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

LAB CHRONICLE

OrderID:	Q1206	**OrderDate:**	1/28/2025 11:18:51 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
Q1206-03	**JPP-20.1-012725**	**SOIL**			**01/27/25**			**01/28/25**
			SVOC-TCL BNA -20	8270E		01/29/25	02/05/25	
Q1206-03DL	**JPP-20.1-012725DL**	**SOIL**			**01/27/25**			**01/28/25**
			SVOC-TCL BNA -20	8270E		01/29/25	02/11/25	
Q1206-04	**JPP-20.1-012725**	**TCLP**			**01/27/25**			**01/28/25**
			TCLP BNA	8270E		01/29/25	02/04/25	
Q1206-07	**JPP-16.3-012725**	**SOIL**			**01/27/25**			**01/28/25**
			SVOC-TCL BNA -20	8270E		01/29/25	02/05/25	
Q1206-08	**JPP-16.3-012725**	**TCLP**			**01/27/25**			**01/28/25**
			TCLP BNA	8270E		01/29/25	02/04/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1206

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID :	**JPP-20.1-012725**								
Q1206-03	JPP-20.1-012725	SOIL	Acenaphthene		200.000		94.7	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Fluorene		180.000	J	99.8	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Phenanthrene		2,000.000		98	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Anthracene		630.000		98.5	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Carbazole		140.000	J	93.7	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Fluoranthene		3,600.000	E	95.4	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Pyrene		2,400.000		96.9	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Benzo(a)anthracene		1,800.000		94.2	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Chrysene		1,400.000		92.8	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Benzo(b)fluoranthene		2,000.000		94.7	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Benzo(k)fluoranthene		810.000		96.4	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Benzo(a)pyrene		1,800.000		110	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Indeno(1,2,3-cd)pyrene		700.000		91.2	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Dibenzo(a,h)anthracene		230.000		94.8	200	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Benzo(g,h,i)perylene		820.000		93.5	200	ug/Kg
			Total Svoc :		**18,710.00**				
Q1206-03	JPP-20.1-012725	SOIL	11H-Benzo[b]fluorene	*	180.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	1H-Cyclopropa[l]phenanthrene,1a	*	210.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	3-Methyl-[1,1-biphenyl]-4-carbal	*	130.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	3-Methylcarbazole	*	120.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	4H-Cyclopenta[def]phenanthrene	*	820.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	9H-Fluoren-9-one	*	93.800	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	9H-Fluorene, 2-methyl-	*	140.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Anthracene, 2-ethyl-	*	140.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Benzo[e]pyrene	*	320.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Benzo[j]fluoranthene	*	1,200.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Benzophenone	*	390.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Cyclopenta(def)phenanthrenone	*	240.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Dibenzothiophene	*	120.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Fluoranthene, 2-methyl-	*	120.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Naphthalene, 2-phenyl-	*	270.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Phenanthrene, 1-methyl-	*	580.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Phenanthrene, 2,5-dimethyl-	*	260.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Phenanthrene, 2-methyl-	*	330.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Pyrene, 1-methyl-	*	130.000	J	0	0	ug/Kg
Q1206-03	JPP-20.1-012725	SOIL	Pyrene, 4,5,9,10-tetrahydro-	*	160.000	J	0	0	ug/Kg
			Total Tics :		**5,953.80**				

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Hit Summary Sheet
SW-846

SDG No.: Q1206

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
			Total Concentration:		**24,663.80**				
Client ID :	**JPP-20.1-012725DL**								
Q1206-03DL	JPP-20.1-012725DL	SOIL	Acenaphthene		210.000	JD	190	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Phenanthrene		2,000.000	D	200	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Anthracene		610.000	D	200	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Fluoranthene		3,200.000	D	190	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Pyrene		2,500.000	D	190	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Benzo(a)anthracene		1,800.000	D	190	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Chrysene		1,500.000	D	190	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Benzo(b)fluoranthene		1,800.000	D	190	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Benzo(k)fluoranthene		620.000	D	190	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Benzo(a)pyrene		1,700.000	D	220	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Indeno(1,2,3-cd)pyrene		770.000	D	180	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Dibenzo(a,h)anthracene		240.000	JD	190	400	ug/Kg
Q1206-03DL	JPP-20.1-012725DL	SOIL	Benzo(g,h,i)perylene		830.000	D	190	400	ug/Kg
			Total Svoc :		**17,780.00**				
			Total Concentration:		**17,780.00**				
Client ID :	**JPP-16.3-012725**								
Q1206-07	JPP-16.3-012725	SOIL	Phenanthrene		700.000		200	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Fluoranthene		1,700.000		190	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Pyrene		1,400.000		200	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Benzo(a)anthracene		730.000		190	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Chrysene		680.000		190	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Benzo(b)fluoranthene		900.000		190	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Benzo(k)fluoranthene		410.000		190	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Benzo(a)pyrene		820.000		220	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Indeno(1,2,3-cd)pyrene		360.000	J	180	400	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Benzo(g,h,i)perylene		420.000		190	400	ug/Kg
			Total Svoc :		**8,120.00**				
Q1206-07	JPP-16.3-012725	SOIL	Benzophenone	*	260.000	J	0	0	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	4H-Cyclopenta[def]phenanthrene	*	300.000	J	0	0	ug/Kg
Q1206-07	JPP-16.3-012725	SOIL	Anthracene, 2-methyl-	*	220.000	J	0	0	ug/Kg
			Total Tics :		**780.00**				
			Total Concentration:		**8,900.00**				

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:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.1-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	85.5
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
BF141461.D	1	01/29/25 08:40	02/05/25 21:31	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	390	U	210	390	ug/Kg
108-95-2	Phenol	200	U	96.8	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	200	U	97.7	200	ug/Kg
95-57-8	2-Chlorophenol	200	U	97.5	200	ug/Kg
95-48-7	2-Methylphenol	200	U	94.1	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	200	U	110	200	ug/Kg
98-86-2	Acetophenone	200	U	100	200	ug/Kg
65794-96-9	3+4-Methylphenols	390	U	93.1	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	93.4	U	47.0	93.4	ug/Kg
67-72-1	Hexachloroethane	200	U	96.9	200	ug/Kg
98-95-3	Nitrobenzene	200	U	110	200	ug/Kg
78-59-1	Isophorone	200	U	98.7	200	ug/Kg
88-75-5	2-Nitrophenol	200	U	110	200	ug/Kg
105-67-9	2,4-Dimethylphenol	200	U	110	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	200	U	100	200	ug/Kg
120-83-2	2,4-Dichlorophenol	200	U	88.1	200	ug/Kg
91-20-3	Naphthalene	200	U	96.4	200	ug/Kg
106-47-8	4-Chloroaniline	200	U	96.4	200	ug/Kg
87-68-3	Hexachlorobutadiene	200	U	97.2	200	ug/Kg
105-60-2	Caprolactam	390	U	100	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	200	U	90.5	200	ug/Kg
91-57-6	2-Methylnaphthalene	200	U	96.3	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	390	UQ	180	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	200	U	83.3	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	200	U	86.4	200	ug/Kg
92-52-4	1,1-Biphenyl	200	U	100	200	ug/Kg
91-58-7	2-Chloronaphthalene	200	U	97.2	200	ug/Kg
88-74-4	2-Nitroaniline	200	U	110	200	ug/Kg
131-11-3	Dimethylphthalate	200	U	95.4	200	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.1-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	85.5
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
BF141461.D	1	01/29/25 08:40	02/05/25 21:31	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	200	U	100	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	200	U	97.1	200	ug/Kg
99-09-2	3-Nitroaniline	200	U	100	200	ug/Kg
83-32-9	Acenaphthene	200		94.7	200	ug/Kg
51-28-5	2,4-Dinitrophenol	390	U	280	390	ug/Kg
100-02-7	4-Nitrophenol	390	U	140	390	ug/Kg
132-64-9	Dibenzofuran	200	U	98.5	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	200	U	100	200	ug/Kg
84-66-2	Diethylphthalate	200	U	93.5	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	200	U	99.9	200	ug/Kg
86-73-7	Fluorene	180	J	99.8	200	ug/Kg
100-01-6	4-Nitroaniline	200	U	120	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	390	U	140	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	200	U	95.2	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	200	U	92.1	200	ug/Kg
118-74-1	Hexachlorobenzene	200	U	99.2	200	ug/Kg
1912-24-9	Atrazine	200	U	110	200	ug/Kg
87-86-5	Pentachlorophenol	390	U	90.2	390	ug/Kg
85-01-8	Phenanthrene	2000		98.0	200	ug/Kg
120-12-7	Anthracene	630		98.5	200	ug/Kg
86-74-8	Carbazole	140	J	93.7	200	ug/Kg
84-74-2	Di-n-butylphthalate	200	U	98.4	200	ug/Kg
206-44-0	Fluoranthene	3600	E	95.4	200	ug/Kg
129-00-0	Pyrene	2400		96.9	200	ug/Kg
85-68-7	Butylbenzylphthalate	200	U	110	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	390	U	120	390	ug/Kg
56-55-3	Benzo(a)anthracene	1800		94.2	200	ug/Kg
218-01-9	Chrysene	1400		92.8	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	200	U	110	200	ug/Kg
117-84-0	Di-n-octyl phthalate	390	U	130	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	2000		94.7	200	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.1-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	85.5
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
BF141461.D	1	01/29/25 08:40	02/05/25 21:31	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	810		96.4	200	ug/Kg
50-32-8	Benzo(a)pyrene	1800		110	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	700		91.2	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	230		94.8	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	820		93.5	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U	100	200	ug/Kg
123-91-1	1,4-Dioxane	200	U	130	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	200	U	87.2	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	70.2		18 - 112	47%	SPK: 150
13127-88-3	Phenol-d6	68.9		15 - 107	46%	SPK: 150
4165-60-0	Nitrobenzene-d5	52.0		18 - 107	52%	SPK: 100
321-60-8	2-Fluorobiphenyl	49.9		20 - 109	50%	SPK: 100
118-79-6	2,4,6-Tribromophenol	67.1		10 - 116	45%	SPK: 150
1718-51-0	Terphenyl-d14	35.5		10 - 105	36%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	73900	6.787			
1146-65-2	Naphthalene-d8	280000	8.069			
15067-26-2	Acenaphthene-d10	130000	9.828			
1517-22-2	Phenanthrene-d10	190000	11.316			
1719-03-5	Chrysene-d12	151000	13.963			
1520-96-3	Perylene-d12	120000	15.421			
TENTATIVE IDENTIFIED COMPOUNDS						
000119-61-9	Benzophenone	390	J		10.5	ug/Kg
001430-97-3	9H-Fluorene, 2-methyl-	140	J		10.9	ug/Kg
000486-25-9	9H-Fluoren-9-one	93.8	J		11.1	ug/Kg
400744-83-4	3-Methyl-[1,1-biphenyl]-4-carbal	130	J		11.2	ug/Kg
000132-65-0	Dibenzothiophene	120	J		11.2	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	330	J		11.8	ug/Kg
000832-69-9	Phenanthrene, 1-methyl-	580	J		11.8	ug/Kg

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.1-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	85.5
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
BF141461.D	1	01/29/25 08:40	02/05/25 21:31	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000949-41-7	1H-Cyclopropa[l]phenanthrene,1a,9b	210	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	820	J		11.9	ug/Kg
004630-20-0	3-Methylcarbazole	120	J		12.0	ug/Kg
000612-94-2	Naphthalene, 2-phenyl-	270	J		12.1	ug/Kg
052251-71-5	Anthracene, 2-ethyl-	140	J		12.3	ug/Kg
003674-66-6	Phenanthrene, 2,5-dimethyl-	260	J		12.4	ug/Kg
000781-17-9	Pyrene, 4,5,9,10-tetrahydro-	160	J		12.4	ug/Kg
005737-13-3	Cyclopenta(def)phenanthrenone	240	J		12.5	ug/Kg
002381-21-7	Pyrene, 1-methyl-	130	J		13.0	ug/Kg
000243-17-4	11H-Benzo[b]fluorene	180	J		13.1	ug/Kg
033543-31-6	Fluoranthene, 2-methyl-	120	J		13.2	ug/Kg
000192-97-2	Benzo[e]pyrene	320	J		15.1	ug/Kg
000205-82-3	Benzo[j]fluoranthene	1200	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:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.1-012725DL	SDG No.:	Q1206
Lab Sample ID:	Q1206-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	85.5
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
BF141567.D	2	01/29/25 08:40	02/11/25 17:35	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	770	UD	420	770	ug/Kg
108-95-2	Phenol	400	UD	190	400	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	400	UD	200	400	ug/Kg
95-57-8	2-Chlorophenol	400	UD	190	400	ug/Kg
95-48-7	2-Methylphenol	400	UD	190	400	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	400	UD	210	400	ug/Kg
98-86-2	Acetophenone	400	UD	200	400	ug/Kg
65794-96-9	3+4-Methylphenols	770	UD	190	770	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	190	UD	94.1	190	ug/Kg
67-72-1	Hexachloroethane	400	UD	190	400	ug/Kg
98-95-3	Nitrobenzene	400	UD	210	400	ug/Kg
78-59-1	Isophorone	400	UD	200	400	ug/Kg
88-75-5	2-Nitrophenol	400	UD	220	400	ug/Kg
105-67-9	2,4-Dimethylphenol	400	UD	220	400	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	400	UD	200	400	ug/Kg
120-83-2	2,4-Dichlorophenol	400	UD	180	400	ug/Kg
91-20-3	Naphthalene	400	UD	190	400	ug/Kg
106-47-8	4-Chloroaniline	400	UD	190	400	ug/Kg
87-68-3	Hexachlorobutadiene	400	UD	190	400	ug/Kg
105-60-2	Caprolactam	770	UD	200	770	ug/Kg
59-50-7	4-Chloro-3-methylphenol	400	UD	180	400	ug/Kg
91-57-6	2-Methylnaphthalene	400	UD	190	400	ug/Kg
77-47-4	Hexachlorocyclopentadiene	770	UDQ	360	770	ug/Kg
88-06-2	2,4,6-Trichlorophenol	400	UD	170	400	ug/Kg
95-95-4	2,4,5-Trichlorophenol	400	UD	170	400	ug/Kg
92-52-4	1,1-Biphenyl	400	UD	200	400	ug/Kg
91-58-7	2-Chloronaphthalene	400	UD	190	400	ug/Kg
88-74-4	2-Nitroaniline	400	UD	220	400	ug/Kg
131-11-3	Dimethylphthalate	400	UD	190	400	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.1-012725DL	SDG No.:	Q1206
Lab Sample ID:	Q1206-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	85.5
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
BF141567.D	2	01/29/25 08:40	02/11/25 17:35	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	400	UD	200	400	ug/Kg
606-20-2	2,6-Dinitrotoluene	400	UD	190	400	ug/Kg
99-09-2	3-Nitroaniline	400	UD	210	400	ug/Kg
83-32-9	Acenaphthene	210	JD	190	400	ug/Kg
51-28-5	2,4-Dinitrophenol	770	UD	570	770	ug/Kg
100-02-7	4-Nitrophenol	770	UD	270	770	ug/Kg
132-64-9	Dibenzofuran	400	UD	200	400	ug/Kg
121-14-2	2,4-Dinitrotoluene	400	UD	200	400	ug/Kg
84-66-2	Diethylphthalate	400	UD	190	400	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	400	UD	200	400	ug/Kg
86-73-7	Fluorene	400	UD	200	400	ug/Kg
100-01-6	4-Nitroaniline	400	UD	250	400	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	770	UD	270	770	ug/Kg
86-30-6	n-Nitrosodiphenylamine	400	UD	190	400	ug/Kg
101-55-3	4-Bromophenyl-phenylether	400	UD	180	400	ug/Kg
118-74-1	Hexachlorobenzene	400	UD	200	400	ug/Kg
1912-24-9	Atrazine	400	UD	210	400	ug/Kg
87-86-5	Pentachlorophenol	770	UD	180	770	ug/Kg
85-01-8	Phenanthrene	2000	D	200	400	ug/Kg
120-12-7	Anthracene	610	D	200	400	ug/Kg
86-74-8	Carbazole	400	UD	190	400	ug/Kg
84-74-2	Di-n-butylphthalate	400	UD	200	400	ug/Kg
206-44-0	Fluoranthene	3200	D	190	400	ug/Kg
129-00-0	Pyrene	2500	D	190	400	ug/Kg
85-68-7	Butylbenzylphthalate	400	UD	230	400	ug/Kg
91-94-1	3,3-Dichlorobenzidine	770	UD	230	770	ug/Kg
56-55-3	Benzo(a)anthracene	1800	D	190	400	ug/Kg
218-01-9	Chrysene	1500	D	190	400	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	400	UD	210	400	ug/Kg
117-84-0	Di-n-octyl phthalate	770	UD	260	770	ug/Kg
205-99-2	Benzo(b)fluoranthene	1800	D	190	400	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.1-012725DL	SDG No.:	Q1206
Lab Sample ID:	Q1206-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	85.5
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
BF141567.D	2	01/29/25 08:40	02/11/25 17:35	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	620	D	190	400	ug/Kg
50-32-8	Benzo(a)pyrene	1700	D	220	400	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	770	D	180	400	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	240	JD	190	400	ug/Kg
191-24-2	Benzo(g,h,i)perylene	830	D	190	400	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	400	UD	200	400	ug/Kg
123-91-1	1,4-Dioxane	400	UD	260	400	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	400	UD	170	400	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	67.9		18 - 112	45%	SPK: 150
13127-88-3	Phenol-d6	67.7		15 - 107	45%	SPK: 150
4165-60-0	Nitrobenzene-d5	50.4		18 - 107	50%	SPK: 100
321-60-8	2-Fluorobiphenyl	47.5		20 - 109	48%	SPK: 100
118-79-6	2,4,6-Tribromophenol	58.3		10 - 116	39%	SPK: 150
1718-51-0	Terphenyl-d14	34.9		10 - 105	35%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	83600	6.787			
1146-65-2	Naphthalene-d8	319000	8.069			
15067-26-2	Acenaphthene-d10	161000	9.822			
1517-22-2	Phenanthrene-d10	233000	11.304			
1719-03-5	Chrysene-d12	199000	13.951			
1520-96-3	Perylene-d12	227000	15.416			

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:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.3-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.5
Sample Wt/Vol:	30.08 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
BF141466.D	2	01/29/25 08:40	02/05/25 23:41	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	780	U	430	780	ug/Kg
108-95-2	Phenol	400	U	200	400	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	400	U	200	400	ug/Kg
95-57-8	2-Chlorophenol	400	U	200	400	ug/Kg
95-48-7	2-Methylphenol	400	U	190	400	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	400	U	210	400	ug/Kg
98-86-2	Acetophenone	400	U	210	400	ug/Kg
65794-96-9	3+4-Methylphenols	780	U	190	780	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	190	U	95.1	190	ug/Kg
67-72-1	Hexachloroethane	400	U	200	400	ug/Kg
98-95-3	Nitrobenzene	400	U	210	400	ug/Kg
78-59-1	Isophorone	400	U	200	400	ug/Kg
88-75-5	2-Nitrophenol	400	U	220	400	ug/Kg
105-67-9	2,4-Dimethylphenol	400	U	220	400	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	400	U	200	400	ug/Kg
120-83-2	2,4-Dichlorophenol	400	U	180	400	ug/Kg
91-20-3	Naphthalene	400	U	190	400	ug/Kg
106-47-8	4-Chloroaniline	400	U	190	400	ug/Kg
87-68-3	Hexachlorobutadiene	400	U	200	400	ug/Kg
105-60-2	Caprolactam	780	U	200	780	ug/Kg
59-50-7	4-Chloro-3-methylphenol	400	U	180	400	ug/Kg
91-57-6	2-Methylnaphthalene	400	U	190	400	ug/Kg
77-47-4	Hexachlorocyclopentadiene	780	UQ	370	780	ug/Kg
88-06-2	2,4,6-Trichlorophenol	400	U	170	400	ug/Kg
95-95-4	2,4,5-Trichlorophenol	400	U	170	400	ug/Kg
92-52-4	1,1-Biphenyl	400	U	210	400	ug/Kg
91-58-7	2-Chloronaphthalene	400	U	200	400	ug/Kg
88-74-4	2-Nitroaniline	400	U	220	400	ug/Kg
131-11-3	Dimethylphthalate	400	U	190	400	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.3-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.5
Sample Wt/Vol:	30.08 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
BF141466.D	2	01/29/25 08:40	02/05/25 23:41	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	400	U	200	400	ug/Kg
606-20-2	2,6-Dinitrotoluene	400	U	200	400	ug/Kg
99-09-2	3-Nitroaniline	400	U	210	400	ug/Kg
83-32-9	Acenaphthene	400	U	190	400	ug/Kg
51-28-5	2,4-Dinitrophenol	780	U	570	780	ug/Kg
100-02-7	4-Nitrophenol	780	U	270	780	ug/Kg
132-64-9	Dibenzofuran	400	U	200	400	ug/Kg
121-14-2	2,4-Dinitrotoluene	400	U	200	400	ug/Kg
84-66-2	Diethylphthalate	400	U	190	400	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	400	U	200	400	ug/Kg
86-73-7	Fluorene	400	U	200	400	ug/Kg
100-01-6	4-Nitroaniline	400	U	250	400	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	780	U	280	780	ug/Kg
86-30-6	n-Nitrosodiphenylamine	400	U	190	400	ug/Kg
101-55-3	4-Bromophenyl-phenylether	400	U	190	400	ug/Kg
118-74-1	Hexachlorobenzene	400	U	200	400	ug/Kg
1912-24-9	Atrazine	400	U	220	400	ug/Kg
87-86-5	Pentachlorophenol	780	U	180	780	ug/Kg
85-01-8	Phenanthrene	700		200	400	ug/Kg
120-12-7	Anthracene	400	U	200	400	ug/Kg
86-74-8	Carbazole	400	U	190	400	ug/Kg
84-74-2	Di-n-butylphthalate	400	U	200	400	ug/Kg
206-44-0	Fluoranthene	1700		190	400	ug/Kg
129-00-0	Pyrene	1400		200	400	ug/Kg
85-68-7	Butylbenzylphthalate	400	U	230	400	ug/Kg
91-94-1	3,3-Dichlorobenzidine	780	U	230	780	ug/Kg
56-55-3	Benzo(a)anthracene	730		190	400	ug/Kg
218-01-9	Chrysene	680		190	400	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	400	U	210	400	ug/Kg
117-84-0	Di-n-octyl phthalate	780	U	260	780	ug/Kg
205-99-2	Benzo(b)fluoranthene	900		190	400	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.3-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.5
Sample Wt/Vol:	30.08 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
BF141466.D	2	01/29/25 08:40	02/05/25 23:41	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	410		190	400	ug/Kg
50-32-8	Benzo(a)pyrene	820		220	400	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	360	J	180	400	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	400	U	190	400	ug/Kg
191-24-2	Benzo(g,h,i)perylene	420		190	400	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	400	U	200	400	ug/Kg
123-91-1	1,4-Dioxane	400	U	260	400	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	400	U	180	400	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	51.0		18 - 112	34%	SPK: 150
13127-88-3	Phenol-d6	46.4		15 - 107	31%	SPK: 150
4165-60-0	Nitrobenzene-d5	36.7		18 - 107	37%	SPK: 100
321-60-8	2-Fluorobiphenyl	36.1		20 - 109	36%	SPK: 100
118-79-6	2,4,6-Tribromophenol	51.1		10 - 116	34%	SPK: 150
1718-51-0	Terphenyl-d14	31.5		10 - 105	32%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	60500	6.792			
1146-65-2	Naphthalene-d8	216000	8.075			
15067-26-2	Acenaphthene-d10	104000	9.828			
1517-22-2	Phenanthrene-d10	181000	11.316			
1719-03-5	Chrysene-d12	126000	13.957			
1520-96-3	Perylene-d12	92200	15.415			
TENTATIVE IDENTIFIED COMPOUNDS						
000119-61-9	Benzophenone	260	J		10.5	ug/Kg
000613-12-7	Anthracene, 2-methyl-	220	J		11.8	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	300	J		11.9	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.3-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.5
Sample Wt/Vol:	30.08 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
BF141466.D	2	01/29/25 08:40	02/05/25 23:41	PB166335

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
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() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: Q1206

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB166335BL	PB166335BL	2-Fluorophenol	150	143	96		18	112
		Phenol-d6	150	140	93		15	107
		Nitrobenzene-d5	100	100.0	100		18	107
		2-Fluorobiphenyl	100	98.4	98		20	109
		2,4,6-Tribromophenol	150	158	105		10	116
		Terphenyl-d14	100	90.7	91		10	105
PB166335BS	PB166335BS	2-Fluorophenol	150	128	85		18	112
		Phenol-d6	150	128	85		15	107
		Nitrobenzene-d5	100	87.9	88		18	107
		2-Fluorobiphenyl	100	83.5	83		20	109
		2,4,6-Tribromophenol	150	133	89		10	116
		Terphenyl-d14	100	88.2	88		10	105
Q1206-03	JPP-20.1-012725	2-Fluorophenol	150	70.2	47		18	112
		Phenol-d6	150	68.9	46		15	107
		Nitrobenzene-d5	100	52.0	52		18	107
		2-Fluorobiphenyl	100	49.9	50		20	109
		2,4,6-Tribromophenol	150	67.1	45		10	116
		Terphenyl-d14	100	35.5	36		10	105
Q1206-03DL	JPP-20.1-012725DL	2-Fluorophenol	150	67.9	45		18	112
		Phenol-d6	150	67.7	45		15	107
		Nitrobenzene-d5	100	50.4	50		18	107
		2-Fluorobiphenyl	100	47.5	48		20	109
		2,4,6-Tribromophenol	150	58.3	39		10	116
		Terphenyl-d14	100	34.9	35		10	105
Q1206-07	JPP-16.3-012725	2-Fluorophenol	150	51.0	34		18	112
		Phenol-d6	150	46.4	31		15	107
		Nitrobenzene-d5	100	36.7	37		18	107
		2-Fluorobiphenyl	100	36.1	36		20	109
		2,4,6-Tribromophenol	150	51.1	34		10	116
		Terphenyl-d14	100	31.5	32		10	105
Q1209-05MS	WC-5MS	2-Fluorophenol	150	88.1	59		18	112
		Phenol-d6	150	88.4	59		15	107
		Nitrobenzene-d5	100	61.6	62		18	107
		2-Fluorobiphenyl	100	57.4	57		20	109
		2,4,6-Tribromophenol	150	93.3	62		10	116
		Terphenyl-d14	100	65.2	65		10	105
Q1209-05MSD	WC-5MSD	2-Fluorophenol	150	89.7	60		18	112
		Phenol-d6	150	90.9	61		15	107
		Nitrobenzene-d5	100	63.3	63		18	107
		2-Fluorobiphenyl	100	59.4	59		20	109
		2,4,6-Tribromophenol	150	97.4	65		10	116
		Terphenyl-d14	100	66.2	66		10	105

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1206

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: Q1209-05MS		**Client Sample ID: WC-5MS**						**DataFile: BF141315.D**			
Benzaldehyde	1100	0	1100	ug/Kg	100	*			10	86	
Phenol	1100	0	880	ug/Kg	80				67	126	
bis(2-Chloroethyl)ether	1100	0	870	ug/Kg	79				54	125	
2-Chlorophenol	1100	0	890	ug/Kg	81				79	107	
2-Methylphenol	1100	0	890	ug/Kg	81				66	122	
2,2-oxybis(1-Chloropropane)	1100	0	910	ug/Kg	83				65	110	
Acetophenone	1100	0	930	ug/Kg	85				75	111	
3+4-Methylphenols	1100	0	840	ug/Kg	76				66	104	
N-Nitroso-di-n-propylamine	1100	0	850	ug/Kg	77				59	119	
Hexachloroethane	1100	0	840	ug/Kg	76				65	117	
Nitrobenzene	1100	0	830	ug/Kg	75				70	119	
Isophorone	1100	0	890	ug/Kg	81				76	122	
2-Nitrophenol	1100	0	890	ug/Kg	81				54	145	
2,4-Dimethylphenol	1100	0	1100	ug/Kg	100				44	135	
bis(2-Chloroethoxy)methane	1100	0	870	ug/Kg	79				68	112	
2,4-Dichlorophenol	1100	0	870	ug/Kg	79				72	118	
Naphthalene	1100	0	830	ug/Kg	75				72	110	
4-Chloroaniline	1100	0	340	ug/Kg	31				10	91	
Hexachlorobutadiene	1100	0	820	ug/Kg	75				66	114	
Caprolactam	1100	0	970	ug/Kg	88				51	134	
4-Chloro-3-methylphenol	1100	0	890	ug/Kg	81				57	132	
2-Methylnaphthalene	1100	0	820	ug/Kg	75				59	123	
Hexachlorocyclopentadiene	2300	0	3300	ug/Kg	143				10	175	
2,4,6-Trichlorophenol	1100	0	910	ug/Kg	83				72	117	
2,4,5-Trichlorophenol	1100	0	810	ug/Kg	74				72	117	
1,1-Biphenyl	1100	0	920	ug/Kg	84				75	113	
2-Chloronaphthalene	1100	0	820	ug/Kg	75				67	118	
2-Nitroaniline	1100	0	880	ug/Kg	80				69	127	
Dimethylphthalate	1100	0	860	ug/Kg	78				70	113	
Acenaphthylene	1100	0	910	ug/Kg	83				79	118	
2,6-Dinitrotoluene	1100	0	820	ug/Kg	75				70	125	
3-Nitroaniline	1100	0	400	ug/Kg	36				30	99	
Acenaphthene	1100	0	940	ug/Kg	85				70	121	
2,4-Dinitrophenol	2300	0	2100	ug/Kg	91				10	155	
4-Nitrophenol	2300	0	2000	ug/Kg	87				45	133	
Dibenzofuran	1100	0	840	ug/Kg	76				72	110	
2,4-Dinitrotoluene	1100	0	860	ug/Kg	78				55	128	
Diethylphthalate	1100	0	850	ug/Kg	77				70	112	
4-Chlorophenyl-phenylether	1100	0	820	ug/Kg	75				71	108	
Fluorene	1100	0	830	ug/Kg	75				68	116	
4-Nitroaniline	1100	0	880	ug/Kg	80				55	120	
4,6-Dinitro-2-methylphenol	1100	0	1000	ug/Kg	91				10	160	
N-Nitrosodiphenylamine	1100	0	900	ug/Kg	82				73	118	
4-Bromophenyl-phenylether	1100	0	880	ug/Kg	80				65	121	
Hexachlorobenzene	1100	0	870	ug/Kg	79				67	118	
Atrazine	1100	0	980	ug/Kg	89				79	127	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1206

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	2300	0	1900	ug/Kg	83				47	128	
Phenanthrene	1100	0	890	ug/Kg	81				52	128	
Anthracene	1100	0	920	ug/Kg	84				62	124	
Carbazole	1100	0	910	ug/Kg	83				59	119	
Di-n-butylphthalate	1100	0	910	ug/Kg	83				69	118	
Fluoranthene	1100	0	870	ug/Kg	79				44	125	
Pyrene	1100	0	880	ug/Kg	80				26	142	
Butylbenzylphthalate	1100	0	1000	ug/Kg	91				64	126	
3,3-Dichlorobenzidine	1100	0	660	ug/Kg	60				33	116	
Benzo(a)anthracene	1100	0	830	ug/Kg	75				71	114	
Chrysene	1100	0	880	ug/Kg	80				57	121	
bis(2-Ethylhexyl)phthalate	1100	0	960	ug/Kg	87				42	169	
Di-n-octyl phthalate	1100	0	910	ug/Kg	83				23	175	
Benzo(b)fluoranthene	1100	0	860	ug/Kg	78				67	121	
Benzo(k)fluoranthene	1100	0	870	ug/Kg	79				57	134	
Benzo(a)pyrene	1100	0	950	ug/Kg	86				70	142	
Indeno(1,2,3-cd)pyrene	1100	0	1000	ug/Kg	91				40	129	
Dibenz(a,h)anthracene	1100	0	1000	ug/Kg	91				43	123	
Benzo(g,h,i)perylene	1100	0	940	ug/Kg	85				24	125	
1,2,4,5-Tetrachlorobenzene	1100	0	910	ug/Kg	83				69	124	
1,4-Dioxane	1100	0	870	ug/Kg	79				46	112	
2,3,4,6-Tetrachlorophenol	1100	0	910	ug/Kg	83				69	112	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1206

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: Q1209-05MSD		**Client Sample ID: WC-5MSD**						**DataFile: BF141316.D**			
Benzaldehyde	1100	0	1200	ug/Kg	109	*	9		10	86	20
Phenol	1100	0	900	ug/Kg	82		2		67	126	20
bis(2-Chloroethyl)ether	1100	0	880	ug/Kg	80		1		54	125	20
2-Chlorophenol	1100	0	920	ug/Kg	84		4		79	107	20
2-Methylphenol	1100	0	900	ug/Kg	82		1		66	122	20
2,2-oxybis(1-Chloropropane)	1100	0	930	ug/Kg	85		2		65	110	20
Acetophenone	1100	0	960	ug/Kg	87		2		75	111	20
3+4-Methylphenols	1100	0	850	ug/Kg	77		1		66	104	20
N-Nitroso-di-n-propylamine	1100	0	880	ug/Kg	80		4		59	119	20
Hexachloroethane	1100	0	870	ug/Kg	79		4		65	117	20
Nitrobenzene	1100	0	840	ug/Kg	76		1		70	119	20
Isophorone	1100	0	910	ug/Kg	83		2		76	122	20
2-Nitrophenol	1100	0	920	ug/Kg	84		4		54	145	20
2,4-Dimethylphenol	1100	0	1100	ug/Kg	100		0		44	135	20
bis(2-Chloroethoxy)methane	1100	0	890	ug/Kg	81		3		68	112	20
2,4-Dichlorophenol	1100	0	890	ug/Kg	81		3		72	118	20
Naphthalene	1100	0	840	ug/Kg	76		1		72	110	20
4-Chloroaniline	1100	0	320	ug/Kg	29		7		10	91	20
Hexachlorobutadiene	1100	0	830	ug/Kg	75		0		66	114	20
Caprolactam	1100	0	970	ug/Kg	88		0		51	134	20
4-Chloro-3-methylphenol	1100	0	900	ug/Kg	82		1		57	132	20
2-Methylnaphthalene	1100	0	840	ug/Kg	76		1		59	123	20
Hexachlorocyclopentadiene	2300	0	3500	ug/Kg	152		6		10	175	20
2,4,6-Trichlorophenol	1100	0	960	ug/Kg	87		5		72	117	20
2,4,5-Trichlorophenol	1100	0	850	ug/Kg	77		4		72	117	20
1,1-Biphenyl	1100	0	960	ug/Kg	87		4		75	113	20
2-Chloronaphthalene	1100	0	850	ug/Kg	77		3		67	118	20
2-Nitroaniline	1100	0	940	ug/Kg	85		6		69	127	20
Dimethylphthalate	1100	0	890	ug/Kg	81		4		70	113	20
Acenaphthylene	1100	0	940	ug/Kg	85		2		79	118	20
2,6-Dinitrotoluene	1100	0	860	ug/Kg	78		4		70	125	20
3-Nitroaniline	1100	0	410	ug/Kg	37		3		30	99	20
Acenaphthene	1100	0	980	ug/Kg	89		5		70	121	20
2,4-Dinitrophenol	2300	0	2200	ug/Kg	96		5		10	155	20
4-Nitrophenol	2300	0	2100	ug/Kg	91		4		45	133	20
Dibenzofuran	1100	0	870	ug/Kg	79		4		72	110	20
2,4-Dinitrotoluene	1100	0	890	ug/Kg	81		4		55	128	20
Diethylphthalate	1100	0	880	ug/Kg	80		4		70	112	20
4-Chlorophenyl-phenylether	1100	0	850	ug/Kg	77		3		71	108	20
Fluorene	1100	0	860	ug/Kg	78		4		68	116	20
4-Nitroaniline	1100	0	910	ug/Kg	83		4		55	120	20
4,6-Dinitro-2-methylphenol	1100	0	1100	ug/Kg	100		9		10	160	20
N-Nitrosodiphenylamine	1100	0	920	ug/Kg	84		2		73	118	20
4-Bromophenyl-phenylether	1100	0	910	ug/Kg	83		4		65	121	20
Hexachlorobenzene	1100	0	880	ug/Kg	80		1		67	118	20
Atrazine	1100	0	1000	ug/Kg	91		2		79	127	20

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1206

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	2300	0	1900	ug/Kg	83	0			47	128	20
Phenanthrene	1100	0	910	ug/Kg	83	2			52	128	20
Anthracene	1100	0	940	ug/Kg	85	1			62	124	20
Carbazole	1100	0	930	ug/Kg	85	2			59	119	20
Di-n-butylphthalate	1100	0	930	ug/Kg	85	2			69	118	20
Fluoranthene	1100	0	910	ug/Kg	83	5			44	125	20
Pyrene	1100	0	900	ug/Kg	82	2			26	142	20
Butylbenzylphthalate	1100	0	1000	ug/Kg	91	0			64	126	20
3,3-Dichlorobenzidine	1100	0	700	ug/Kg	64	6			33	116	20
Benzo(a)anthracene	1100	0	890	ug/Kg	81	8			71	114	20
Chrysene	1100	0	890	ug/Kg	81	1			57	121	20
bis(2-Ethylhexyl)phthalate	1100	0	1000	ug/Kg	91	4			42	169	20
Di-n-octyl phthalate	1100	0	950	ug/Kg	86	4			23	175	20
Benzo(b)fluoranthene	1100	0	950	ug/Kg	86	10			67	121	20
Benzo(k)fluoranthene	1100	0	850	ug/Kg	77	3			57	134	20
Benzo(a)pyrene	1100	0	980	ug/Kg	89	3			70	142	20
Indeno(1,2,3-cd)pyrene	1100	0	1000	ug/Kg	91	0			40	129	20
Dibenz(a,h)anthracene	1100	0	1000	ug/Kg	91	0			43	123	20
Benzo(g,h,i)perylene	1100	0	960	ug/Kg	87	2			24	125	20
1,2,4,5-Tetrachlorobenzene	1100	0	950	ug/Kg	86	4			69	124	20
1,4-Dioxane	1100	0	870	ug/Kg	79	0			46	112	20
2,3,4,6-Tetrachlorophenol	1100	0	950	ug/Kg	86	4			69	112	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1206

Client: RU2 Engineering, LLC

Analytical Method: 8270E **DataFile:** BF141303.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB166335BS	Benzaldehyde	1700	220	ug/Kg	13				10	133	
	Phenol	1700	1500	ug/Kg	88				62	112	
	bis(2-Chloroethyl)ether	1700	1600	ug/Kg	94				60	101	
	2-Chlorophenol	1700	1600	ug/Kg	94				65	112	
	2-Methylphenol	1700	1600	ug/Kg	94				61	108	
	2,2-oxybis(1-Chloropropane)	1700	1600	ug/Kg	94				51	100	
	Acetophenone	1700	1500	ug/Kg	88				66	98	
	3+4-Methylphenols	1700	1500	ug/Kg	88				58	111	
	N-Nitroso-di-n-propylamine	1700	1500	ug/Kg	88				63	95	
	Hexachloroethane	1700	1500	ug/Kg	88				72	108	
	Nitrobenzene	1700	1400	ug/Kg	82				57	101	
	Isophorone	1700	1600	ug/Kg	94				59	99	
	2-Nitrophenol	1700	1500	ug/Kg	88				61	111	
	2,4-Dimethylphenol	1700	1900	ug/Kg	112				46	141	
	bis(2-Chloroethoxy)methane	1700	1500	ug/Kg	88				66	97	
	2,4-Dichlorophenol	1700	1500	ug/Kg	88				62	107	
	Naphthalene	1700	1500	ug/Kg	88				62	100	
	4-Chloroaniline	1700	790	ug/Kg	46				16	100	
	Hexachlorobutadiene	1700	1400	ug/Kg	82				53	98	
	Caprolactam	1700	1600	ug/Kg	94				67	110	
	4-Chloro-3-methylphenol	1700	1600	ug/Kg	94				58	112	
	2-Methylnaphthalene	1700	1500	ug/Kg	88				60	104	
	Hexachlorocyclopentadiene	3300	5800	ug/Kg	176		*		45	165	
	2,4,6-Trichlorophenol	1700	1500	ug/Kg	88				59	102	
	2,4,5-Trichlorophenol	1700	1500	ug/Kg	88				61	98	
	1,1-Biphenyl	1700	1500	ug/Kg	88				57	103	
	2-Chloronaphthalene	1700	1400	ug/Kg	82				58	99	
	2-Nitroaniline	1700	1600	ug/Kg	94				66	101	
	Dimethylphthalate	1700	1500	ug/Kg	88				61	99	
	Acenaphthylene	1700	1600	ug/Kg	94				63	101	
	2,6-Dinitrotoluene	1700	1500	ug/Kg	88				61	104	
	3-Nitroaniline	1700	970	ug/Kg	57				28	100	
	Acenaphthene	1700	1600	ug/Kg	94				57	104	
	2,4-Dinitrophenol	3300	3400	ug/Kg	103				37	128	
	4-Nitrophenol	3300	3300	ug/Kg	100				48	119	
	Dibenzofuran	1700	1500	ug/Kg	88				63	99	
	2,4-Dinitrotoluene	1700	1500	ug/Kg	88				60	106	
	Diethylphthalate	1700	1500	ug/Kg	88				60	101	
	4-Chlorophenyl-phenylether	1700	1400	ug/Kg	82				58	98	
	Fluorene	1700	1400	ug/Kg	82				61	101	
	4-Nitroaniline	1700	1600	ug/Kg	94				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	1500	ug/Kg	88				66	102	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1206

Client: RU2 Engineering, LLC

Analytical Method: 8270E **DataFile:** BF141303.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB166335BS	Hexachlorobenzene	1700	1500	ug/Kg	88				64	98	
	Atrazine	1700	1600	ug/Kg	94				47	152	
	Pentachlorophenol	3300	3100	ug/Kg	94				67	105	
	Phenanthrene	1700	1600	ug/Kg	94				59	103	
	Anthracene	1700	1600	ug/Kg	94				61	105	
	Carbazole	1700	1600	ug/Kg	94				61	99	
	Di-n-butylphthalate	1700	1600	ug/Kg	94				58	104	
	Fluoranthene	1700	1600	ug/Kg	94				57	107	
	Pyrene	1700	1500	ug/Kg	88				59	103	
	Butylbenzylphthalate	1700	1600	ug/Kg	94				55	103	
	3,3-Dichlorobenzidine	1700	840	ug/Kg	49				42	91	
	Benzo(a)anthracene	1700	1500	ug/Kg	88				60	102	
	Chrysene	1700	1500	ug/Kg	88				59	101	
	bis(2-Ethylhexyl)phthalate	1700	1600	ug/Kg	94				54	135	
	Di-n-octyl phthalate	1700	1600	ug/Kg	94				52	137	
	Benzo(b)fluoranthene	1700	1600	ug/Kg	94				62	109	
	Benzo(k)fluoranthene	1700	1700	ug/Kg	100				62	109	
	Benzo(a)pyrene	1700	1700	ug/Kg	100				63	103	
	Indeno(1,2,3-cd)pyrene	1700	1600	ug/Kg	94				63	101	
	Dibenz(a,h)anthracene	1700	1600	ug/Kg	94				61	112	
	Benzo(g,h,i)perylene	1700	1500	ug/Kg	88				70	108	
	1,2,4,5-Tetrachlorobenzene	1700	1400	ug/Kg	82				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.

PB166335BL

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

Lab File ID: BF141374.D Lab Sample ID: PB166335BL

Instrument ID: BNA_F Date Extracted: 01/29/2025

Matrix: (soil/water) SOIL Date Analyzed: 02/03/2025

Level: (low/med) LOW Time Analyzed: 17:41

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
JPP-20.1-012725	Q1206-03	BF141461.D	02/05/2025
JPP-16.3-012725	Q1206-07	BF141466.D	02/05/2025
PB166335BS	PB166335BS	BF141303.D	01/30/2025
WC-5MS	Q1209-05MS	BF141315.D	01/30/2025
WC-5MSD	Q1209-05MSD	BF141316.D	01/30/2025

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1206 SDG NO.: Q1206

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.: Q1206 SDG NO.: Q1206

Lab File ID: BF141300.D DFTPP Injection Date: 01/30/2025

Instrument ID: BNA_F DFTPP Injection Time: 08:28

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	45
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	37.4
70	Less than 2.0% of mass 69	0.2 (0.6) 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	25.8
365	Greater than 1% of mass 198	3
441	Present, but less than mass 443	11.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.4 (19.8) 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	BF141301.D	01/30/2025	08:54
PB166335BS	PB166335BS	BF141303.D	01/30/2025	09:57
WC-5MS	Q1209-05MS	BF141315.D	01/30/2025	16:03
WC-5MSD	Q1209-05MSD	BF141316.D	01/30/2025	16:30

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1206 SDG NO.: Q1206

Lab File ID: BF141372.D DFTPP Injection Date: 02/03/2025

Instrument ID: BNA_F DFTPP Injection Time: 16:43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	44.1
68	Less than 2.0% of mass 69	0.8 (2) 1
69	Mass 69 relative abundance	37.8
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	50.3
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	6.9
275	10.0 - 60.0% of mass 198	26.7
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	12.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.7 (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	BF141373.D	02/03/2025	17:14
PB166335BL	PB166335BL	BF141374.D	02/03/2025	17:41

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1206 SDG NO.: Q1206

Lab File ID: BF141446.D DFTPP Injection Date: 02/05/2025

Instrument ID: BNA_F DFTPP Injection Time: 14:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	40.8
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	36.3
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	47.7
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	6.3
275	10.0 - 60.0% of mass 198	26.9
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	12.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.9 (18.2) 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	BF141447.D	02/05/2025	15:16
JPP-20.1-012725	Q1206-03	BF141461.D	02/05/2025	21:31
JPP-16.3-012725	Q1206-07	BF141466.D	02/05/2025	23:41

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1206 SDG NO.: Q1206

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.: Q1206 SDG NO.: Q1206

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-20.1-012725DL	Q1206-03DL	BF141567.D	02/11/2025	17:35

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

EPA Sample No.: SSTDCCC040 Date Analyzed: 01/30/2025

Lab File ID: BF141301.D Time Analyzed: 08:54

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	146467	6.798	575983	8.08	308835	9.84
	UPPER LIMIT	292934	7.298	1151970	8.581	617670	10.339
	LOWER LIMIT	73233.5	6.298	287992	7.581	154418	9.339
	EPA SAMPLE NO.						
01	PB166335BS	142147	6.80	577653	8.08	314839	9.84
02	WC-5MS	167075	6.80	669898	8.08	361408	9.84
03	WC-5MSD	167424	6.80	670473	8.08	356498	9.84

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.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

EPA Sample No.: SSTDCCC040 Date Analyzed: 01/30/2025

Lab File ID: BF141301.D Time Analyzed: 08:54

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	511005	11.322	290304	13.969	298783	15.421
	UPPER LIMIT	1022010	11.822	580608	14.469	597566	15.921
	LOWER LIMIT	255503	10.822	145152	13.469	149392	14.921
	EPA SAMPLE NO.						
01	PB166335BS	527268	11.33	325031	13.97	295368	15.45
02	WC-5MS	589870	11.33	319317	13.97	315915	15.45
03	WC-5MSD	588680	11.33	325949	13.97	310604	15.46

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.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/03/2025

Lab File ID: BF141373.D Time Analyzed: 17:14

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	104167	6.798	414412	8.08	226326	9.83
	UPPER LIMIT	208334	7.298	828824	8.581	452652	10.333
	LOWER LIMIT	52083.5	6.298	207206	7.581	113163	9.333
	EPA SAMPLE NO.						
01	PB166335BL	90939	6.79	365110	8.08	206122	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.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/03/2025

Lab File ID: BF141373.D Time Analyzed: 17:14

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	383558	11.322	233911	13.963	231577	15.415
	UPPER LIMIT	767116	11.822	467822	14.463	463154	15.915
	LOWER LIMIT	191779	10.822	116956	13.463	115789	14.915
	EPA SAMPLE NO.						
01	PB166335BL	372851	11.32	290144	13.96	250729	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.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/05/2025

Lab File ID: BF141447.D Time Analyzed: 15:16

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	82418	6.792	312528	8.08	169230	9.83
	UPPER LIMIT	164836	7.292	625056	8.575	338460	10.328
	LOWER LIMIT	41209	6.292	156264	7.575	84615	9.328
	EPA SAMPLE NO.						
01	JPP-20.1-012725	73862	6.79	280125	8.07	130310	9.83
02	JPP-16.3-012725	60479	6.79	215731	8.08	104225	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.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

EPA Sample No.: SSTDCCC040 Date Analyzed: 02/05/2025

Lab File ID: BF141447.D Time Analyzed: 15:16

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	293274	11.316	189132	13.963	170936	15.421
	UPPER LIMIT	586548	11.816	378264	14.463	341872	15.921
	LOWER LIMIT	146637	10.816	94566	13.463	85468	14.921
	EPA SAMPLE NO.						
01	JPP-20.1-012725	189517	11.32	150837	13.96	120024	15.42
02	JPP-16.3-012725	180536	11.32	126264	13.96	92226	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.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

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-20.1-012725DL	83557	6.79	319161	8.07	160811	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.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

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-20.1-012725DL	232903	11.30	199404	13.95	227355	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.

QC SAMPLE DATA

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166335BL	SDG No.:	Q1206
Lab Sample ID:	PB166335BL	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
BF141374.D	1	01/29/25 08:40	02/03/25 17:41	PB166335

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

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166335BL	SDG No.:	Q1206
Lab Sample ID:	PB166335BL	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
BF141374.D	1	01/29/25 08:40	02/03/25 17:41	PB166335

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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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166335BL	SDG No.:	Q1206
Lab Sample ID:	PB166335BL	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
BF141374.D	1	01/29/25 08:40	02/03/25 17:41	PB166335

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	143		18 - 112	96%	SPK: 150
13127-88-3	Phenol-d6	140		15 - 107	93%	SPK: 150
4165-60-0	Nitrobenzene-d5	100.0		18 - 107	100%	SPK: 100
321-60-8	2-Fluorobiphenyl	98.4		20 - 109	98%	SPK: 100
118-79-6	2,4,6-Tribromophenol	158		10 - 116	105%	SPK: 150
1718-51-0	Terphenyl-d14	90.7		10 - 105	91%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	90900	6.792			
1146-65-2	Naphthalene-d8	365000	8.075			
15067-26-2	Acenaphthene-d10	206000	9.827			
1517-22-2	Phenanthrene-d10	373000	11.316			
1719-03-5	Chrysene-d12	290000	13.957			
1520-96-3	Perylene-d12	251000	15.404			
TENTATIVE IDENTIFIED COMPOUNDS						
004744-10-9	Propane, 1,1-dimethoxy-	150	J		2.18	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	70.6	A		5.02	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:	PB166335BL	SDG No.:	Q1206
Lab Sample ID:	PB166335BL	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
BF141374.D	1	01/29/25 08:40	02/03/25 17:41	PB166335

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

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166335BS	SDG No.:	Q1206
Lab Sample ID:	PB166335BS	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
BF141303.D	1	01/29/25 08:40	01/30/25 09:57	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	220	J	180	330	ug/Kg
108-95-2	Phenol	1500		82.9	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1600		83.7	170	ug/Kg
95-57-8	2-Chlorophenol	1600		83.5	170	ug/Kg
95-48-7	2-Methylphenol	1600		80.6	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1600		90.9	170	ug/Kg
98-86-2	Acetophenone	1500		86.9	170	ug/Kg
65794-96-9	3+4-Methylphenols	1500		79.8	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1500		40.3	80.0	ug/Kg
67-72-1	Hexachloroethane	1500		83.0	170	ug/Kg
98-95-3	Nitrobenzene	1400		90.8	170	ug/Kg
78-59-1	Isophorone	1600		84.6	170	ug/Kg
88-75-5	2-Nitrophenol	1500		94.5	170	ug/Kg
105-67-9	2,4-Dimethylphenol	1900		93.2	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1500		85.8	170	ug/Kg
120-83-2	2,4-Dichlorophenol	1500		75.5	170	ug/Kg
91-20-3	Naphthalene	1500		82.6	170	ug/Kg
106-47-8	4-Chloroaniline	790		82.6	170	ug/Kg
87-68-3	Hexachlorobutadiene	1400		83.3	170	ug/Kg
105-60-2	Caprolactam	1600		86.8	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1600		77.5	170	ug/Kg
91-57-6	2-Methylnaphthalene	1500		82.5	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	5800	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	1500		74.0	170	ug/Kg
92-52-4	1,1-Biphenyl	1500		87.4	170	ug/Kg
91-58-7	2-Chloronaphthalene	1400		83.3	170	ug/Kg
88-74-4	2-Nitroaniline	1600		95.0	170	ug/Kg
131-11-3	Dimethylphthalate	1500		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:	PB166335BS	SDG No.:	Q1206
Lab Sample ID:	PB166335BS	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
BF141303.D	1	01/29/25 08:40	01/30/25 09:57	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1600		86.5	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	1500		83.2	170	ug/Kg
99-09-2	3-Nitroaniline	970		89.2	170	ug/Kg
83-32-9	Acenaphthene	1600		81.1	170	ug/Kg
51-28-5	2,4-Dinitrophenol	3400	E	240	330	ug/Kg
100-02-7	4-Nitrophenol	3300	E	120	330	ug/Kg
132-64-9	Dibenzofuran	1500		84.4	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	1500		86.2	170	ug/Kg
84-66-2	Diethylphthalate	1500		80.1	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1400		85.6	170	ug/Kg
86-73-7	Fluorene	1400		85.5	170	ug/Kg
100-01-6	4-Nitroaniline	1600		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	1500		78.9	170	ug/Kg
118-74-1	Hexachlorobenzene	1500		85.0	170	ug/Kg
1912-24-9	Atrazine	1600		91.4	170	ug/Kg
87-86-5	Pentachlorophenol	3100	E	77.3	330	ug/Kg
85-01-8	Phenanthrene	1600		84.0	170	ug/Kg
120-12-7	Anthracene	1600		84.4	170	ug/Kg
86-74-8	Carbazole	1600		80.3	170	ug/Kg
84-74-2	Di-n-butylphthalate	1600		84.3	170	ug/Kg
206-44-0	Fluoranthene	1600		81.7	170	ug/Kg
129-00-0	Pyrene	1500		83.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	1600		96.8	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	840		98.6	330	ug/Kg
56-55-3	Benzo(a)anthracene	1500		80.7	170	ug/Kg
218-01-9	Chrysene	1500		79.5	170	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1600		91.0	170	ug/Kg
117-84-0	Di-n-octyl phthalate	1600		110	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	1600		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:	PB166335BS	SDG No.:	Q1206
Lab Sample ID:	PB166335BS	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
BF141303.D	1	01/29/25 08:40	01/30/25 09:57	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1700		82.6	170	ug/Kg
50-32-8	Benzo(a)pyrene	1700		93.0	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1600		78.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1600		81.2	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1500		80.1	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1400		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	128		18 - 112	85%	SPK: 150
13127-88-3	Phenol-d6	128		15 - 107	85%	SPK: 150
4165-60-0	Nitrobenzene-d5	87.9		18 - 107	88%	SPK: 100
321-60-8	2-Fluorobiphenyl	83.5		20 - 109	83%	SPK: 100
118-79-6	2,4,6-Tribromophenol	133		10 - 116	89%	SPK: 150
1718-51-0	Terphenyl-d14	88.2		10 - 105	88%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	142000	6.798			
1146-65-2	Naphthalene-d8	578000	8.081			
15067-26-2	Acenaphthene-d10	315000	9.839			
1517-22-2	Phenanthrene-d10	527000	11.328			
1719-03-5	Chrysene-d12	325000	13.974			
1520-96-3	Perylene-d12	295000	15.451			

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:	01/28/25
Client Sample ID:	WC-5MS	SDG No.:	Q1206
Lab Sample ID:	Q1209-05MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.4
Sample Wt/Vol:	50.07 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
BF141315.D	1	01/29/25 08:40	01/30/25 16:03	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1100		120	220	ug/Kg
108-95-2	Phenol	880		56.2	120	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	870		56.7	120	ug/Kg
95-57-8	2-Chlorophenol	890		56.6	120	ug/Kg
95-48-7	2-Methylphenol	890		54.6	120	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	910		61.6	120	ug/Kg
98-86-2	Acetophenone	930		58.9	120	ug/Kg
65794-96-9	3+4-Methylphenols	840		54.1	220	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	850		27.3	54.2	ug/Kg
67-72-1	Hexachloroethane	840		56.3	120	ug/Kg
98-95-3	Nitrobenzene	830		61.5	120	ug/Kg
78-59-1	Isophorone	890		57.3	120	ug/Kg
88-75-5	2-Nitrophenol	890		64.1	120	ug/Kg
105-67-9	2,4-Dimethylphenol	1100		63.2	120	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	870		58.2	120	ug/Kg
120-83-2	2,4-Dichlorophenol	870		51.2	120	ug/Kg
91-20-3	Naphthalene	830		56.0	120	ug/Kg
106-47-8	4-Chloroaniline	340		56.0	120	ug/Kg
87-68-3	Hexachlorobutadiene	820		56.5	120	ug/Kg
105-60-2	Caprolactam	970		58.8	220	ug/Kg
59-50-7	4-Chloro-3-methylphenol	890		52.5	120	ug/Kg
91-57-6	2-Methylnaphthalene	820		55.9	120	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3300	E	110	220	ug/Kg
88-06-2	2,4,6-Trichlorophenol	910		48.4	120	ug/Kg
95-95-4	2,4,5-Trichlorophenol	810		50.2	120	ug/Kg
92-52-4	1,1-Biphenyl	920		59.2	120	ug/Kg
91-58-7	2-Chloronaphthalene	820		56.5	120	ug/Kg
88-74-4	2-Nitroaniline	880		64.4	120	ug/Kg
131-11-3	Dimethylphthalate	860		55.4	120	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:	01/28/25
Client Sample ID:	WC-5MS	SDG No.:	Q1206
Lab Sample ID:	Q1209-05MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.4
Sample Wt/Vol:	50.07 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
BF141315.D	1	01/29/25 08:40	01/30/25 16:03	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	910		58.6	120	ug/Kg
606-20-2	2,6-Dinitrotoluene	820		56.4	120	ug/Kg
99-09-2	3-Nitroaniline	400		60.5	120	ug/Kg
83-32-9	Acenaphthene	940		55.0	120	ug/Kg
51-28-5	2,4-Dinitrophenol	2100	E	160	220	ug/Kg
100-02-7	4-Nitrophenol	2000	E	78.6	220	ug/Kg
132-64-9	Dibenzofuran	840		57.2	120	ug/Kg
121-14-2	2,4-Dinitrotoluene	860		58.4	120	ug/Kg
84-66-2	Diethylphthalate	850		54.3	120	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	820		58.0	120	ug/Kg
86-73-7	Fluorene	830		58.0	120	ug/Kg
100-01-6	4-Nitroaniline	880		72.5	120	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1000		79.3	220	ug/Kg
86-30-6	n-Nitrosodiphenylamine	900		55.3	120	ug/Kg
101-55-3	4-Bromophenyl-phenylether	880		53.5	120	ug/Kg
118-74-1	Hexachlorobenzene	870		57.6	120	ug/Kg
1912-24-9	Atrazine	980		61.9	120	ug/Kg
87-86-5	Pentachlorophenol	1900	E	52.4	220	ug/Kg
85-01-8	Phenanthrene	890		56.9	120	ug/Kg
120-12-7	Anthracene	920		57.2	120	ug/Kg
86-74-8	Carbazole	910		54.4	120	ug/Kg
84-74-2	Di-n-butylphthalate	910		57.1	120	ug/Kg
206-44-0	Fluoranthene	870		55.4	120	ug/Kg
129-00-0	Pyrene	880		56.3	120	ug/Kg
85-68-7	Butylbenzylphthalate	1000		65.6	120	ug/Kg
91-94-1	3,3-Dichlorobenzidine	660		66.8	220	ug/Kg
56-55-3	Benzo(a)anthracene	830		54.7	120	ug/Kg
218-01-9	Chrysene	880		53.9	120	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	960		61.7	120	ug/Kg
117-84-0	Di-n-octyl phthalate	910		74.6	220	ug/Kg
205-99-2	Benzo(b)fluoranthene	860		55.0	120	ug/Kg

Alliance TECHNICAL GROUP
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:	01/28/25
Client Sample ID:	WC-5MS	SDG No.:	Q1206
Lab Sample ID:	Q1209-05MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.4
Sample Wt/Vol:	50.07 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
BF141315.D	1	01/29/25 08:40	01/30/25 16:03	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	870		56.0	120	ug/Kg
50-32-8	Benzo(a)pyrene	950		63.0	120	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1000		52.9	120	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1000		55.0	120	ug/Kg
191-24-2	Benzo(g,h,i)perylene	940		54.3	120	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	910		58.8	120	ug/Kg
123-91-1	1,4-Dioxane	870		74.6	120	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	910		50.6	120	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	88.1		18 - 112	59%	SPK: 150
13127-88-3	Phenol-d6	88.4		15 - 107	59%	SPK: 150
4165-60-0	Nitrobenzene-d5	61.6		18 - 107	62%	SPK: 100
321-60-8	2-Fluorobiphenyl	57.4		20 - 109	57%	SPK: 100
118-79-6	2,4,6-Tribromophenol	93.3		10 - 116	62%	SPK: 150
1718-51-0	Terphenyl-d14	65.2		10 - 105	65%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	167000	6.798			
1146-65-2	Naphthalene-d8	670000	8.081			
15067-26-2	Acenaphthene-d10	361000	9.839			
1517-22-2	Phenanthrene-d10	590000	11.328			
1719-03-5	Chrysene-d12	319000	13.974			
1520-96-3	Perylene-d12	316000	15.445			

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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Fax : 908 789 8922

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	WC-5MSD	SDG No.:	Q1206
Lab Sample ID:	Q1209-05MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.4
Sample Wt/Vol:	50.06 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
BF141316.D	1	01/29/25 08:40	01/30/25 16:30	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1200		120	220	ug/Kg
108-95-2	Phenol	900		56.2	120	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	880		56.7	120	ug/Kg
95-57-8	2-Chlorophenol	920		56.6	120	ug/Kg
95-48-7	2-Methylphenol	900		54.6	120	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	930		61.6	120	ug/Kg
98-86-2	Acetophenone	960		58.9	120	ug/Kg
65794-96-9	3+4-Methylphenols	850		54.1	220	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	880		27.3	54.2	ug/Kg
67-72-1	Hexachloroethane	870		56.3	120	ug/Kg
98-95-3	Nitrobenzene	840		61.6	120	ug/Kg
78-59-1	Isophorone	910		57.4	120	ug/Kg
88-75-5	2-Nitrophenol	920		64.1	120	ug/Kg
105-67-9	2,4-Dimethylphenol	1100		63.2	120	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	890		58.2	120	ug/Kg
120-83-2	2,4-Dichlorophenol	890		51.2	120	ug/Kg
91-20-3	Naphthalene	840		56.0	120	ug/Kg
106-47-8	4-Chloroaniline	320		56.0	120	ug/Kg
87-68-3	Hexachlorobutadiene	830		56.5	120	ug/Kg
105-60-2	Caprolactam	970		58.8	220	ug/Kg
59-50-7	4-Chloro-3-methylphenol	900		52.5	120	ug/Kg
91-57-6	2-Methylnaphthalene	840		55.9	120	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3500	E	110	220	ug/Kg
88-06-2	2,4,6-Trichlorophenol	960		48.4	120	ug/Kg
95-95-4	2,4,5-Trichlorophenol	850		50.2	120	ug/Kg
92-52-4	1,1-Biphenyl	960		59.3	120	ug/Kg
91-58-7	2-Chloronaphthalene	850		56.5	120	ug/Kg
88-74-4	2-Nitroaniline	940		64.4	120	ug/Kg
131-11-3	Dimethylphthalate	890		55.4	120	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:	01/28/25
Client Sample ID:	WC-5MSD	SDG No.:	Q1206
Lab Sample ID:	Q1209-05MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.4
Sample Wt/Vol:	50.06 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
BF141316.D	1	01/29/25 08:40	01/30/25 16:30	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	940		58.6	120	ug/Kg
606-20-2	2,6-Dinitrotoluene	860		56.4	120	ug/Kg
99-09-2	3-Nitroaniline	410		60.5	120	ug/Kg
83-32-9	Acenaphthene	980		55.0	120	ug/Kg
51-28-5	2,4-Dinitrophenol	2200	E	160	220	ug/Kg
100-02-7	4-Nitrophenol	2100	E	78.6	220	ug/Kg
132-64-9	Dibenzofuran	870		57.2	120	ug/Kg
121-14-2	2,4-Dinitrotoluene	890		58.4	120	ug/Kg
84-66-2	Diethylphthalate	880		54.3	120	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	850		58.0	120	ug/Kg
86-73-7	Fluorene	860		58.0	120	ug/Kg
100-01-6	4-Nitroaniline	910		72.5	120	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1100		79.3	220	ug/Kg
86-30-6	n-Nitrosodiphenylamine	920		55.3	120	ug/Kg
101-55-3	4-Bromophenyl-phenylether	910		53.5	120	ug/Kg
118-74-1	Hexachlorobenzene	880		57.6	120	ug/Kg
1912-24-9	Atrazine	1000		62.0	120	ug/Kg
87-86-5	Pentachlorophenol	1900	E	52.4	220	ug/Kg
85-01-8	Phenanthrene	910		56.9	120	ug/Kg
120-12-7	Anthracene	940		57.2	120	ug/Kg
86-74-8	Carbazole	930		54.4	120	ug/Kg
84-74-2	Di-n-butylphthalate	930		57.1	120	ug/Kg
206-44-0	Fluoranthene	910		55.4	120	ug/Kg
129-00-0	Pyrene	900		56.3	120	ug/Kg
85-68-7	Butylbenzylphthalate	1000		65.6	120	ug/Kg
91-94-1	3,3-Dichlorobenzidine	700		66.8	220	ug/Kg
56-55-3	Benzo(a)anthracene	890		54.7	120	ug/Kg
218-01-9	Chrysene	890		53.9	120	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1000		61.7	120	ug/Kg
117-84-0	Di-n-octyl phthalate	950		74.6	220	ug/Kg
205-99-2	Benzo(b)fluoranthene	950		55.0	120	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:	01/28/25
Client Sample ID:	WC-5MSD	SDG No.:	Q1206
Lab Sample ID:	Q1209-05MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.4
Sample Wt/Vol:	50.06 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
BF141316.D	1	01/29/25 08:40	01/30/25 16:30	PB166335

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	850		56.0	120	ug/Kg
50-32-8	Benzo(a)pyrene	980		63.0	120	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1000		52.9	120	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1000		55.0	120	ug/Kg
191-24-2	Benzo(g,h,i)perylene	960		54.3	120	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	950		58.8	120	ug/Kg
123-91-1	1,4-Dioxane	870		74.6	120	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	950		50.6	120	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	89.7		18 - 112	60%	SPK: 150
13127-88-3	Phenol-d6	90.9		15 - 107	61%	SPK: 150
4165-60-0	Nitrobenzene-d5	63.3		18 - 107	63%	SPK: 100
321-60-8	2-Fluorobiphenyl	59.4		20 - 109	59%	SPK: 100
118-79-6	2,4,6-Tribromophenol	97.4		10 - 116	65%	SPK: 150
1718-51-0	Terphenyl-d14	66.2		10 - 105	66%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	167000	6.798			
1146-65-2	Naphthalene-d8	670000	8.081			
15067-26-2	Acenaphthene-d10	356000	9.839			
1517-22-2	Phenanthrene-d10	589000	11.328			
1719-03-5	Chrysene-d12	326000	13.974			
1520-96-3	Perylene-d12	311000	15.457			

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

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

Instrument ID: BNA_F Calibration Date/Time: 01/30/2025 08:54

Lab File ID: BF141301.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	1.194		-8.4	
Benzaldehyde	0.960	0.852		-11.3	
Phenol-d6	1.657	1.545		-6.8	
Phenol	1.757	1.657		-5.7	20.0
bis(2-Chloroethyl)ether	1.347	1.242		-7.8	
2-Chlorophenol	1.396	1.317		-5.7	
2-Methylphenol	1.135	1.057		-6.9	
2,2-oxybis(1-Chloropropane)	2.342	2.216		-5.4	
Acetophenone	0.475	0.435		-8.4	
3+4-Methylphenols	1.393	1.298		-6.8	
n-Nitroso-di-n-propylamine	0.985	0.911	0.050	-7.5	
Nitrobenzene-d5	0.379	0.356		-6.1	
Hexachloroethane	0.571	0.533		-6.7	
Nitrobenzene	0.393	0.370		-5.9	
Isophorone	0.656	0.621		-5.3	
2-Nitrophenol	0.185	0.177		-4.3	20.0
2,4-Dimethylphenol	0.236	0.227		-3.8	
bis(2-Chloroethoxy)methane	0.418	0.394		-5.7	
2,4-Dichlorophenol	0.289	0.273		-5.5	20.0
Naphthalene	1.057	0.980		-7.3	
4-Chloroaniline	0.358	0.341		-4.7	
Hexachlorobutadiene	0.194	0.181		-6.7	20.0
Caprolactam	0.094	0.091		-3.2	
4-Chloro-3-methylphenol	0.310	0.295		-4.8	20.0
2-Methylnaphthalene	0.672	0.622		-7.4	
Hexachlorocyclopentadiene	0.168	0.172	0.050	2.4	
2,4,6-Trichlorophenol	0.372	0.361		-3.0	20.0
2-Fluorobiphenyl	1.299	1.166		-10.2	
2,4,5-Trichlorophenol	0.405	0.374		-7.7	
1,1-Biphenyl	1.560	1.444		-7.4	
2-Chloronaphthalene	1.216	1.115		-8.3	
2-Nitroaniline	0.382	0.364		-4.7	
Dimethylphthalate	1.351	1.260		-6.7	
Acenaphthylene	1.702	1.594		-6.3	
2,6-Dinitrotoluene	0.314	0.293		-6.7	
3-Nitroaniline	0.307	0.296		-3.6	
Acenaphthene	1.216	1.130		-7.1	20.0
2,4-Dinitrophenol	0.146	0.139	0.050	-4.8	
4-Nitrophenol	0.225	0.221	0.050	-1.8	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

Instrument ID: BNA_F Calibration Date/Time: 01/30/2025 08:54

Lab File ID: BF141301.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	1.502		-7.7	
2,4-Dinitrotoluene	0.406	0.387		-4.7	
Diethylphthalate	1.310	1.217		-7.1	
4-Chlorophenyl-phenylether	0.617	0.568		-7.9	
Fluorene	1.262	1.151		-8.8	
4-Nitroaniline	0.302	0.294		-2.6	
4,6-Dinitro-2-methylphenol	0.118	0.123		4.2	
n-Nitrosodiphenylamine	0.647	0.610		-5.7	20.0
2,4,6-Tribromophenol	0.183	0.174		-4.9	
4-Bromophenyl-phenylether	0.224	0.216		-3.6	
Hexachlorobenzene	0.238	0.229		-3.8	
Atrazine	0.216	0.194		-10.2	
Pentachlorophenol	0.139	0.142		2.2	20.0
Phenanthrene	1.075	1.008		-6.2	
Anthracene	1.053	0.988		-6.2	
Carbazole	0.934	0.889		-4.8	
Di-n-butylphthalate	1.132	1.094		-3.4	
Fluoranthene	1.062	1.005		-5.4	20.0
Pyrene	1.920	1.777		-7.4	
Terphenyl-d14	1.297	1.185		-8.6	
Butylbenzylphthalate	0.671	0.641		-4.5	
3,3-Dichlorobenzidine	0.439	0.407		-7.3	
Benzo(a)anthracene	1.380	1.214		-12.0	
Chrysene	1.265	1.188		-6.1	
Bis(2-ethylhexyl)phthalate	0.851	0.798		-6.2	
Di-n-octyl phthalate	1.321	1.218		-7.8	20.0
Benzo(b)fluoranthene	1.258	1.162		-7.6	
Benzo(k)fluoranthene	1.114	1.056		-5.2	
Benzo(a)pyrene	1.063	1.010		-5.0	20.0
Indeno(1,2,3-cd)pyrene	1.291	1.200		-7.0	
Dibenzo(a,h)anthracene	1.039	0.965		-7.1	
Benzo(g,h,i)perylene	1.080	0.995		-7.9	
1,2,4,5-Tetrachlorobenzene	0.569	0.533		-6.3	
1,4-Dioxane	0.573	0.542		-5.4	20.0
2,3,4,6-Tetrachlorophenol	0.319	0.312		-2.2	

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.: Q1206 SAS No.: Q1206 SDG No.: Q1206

Instrument ID: BNA_F Calibration Date/Time: 02/03/2025 17:14

Lab File ID: BF141373.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	1.038		8.1	
Phenol-d6	1.657	1.598		-3.6	
Phenol	1.757	1.694		-3.6	20.0
bis(2-Chloroethyl)ether	1.347	1.310		-2.7	
2-Chlorophenol	1.396	1.391		-0.4	
2-Methylphenol	1.135	1.109		-2.3	
2,2-oxybis(1-Chloropropane)	2.342	2.192		-6.4	
Acetophenone	0.475	0.486		2.3	
3+4-Methylphenols	1.393	1.420		1.9	
n-Nitroso-di-n-propylamine	0.985	0.981	0.050	-0.4	
Nitrobenzene-d5	0.379	0.382		0.8	
Hexachloroethane	0.571	0.590		3.3	
Nitrobenzene	0.393	0.389		-1.0	
Isophorone	0.656	0.653		-0.5	
2-Nitrophenol	0.185	0.188		1.6	20.0
2,4-Dimethylphenol	0.236	0.237		0.4	
bis(2-Chloroethoxy)methane	0.418	0.408		-2.4	
2,4-Dichlorophenol	0.289	0.293		1.4	20.0
Naphthalene	1.057	1.046		-1.0	
4-Chloroaniline	0.358	0.293		-18.2	
Hexachlorobutadiene	0.194	0.204		5.2	20.0
Caprolactam	0.094	0.096		2.1	
4-Chloro-3-methylphenol	0.310	0.318		2.6	20.0
2-Methylnaphthalene	0.672	0.672		0.0	
Hexachlorocyclopentadiene	0.168	0.186	0.050	10.7	
2,4,6-Trichlorophenol	0.372	0.380		2.2	20.0
2-Fluorobiphenyl	1.299	1.292		-0.5	
2,4,5-Trichlorophenol	0.405	0.413		2.0	
1,1-Biphenyl	1.560	1.536		-1.5	
2-Chloronaphthalene	1.216	1.196		-1.6	
2-Nitroaniline	0.382	0.388		1.6	
Dimethylphthalate	1.351	1.357		0.4	
Acenaphthylene	1.702	1.683		-1.1	
2,6-Dinitrotoluene	0.314	0.315		0.3	
3-Nitroaniline	0.307	0.310		1.0	
Acenaphthene	1.216	1.226		0.8	20.0
2,4-Dinitrophenol	0.146	0.170	0.050	16.4	
4-Nitrophenol	0.225	0.235	0.050	4.4	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

Instrument ID: BNA_F Calibration Date/Time: 02/03/2025 17:14

Lab File ID: BF141373.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	1.608		-1.2	
2,4-Dinitrotoluene	0.406	0.423		4.2	
Diethylphthalate	1.310	1.346		2.7	
4-Chlorophenyl-phenylether	0.617	0.621		0.6	
Fluorene	1.262	1.286		1.9	
4-Nitroaniline	0.302	0.327		8.3	
4,6-Dinitro-2-methylphenol	0.118	0.140		18.6	
n-Nitrosodiphenylamine	0.647	0.642		-0.8	20.0
2,4,6-Tribromophenol	0.183	0.194		6.0	
4-Bromophenyl-phenylether	0.224	0.234		4.5	
Hexachlorobenzene	0.238	0.244		2.5	
Atrazine	0.216	0.216		0.0	
Pentachlorophenol	0.139	0.157		12.9	20.0
Phenanthrene	1.075	1.095		1.9	
Anthracene	1.053	1.082		2.8	
Carbazole	0.934	0.977		4.6	
Di-n-butylphthalate	1.132	1.197		5.7	
Fluoranthene	1.062	1.123		5.7	20.0
Pyrene	1.920	1.838		-4.3	
Terphenyl-d14	1.297	1.274		-1.8	
Butylbenzylphthalate	0.671	0.703		4.8	
3,3-Dichlorobenzidine	0.439	0.424		-3.4	
Benzo(a)anthracene	1.380	1.292		-6.4	
Chrysene	1.265	1.240		-2.0	
Bis(2-ethylhexyl)phthalate	0.851	0.932		9.5	
Di-n-octyl phthalate	1.321	1.473		11.5	20.0
Benzo(b)fluoranthene	1.258	1.234		-1.9	
Benzo(k)fluoranthene	1.114	1.155		3.7	
Benzo(a)pyrene	1.063	1.088		2.4	20.0
Indeno(1,2,3-cd)pyrene	1.291	1.353		4.8	
Dibenzo(a,h)anthracene	1.039	1.102		6.1	
Benzo(g,h,i)perylene	1.080	1.119		3.6	
1,2,4,5-Tetrachlorobenzene	0.569	0.571		0.4	
1,4-Dioxane	0.573	0.582		1.6	20.0
2,3,4,6-Tetrachlorophenol	0.319	0.336		5.3	

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.: Q1206 SAS No.: Q1206 SDG No.: Q1206

Instrument ID: BNA_F Calibration Date/Time: 02/05/2025 15:16

Lab File ID: BF141447.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	1.309		0.5	
Benzaldehyde	0.960	1.065		10.9	
Phenol-d6	1.657	1.599		-3.5	
Phenol	1.757	1.692		-3.7	20.0
bis(2-Chloroethyl)ether	1.347	1.250		-7.2	
2-Chlorophenol	1.396	1.375		-1.5	
2-Methylphenol	1.135	1.070		-5.7	
2,2-oxybis(1-Chloropropane)	2.342	2.062		-12.0	
Acetophenone	0.475	0.495		4.2	
3+4-Methylphenols	1.393	1.393		0.0	
n-Nitroso-di-n-propylamine	0.985	0.936	0.050	-5.0	
Nitrobenzene-d5	0.379	0.401		5.8	
Hexachloroethane	0.571	0.587		2.8	
Nitrobenzene	0.393	0.410		4.3	
Isophorone	0.656	0.639		-2.6	
2-Nitrophenol	0.185	0.192		3.8	20.0
2,4-Dimethylphenol	0.236	0.229		-3.0	
bis(2-Chloroethoxy)methane	0.418	0.394		-5.7	
2,4-Dichlorophenol	0.289	0.299		3.5	20.0
Naphthalene	1.057	1.071		1.3	
4-Chloroaniline	0.358	0.310		-13.4	
Hexachlorobutadiene	0.194	0.212		9.3	20.0
Caprolactam	0.094	0.093		-1.1	
4-Chloro-3-methylphenol	0.310	0.324		4.5	20.0
2-Methylnaphthalene	0.672	0.677		0.7	
Hexachlorocyclopentadiene	0.168	0.169	0.050	0.6	
2,4,6-Trichlorophenol	0.372	0.384		3.2	20.0
2-Fluorobiphenyl	1.299	1.332		2.5	
2,4,5-Trichlorophenol	0.405	0.414		2.2	
1,1-Biphenyl	1.560	1.541		-1.2	
2-Chloronaphthalene	1.216	1.206		-0.8	
2-Nitroaniline	0.382	0.407		6.5	
Dimethylphthalate	1.351	1.366		1.1	
Acenaphthylene	1.702	1.722		1.2	
2,6-Dinitrotoluene	0.314	0.321		2.2	
3-Nitroaniline	0.307	0.312		1.6	
Acenaphthene	1.216	1.253		3.0	20.0
2,4-Dinitrophenol	0.146	0.168	0.050	15.1	
4-Nitrophenol	0.225	0.235	0.050	4.4	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

Instrument ID: BNA_F Calibration Date/Time: 02/05/2025 15:16

Lab File ID: BF141447.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	1.652		1.5	
2,4-Dinitrotoluene	0.406	0.439		8.1	
Diethylphthalate	1.310	1.335		1.9	
4-Chlorophenyl-phenylether	0.617	0.647		4.9	
Fluorene	1.262	1.315		4.2	
4-Nitroaniline	0.302	0.331		9.6	
4,6-Dinitro-2-methylphenol	0.118	0.139		17.8	
n-Nitrosodiphenylamine	0.647	0.640		-1.1	20.0
2,4,6-Tribromophenol	0.183	0.203		10.9	
4-Bromophenyl-phenylether	0.224	0.230		2.7	
Hexachlorobenzene	0.238	0.245		2.9	
Atrazine	0.216	0.205		-5.1	
Pentachlorophenol	0.139	0.152		9.4	20.0
Phenanthrene	1.075	1.125		4.7	
Anthracene	1.053	1.105		4.9	
Carbazole	0.934	1.005		7.6	
Di-n-butylphthalate	1.132	1.175		3.8	
Fluoranthene	1.062	1.201		13.1	20.0
Pyrene	1.920	1.896		-1.3	
Terphenyl-d14	1.297	1.301		0.3	
Butylbenzylphthalate	0.671	0.684		1.9	
3,3-Dichlorobenzidine	0.439	0.417		-5.0	
Benzo(a)anthracene	1.380	1.336		-3.2	
Chrysene	1.265	1.238		-2.1	
Bis(2-ethylhexyl)phthalate	0.851	0.857		0.7	
Di-n-octyl phthalate	1.321	1.226		-7.2	20.0
Benzo(b)fluoranthene	1.258	1.311		4.2	
Benzo(k)fluoranthene	1.114	1.155		3.7	
Benzo(a)pyrene	1.063	1.108		4.2	20.0
Indeno(1,2,3-cd)pyrene	1.291	1.316		1.9	
Dibenzo(a,h)anthracene	1.039	1.048		0.9	
Benzo(g,h,i)perylene	1.080	1.092		1.1	
1,2,4,5-Tetrachlorobenzene	0.569	0.580		1.9	
1,4-Dioxane	0.573	0.522		-8.9	20.0
2,3,4,6-Tetrachlorophenol	0.319	0.343		7.5	

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.: Q1206 SAS No.: Q1206 SDG No.: Q1206

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.: Q1206 SAS No.: Q1206 SDG No.: Q1206

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.