kg
84-74-2	Di-n-butylphthalate	1900		94.7	190	ug/Kg
206-44-0	Fluoranthene	3300	E	91.8	190	ug/Kg
129-00-0	Pyrene	2900		93.3	190	ug/Kg
85-68-7	Butylbenzylphthalate	1900		110	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1200		110	370	ug/Kg
56-55-3	Benzo(a)anthracene	2800		90.7	190	ug/Kg
218-01-9	Chrysene	2600		89.3	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	2200		100	190	ug/Kg
117-84-0	Di-n-octyl phthalate	2700		120	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	2900		91.1	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MS	SDG No.:	Q1215
Lab Sample ID:	Q1215-03MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141573.D	1	01/30/25 09:15	02/11/25 20:11	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	2200		92.8	190	ug/Kg
50-32-8	Benzo(a)pyrene	2800		100	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1900		87.8	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1600		91.3	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1800		90.0	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	2000		97.6	190	ug/Kg
123-91-1	1,4-Dioxane	1800		120	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1600		84.0	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	96.4		18 - 112	64%	SPK: 150
13127-88-3	Phenol-d6	92.7		15 - 107	62%	SPK: 150
4165-60-0	Nitrobenzene-d5	72.2		18 - 107	72%	SPK: 100
321-60-8	2-Fluorobiphenyl	73.2		20 - 109	73%	SPK: 100
118-79-6	2,4,6-Tribromophenol	90.2		10 - 116	60%	SPK: 150
1718-51-0	Terphenyl-d14	59.0		10 - 105	59%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	77600	6.787			
1146-65-2	Naphthalene-d8	287000	8.069			
15067-26-2	Acenaphthene-d10	146000	9.822			
1517-22-2	Phenanthrene-d10	214000	11.31			
1719-03-5	Chrysene-d12	167000	13.957			
1520-96-3	Perylene-d12	163000	15.404			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MSD	SDG No.:	Q1215
Lab Sample ID:	Q1215-03MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141574.D	1	01/30/25 09:15	02/11/25 20:38	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	2200		200	370	ug/Kg
108-95-2	Phenol	1600		93.2	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1800		94.1	190	ug/Kg
95-57-8	2-Chlorophenol	1700		93.9	190	ug/Kg
95-48-7	2-Methylphenol	1600		90.6	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1700		100	190	ug/Kg
98-86-2	Acetophenone	1800		97.7	190	ug/Kg
65794-96-9	3+4-Methylphenols	1600		89.7	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1700		45.3	89.9	ug/Kg
67-72-1	Hexachloroethane	1700		93.3	190	ug/Kg
98-95-3	Nitrobenzene	1700		100	190	ug/Kg
78-59-1	Isophorone	1700		95.1	190	ug/Kg
88-75-5	2-Nitrophenol	1700		110	190	ug/Kg
105-67-9	2,4-Dimethylphenol	2100		100	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1700		96.5	190	ug/Kg
120-83-2	2,4-Dichlorophenol	1600		84.9	190	ug/Kg
91-20-3	Naphthalene	1700		92.9	190	ug/Kg
106-47-8	4-Chloroaniline	350		92.9	190	ug/Kg
87-68-3	Hexachlorobutadiene	1700		93.7	190	ug/Kg
105-60-2	Caprolactam	1800		97.6	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1500		87.1	190	ug/Kg
91-57-6	2-Methylnaphthalene	1600		92.8	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	1800		180	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1700		80.3	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1600		83.2	190	ug/Kg
92-52-4	1,1-Biphenyl	1900		98.3	190	ug/Kg
91-58-7	2-Chloronaphthalene	1700		93.7	190	ug/Kg
88-74-4	2-Nitroaniline	1700		110	190	ug/Kg
131-11-3	Dimethylphthalate	1700		91.9	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MSD	SDG No.:	Q1215
Lab Sample ID:	Q1215-03MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141574.D	1	01/30/25 09:15	02/11/25 20:38	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1700		97.2	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	1600		93.5	190	ug/Kg
99-09-2	3-Nitroaniline	800		100	190	ug/Kg
83-32-9	Acenaphthene	1700		91.2	190	ug/Kg
51-28-5	2,4-Dinitrophenol	1600		270	370	ug/Kg
100-02-7	4-Nitrophenol	3000		130	370	ug/Kg
132-64-9	Dibenzofuran	1600		94.9	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	1600		96.9	190	ug/Kg
84-66-2	Diethylphthalate	1600		90.1	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1600		96.2	190	ug/Kg
86-73-7	Fluorene	1600		96.1	190	ug/Kg
100-01-6	4-Nitroaniline	1200		120	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1000		130	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1900		91.7	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1800		88.7	190	ug/Kg
118-74-1	Hexachlorobenzene	1700		95.6	190	ug/Kg
1912-24-9	Atrazine	2300		100	190	ug/Kg
87-86-5	Pentachlorophenol	3000		86.9	370	ug/Kg
85-01-8	Phenanthrene	2500		94.4	190	ug/Kg
120-12-7	Anthracene	1900		94.9	190	ug/Kg
86-74-8	Carbazole	1700		90.3	190	ug/Kg
84-74-2	Di-n-butylphthalate	1800		94.8	190	ug/Kg
206-44-0	Fluoranthene	3100	E	91.9	190	ug/Kg
129-00-0	Pyrene	2700		93.3	190	ug/Kg
85-68-7	Butylbenzylphthalate	1700		110	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1300		110	370	ug/Kg
56-55-3	Benzo(a)anthracene	2700		90.7	190	ug/Kg
218-01-9	Chrysene	2500		89.4	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	2100		100	190	ug/Kg
117-84-0	Di-n-octyl phthalate	2500		120	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	2800		91.2	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MSD	SDG No.:	Q1215
Lab Sample ID:	Q1215-03MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141574.D	1	01/30/25 09:15	02/11/25 20:38	PB166360

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1900		92.9	190	ug/Kg
50-32-8	Benzo(a)pyrene	2700		100	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1800		87.8	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1500		91.3	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1700		90.1	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1900		97.6	190	ug/Kg
123-91-1	1,4-Dioxane	1900		120	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1500		84.0	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	94.8		18 - 112	63%	SPK: 150
13127-88-3	Phenol-d6	92.1		15 - 107	61%	SPK: 150
4165-60-0	Nitrobenzene-d5	68.4		18 - 107	68%	SPK: 100
321-60-8	2-Fluorobiphenyl	70.6		20 - 109	71%	SPK: 100
118-79-6	2,4,6-Tribromophenol	82.2		10 - 116	55%	SPK: 150
1718-51-0	Terphenyl-d14	56.0		10 - 105	56%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	77700	6.787			
1146-65-2	Naphthalene-d8	297000	8.069			
15067-26-2	Acenaphthene-d10	147000	9.822			
1517-22-2	Phenanthrene-d10	214000	11.31			
1719-03-5	Chrysene-d12	172000	13.957			
1520-96-3	Perylene-d12	165000	15.41			

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

CALIBRATION SUMMARY

Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF012925.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Jan 29 17:41:25 2025
Response Via : Initial Calibration

Calibration Files
2.5 =BF141290.D 5 =BF141291.D 10 =BF141292.D 20 =BF141293.D 40 =BF141294.D 50 =BF141295.D 60 =BF141296.D 80 =BF1412
97.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------									
2)		1,4-Dioxane		0.600	0.603	0.597	0.538	0.574	0.569	0.530	0.573	5.19
3)		Pyridine		1.364	1.410	1.450	1.320	1.394	1.404	1.322	1.380	3.46
4)		n-Nitrosodimet...		0.770	0.789	0.824	0.751	0.803	0.813	0.771	0.789	3.32
5)	S	2-Fluorophenol		1.428	1.391	1.402	1.201	1.267	1.268	1.163	1.303	8.03
6)		Aniline		1.480	1.511	1.542	1.359	1.404	1.350	1.174	1.403	8.93
7)	S	Phenol-d6		1.841	1.800	1.743	1.520	1.611	1.611	1.475	1.657	8.47
8)		2-Chlorophenol		1.535	1.510	1.487	1.297	1.353	1.355	1.237	1.396	8.24
9)		Benzaldehyde		1.166	1.130	1.104	0.895	0.861	0.837	0.727	0.960	17.81
10)	C	Phenol		1.938	1.879	1.884	1.643	1.696	1.704	1.554	1.757	8.22
11)		bis(2-Chloroet...		1.478	1.413	1.426	1.232	1.299	1.329	1.253	1.347	6.93
12)		1,3-Dichlorobe...		1.697	1.668	1.648	1.429	1.499	1.474	1.362	1.540	8.49
13)	C	1,4-Dichlorobe...		1.719	1.663	1.659	1.432	1.502	1.487	1.365	1.547	8.66
14)		1,2-Dichlorobe...		1.629	1.609	1.565	1.338	1.392	1.366	1.240	1.448	10.46
15)		Benzyl Alcohol		1.138	1.201	1.216	1.082	1.137	1.125	1.028	1.133	5.72
16)		2,2'-oxybis(1-...		2.533	2.484	2.495	2.189	2.296	2.287	2.112	2.342	7.01
17)		2-Methylphenol		1.237	1.175	1.210	1.042	1.107	1.120	1.053	1.135	6.62
18)		Hexachloroethane		0.609	0.612	0.610	0.530	0.560	0.561	0.513	0.571	7.09
19)	P	n-Nitroso-di-n...	1.084	1.052	1.060	1.032	0.895	0.936	0.945	0.874	0.985	8.27
20)		3+4-Methylphenols		1.561	1.564	1.502	1.287	1.331	1.323	1.186	1.393	10.65
21)	I	Naphthalene-d8	----------ISTD----------									
22)		Acetophenone		0.547	0.523	0.517	0.436	0.449	0.443	0.412	0.475	11.06
23)	S	Nitrobenzene-d5		0.405	0.396	0.406	0.354	0.373	0.373	0.349	0.379	6.14
24)		Nitrobenzene		0.418	0.411	0.420	0.371	0.385	0.389	0.358	0.393	6.14
25)		Isophorone		0.698	0.685	0.694	0.611	0.640	0.648	0.615	0.656	5.62
26)	C	2-Nitrophenol		0.176	0.187	0.199	0.177	0.189	0.191	0.179	0.185	4.66
27)		2,4-Dimethylph...		0.244	0.239	0.249	0.224	0.235	0.238	0.223	0.236	4.12
28)		bis(2-Chloroet...		0.454	0.440	0.445	0.389	0.405	0.411	0.384	0.418	6.70
29)	C	2,4-Dichloroph...		0.307	0.300	0.312	0.271	0.284	0.286	0.262	0.289	6.39
30)		1,2,4-Trichlor...		0.372	0.354	0.354	0.304	0.318	0.316	0.292	0.330	9.11
31)		Naphthalene		1.193	1.145	1.140	0.976	1.020	1.002	0.919	1.057	9.72
32)		Benzoic acid		0.140	0.178	0.238	0.221	0.241	0.259	0.242	0.217	19.59
33)		4-Chloroaniline		0.382	0.378	0.391	0.338	0.351	0.349	0.318	0.358	7.38
34)	C	Hexachlorobuta...		0.209	0.207	0.209	0.179	0.190	0.187	0.174	0.194	7.52
35)		Caprolactam		0.097	0.095	0.102	0.089	0.094	0.096	0.089	0.094	4.89
36)	C	4-Chloro-3-met...		0.328	0.328	0.334	0.287	0.301	0.307	0.283	0.310	6.71
37)		2-Methylnaphth...		0.755	0.732	0.724	0.624	0.643	0.639	0.583	0.672	9.68
38)		1-Methylnaphth...		0.757	0.723	0.711	0.606	0.625	0.623	0.573	0.660	10.56

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF012925.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.615	0.613	0.603	0.534	0.555	0.551	0.512	0.569	7.25
41)	P	Hexachlorocycl...	0.136	0.157	0.174	0.172	0.182	0.181	0.174	0.168	9.69
42)	S	2,4,6-Tribromo...	0.198	0.198	0.198	0.173	0.175	0.179	0.163	0.183	7.98
43)	C	2,4,6-Trichlor...	0.381	0.380	0.390	0.364	0.375	0.369	0.347	0.372	3.79
44)		2,4,5-Trichlor...	0.429	0.425	0.429	0.377	0.391	0.403	0.383	0.405	5.50
45)	S	2-Fluorobiphenyl	1.597	1.464	1.398	1.184	1.202	1.168	1.083	1.299	14.48
46)		1,1'-Biphenyl	1.810	1.692	1.650	1.454	1.492	1.460	1.360	1.560	10.27
47)		2-Chloronaphth...	1.396	1.310	1.290	1.122	1.159	1.156	1.077	1.216	9.59
48)		2-Nitroaniline	0.386	0.389	0.407	0.364	0.382	0.385	0.364	0.382	3.91
49)		Acenaphthylene	1.921	1.854	1.815	1.595	1.620	1.612	1.495	1.702	9.38
50)		Dimethylphthalate	1.498	1.456	1.445	1.239	1.299	1.296	1.223	1.351	8.34
51)		2,6-Dinitrotol...	0.333	0.331	0.333	0.296	0.304	0.309	0.290	0.314	5.90
52)	C	Acenaphthene	1.361	1.300	1.291	1.128	1.170	1.180	1.079	1.216	8.46
53)		3-Nitroaniline	0.321	0.330	0.341	0.303	0.293	0.298	0.264	0.307	8.44
54)	P	2,4-Dinitrophenol		0.102	0.136	0.147	0.156	0.169	0.164	0.146	16.81
55)		Dibenzofuran	1.869	1.788	1.755	1.518	1.525	1.539	1.398	1.627	10.72
56)	P	4-Nitrophenol	0.187	0.215	0.251	0.224	0.231	0.244	0.222	0.225	9.21
57)		2,4-Dinitrotol...	0.424	0.431	0.443	0.386	0.392	0.404	0.362	0.406	7.03
58)		Fluorene	1.512	1.410	1.353	1.167	1.164	1.172	1.059	1.262	12.96
59)		2,3,4,6-Tetrac...	0.325	0.343	0.341	0.304	0.305	0.324	0.291	0.319	6.11
60)		Diethylphthalate	1.470	1.417	1.412	1.225	1.238	1.260	1.146	1.310	9.32
61)		4-Chlorophenyl...	0.738	0.694	0.659	0.567	0.565	0.571	0.522	0.617	13.04
62)		4-Nitroaniline	0.297	0.312	0.330	0.290	0.294	0.311	0.281	0.302	5.45
63)		Azobenzene	1.464	1.411	1.390	1.224	1.249	1.276	1.162	1.311	8.51
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...	0.080	0.105	0.122	0.125	0.131	0.134	0.131	0.118	16.29
66)	c	n-Nitrosodiphe...	0.716	0.684	0.674	0.626	0.622	0.614	0.593	0.647	6.89
67)		4-Bromophenyl-...	0.235	0.234	0.234	0.217	0.218	0.220	0.210	0.224	4.57
68)		Hexachlorobenzene	0.257	0.250	0.248	0.229	0.229	0.232	0.217	0.238	6.07
69)		Atrazine	0.211	0.202	0.213	0.213	0.215	0.235	0.224	0.216	4.86
70)	C	Pentachlorophenol	0.112	0.136	0.146	0.143	0.146	0.149	0.141	0.139	9.08
71)		Phenanthrene	1.233	1.170	1.142	1.025	1.008	1.010	0.937	1.075	9.96
72)		Anthracene	1.179	1.146	1.120	1.009	0.999	0.996	0.924	1.053	9.00
73)		Carbazole	1.019	1.014	1.021	0.899	0.878	0.900	0.807	0.934	9.04
74)		Di-n-butylphth...	1.244	1.239	1.245	1.086	1.051	1.081	0.978	1.132	9.65
75)	C	Fluoranthene	1.195	1.202	1.196	1.013	0.963	0.982	0.880	1.062	12.57
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine	0.882	0.480	0.210	0.730	0.906	0.724	0.556	0.641	38.34
78)		Pyrene	2.178	2.063	2.002	1.754	1.870	1.898	1.674	1.920	9.14
79)	S	Terphenyl-d14	1.543	1.411	1.370	1.183	1.238	1.230	1.103	1.297	11.68
80)		Butylbenzylpht...	0.686	0.690	0.739	0.626	0.657	0.688	0.610	0.671	6.49
81)		Benzo(a)anthra...	1.532	1.410	1.453	1.270	1.375	1.355	1.265	1.380	6.96
82)		3,3'-Dichlorob...	0.412	0.422	0.427	0.418	0.478	0.466	0.449	0.439	5.82
83)		Chrysene	1.332	1.325	1.342	1.136	1.267	1.243	1.210	1.265	5.98
84)		Bis(2-ethylhex...	0.882	0.903	0.956	0.785	0.831	0.834	0.764	0.851	7.93
85)	c	Di-n-octyl pht...	1.194	1.267	1.438	1.230	1.365	1.406	1.352	1.321	6.98

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF012925.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	1.217	1.268	1.337	1.257	1.348	1.322	1.287	1.291	3.67
88)		Benzo(b)fluora...	1.358	1.382	1.328	1.120	1.265	1.218	1.136	1.258	8.33
89)		Benzo(k)fluora...	1.167	1.114	1.274	1.083	1.049	1.060	1.054	1.114	7.32
90)	C	Benzo(a)pyrene	1.118	1.059	1.131	1.011	1.061	1.051	1.010	1.063	4.44
91)		Dibenzo(a,h)an...	0.966	1.001	1.101	1.016	1.087	1.071	1.028	1.039	4.73
92)		Benzo(g,h,i)pe...	1.011	1.075	1.139	1.043	1.123	1.105	1.063	1.080	4.22

(#) = Out of Range

Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF020625.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Feb 06 16:58:59 2025
Response Via : Initial Calibration

Calibration Files
2.5 =BF141472.D 5 =BF141473.D 10 =BF141474.D 20 =BF141475.D 40 =BF141476.D 50 =BF141477.D 60 =BF141478.D 80 =BF1414
79.D

		Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------									
2)		1,4-Dioxane		0.511	0.519	0.523	0.517	0.502	0.521	0.501	0.513	1.73
3)		Pyridine		1.053	1.205	1.311	1.263	1.256	1.261	1.204	1.222	6.79
4)		n-Nitrosodimet...		0.737	0.774	0.820	0.818	0.835	0.846	0.833	0.809	4.83
5)	S	2-Fluorophenol		1.235	1.290	1.365	1.289	1.273	1.264	1.214	1.276	3.77
6)		Aniline		1.476	1.545	1.650	1.538	1.506	1.494	1.379	1.513	5.42
7)	S	Phenol-d6		1.619	1.629	1.704	1.613	1.599	1.585	1.538	1.612	3.13
8)		2-Chlorophenol		1.399	1.410	1.446	1.379	1.368	1.345	1.302	1.378	3.38
9)		Benzaldehyde		0.892	0.993	0.981	0.821	0.747	0.706		0.857	13.92
10)	C	Phenol		1.693	1.681	1.817	1.685	1.659	1.644	1.569	1.678	4.42
11)		bis(2-Chloroet...		1.262	1.229	1.296	1.266	1.252	1.262	1.256	1.261	1.59
12)		1,3-Dichlorobe...		1.473	1.482	1.554	1.441	1.441	1.430	1.366	1.455	3.95
13)	C	1,4-Dichlorobe...		1.546	1.538	1.571	1.471	1.465	1.439	1.379	1.487	4.59
14)		1,2-Dichlorobe...		1.393	1.439	1.473	1.374	1.351	1.345	1.285	1.380	4.55
15)		Benzyl Alcohol		1.191	1.251	1.322	1.262	1.248	1.218	1.163	1.236	4.19
16)		2,2'-oxybis(1-...		2.222	2.245	2.313	2.165	2.119	2.082	1.959	2.158	5.45
17)		2-Methylphenol		1.116	1.089	1.121	1.077	1.059	1.066	1.024	1.079	3.15
18)		Hexachloroethane		0.539	0.545	0.589	0.553	0.556	0.544	0.526	0.550	3.59
19)	P	n-Nitroso-di-n...	0.950	0.978	0.985	1.039	0.969	0.947	0.941	0.907	0.964	4.03
20)		3+4-Methylphenols		1.442	1.417	1.459	1.372	1.344	1.319	1.244	1.371	5.52
21)	I	Naphthalene-d8	----------ISTD----------									
22)		Acetophenone		0.517	0.502	0.521	0.493	0.483	0.488	0.478	0.498	3.35
23)	S	Nitrobenzene-d5		0.380	0.379	0.396	0.385	0.378	0.381	0.384	0.383	1.58
24)		Nitrobenzene		0.370	0.371	0.383	0.374	0.369	0.375	0.376	0.374	1.29
25)		Isophorone		0.611	0.594	0.633	0.611	0.601	0.617	0.614	0.611	2.04
26)	C	2-Nitrophenol		0.171	0.175	0.190	0.193	0.190	0.193	0.191	0.186	4.91
27)		2,4-Dimethylph...		0.208	0.212	0.221	0.223	0.218	0.220	0.220	0.217	2.46
28)		bis(2-Chloroet...		0.384	0.390	0.408	0.394	0.387	0.391	0.388	0.392	2.03
29)	C	2,4-Dichloroph...		0.286	0.287	0.312	0.296	0.290	0.292	0.292	0.294	2.95
30)		1,2,4-Trichlor...		0.327	0.321	0.331	0.317	0.312	0.317	0.314	0.320	2.12
31)		Naphthalene		1.067	1.041	1.096	1.037	1.012	1.022	1.012	1.041	2.98
32)		Benzoic acid			0.186	0.217	0.229	0.233	0.243	0.246	0.226	9.70
33)		4-Chloroaniline		0.354	0.352	0.382	0.364	0.360	0.364	0.370	0.363	2.82
34)	C	Hexachlorobuta...		0.193	0.191	0.200	0.192	0.188	0.191	0.189	0.192	2.01
35)		Caprolactam		0.083	0.085	0.094	0.093	0.088	0.091	0.092	0.089	4.75
36)	C	4-Chloro-3-met...		0.310	0.324	0.342	0.329	0.324	0.325	0.324	0.325	2.91
37)		2-Methylnaphth...		0.688	0.689	0.719	0.669	0.659	0.666	0.652	0.677	3.42
38)		1-Methylnaphth...		0.680	0.657	0.691	0.656	0.637	0.640	0.631	0.656	3.40

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF020625.M

39)	I	Acenaphthene-d10	----------ISTD----------								
40)		1,2,4,5-Tetrac...	0.582	0.588	0.600	0.584	0.560	0.574	0.562	0.579	2.50
41)	P	Hexachlorocycl...		0.138	0.180	0.204	0.205	0.214	0.214	0.192	15.36
42)	S	2,4,6-Tribromo...	0.201	0.200	0.210	0.200	0.199	0.201	0.196	0.201	2.08
43)	C	2,4,6-Trichlor...	0.364	0.365	0.389	0.377	0.373	0.378	0.372	0.374	2.28
44)		2,4,5-Trichlor...	0.385	0.407	0.430	0.410	0.394	0.409	0.401	0.405	3.51
45)	S	2-Fluorobiphenyl	1.373	1.360	1.385	1.269	1.241	1.259	1.201	1.298	5.62
46)		1,1'-Biphenyl	1.582	1.564	1.632	1.545	1.517	1.537	1.478	1.551	3.16
47)		2-Chloronaphth...	1.167	1.161	1.211	1.135	1.114	1.136	1.103	1.147	3.18
48)		2-Nitroaniline	0.371	0.371	0.394	0.390	0.382	0.401	0.385	0.385	2.92
49)		Acenaphthylene	1.739	1.736	1.791	1.696	1.660	1.689	1.626	1.705	3.21
50)		Dimethylphthalate	1.382	1.359	1.408	1.345	1.324	1.341	1.345	1.358	2.09
51)		2,6-Dinitrotol...	0.289	0.290	0.314	0.301	0.295	0.299	0.290	0.297	3.06
52)	C	Acenaphthene	1.186	1.164	1.188	1.152	1.108	1.127	1.101	1.147	3.10
53)		3-Nitroaniline	0.312	0.313	0.335	0.319	0.320	0.321	0.316	0.319	2.35
54)	P	2,4-Dinitrophenol		0.133	0.167	0.177	0.185	0.198	0.198	0.176	13.83
55)		Dibenzofuran	1.768	1.722	1.774	1.673	1.633	1.634	1.576	1.683	4.44
56)	P	4-Nitrophenol	0.190	0.216	0.247	0.249	0.249	0.257	0.251	0.237	10.43
57)		2,4-Dinitrotol...	0.383	0.403	0.414	0.398	0.390	0.396	0.383	0.395	2.83
58)		Fluorene	1.359	1.361	1.377	1.290	1.239	1.263	1.221	1.301	4.90
59)		2,3,4,6-Tetrac...	0.332	0.361	0.359	0.348	0.348	0.355	0.340	0.349	2.95
60)		Diethylphthalate	1.400	1.346	1.398	1.330	1.300	1.308	1.269	1.336	3.71
61)		4-Chlorophenyl...	0.661	0.643	0.659	0.622	0.602	0.611	0.585	0.626	4.66
62)		4-Nitroaniline	0.315	0.319	0.333	0.335	0.319	0.327	0.324	0.324	2.28
63)		Azobenzene	1.348	1.329	1.385	1.326	1.295	1.320	1.294	1.328	2.38
64)	I	Phenanthrene-d10	----------ISTD----------								
65)		4,6-Dinitro-2-...		0.116	0.140	0.142	0.142	0.146	0.148	0.139	8.48
66)	c	n-Nitrosodiphe...	0.650	0.653	0.674	0.627	0.625	0.625	0.627	0.640	2.97
67)		4-Bromophenyl-...	0.228	0.220	0.234	0.221	0.220	0.221	0.221	0.224	2.46
68)		Hexachlorobenzene	0.229	0.234	0.241	0.227	0.224	0.228	0.228	0.230	2.46
69)		Atrazine	0.200	0.203	0.214	0.185	0.185	0.182	0.176	0.192	7.12
70)	C	Pentachlorophenol	0.116	0.131	0.151	0.154	0.158	0.159	0.160	0.147	11.68
71)		Phenanthrene	1.141	1.132	1.161	1.084	1.071	1.069	1.049	1.101	3.91
72)		Anthracene	1.168	1.126	1.158	1.082	1.084	1.071	1.057	1.107	3.99
73)		Carbazole	1.022	1.026	1.076	0.986	0.966	0.961	0.933	0.996	4.87
74)		Di-n-butylphth...	1.165	1.156	1.223	1.141	1.132	1.126	1.105	1.150	3.29
75)	C	Fluoranthene	1.251	1.239	1.243	1.151	1.129	1.091	1.065	1.167	6.63
76)	I	Chrysene-d12	----------ISTD----------								
77)		Benzidine	0.474	0.487	0.334	0.528	0.432	0.351	0.481	0.441	16.58
78)		Pyrene	1.528	1.557	1.717	1.745	1.774	1.807	1.789	1.703	6.67
79)	S	Terphenyl-d14	1.129	1.104	1.211	1.198	1.209	1.234	1.208	1.185	4.07
80)		Butylbenzylpht...	0.525	0.540	0.605	0.609	0.603	0.623	0.624	0.590	6.83
81)		Benzo(a)anthra...	1.381	1.332	1.350	1.345	1.309	1.309	1.279	1.329	2.51
82)		3,3'-Dichlorob...	0.397	0.411	0.407	0.377	0.363	0.353	0.358	0.381	6.31
83)		Chrysene	1.187	1.223	1.314	1.201	1.215	1.224	1.229	1.228	3.34
84)		Bis(2-ethylhex...	0.593	0.610	0.685	0.689	0.680	0.697	0.702	0.665	6.68
85)	c	Di-n-octyl pht...	0.802	0.814	0.910	0.965	1.010	1.051	1.090	0.949	11.82

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF020625.M

86)	I	Perylene-d12	----------ISTD----------							
87)		Indeno(1,2,3-c...	0.987	1.029	1.186	1.288	1.341	1.410	1.408	1.236	14.06
88)		Benzo(b)fluora...	1.286	1.407	1.398	1.336	1.350	1.356	1.268	1.343	3.88
89)		Benzo(k)fluora...	1.113	1.216	1.247	1.142	1.074	1.098	1.138	1.147	5.49
90)	C	Benzo(a)pyrene	1.085	1.074	1.115	1.080	1.069	1.094	1.089	1.087	1.41
91)		Dibenzo(a,h)an...	0.796	0.828	0.970	1.051	1.092	1.138	1.134	1.001	14.13
92)		Benzo(g,h,i)pe...	0.805	0.864	1.001	1.100	1.144	1.203	1.218	1.048	15.60

(#) = Out of Range

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Fax : 908 789 8922

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Instrument ID: BNA_F Calibration Date/Time: 02/04/2025 10:42

Lab File ID: BF141398.D Init. Calib. Date(s): 01/29/2025 01/29/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 10:30 17:05

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.303	1.302		-0.1	
Benzaldehyde	0.960	0.893		-7.0	
Phenol-d6	1.657	1.560		-5.9	
Phenol	1.757	1.650		-6.1	20.0
bis(2-Chloroethyl)ether	1.347	1.262		-6.3	
2-Chlorophenol	1.396	1.387		-0.6	
2-Methylphenol	1.135	1.074		-5.4	
2,2-oxybis(1-Chloropropane)	2.342	2.108		-10.0	
Acetophenone	0.475	0.491		3.4	
3+4-Methylphenols	1.393	1.375		-1.3	
n-Nitroso-di-n-propylamine	0.985	0.929	0.050	-5.7	
Nitrobenzene-d5	0.379	0.391		3.2	
Hexachloroethane	0.571	0.583		2.1	
Nitrobenzene	0.393	0.398		1.3	
Isophorone	0.656	0.643		-2.0	
2-Nitrophenol	0.185	0.185		0.0	20.0
2,4-Dimethylphenol	0.236	0.230		-2.5	
bis(2-Chloroethoxy)methane	0.418	0.403		-3.6	
2,4-Dichlorophenol	0.289	0.296		2.4	20.0
Naphthalene	1.057	1.061		0.4	
4-Chloroaniline	0.358	0.347		-3.1	
Hexachlorobutadiene	0.194	0.208		7.2	20.0
Caprolactam	0.094	0.093		-1.1	
4-Chloro-3-methylphenol	0.310	0.325		4.8	20.0
2-Methylnaphthalene	0.672	0.684		1.8	
Hexachlorocyclopentadiene	0.168	0.185	0.050	10.1	
2,4,6-Trichlorophenol	0.372	0.382		2.7	20.0
2-Fluorobiphenyl	1.299	1.328		2.2	
2,4,5-Trichlorophenol	0.405	0.421		4.0	
1,1-Biphenyl	1.560	1.563		0.2	
2-Chloronaphthalene	1.216	1.209		-0.6	
2-Nitroaniline	0.382	0.390		2.1	
Dimethylphthalate	1.351	1.371		1.5	
Acenaphthylene	1.702	1.717		0.9	
2,6-Dinitrotoluene	0.314	0.321		2.2	
3-Nitroaniline	0.307	0.321		4.6	
Acenaphthene	1.216	1.256		3.3	20.0
2,4-Dinitrophenol	0.146	0.165	0.050	13.0	
4-Nitrophenol	0.225	0.257	0.050	14.2	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Instrument ID: BNA_F Calibration Date/Time: 02/04/2025 10:42

Lab File ID: BF141398.D Init. Calib. Date(s): 01/29/2025 01/29/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 10:30 17:05

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.627	1.669		2.6	
2,4-Dinitrotoluene	0.406	0.441		8.6	
Diethylphthalate	1.310	1.374		4.9	
4-Chlorophenyl-phenylether	0.617	0.648		5.0	
Fluorene	1.262	1.306		3.5	
4-Nitroaniline	0.302	0.344		13.9	
4,6-Dinitro-2-methylphenol	0.118	0.137		16.1	
n-Nitrosodiphenylamine	0.647	0.634		-2.0	20.0
2,4,6-Tribromophenol	0.183	0.202		10.4	
4-Bromophenyl-phenylether	0.224	0.225		0.4	
Hexachlorobenzene	0.238	0.243		2.1	
Atrazine	0.216	0.214		-0.9	
Pentachlorophenol	0.139	0.161		15.8	20.0
Phenanthrene	1.075	1.109		3.2	
Anthracene	1.053	1.092		3.7	
Carbazole	0.934	1.029		10.1	
Di-n-butylphthalate	1.132	1.214		7.2	
Fluoranthene	1.062	1.240		16.8	20.0
Pyrene	1.920	1.729		-9.9	
Terphenyl-d14	1.297	1.200		-7.5	
Butylbenzylphthalate	0.671	0.691		3.0	
3,3-Dichlorobenzidine	0.439	0.412		-6.2	
Benzo(a)anthracene	1.380	1.305		-5.4	
Chrysene	1.265	1.270		0.4	
Bis(2-ethylhexyl)phthalate	0.851	0.910		6.9	
Di-n-octyl phthalate	1.321	1.415		7.1	20.0
Benzo(b)fluoranthene	1.258	1.341		6.6	
Benzo(k)fluoranthene	1.114	1.140		2.3	
Benzo(a)pyrene	1.063	1.072		0.8	20.0
Indeno(1,2,3-cd)pyrene	1.291	1.338		3.6	
Dibenzo(a,h)anthracene	1.039	1.068		2.8	
Benzo(g,h,i)perylene	1.080	1.113		3.1	
1,2,4,5-Tetrachlorobenzene	0.569	0.587		3.2	
1,4-Dioxane	0.573	0.555		-3.1	20.0
2,3,4,6-Tetrachlorophenol	0.319	0.341		6.9	

All other compounds must meet a minimum RRF of 0.010.

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Instrument ID: BNA_F Calibration Date/Time: 02/07/2025 14:33

Lab File ID: BF141506.D Init. Calib. Date(s): 02/06/2025 02/06/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:07 14:14

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.276	1.294		1.4	
Benzaldehyde	0.857	0.844		-1.5	
Phenol-d6	1.612	1.599		-0.8	
Phenol	1.678	1.676		-0.1	20.0
bis(2-Chloroethyl)ether	1.261	1.237		-1.9	
2-Chlorophenol	1.378	1.383		0.4	
2-Methylphenol	1.079	1.064		-1.4	
2,2-oxybis(1-Chloropropane)	2.158	2.121		-1.7	
Acetophenone	0.498	0.489		-1.8	
3+4-Methylphenols	1.371	1.329		-3.1	
n-Nitroso-di-n-propylamine	0.964	0.978	0.050	1.5	
Nitrobenzene-d5	0.383	0.384		0.3	
Hexachloroethane	0.550	0.545		-0.9	
Nitrobenzene	0.374	0.372		-0.5	
Isophorone	0.611	0.607		-0.7	
2-Nitrophenol	0.186	0.191		2.7	20.0
2,4-Dimethylphenol	0.217	0.219		0.9	
bis(2-Chloroethoxy)methane	0.392	0.396		1.0	
2,4-Dichlorophenol	0.294	0.296		0.7	20.0
Naphthalene	1.041	1.040		-0.1	
4-Chloroaniline	0.363	0.327		-9.9	
Hexachlorobutadiene	0.192	0.191		-0.5	20.0
Caprolactam	0.089	0.093		4.5	
4-Chloro-3-methylphenol	0.325	0.326		0.3	20.0
2-Methylnaphthalene	0.677	0.668		-1.3	
Hexachlorocyclopentadiene	0.192	0.193	0.050	0.5	
2,4,6-Trichlorophenol	0.374	0.368		-1.6	20.0
2-Fluorobiphenyl	1.298	1.268		-2.3	
2,4,5-Trichlorophenol	0.405	0.399		-1.5	
1,1-Biphenyl	1.551	1.528		-1.5	
2-Chloronaphthalene	1.147	1.132		-1.3	
2-Nitroaniline	0.385	0.385		0.0	
Dimethylphthalate	1.358	1.338		-1.5	
Acenaphthylene	1.705	1.697		-0.5	
2,6-Dinitrotoluene	0.297	0.295		-0.7	
3-Nitroaniline	0.319	0.315		-1.3	
Acenaphthene	1.147	1.116		-2.7	20.0
2,4-Dinitrophenol	0.176	0.169	0.050	-4.0	
4-Nitrophenol	0.237	0.240	0.050	1.3	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Instrument ID: BNA_F Calibration Date/Time: 02/07/2025 14:33

Lab File ID: BF141506.D Init. Calib. Date(s): 02/06/2025 02/06/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:07 14:14

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.683	1.655		-1.7	
2,4-Dinitrotoluene	0.395	0.400		1.3	
Diethylphthalate	1.336	1.313		-1.7	
4-Chlorophenyl-phenylether	0.626	0.616		-1.6	
Fluorene	1.301	1.278		-1.8	
4-Nitroaniline	0.324	0.326		0.6	
4,6-Dinitro-2-methylphenol	0.139	0.139		0.0	
n-Nitrosodiphenylamine	0.640	0.631		-1.4	20.0
2,4,6-Tribromophenol	0.201	0.200		-0.5	
4-Bromophenyl-phenylether	0.224	0.217		-3.1	
Hexachlorobenzene	0.230	0.229		-0.4	
Atrazine	0.192	0.182		-5.2	
Pentachlorophenol	0.147	0.147		0.0	20.0
Phenanthrene	1.101	1.082		-1.7	
Anthracene	1.107	1.095		-1.1	
Carbazole	0.996	1.004		0.8	
Di-n-butylphthalate	1.150	1.152		0.2	
Fluoranthene	1.167	1.168		0.1	20.0
Pyrene	1.703	1.702		-0.1	
Terphenyl-d14	1.185	1.171		-1.2	
Butylbenzylphthalate	0.590	0.640		8.5	
3,3-Dichlorobenzidine	0.381	0.385		1.0	
Benzo(a)anthracene	1.329	1.316		-1.0	
Chrysene	1.228	1.167		-5.0	
Bis(2-ethylhexyl)phthalate	0.665	0.759		14.1	
Di-n-octyl phthalate	0.949	1.017		7.2	20.0
Benzo(b)fluoranthene	1.343	1.426		6.2	
Benzo(k)fluoranthene	1.147	1.070		-6.7	
Benzo(a)pyrene	1.087	1.090		0.3	20.0
Indeno(1,2,3-cd)pyrene	1.236	1.245		0.7	
Dibenzo(a,h)anthracene	1.001	1.011		1.0	
Benzo(g,h,i)perylene	1.048	1.028		-1.9	
1,2,4,5-Tetrachlorobenzene	0.579	0.571		-1.4	
1,4-Dioxane	0.513	0.512		-0.2	20.0
2,3,4,6-Tetrachlorophenol	0.349	0.346		-0.9	

All other compounds must meet a minimum RRF of 0.010.

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Instrument ID: BNA_F Calibration Date/Time: 02/10/2025 11:34

Lab File ID: BF141531.D Init. Calib. Date(s): 02/06/2025 02/06/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:07 14:14

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.276	1.279		0.2	
Benzaldehyde	0.857	0.700		-18.3	
Phenol-d6	1.612	1.566		-2.9	
Phenol	1.678	1.634		-2.6	20.0
bis(2-Chloroethyl)ether	1.261	1.230		-2.5	
2-Chlorophenol	1.378	1.349		-2.1	
2-Methylphenol	1.079	1.053		-2.4	
2,2-oxybis(1-Chloropropane)	2.158	2.142		-0.7	
Acetophenone	0.498	0.483		-3.0	
3+4-Methylphenols	1.371	1.322		-3.6	
n-Nitroso-di-n-propylamine	0.964	0.933	0.050	-3.2	
Nitrobenzene-d5	0.383	0.378		-1.3	
Hexachloroethane	0.550	0.559		1.6	
Nitrobenzene	0.374	0.366		-2.1	
Isophorone	0.611	0.596		-2.5	
2-Nitrophenol	0.186	0.187		0.5	20.0
2,4-Dimethylphenol	0.217	0.215		-0.9	
bis(2-Chloroethoxy)methane	0.392	0.387		-1.3	
2,4-Dichlorophenol	0.294	0.288		-2.0	20.0
Naphthalene	1.041	1.032		-0.9	
4-Chloroaniline	0.363	0.347		-4.4	
Hexachlorobutadiene	0.192	0.197		2.6	20.0
Caprolactam	0.089	0.087		-2.2	
4-Chloro-3-methylphenol	0.325	0.317		-2.5	20.0
2-Methylnaphthalene	0.677	0.665		-1.8	
Hexachlorocyclopentadiene	0.192	0.179	0.050	-6.8	
2,4,6-Trichlorophenol	0.374	0.374		0.0	20.0
2-Fluorobiphenyl	1.298	1.277		-1.6	
2,4,5-Trichlorophenol	0.405	0.398		-1.7	
1,1-Biphenyl	1.551	1.532		-1.2	
2-Chloronaphthalene	1.147	1.143		-0.3	
2-Nitroaniline	0.385	0.373		-3.1	
Dimethylphthalate	1.358	1.328		-2.2	
Acenaphthylene	1.705	1.674		-1.8	
2,6-Dinitrotoluene	0.297	0.284		-4.4	
3-Nitroaniline	0.319	0.306		-4.1	
Acenaphthene	1.147	1.121		-2.3	20.0
2,4-Dinitrophenol	0.176	0.162	0.050	-8.0	
4-Nitrophenol	0.237	0.223	0.050	-5.9	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Instrument ID: BNA_F Calibration Date/Time: 02/10/2025 11:34

Lab File ID: BF141531.D Init. Calib. Date(s): 02/06/2025 02/06/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:07 14:14

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.683	1.647		-2.1	
2,4-Dinitrotoluene	0.395	0.379		-4.1	
Diethylphthalate	1.336	1.307		-2.2	
4-Chlorophenyl-phenylether	0.626	0.625		-0.2	
Fluorene	1.301	1.275		-2.0	
4-Nitroaniline	0.324	0.303		-6.5	
4,6-Dinitro-2-methylphenol	0.139	0.133		-4.3	
n-Nitrosodiphenylamine	0.640	0.652		1.9	20.0
2,4,6-Tribromophenol	0.201	0.194		-3.5	
4-Bromophenyl-phenylether	0.224	0.230		2.7	
Hexachlorobenzene	0.230	0.235		2.2	
Atrazine	0.192	0.182		-5.2	
Pentachlorophenol	0.147	0.138		-6.1	20.0
Phenanthrene	1.101	1.104		0.3	
Anthracene	1.107	1.109		0.2	
Carbazole	0.996	0.971		-2.5	
Di-n-butylphthalate	1.150	1.153		0.3	
Fluoranthene	1.167	1.119		-4.1	20.0
Pyrene	1.703	1.809		6.2	
Terphenyl-d14	1.185	1.253		5.7	
Butylbenzylphthalate	0.590	0.627		6.3	
3,3-Dichlorobenzidine	0.381	0.373		-2.1	
Benzo(a)anthracene	1.329	1.304		-1.9	
Chrysene	1.228	1.236		0.7	
Bis(2-ethylhexyl)phthalate	0.665	0.755		13.5	
Di-n-octyl phthalate	0.949	1.170		23.3	20.0
Benzo(b)fluoranthene	1.343	1.384		3.1	
Benzo(k)fluoranthene	1.147	1.012		-11.8	
Benzo(a)pyrene	1.087	1.083		-0.4	20.0
Indeno(1,2,3-cd)pyrene	1.236	1.422		15.0	
Dibenzo(a,h)anthracene	1.001	1.172		17.1	
Benzo(g,h,i)perylene	1.048	1.227		17.1	
1,2,4,5-Tetrachlorobenzene	0.579	0.580		0.2	
1,4-Dioxane	0.513	0.497		-3.1	20.0
2,3,4,6-Tetrachlorophenol	0.349	0.335		-4.0	

All other compounds must meet a minimum RRF of 0.010.

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Instrument ID: BNA_F Calibration Date/Time: 02/11/2025 10:28

Lab File ID: BF141551.D Init. Calib. Date(s): 02/06/2025 02/06/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:07 14:14

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.276	1.265		-0.9	
Benzaldehyde	0.857	0.753		-12.1	
Phenol-d6	1.612	1.593		-1.2	
Phenol	1.678	1.648		-1.8	20.0
bis(2-Chloroethyl)ether	1.261	1.246		-1.2	
2-Chlorophenol	1.378	1.375		-0.2	
2-Methylphenol	1.079	1.043		-3.3	
2,2-oxybis(1-Chloropropane)	2.158	2.126		-1.5	
Acetophenone	0.498	0.484		-2.8	
3+4-Methylphenols	1.371	1.332		-2.8	
n-Nitroso-di-n-propylamine	0.964	0.956	0.050	-0.8	
Nitrobenzene-d5	0.383	0.379		-1.0	
Hexachloroethane	0.550	0.547		-0.5	
Nitrobenzene	0.374	0.368		-1.6	
Isophorone	0.611	0.609		-0.3	
2-Nitrophenol	0.186	0.189		1.6	20.0
2,4-Dimethylphenol	0.217	0.221		1.8	
bis(2-Chloroethoxy)methane	0.392	0.398		1.5	
2,4-Dichlorophenol	0.294	0.295		0.3	20.0
Naphthalene	1.041	1.028		-1.2	
4-Chloroaniline	0.363	0.326		-10.2	
Hexachlorobutadiene	0.192	0.193		0.5	20.0
Caprolactam	0.089	0.091		2.2	
4-Chloro-3-methylphenol	0.325	0.324		-0.3	20.0
2-Methylnaphthalene	0.677	0.671		-0.9	
Hexachlorocyclopentadiene	0.192	0.181	0.050	-5.7	
2,4,6-Trichlorophenol	0.374	0.373		-0.3	20.0
2-Fluorobiphenyl	1.298	1.271		-2.1	
2,4,5-Trichlorophenol	0.405	0.401		-1.0	
1,1-Biphenyl	1.551	1.544		-0.5	
2-Chloronaphthalene	1.147	1.123		-2.1	
2-Nitroaniline	0.385	0.372		-3.4	
Dimethylphthalate	1.358	1.360		0.1	
Acenaphthylene	1.705	1.686		-1.1	
2,6-Dinitrotoluene	0.297	0.295		-0.7	
3-Nitroaniline	0.319	0.310		-2.8	
Acenaphthene	1.147	1.121		-2.3	20.0
2,4-Dinitrophenol	0.176	0.181	0.050	2.8	
4-Nitrophenol	0.237	0.233	0.050	-1.7	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1215 SAS No.: Q1215 SDG No.: Q1215

Instrument ID: BNA_F Calibration Date/Time: 02/11/2025 10:28

Lab File ID: BF141551.D Init. Calib. Date(s): 02/06/2025 02/06/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:07 14:14

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.683	1.653		-1.8	
2,4-Dinitrotoluene	0.395	0.398		0.8	
Diethylphthalate	1.336	1.353		1.3	
4-Chlorophenyl-phenylether	0.626	0.620		-1.0	
Fluorene	1.301	1.291		-0.8	
4-Nitroaniline	0.324	0.324		0.0	
4,6-Dinitro-2-methylphenol	0.139	0.139		0.0	
n-Nitrosodiphenylamine	0.640	0.634		-0.9	20.0
2,4,6-Tribromophenol	0.201	0.201		0.0	
4-Bromophenyl-phenylether	0.224	0.226		0.9	
Hexachlorobenzene	0.230	0.230		0.0	
Atrazine	0.192	0.174		-9.4	
Pentachlorophenol	0.147	0.147		0.0	20.0
Phenanthrene	1.101	1.067		-3.1	
Anthracene	1.107	1.091		-1.4	
Carbazole	0.996	0.961		-3.5	
Di-n-butylphthalate	1.150	1.169		1.7	
Fluoranthene	1.167	1.112		-4.7	20.0
Pyrene	1.703	1.914		12.4	
Terphenyl-d14	1.185	1.330		12.2	
Butylbenzylphthalate	0.590	0.654		10.8	
3,3-Dichlorobenzidine	0.381	0.368		-3.4	
Benzo(a)anthracene	1.329	1.313		-1.2	
Chrysene	1.228	1.216		-1.0	
Bis(2-ethylhexyl)phthalate	0.665	0.741		11.4	
Di-n-octyl phthalate	0.949	1.040		9.6	20.0
Benzo(b)fluoranthene	1.343	1.314		-2.2	
Benzo(k)fluoranthene	1.147	1.062		-7.4	
Benzo(a)pyrene	1.087	1.065		-2.0	20.0
Indeno(1,2,3-cd)pyrene	1.236	1.357		9.8	
Dibenzo(a,h)anthracene	1.001	1.106		10.5	
Benzo(g,h,i)perylene	1.048	1.156		10.3	
1,2,4,5-Tetrachlorobenzene	0.579	0.575		-0.7	
1,4-Dioxane	0.513	0.499		-2.7	20.0
2,3,4,6-Tetrachlorophenol	0.349	0.348		-0.3	

All other compounds must meet a minimum RRF of 0.010.