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

LAB CHRONICLE

OrderID:	Q1241	**OrderDate:**	1/30/2025 2:58:00 PM
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
Q1241-03	**JPP-3.5-013025**	**SOIL**			**01/30/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/07/25	
Q1241-03DL	**JPP-3.5-013025DL**	**SOIL**			**01/30/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/10/25	
Q1241-04	**JPP-3.5-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP BNA	8270E		02/03/25	02/04/25	
Q1241-07	**JPP-5.3-013025**	**SOIL**			**01/30/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/05/25	
Q1241-08	**JPP-5.3-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP BNA	8270E		02/03/25	02/04/25	
Q1241-11	**JPP-5.2-013025**	**SOIL**			**01/30/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/07/25	
Q1241-12	**JPP-5.2-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP BNA	8270E		02/03/25	02/04/25	
Q1241-15	**JPP-5.4-013025**	**SOIL**			**01/30/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/07/25	
Q1241-15DL	**JPP-5.4-013025DL**	**SOIL**			**01/30/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/10/25	
Q1241-16	**JPP-5.4-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP BNA	8270E		02/03/25	02/04/25	
Q1241-19	**JPP-51.4-013025**	**SOIL**			**01/30/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/07/25	
Q1241-20	**JPP-51.4-013025**	**TCLP**			**01/30/25**			**01/30/25**

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TCLP BNA	8270E	02/03/25	02/04/25

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Hit Summary Sheet
SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID :	**JPP-3.5-013025**								
Q1241-03	JPP-3.5-013025	SOIL	Naphthalene		380.000		100	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	2-Methylnaphthalene		190.000	J	100	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Acenaphthylene		130.000	J	110	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Acenaphthene		390.000		98.6	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Dibenzofuran		320.000		100	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Fluorene		520.000		100	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Phenanthrene		4,500.000	E	100	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Anthracene		1,200.000		100	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Carbazole		390.000		97.7	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Fluoranthene		5,400.000	E	99.4	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Pyrene		5,500.000	E	100	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzo(a)anthracene		3,400.000	E	98.2	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Chrysene		3,000.000		96.7	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzo(b)fluoranthene		3,400.000	E	98.6	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzo(k)fluoranthene		1,300.000		100	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzo(a)pyrene		2,900.000		110	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Indeno(1,2,3-cd)pyrene		1,400.000		95	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Dibenzo(a,h)anthracene		470.000		98.8	210	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzo(g,h,i)perylene		1,600.000		97.4	210	ug/Kg
			Total Svoc :		**36,390.00**				
Q1241-03	JPP-3.5-013025	SOIL	11H-Benzo[a]fluorene	*	96.500	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	4H-Cyclopenta[def]phenanthrene	*	290.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzene, [1-(2,4-cyclopentadien-1	*	150.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzo[b]naphtho[2,1-d]thiophene	*	92.800	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzo[e]pyrene	*	490.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Benzophenone	*	320.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Fluoranthene, 2-methyl-	*	250.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Naphthalene, 1,4-dimethyl-	*	130.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Naphthalene, 1,5-dimethyl-	*	94.100	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Naphthalene, 2,3,6-trimethyl-	*	120.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Naphthalene, 2,3-dimethyl-	*	170.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Naphthalene, 2-phenyl-	*	85.500	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Perylene	*	2,200.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Phenanthrene, 1-methyl-	*	130.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Phenanthrene, 2,5-dimethyl-	*	100.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Phenanthrene, 2-methyl-	*	220.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	Pyrene, 1-methyl-	*	180.000	J	0	0	ug/Kg

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Hit Summary Sheet
SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1241-03	JPP-3.5-013025	SOIL	Pyrene, 4-methyl-	*	150.000	J	0	0	ug/Kg
Q1241-03	JPP-3.5-013025	SOIL	1-Methylnaphthalene	*	160.000	J	100	210	ug/Kg
			Total Tics :		**5,428.90**				
			Total Concentration:		**41,818.90**				
Client ID :	**JPP-3.5-013025DL**								
Q1241-03DL	JPP-3.5-013025DL	SOIL	Fluorene		590.000	JD	520	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Phenanthrene		5,400.000	D	510	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Anthracene		1,400.000	D	510	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Fluoranthene		6,200.000	D	500	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Pyrene		4,800.000	D	500	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Benzo(a)anthracene		3,600.000	D	490	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Chrysene		3,200.000	D	480	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Benzo(b)fluoranthene		3,600.000	D	490	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Benzo(k)fluoranthene		1,800.000	D	500	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Benzo(a)pyrene		3,300.000	D	570	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Indeno(1,2,3-cd)pyrene		1,300.000	D	470	1000	ug/Kg
Q1241-03DL	JPP-3.5-013025DL	SOIL	Benzo(g,h,i)perylene		1,400.000	D	490	1000	ug/Kg
			Total Svoc :		**36,590.00**				
			Total Concentration:		**36,590.00**				
Client ID :	**JPP-5.3-013025**								
Q1241-07	JPP-5.3-013025	SOIL	Phenanthrene		650.000		95.5	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Anthracene		220.000		96	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Fluoranthene		1,500.000		92.9	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Pyrene		1,300.000		94.4	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Benzo(a)anthracene		790.000		91.8	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Chrysene		680.000		90.4	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Bis(2-ethylhexyl)phthalate		180.000	J	100	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Benzo(b)fluoranthene		1,200.000		92.2	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Benzo(k)fluoranthene		390.000		93.9	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Benzo(a)pyrene		970.000		110	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Indeno(1,2,3-cd)pyrene		380.000		88.8	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Dibenzo(a,h)anthracene		120.000	J	92.3	190	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Benzo(g,h,i)perylene		430.000		91.1	190	ug/Kg
			Total Svoc :		**8,810.00**				
Q1241-07	JPP-5.3-013025	SOIL	Naphthalene, 2-phenyl-	*	130.000	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	n-Hexadecanoic acid	*	430.000	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Octadecanoic acid	*	80.000	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Phenanthrene, 2-methyl-	*	83.000	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	(S)-(+)-1,2-Propanediol	*	230.000	J	0	0	ug/Kg

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Hit Summary Sheet
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SDG No.: Q1241

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1241-07	JPP-5.3-013025	SOIL	11H-Benzo[b]fluorene	*	77.300	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	1H-Indene, 2-phenyl-	*	92.900	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	120.000	AB	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	4H-Cyclopenta[def]phenanthrene	*	280.000	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Benzo[e]pyrene	*	790.000	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Benzophenone	*	220.000	J	0	0	ug/Kg
Q1241-07	JPP-5.3-013025	SOIL	Cyclopenta(def)phenanthrenone	*	98.200	J	0	0	ug/Kg
			Total Tics :		**2,631.40**				
			Total Concentration:		**11,441.40**				
Client ID :	**JPP-5.2-013025**								
Q1241-11	JPP-5.2-013025	SOIL	Naphthalene		110.000	J	93.1	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Acenaphthene		210.000		91.4	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Dibenzofuran		110.000	J	95.1	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Fluorene		160.000	J	96.4	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Phenanthrene		1,200.000		94.7	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Anthracene		350.000		95.1	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Fluoranthene		1,800.000		92.1	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Pyrene		1,800.000		93.5	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Benzo(a)anthracene		940.000		91	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Chrysene		830.000		89.6	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Bis(2-ethylhexyl)phthalate		130.000	J	100	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Benzo(b)fluoranthene		1,000.000		91.4	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Benzo(k)fluoranthene		430.000		93.1	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Benzo(a)pyrene		950.000		100	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Indeno(1,2,3-cd)pyrene		450.000		88	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Dibenzo(a,h)anthracene		130.000	J	91.5	190	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Benzo(g,h,i)perylene		510.000		90.3	190	ug/Kg
			Total Svoc :		**11,110.00**				
Q1241-11	JPP-5.2-013025	SOIL	(1S,4aS,4bS,7S,8aS,10aS)-7-Isopı	*	190.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	1H-Cyclopropa[l]phenanthrene,1a	*	360.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	500.000	AB	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	4b,8-Dimethyl-2-isopropylphenan	*	180.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	4H-Cyclopenta[def]phenanthrene	*	480.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Benzophenone	*	240.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Decane, 1-iodo-	*	250.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Decane, 2,6,8-trimethyl-	*	200.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Naphtho[2,3-b]thiophene	*	270.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Nonadecane	*	380.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Octadecane	*	350.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Octadecane, 1-chloro-	*	220.000	J	0	0	ug/Kg

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Hit Summary Sheet
SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1241-11	JPP-5.2-013025	SOIL	Pentadecane	*	210.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Pentadecane, 2,6,10-trimethyl-	*	700.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Retene	*	610.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	s-Indacen-1(2H)-one, 3,5,6,7-tetra	*	1,200.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Tetradecane	*	370.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Tridecane	*	210.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Heneicosane	*	250.000	J	0	0	ug/Kg
Q1241-11	JPP-5.2-013025	SOIL	Hexadecane	*	300.000	J	0	0	ug/Kg
			Total Tics :		**7,470.00**				
			Total Concentration:		**18,580.00**				
Client ID :	**JPP-5.4-013025**								
Q1241-15	JPP-5.4-013025	SOIL	Acenaphthene		490.000		190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Dibenzofuran		220.000	J	190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Fluorene		400.000		200	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Phenanthrene		5,800.000		190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Anthracene		1,900.000		190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Fluoranthene		10,600.000	E	190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Pyrene		11,400.000	E	190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzo(a)anthracene		6,200.000	E	190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Chrysene		5,300.000		180	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzo(b)fluoranthene		6,500.000	E	190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzo(k)fluoranthene		3,400.000		190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzo(a)pyrene		6,400.000	E	210	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Indeno(1,2,3-cd)pyrene		2,900.000		180	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Dibenzo(a,h)anthracene		880.000		190	390	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzo(g,h,i)perylene		3,200.000		180	390	ug/Kg
			Total Svoc :		**65,590.00**				
Q1241-15	JPP-5.4-013025	SOIL	11H-Benzo[a]fluorene	*	400.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	11H-Benzo[b]fluorene	*	190.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	1-Isopropenylnaphthalene	*	160.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	4H-Cyclopenta[def]phenanthrene	*	450.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzo[b]naphtho[2,1-d]thiophene	*	160.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzo[c]phenanthrene	*	190.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzo[e]pyrene	*	1,500.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Benzophenone	*	470.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Dodecane	*	350.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Heptadecane, 9-octyl-	*	180.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Hexadecane	*	160.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Naphthalene, 2-phenyl-	*	170.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Perylene	*	5,800.000	J	0	0	ug/Kg

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Hit Summary Sheet
SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1241-15	JPP-5.4-013025	SOIL	Pyrene, 1-methyl-	*	270.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Pyrene, 2-methyl-	*	170.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Pyrene, 4-methyl-	*	300.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Phenanthrene, 1-methyl-	*	250.000	J	0	0	ug/Kg
Q1241-15	JPP-5.4-013025	SOIL	Phenanthrene, 2-methyl-	*	170.000	J	0	0	ug/Kg
			Total Tics :		**11,340.00**				
			Total Concentration:		**76,930.00**				
Client ID :	**JPP-5.4-013025DL**								
Q1241-15DL	JPP-5.4-013025DL	SOIL	Phenanthrene		9,000.000	D	970	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Anthracene		2,900.000	D	970	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Fluoranthene		17,800.000	D	940	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Pyrene		12,900.000	D	960	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Benzo(a)anthracene		8,900.000	D	930	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Chrysene		7,600.000	D	920	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Benzo(b)fluoranthene		10,700.000	D	940	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Benzo(k)fluoranthene		4,300.000	D	950	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Benzo(a)pyrene		9,500.000	D	1100	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Indeno(1,2,3-cd)pyrene		3,900.000	D	900	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Dibenzo(a,h)anthracene		1,100.000	JD	940	2000	ug/Kg
Q1241-15DL	JPP-5.4-013025DL	SOIL	Benzo(g,h,i)perylene		4,200.000	D	920	2000	ug/Kg
			Total Svoc :		**92,800.00**				
			Total Concentration:		**92,800.00**				
Client ID :	**JPP-51.4-013025**								
Q1241-19	JPP-51.4-013025	SOIL	Phenanthrene		1,400.000		180	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Anthracene		400.000		180	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Fluoranthene		2,400.000		180	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Pyrene		2,500.000		180	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Benzo(a)anthracene		1,600.000		170	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Chrysene		1,300.000		170	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Benzo(b)fluoranthene		1,700.000		170	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Benzo(k)fluoranthene		670.000		180	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Benzo(a)pyrene		1,400.000		200	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Indeno(1,2,3-cd)pyrene		630.000		170	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Dibenzo(a,h)anthracene		210.000	J	170	360	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Benzo(g,h,i)perylene		730.000		170	360	ug/Kg
			Total Svoc :		**14,940.00**				
Q1241-19	JPP-51.4-013025	SOIL	Anthracene, 2-methyl-	*	180.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Benzophenone	*	220.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	.alpha.-Pinene	*	430.000	J	0	0	ug/Kg

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Hit Summary Sheet
SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1241-19	JPP-51.4-013025	SOIL	11H-Benzo[b]fluorene	*	190.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	1H-Cyclopropa[l]phenanthrene,1a	*	600.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	4b,8-Dimethyl-2-isopropylphenan	*	490.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	4H-Cyclopenta[def]phenanthrene	*	570.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Methyl dehydroabietate	*	200.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Phenanthrene, 1-methyl-	*	190.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Phenanthrene, 2,5-dimethyl-	*	160.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Pyrene, 1-methyl-	*	270.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Retene	*	300.000	J	0	0	ug/Kg
Q1241-19	JPP-51.4-013025	SOIL	Tricyclo[8.2.2.2(4,7)]hexadeca-2,4	*	210.000	J	0	0	ug/Kg
			Total Tics :		**4,010.00**				
			Total Concentration:		**18,950.00**				

SAMPLE DATA

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

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	82
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
BF141518.D	1	01/31/25 10:20	02/07/25 19:54	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	400	U	220	400	ug/Kg
108-95-2	Phenol	210	U	100	210	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	210	U	100	210	ug/Kg
95-57-8	2-Chlorophenol	210	U	100	210	ug/Kg
95-48-7	2-Methylphenol	210	U	98.0	210	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	210	U	110	210	ug/Kg
98-86-2	Acetophenone	210	UQ	110	210	ug/Kg
65794-96-9	3+4-Methylphenols	400	U	97.1	400	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	97.3	U	49.0	97.3	ug/Kg
67-72-1	Hexachloroethane	210	U	100	210	ug/Kg
98-95-3	Nitrobenzene	210	U	110	210	ug/Kg
78-59-1	Isophorone	210	U	100	210	ug/Kg
88-75-5	2-Nitrophenol	210	U	110	210	ug/Kg
105-67-9	2,4-Dimethylphenol	210	U	110	210	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	210	U	100	210	ug/Kg
120-83-2	2,4-Dichlorophenol	210	U	91.8	210	ug/Kg
91-20-3	Naphthalene	380		100	210	ug/Kg
106-47-8	4-Chloroaniline	210	U	100	210	ug/Kg
87-68-3	Hexachlorobutadiene	210	U	100	210	ug/Kg
105-60-2	Caprolactam	400	U	110	400	ug/Kg
59-50-7	4-Chloro-3-methylphenol	210	U	94.3	210	ug/Kg
91-57-6	2-Methylnaphthalene	190	J	100	210	ug/Kg
77-47-4	Hexachlorocyclopentadiene	400	UQ	190	400	ug/Kg
88-06-2	2,4,6-Trichlorophenol	210	U	86.8	210	ug/Kg
95-95-4	2,4,5-Trichlorophenol	210	U	90.0	210	ug/Kg
92-52-4	1,1-Biphenyl	210	U	110	210	ug/Kg
91-58-7	2-Chloronaphthalene	210	U	100	210	ug/Kg
88-74-4	2-Nitroaniline	210	U	120	210	ug/Kg
131-11-3	Dimethylphthalate	210	U	99.4	210	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	82
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
BF141518.D	1	01/31/25 10:20	02/07/25 19:54	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	130	J	110	210	ug/Kg
606-20-2	2,6-Dinitrotoluene	210	U	100	210	ug/Kg
99-09-2	3-Nitroaniline	210	U	110	210	ug/Kg
83-32-9	Acenaphthene	390		98.6	210	ug/Kg
51-28-5	2,4-Dinitrophenol	400	U	300	400	ug/Kg
100-02-7	4-Nitrophenol	400	U	140	400	ug/Kg
132-64-9	Dibenzofuran	320		100	210	ug/Kg
121-14-2	2,4-Dinitrotoluene	210	U	100	210	ug/Kg
84-66-2	Diethylphthalate	210	U	97.4	210	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	210	U	100	210	ug/Kg
86-73-7	Fluorene	520		100	210	ug/Kg
100-01-6	4-Nitroaniline	210	U	130	210	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	400	U	140	400	ug/Kg
86-30-6	n-Nitrosodiphenylamine	210	U	99.2	210	ug/Kg
101-55-3	4-Bromophenyl-phenylether	210	U	96.0	210	ug/Kg
118-74-1	Hexachlorobenzene	210	U	100	210	ug/Kg
1912-24-9	Atrazine	210	U	110	210	ug/Kg
87-86-5	Pentachlorophenol	400	U	94.0	400	ug/Kg
85-01-8	Phenanthrene	4500	E	100	210	ug/Kg
120-12-7	Anthracene	1200		100	210	ug/Kg
86-74-8	Carbazole	390		97.7	210	ug/Kg
84-74-2	Di-n-butylphthalate	210	U	100	210	ug/Kg
206-44-0	Fluoranthene	5400	E	99.4	210	ug/Kg
129-00-0	Pyrene	5500	E	100	210	ug/Kg
85-68-7	Butylbenzylphthalate	210	U	120	210	ug/Kg
91-94-1	3,3-Dichlorobenzidine	400	U	120	400	ug/Kg
56-55-3	Benzo(a)anthracene	3400	E	98.2	210	ug/Kg
218-01-9	Chrysene	3000		96.7	210	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	210	U	110	210	ug/Kg
117-84-0	Di-n-octyl phthalate	400	U	130	400	ug/Kg
205-99-2	Benzo(b)fluoranthene	3400	E	98.6	210	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	82
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
BF141518.D	1	01/31/25 10:20	02/07/25 19:54	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1300		100	210	ug/Kg
50-32-8	Benzo(a)pyrene	2900		110	210	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1400		95.0	210	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	470		98.8	210	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1600		97.4	210	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	210	U	110	210	ug/Kg
123-91-1	1,4-Dioxane	210	U	130	210	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	210	U	90.9	210	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	90.2		18 - 112	60%	SPK: 150
13127-88-3	Phenol-d6	89.1		15 - 107	59%	SPK: 150
4165-60-0	Nitrobenzene-d5	65.0		18 - 107	65%	SPK: 100
321-60-8	2-Fluorobiphenyl	57.3		20 - 109	57%	SPK: 100
118-79-6	2,4,6-Tribromophenol	79.0		10 - 116	53%	SPK: 150
1718-51-0	Terphenyl-d14	54.5		10 - 105	55%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	83000	6.792			
1146-65-2	Naphthalene-d8	313000	8.075			
15067-26-2	Acenaphthene-d10	155000	9.827			
1517-22-2	Phenanthrene-d10	231000	11.316			
1719-03-5	Chrysene-d12	145000	13.968			
1520-96-3	Perylene-d12	116000	15.427			
TENTATIVE IDENTIFIED COMPOUNDS						
90-12-0	1-Methylnaphthalene	160	J		8.88	ug/Kg
000571-58-4	Naphthalene, 1,4-dimethyl-	130	J		9.41	ug/Kg
000581-40-8	Naphthalene, 2,3-dimethyl-	170	J		9.49	ug/Kg
000571-61-9	Naphthalene, 1,5-dimethyl-	94.1	J		9.60	ug/Kg
000829-26-5	Naphthalene, 2,3,6-trimethyl-	120	J		10.2	ug/Kg
002320-32-3	Benzene, [1-(2,4-cyclopentadien-1-	150	J		10.4	ug/Kg
000119-61-9	Benzophenone	320	J		10.5	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	82
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
BF141518.D	1	01/31/25 10:20	02/07/25 19:54	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000832-69-9	Phenanthrene, 1-methyl-	130	J		11.8	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	220	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	290	J		11.9	ug/Kg
000612-94-2	Naphthalene, 2-phenyl-	85.5	J		12.1	ug/Kg
003674-66-6	Phenanthrene, 2,5-dimethyl-	100	J		12.4	ug/Kg
002381-21-7	Pyrene, 1-methyl-	180	J		13.0	ug/Kg
033543-31-6	Fluoranthene, 2-methyl-	250	J		13.1	ug/Kg
000238-84-6	11H-Benzo[a]fluorene	96.5	J		13.2	ug/Kg
003353-12-6	Pyrene, 4-methyl-	150	J		13.2	ug/Kg
000239-35-0	Benzo[b]naphtho[2,1-d]thiophene	92.8	J		13.7	ug/Kg
000192-97-2	Benzo[e]pyrene	490	J		15.1	ug/Kg
000198-55-0	Perylene	2200	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

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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025DL	SDG No.:	Q1241
Lab Sample ID:	Q1241-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	82
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
BF141546.D	5	01/31/25 10:20	02/10/25 20:19	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	2000	UD	1100	2000	ug/Kg
108-95-2	Phenol	1000	UD	500	1000	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1000	UD	510	1000	ug/Kg
95-57-8	2-Chlorophenol	1000	UD	510	1000	ug/Kg
95-48-7	2-Methylphenol	1000	UD	490	1000	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1000	UD	550	1000	ug/Kg
98-86-2	Acetophenone	1000	UDQ	530	1000	ug/Kg
65794-96-9	3+4-Methylphenols	2000	UD	490	2000	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	490	UD	250	490	ug/Kg
67-72-1	Hexachloroethane	1000	UD	500	1000	ug/Kg
98-95-3	Nitrobenzene	1000	UD	550	1000	ug/Kg
78-59-1	Isophorone	1000	UD	510	1000	ug/Kg
88-75-5	2-Nitrophenol	1000	UD	570	1000	ug/Kg
105-67-9	2,4-Dimethylphenol	1000	UD	570	1000	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1000	UD	520	1000	ug/Kg
120-83-2	2,4-Dichlorophenol	1000	UD	460	1000	ug/Kg
91-20-3	Naphthalene	1000	UD	500	1000	ug/Kg
106-47-8	4-Chloroaniline	1000	UD	500	1000	ug/Kg
87-68-3	Hexachlorobutadiene	1000	UD	510	1000	ug/Kg
105-60-2	Caprolactam	2000	UD	530	2000	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1000	UD	470	1000	ug/Kg
91-57-6	2-Methylnaphthalene	1000	UD	500	1000	ug/Kg
77-47-4	Hexachlorocyclopentadiene	2000	UDQ	950	2000	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1000	UD	430	1000	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1000	UD	450	1000	ug/Kg
92-52-4	1,1-Biphenyl	1000	UD	530	1000	ug/Kg
91-58-7	2-Chloronaphthalene	1000	UD	510	1000	ug/Kg
88-74-4	2-Nitroaniline	1000	UD	580	1000	ug/Kg
131-11-3	Dimethylphthalate	1000	UD	500	1000	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025DL	SDG No.:	Q1241
Lab Sample ID:	Q1241-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	82
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
BF141546.D	5	01/31/25 10:20	02/10/25 20:19	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1000	UD	530	1000	ug/Kg
606-20-2	2,6-Dinitrotoluene	1000	UD	510	1000	ug/Kg
99-09-2	3-Nitroaniline	1000	UD	540	1000	ug/Kg
83-32-9	Acenaphthene	1000	UD	490	1000	ug/Kg
51-28-5	2,4-Dinitrophenol	2000	UD	1500	2000	ug/Kg
100-02-7	4-Nitrophenol	2000	UD	710	2000	ug/Kg
132-64-9	Dibenzofuran	1000	UD	510	1000	ug/Kg
121-14-2	2,4-Dinitrotoluene	1000	UD	520	1000	ug/Kg
84-66-2	Diethylphthalate	1000	UD	490	1000	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1000	UD	520	1000	ug/Kg
86-73-7	Fluorene	590	JD	520	1000	ug/Kg
100-01-6	4-Nitroaniline	1000	UD	650	1000	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	2000	UD	710	2000	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1000	UD	500	1000	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1000	UD	480	1000	ug/Kg
118-74-1	Hexachlorobenzene	1000	UD	520	1000	ug/Kg
1912-24-9	Atrazine	1000	UD	560	1000	ug/Kg
87-86-5	Pentachlorophenol	2000	UD	470	2000	ug/Kg
85-01-8	Phenanthrene	5400	D	510	1000	ug/Kg
120-12-7	Anthracene	1400	D	510	1000	ug/Kg
86-74-8	Carbazole	1000	UD	490	1000	ug/Kg
84-74-2	Di-n-butylphthalate	1000	UD	510	1000	ug/Kg
206-44-0	Fluoranthene	6200	D	500	1000	ug/Kg
129-00-0	Pyrene	4800	D	500	1000	ug/Kg
85-68-7	Butylbenzylphthalate	1000	UD	590	1000	ug/Kg
91-94-1	3,3-Dichlorobenzidine	2000	UD	600	2000	ug/Kg
56-55-3	Benzo(a)anthracene	3600	D	490	1000	ug/Kg
218-01-9	Chrysene	3200	D	480	1000	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1000	UD	550	1000	ug/Kg
117-84-0	Di-n-octyl phthalate	2000	UD	670	2000	ug/Kg
205-99-2	Benzo(b)fluoranthene	3600	D	490	1000	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025DL	SDG No.:	Q1241
Lab Sample ID:	Q1241-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	82
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
BF141546.D	5	01/31/25 10:20	02/10/25 20:19	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1800	D	500	1000	ug/Kg
50-32-8	Benzo(a)pyrene	3300	D	570	1000	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1300	D	470	1000	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1000	UD	490	1000	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1400	D	490	1000	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1000	UD	530	1000	ug/Kg
123-91-1	1,4-Dioxane	1000	UD	670	1000	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1000	UD	450	1000	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	101		18 - 112	67%	SPK: 150
13127-88-3	Phenol-d6	100		15 - 107	67%	SPK: 150
4165-60-0	Nitrobenzene-d5	67.9		18 - 107	68%	SPK: 100
321-60-8	2-Fluorobiphenyl	64.9		20 - 109	65%	SPK: 100
118-79-6	2,4,6-Tribromophenol	78.9		10 - 116	53%	SPK: 150
1718-51-0	Terphenyl-d14	44.5		10 - 105	44%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	76100	6.787			
1146-65-2	Naphthalene-d8	302000	8.069			
15067-26-2	Acenaphthene-d10	159000	9.822			
1517-22-2	Phenanthrene-d10	223000	11.31			
1719-03-5	Chrysene-d12	183000	13.951			
1520-96-3	Perylene-d12	165000	15.404			

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

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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	87.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141433.D	1	01/31/25 10:20	02/05/25 02:07	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	380	U	210	380	ug/Kg
108-95-2	Phenol	190	U	94.3	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	190	U	95.2	190	ug/Kg
95-57-8	2-Chlorophenol	190	U	94.9	190	ug/Kg
95-48-7	2-Methylphenol	190	U	91.6	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	190	U	100	190	ug/Kg
98-86-2	Acetophenone	190	UQ	98.8	190	ug/Kg
65794-96-9	3+4-Methylphenols	380	U	90.7	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	91.0	U	45.8	91.0	ug/Kg
67-72-1	Hexachloroethane	190	U	94.4	190	ug/Kg
98-95-3	Nitrobenzene	190	U	100	190	ug/Kg
78-59-1	Isophorone	190	U	96.2	190	ug/Kg
88-75-5	2-Nitrophenol	190	U	110	190	ug/Kg
105-67-9	2,4-Dimethylphenol	190	U	110	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	190	U	97.6	190	ug/Kg
120-83-2	2,4-Dichlorophenol	190	U	85.8	190	ug/Kg
91-20-3	Naphthalene	190	U	93.9	190	ug/Kg
106-47-8	4-Chloroaniline	190	U	93.9	190	ug/Kg
87-68-3	Hexachlorobutadiene	190	U	94.7	190	ug/Kg
105-60-2	Caprolactam	380	U	98.7	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	190	U	88.1	190	ug/Kg
91-57-6	2-Methylnaphthalene	190	U	93.8	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	380	UQ	180	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	190	U	81.2	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	190	U	84.1	190	ug/Kg
92-52-4	1,1-Biphenyl	190	U	99.4	190	ug/Kg
91-58-7	2-Chloronaphthalene	190	U	94.7	190	ug/Kg
88-74-4	2-Nitroaniline	190	U	110	190	ug/Kg
131-11-3	Dimethylphthalate	190	U	92.9	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	87.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141433.D	1	01/31/25 10:20	02/05/25 02:07	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	190	U	98.4	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	190	U	94.6	190	ug/Kg
99-09-2	3-Nitroaniline	190	U	100	190	ug/Kg
83-32-9	Acenaphthene	190	U	92.2	190	ug/Kg
51-28-5	2,4-Dinitrophenol	380	U	280	380	ug/Kg
100-02-7	4-Nitrophenol	380	U	130	380	ug/Kg
132-64-9	Dibenzofuran	190	U	96.0	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	190	U	98.0	190	ug/Kg
84-66-2	Diethylphthalate	190	U	91.1	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	190	U	97.3	190	ug/Kg
86-73-7	Fluorene	190	U	97.2	190	ug/Kg
100-01-6	4-Nitroaniline	190	U	120	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	380	U	130	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	190	U	92.8	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	190	U	89.7	190	ug/Kg
118-74-1	Hexachlorobenzene	190	U	96.6	190	ug/Kg
1912-24-9	Atrazine	190	U	100	190	ug/Kg
87-86-5	Pentachlorophenol	380	U	87.9	380	ug/Kg
85-01-8	Phenanthrene	650		95.5	190	ug/Kg
120-12-7	Anthracene	220		96.0	190	ug/Kg
86-74-8	Carbazole	190	U	91.3	190	ug/Kg
84-74-2	Di-n-butylphthalate	190	U	95.9	190	ug/Kg
206-44-0	Fluoranthene	1500		92.9	190	ug/Kg
129-00-0	Pyrene	1300		94.4	190	ug/Kg
85-68-7	Butylbenzylphthalate	190	U	110	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	380	U	110	380	ug/Kg
56-55-3	Benzo(a)anthracene	790		91.8	190	ug/Kg
218-01-9	Chrysene	680		90.4	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	180	J	100	190	ug/Kg
117-84-0	Di-n-octyl phthalate	380	U	130	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	1200		92.2	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	87.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141433.D	1	01/31/25 10:20	02/05/25 02:07	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	390		93.9	190	ug/Kg
50-32-8	Benzo(a)pyrene	970		110	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	380		88.8	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	120	J	92.3	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	430		91.1	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	98.7	190	ug/Kg
123-91-1	1,4-Dioxane	190	U	130	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	190	U	84.9	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	77.0		18 - 112	51%	SPK: 150
13127-88-3	Phenol-d6	86.8		15 - 107	58%	SPK: 150
4165-60-0	Nitrobenzene-d5	64.3		18 - 107	64%	SPK: 100
321-60-8	2-Fluorobiphenyl	60.7		20 - 109	61%	SPK: 100
118-79-6	2,4,6-Tribromophenol	63.1		10 - 116	42%	SPK: 150
1718-51-0	Terphenyl-d14	48.7		10 - 105	49%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	80200	6.793			
1146-65-2	Naphthalene-d8	314000	8.075			
15067-26-2	Acenaphthene-d10	170000	9.828			
1517-22-2	Phenanthrene-d10	250000	11.316			
1719-03-5	Chrysene-d12	170000	13.963			
1520-96-3	Perylene-d12	133000	15.416			
TENTATIVE IDENTIFIED COMPOUNDS						
004254-15-3	(S)-(+)-1,2-Propanediol	230	J		3.19	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	120	AB		4.99	ug/Kg
000119-61-9	Benzophenone	220	J		10.5	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	83.0	J		11.8	ug/Kg
000057-10-3	n-Hexadecanoic acid	430	J		11.9	ug/Kg
004505-48-0	1H-Indene, 2-phenyl-	92.9	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	280	J		11.9	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	87.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141433.D	1	01/31/25 10:20	02/05/25 02:07	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000612-94-2	Naphthalene, 2-phenyl-	130	J		12.1	ug/Kg
005737-13-3	Cyclopenta(def)phenanthrenone	98.2	J		12.5	ug/Kg
000057-11-4	Octadecanoic acid	80.0	J		12.6	ug/Kg
000243-17-4	11H-Benzo[b]fluorene	77.3	J		13.1	ug/Kg
000192-97-2	Benzo[e]pyrene	790	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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.2-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-11	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.7
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
BF141521.D	1	01/31/25 10:20	02/07/25 21:13	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	370	U	210	370	ug/Kg
108-95-2	Phenol	190	U	93.4	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	190	U	94.3	190	ug/Kg
95-57-8	2-Chlorophenol	190	U	94.1	190	ug/Kg
95-48-7	2-Methylphenol	190	U	90.8	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	190	U	100	190	ug/Kg
98-86-2	Acetophenone	190	UQ	97.9	190	ug/Kg
65794-96-9	3+4-Methylphenols	370	U	89.9	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	90.2	U	45.4	90.2	ug/Kg
67-72-1	Hexachloroethane	190	U	93.5	190	ug/Kg
98-95-3	Nitrobenzene	190	U	100	190	ug/Kg
78-59-1	Isophorone	190	U	95.3	190	ug/Kg
88-75-5	2-Nitrophenol	190	U	110	190	ug/Kg
105-67-9	2,4-Dimethylphenol	190	U	110	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	190	U	96.7	190	ug/Kg
120-83-2	2,4-Dichlorophenol	190	U	85.1	190	ug/Kg
91-20-3	Naphthalene	110	J	93.1	190	ug/Kg
106-47-8	4-Chloroaniline	190	U	93.1	190	ug/Kg
87-68-3	Hexachlorobutadiene	190	U	93.9	190	ug/Kg
105-60-2	Caprolactam	370	U	97.8	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	190	U	87.3	190	ug/Kg
91-57-6	2-Methylnaphthalene	190	U	93.0	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	370	UQ	180	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	190	U	80.5	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	190	U	83.4	190	ug/Kg
92-52-4	1,1-Biphenyl	190	U	98.5	190	ug/Kg
91-58-7	2-Chloronaphthalene	190	U	93.9	190	ug/Kg
88-74-4	2-Nitroaniline	190	U	110	190	ug/Kg
131-11-3	Dimethylphthalate	190	U	92.1	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.2-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-11	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.7
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
BF141521.D	1	01/31/25 10:20	02/07/25 21:13	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	190	U	97.5	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	190	U	93.8	190	ug/Kg
99-09-2	3-Nitroaniline	190	U	100	190	ug/Kg
83-32-9	Acenaphthene	210		91.4	190	ug/Kg
51-28-5	2,4-Dinitrophenol	370	U	270	370	ug/Kg
100-02-7	4-Nitrophenol	370	U	130	370	ug/Kg
132-64-9	Dibenzofuran	110	J	95.1	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	190	U	97.1	190	ug/Kg
84-66-2	Diethylphthalate	190	U	90.3	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	190	U	96.5	190	ug/Kg
86-73-7	Fluorene	160	J	96.4	190	ug/Kg
100-01-6	4-Nitroaniline	190	U	120	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	370	U	130	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	190	U	92.0	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	190	U	88.9	190	ug/Kg
118-74-1	Hexachlorobenzene	190	U	95.8	190	ug/Kg
1912-24-9	Atrazine	190	U	100	190	ug/Kg
87-86-5	Pentachlorophenol	370	U	87.1	370	ug/Kg
85-01-8	Phenanthrene	1200		94.7	190	ug/Kg
120-12-7	Anthracene	350		95.1	190	ug/Kg
86-74-8	Carbazole	190	U	90.5	190	ug/Kg
84-74-2	Di-n-butylphthalate	190	U	95.0	190	ug/Kg
206-44-0	Fluoranthene	1800		92.1	190	ug/Kg
129-00-0	Pyrene	1800		93.5	190	ug/Kg
85-68-7	Butylbenzylphthalate	190	U	110	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	370	U	110	370	ug/Kg
56-55-3	Benzo(a)anthracene	940		91.0	190	ug/Kg
218-01-9	Chrysene	830		89.6	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	130	J	100	190	ug/Kg
117-84-0	Di-n-octyl phthalate	370	U	120	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	1000		91.4	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.2-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-11	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.7
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
BF141521.D	1	01/31/25 10:20	02/07/25 21:13	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	430		93.1	190	ug/Kg
50-32-8	Benzo(a)pyrene	950		100	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	450		88.0	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	130	J	91.5	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	510		90.3	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	97.8	190	ug/Kg
123-91-1	1,4-Dioxane	190	U	120	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	190	U	84.2	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	17.5	*	18 - 112	12%	SPK: 150
13127-88-3	Phenol-d6	74.0		15 - 107	49%	SPK: 150
4165-60-0	Nitrobenzene-d5	62.2		18 - 107	62%	SPK: 100
321-60-8	2-Fluorobiphenyl	68.7		20 - 109	69%	SPK: 100
118-79-6	2,4,6-Tribromophenol	5.35	*	10 - 116	4%	SPK: 150
1718-51-0	Terphenyl-d14	66.4		10 - 105	66%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	79800	6.792			
1146-65-2	Naphthalene-d8	308000	8.075			
15067-26-2	Acenaphthene-d10	141000	9.828			
1517-22-2	Phenanthrene-d10	218000	11.316			
1719-03-5	Chrysene-d12	140000	13.963			
1520-96-3	Perylene-d12	107000	15.421			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	500	AB		4.99	ug/Kg
000629-50-5	Tridecane	210	J		8.66	ug/Kg
000629-59-4	Tetradecane	370	J		9.23	ug/Kg
003386-33-2	Octadecane, 1-chloro-	220	J		9.54	ug/Kg
000544-76-3	Hexadecane	300	J		9.76	ug/Kg
000629-92-5	Nonadecane	380	J		10.3	ug/Kg
062108-26-3	Decane, 2,6,8-trimethyl-	200	J		10.5	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.2-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-11	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.7
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
BF141521.D	1	01/31/25 10:20	02/07/25 21:13	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000119-61-9	Benzophenone	240	J		10.5	ug/Kg
003892-00-0	Pentadecane, 2,6,10-trimethyl-	700	J		10.7	ug/Kg
000593-45-3	Octadecane	350	J		11.2	ug/Kg
000268-77-9	Naphtho[2,3-b]thiophene	270	J		11.2	ug/Kg
002050-77-3	Decane, 1-iodo-	250	J		11.6	ug/Kg
000949-41-7	1H-Cyclopropa[l]phenanthrene,1a,9b	360	J		11.8	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	480	J		11.9	ug/Kg
000629-62-9	Pentadecane	210	J		12.0	ug/Kg
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthr	180	J		12.1	ug/Kg
002221-95-6	(1S,4aS,4bS,7S,8aS,10aS)-7-Isoprop	190	J		12.2	ug/Kg
038754-94-8	s-Indacen-1(2H)-one, 3,5,6,7-tetra	1200	J		12.3	ug/Kg
000629-94-7	Heneicosane	250	J		12.4	ug/Kg
000483-65-8	Retene	610	J		13.0	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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-15	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	86.6
Sample Wt/Vol:	30.04 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
BF141525.D	2	01/31/25 10:20	02/07/25 23:00	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	760	U	420	760	ug/Kg
108-95-2	Phenol	390	U	190	390	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	390	U	190	390	ug/Kg
95-57-8	2-Chlorophenol	390	U	190	390	ug/Kg
95-48-7	2-Methylphenol	390	U	190	390	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	390	U	210	390	ug/Kg
98-86-2	Acetophenone	390	UQ	200	390	ug/Kg
65794-96-9	3+4-Methylphenols	760	U	180	760	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	180	U	92.9	180	ug/Kg
67-72-1	Hexachloroethane	390	U	190	390	ug/Kg
98-95-3	Nitrobenzene	390	U	210	390	ug/Kg
78-59-1	Isophorone	390	U	200	390	ug/Kg
88-75-5	2-Nitrophenol	390	U	220	390	ug/Kg
105-67-9	2,4-Dimethylphenol	390	U	210	390	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	390	U	200	390	ug/Kg
120-83-2	2,4-Dichlorophenol	390	U	170	390	ug/Kg
91-20-3	Naphthalene	390	U	190	390	ug/Kg
106-47-8	4-Chloroaniline	390	U	190	390	ug/Kg
87-68-3	Hexachlorobutadiene	390	U	190	390	ug/Kg
105-60-2	Caprolactam	760	U	200	760	ug/Kg
59-50-7	4-Chloro-3-methylphenol	390	U	180	390	ug/Kg
91-57-6	2-Methylnaphthalene	390	U	190	390	ug/Kg
77-47-4	Hexachlorocyclopentadiene	760	UQ	360	760	ug/Kg
88-06-2	2,4,6-Trichlorophenol	390	U	160	390	ug/Kg
95-95-4	2,4,5-Trichlorophenol	390	U	170	390	ug/Kg
92-52-4	1,1-Biphenyl	390	U	200	390	ug/Kg
91-58-7	2-Chloronaphthalene	390	U	190	390	ug/Kg
88-74-4	2-Nitroaniline	390	U	220	390	ug/Kg
131-11-3	Dimethylphthalate	390	U	190	390	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-15	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	86.6
Sample Wt/Vol:	30.04 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
BF141525.D	2	01/31/25 10:20	02/07/25 23:00	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	390	U	200	390	ug/Kg
606-20-2	2,6-Dinitrotoluene	390	U	190	390	ug/Kg
99-09-2	3-Nitroaniline	390	U	210	390	ug/Kg
83-32-9	Acenaphthene	490		190	390	ug/Kg
51-28-5	2,4-Dinitrophenol	760	U	560	760	ug/Kg
100-02-7	4-Nitrophenol	760	U	270	760	ug/Kg
132-64-9	Dibenzofuran	220	J	190	390	ug/Kg
121-14-2	2,4-Dinitrotoluene	390	U	200	390	ug/Kg
84-66-2	Diethylphthalate	390	U	180	390	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	390	U	200	390	ug/Kg
86-73-7	Fluorene	400		200	390	ug/Kg
100-01-6	4-Nitroaniline	390	U	250	390	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	760	U	270	760	ug/Kg
86-30-6	n-Nitrosodiphenylamine	390	U	190	390	ug/Kg
101-55-3	4-Bromophenyl-phenylether	390	U	180	390	ug/Kg
118-74-1	Hexachlorobenzene	390	U	200	390	ug/Kg
1912-24-9	Atrazine	390	U	210	390	ug/Kg
87-86-5	Pentachlorophenol	760	U	180	760	ug/Kg
85-01-8	Phenanthrene	5800		190	390	ug/Kg
120-12-7	Anthracene	1900		190	390	ug/Kg
86-74-8	Carbazole	390	U	190	390	ug/Kg
84-74-2	Di-n-butylphthalate	390	U	190	390	ug/Kg
206-44-0	Fluoranthene	10600	E	190	390	ug/Kg
129-00-0	Pyrene	11400	E	190	390	ug/Kg
85-68-7	Butylbenzylphthalate	390	U	220	390	ug/Kg
91-94-1	3,3-Dichlorobenzidine	760	U	230	760	ug/Kg
56-55-3	Benzo(a)anthracene	6200	E	190	390	ug/Kg
218-01-9	Chrysene	5300		180	390	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	390	U	210	390	ug/Kg
117-84-0	Di-n-octyl phthalate	760	U	250	760	ug/Kg
205-99-2	Benzo(b)fluoranthene	6500	E	190	390	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-15	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	86.6
Sample Wt/Vol:	30.04 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
BF141525.D	2	01/31/25 10:20	02/07/25 23:00	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	3400		190	390	ug/Kg
50-32-8	Benzo(a)pyrene	6400	E	210	390	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2900		180	390	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	880		190	390	ug/Kg
191-24-2	Benzo(g,h,i)perylene	3200		180	390	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	390	U	200	390	ug/Kg
123-91-1	1,4-Dioxane	390	U	250	390	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	390	U	170	390	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	87.8		18 - 112	59%	SPK: 150
13127-88-3	Phenol-d6	87.7		15 - 107	58%	SPK: 150
4165-60-0	Nitrobenzene-d5	58.4		18 - 107	58%	SPK: 100
321-60-8	2-Fluorobiphenyl	65.2		20 - 109	65%	SPK: 100
118-79-6	2,4,6-Tribromophenol	68.6		10 - 116	46%	SPK: 150
1718-51-0	Terphenyl-d14	64.6		10 - 105	65%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	88500	6.792			
1146-65-2	Naphthalene-d8	335000	8.075			
15067-26-2	Acenaphthene-d10	161000	9.828			
1517-22-2	Phenanthrene-d10	239000	11.322			
1719-03-5	Chrysene-d12	139000	13.974			
1520-96-3	Perylene-d12	114000	15.451			
TENTATIVE IDENTIFIED COMPOUNDS						
000544-76-3	Hexadecane	160	J		9.23	ug/Kg
000112-40-3	Dodecane	350	J		10.3	ug/Kg
001855-47-6	1-Isopropenylnaphthalene	160	J		10.4	ug/Kg
000119-61-9	Benzophenone	470	J		10.5	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	170	J		11.8	ug/Kg
000832-69-9	Phenanthrene, 1-methyl-	250	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	450	J		11.9	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-15	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	86.6
Sample Wt/Vol:	30.04 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
BF141525.D	2	01/31/25 10:20	02/07/25 23:00	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000612-94-2	Naphthalene, 2-phenyl-	170	J		12.1	ug/Kg
002381-21-7	Pyrene, 1-methyl-	270	J		13.0	ug/Kg
000238-84-6	11H-Benzo[a]fluorene	400	J		13.1	ug/Kg
000243-17-4	11H-Benzo[b]fluorene	190	J		13.2	ug/Kg
003353-12-6	Pyrene, 4-methyl-	300	J		13.2	ug/Kg
003442-78-2	Pyrene, 2-methyl-	170	J		13.3	ug/Kg
007225-64-1	Heptadecane, 9-octyl-	180	J		13.5	ug/Kg
000239-35-0	Benzo[b]naphtho[2,1-d]thiophene	160	J		13.7	ug/Kg
000195-19-7	Benzo[c]phenanthrene	190	J		14.1	ug/Kg
000192-97-2	Benzo[e]pyrene	1500	J		15.1	ug/Kg
000198-55-0	Perylene	5800	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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025DL	SDG No.:	Q1241
Lab Sample ID:	Q1241-15DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	86.6
Sample Wt/Vol:	30.04 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
BF141549.D	10	01/31/25 10:20	02/10/25 21:38	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	3800	UD	2100	3800	ug/Kg
108-95-2	Phenol	2000	UD	960	2000	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	2000	UD	970	2000	ug/Kg
95-57-8	2-Chlorophenol	2000	UD	960	2000	ug/Kg
95-48-7	2-Methylphenol	2000	UD	930	2000	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	2000	UD	1000	2000	ug/Kg
98-86-2	Acetophenone	2000	UDQ	1000	2000	ug/Kg
65794-96-9	3+4-Methylphenols	3800	UD	920	3800	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	920	UD	460	920	ug/Kg
67-72-1	Hexachloroethane	2000	UD	960	2000	ug/Kg
98-95-3	Nitrobenzene	2000	UD	1000	2000	ug/Kg
78-59-1	Isophorone	2000	UD	980	2000	ug/Kg
88-75-5	2-Nitrophenol	2000	UD	1100	2000	ug/Kg
105-67-9	2,4-Dimethylphenol	2000	UD	1100	2000	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	2000	UD	990	2000	ug/Kg
120-83-2	2,4-Dichlorophenol	2000	UD	870	2000	ug/Kg
91-20-3	Naphthalene	2000	UD	950	2000	ug/Kg
106-47-8	4-Chloroaniline	2000	UD	950	2000	ug/Kg
87-68-3	Hexachlorobutadiene	2000	UD	960	2000	ug/Kg
105-60-2	Caprolactam	3800	UD	1000	3800	ug/Kg
59-50-7	4-Chloro-3-methylphenol	2000	UD	890	2000	ug/Kg
91-57-6	2-Methylnaphthalene	2000	UD	950	2000	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3800	UDQ	1800	3800	ug/Kg
88-06-2	2,4,6-Trichlorophenol	2000	UD	820	2000	ug/Kg
95-95-4	2,4,5-Trichlorophenol	2000	UD	850	2000	ug/Kg
92-52-4	1,1-Biphenyl	2000	UD	1000	2000	ug/Kg
91-58-7	2-Chloronaphthalene	2000	UD	960	2000	ug/Kg
88-74-4	2-Nitroaniline	2000	UD	1100	2000	ug/Kg
131-11-3	Dimethylphthalate	2000	UD	940	2000	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025DL	SDG No.:	Q1241
Lab Sample ID:	Q1241-15DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	86.6
Sample Wt/Vol:	30.04 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
BF141549.D	10	01/31/25 10:20	02/10/25 21:38	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	2000	UD	1000	2000	ug/Kg
606-20-2	2,6-Dinitrotoluene	2000	UD	960	2000	ug/Kg
99-09-2	3-Nitroaniline	2000	UD	1000	2000	ug/Kg
83-32-9	Acenaphthene	2000	UD	940	2000	ug/Kg
51-28-5	2,4-Dinitrophenol	3800	UD	2800	3800	ug/Kg
100-02-7	4-Nitrophenol	3800	UD	1300	3800	ug/Kg
132-64-9	Dibenzofuran	2000	UD	970	2000	ug/Kg
121-14-2	2,4-Dinitrotoluene	2000	UD	990	2000	ug/Kg
84-66-2	Diethylphthalate	2000	UD	920	2000	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	2000	UD	990	2000	ug/Kg
86-73-7	Fluorene	2000	UD	990	2000	ug/Kg
100-01-6	4-Nitroaniline	2000	UD	1200	2000	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	3800	UD	1300	3800	ug/Kg
86-30-6	n-Nitrosodiphenylamine	2000	UD	940	2000	ug/Kg
101-55-3	4-Bromophenyl-phenylether	2000	UD	910	2000	ug/Kg
118-74-1	Hexachlorobenzene	2000	UD	980	2000	ug/Kg
1912-24-9	Atrazine	2000	UD	1100	2000	ug/Kg
87-86-5	Pentachlorophenol	3800	UD	890	3800	ug/Kg
85-01-8	Phenanthrene	9000	D	970	2000	ug/Kg
120-12-7	Anthracene	2900	D	970	2000	ug/Kg
86-74-8	Carbazole	2000	UD	930	2000	ug/Kg
84-74-2	Di-n-butylphthalate	2000	UD	970	2000	ug/Kg
206-44-0	Fluoranthene	17800	D	940	2000	ug/Kg
129-00-0	Pyrene	12900	D	960	2000	ug/Kg
85-68-7	Butylbenzylphthalate	2000	UD	1100	2000	ug/Kg
91-94-1	3,3-Dichlorobenzidine	3800	UD	1100	3800	ug/Kg
56-55-3	Benzo(a)anthracene	8900	D	930	2000	ug/Kg
218-01-9	Chrysene	7600	D	920	2000	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	2000	UD	1000	2000	ug/Kg
117-84-0	Di-n-octyl phthalate	3800	UD	1300	3800	ug/Kg
205-99-2	Benzo(b)fluoranthene	10700	D	940	2000	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025DL	SDG No.:	Q1241
Lab Sample ID:	Q1241-15DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	86.6
Sample Wt/Vol:	30.04 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
BF141549.D	10	01/31/25 10:20	02/10/25 21:38	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	4300	D	950	2000	ug/Kg
50-32-8	Benzo(a)pyrene	9500	D	1100	2000	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	3900	D	900	2000	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1100	JD	940	2000	ug/Kg
191-24-2	Benzo(g,h,i)perylene	4200	D	920	2000	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	2000	UD	1000	2000	ug/Kg
123-91-1	1,4-Dioxane	2000	UD	1300	2000	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	2000	UD	860	2000	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	122		18 - 112	81%	SPK: 150
13127-88-3	Phenol-d6	124		15 - 107	83%	SPK: 150
4165-60-0	Nitrobenzene-d5	83.8		18 - 107	84%	SPK: 100
321-60-8	2-Fluorobiphenyl	92.2		20 - 109	92%	SPK: 100
118-79-6	2,4,6-Tribromophenol	86.3		10 - 116	58%	SPK: 150
1718-51-0	Terphenyl-d14	64.5		10 - 105	64%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	77700	6.787			
1146-65-2	Naphthalene-d8	311000	8.069			
15067-26-2	Acenaphthene-d10	156000	9.822			
1517-22-2	Phenanthrene-d10	213000	11.31			
1719-03-5	Chrysene-d12	190000	13.951			
1520-96-3	Perylene-d12	158000	15.409			

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

Alliance TECHNICAL GROUP
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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-19	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141524.D	2	01/31/25 10:20	02/07/25 22:33	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	710	U	390	710	ug/Kg
108-95-2	Phenol	360	U	180	360	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	360	U	180	360	ug/Kg
95-57-8	2-Chlorophenol	360	U	180	360	ug/Kg
95-48-7	2-Methylphenol	360	U	170	360	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	360	U	190	360	ug/Kg
98-86-2	Acetophenone	360	UQ	190	360	ug/Kg
65794-96-9	3+4-Methylphenols	710	U	170	710	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	170	U	86.4	170	ug/Kg
67-72-1	Hexachloroethane	360	U	180	360	ug/Kg
98-95-3	Nitrobenzene	360	U	190	360	ug/Kg
78-59-1	Isophorone	360	U	180	360	ug/Kg
88-75-5	2-Nitrophenol	360	U	200	360	ug/Kg
105-67-9	2,4-Dimethylphenol	360	U	200	360	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	360	U	180	360	ug/Kg
120-83-2	2,4-Dichlorophenol	360	U	160	360	ug/Kg
91-20-3	Naphthalene	360	U	180	360	ug/Kg
106-47-8	4-Chloroaniline	360	U	180	360	ug/Kg
87-68-3	Hexachlorobutadiene	360	U	180	360	ug/Kg
105-60-2	Caprolactam	710	U	190	710	ug/Kg
59-50-7	4-Chloro-3-methylphenol	360	U	170	360	ug/Kg
91-57-6	2-Methylnaphthalene	360	U	180	360	ug/Kg
77-47-4	Hexachlorocyclopentadiene	710	UQ	330	710	ug/Kg
88-06-2	2,4,6-Trichlorophenol	360	U	150	360	ug/Kg
95-95-4	2,4,5-Trichlorophenol	360	U	160	360	ug/Kg
92-52-4	1,1-Biphenyl	360	U	190	360	ug/Kg
91-58-7	2-Chloronaphthalene	360	U	180	360	ug/Kg
88-74-4	2-Nitroaniline	360	U	200	360	ug/Kg
131-11-3	Dimethylphthalate	360	U	180	360	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-19	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141524.D	2	01/31/25 10:20	02/07/25 22:33	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	360	U	190	360	ug/Kg
606-20-2	2,6-Dinitrotoluene	360	U	180	360	ug/Kg
99-09-2	3-Nitroaniline	360	U	190	360	ug/Kg
83-32-9	Acenaphthene	360	U	170	360	ug/Kg
51-28-5	2,4-Dinitrophenol	710	U	520	710	ug/Kg
100-02-7	4-Nitrophenol	710	U	250	710	ug/Kg
132-64-9	Dibenzofuran	360	U	180	360	ug/Kg
121-14-2	2,4-Dinitrotoluene	360	U	180	360	ug/Kg
84-66-2	Diethylphthalate	360	U	170	360	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	360	U	180	360	ug/Kg
86-73-7	Fluorene	360	U	180	360	ug/Kg
100-01-6	4-Nitroaniline	360	U	230	360	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	710	U	250	710	ug/Kg
86-30-6	n-Nitrosodiphenylamine	360	U	170	360	ug/Kg
101-55-3	4-Bromophenyl-phenylether	360	U	170	360	ug/Kg
118-74-1	Hexachlorobenzene	360	U	180	360	ug/Kg
1912-24-9	Atrazine	360	U	200	360	ug/Kg
87-86-5	Pentachlorophenol	710	U	170	710	ug/Kg
85-01-8	Phenanthrene	1400		180	360	ug/Kg
120-12-7	Anthracene	400		180	360	ug/Kg
86-74-8	Carbazole	360	U	170	360	ug/Kg
84-74-2	Di-n-butylphthalate	360	U	180	360	ug/Kg
206-44-0	Fluoranthene	2400		180	360	ug/Kg
129-00-0	Pyrene	2500		180	360	ug/Kg
85-68-7	Butylbenzylphthalate	360	U	210	360	ug/Kg
91-94-1	3,3-Dichlorobenzidine	710	U	210	710	ug/Kg
56-55-3	Benzo(a)anthracene	1600		170	360	ug/Kg
218-01-9	Chrysene	1300		170	360	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	360	U	200	360	ug/Kg
117-84-0	Di-n-octyl phthalate	710	U	240	710	ug/Kg
205-99-2	Benzo(b)fluoranthene	1700		170	360	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-19	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141524.D	2	01/31/25 10:20	02/07/25 22:33	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	670		180	360	ug/Kg
50-32-8	Benzo(a)pyrene	1400		200	360	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	630		170	360	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	210	J	170	360	ug/Kg
191-24-2	Benzo(g,h,i)perylene	730		170	360	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	360	U	190	360	ug/Kg
123-91-1	1,4-Dioxane	360	U	240	360	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	360	U	160	360	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	81.4		18 - 112	54%	SPK: 150
13127-88-3	Phenol-d6	77.7		15 - 107	52%	SPK: 150
4165-60-0	Nitrobenzene-d5	52.9		18 - 107	53%	SPK: 100
321-60-8	2-Fluorobiphenyl	62.9		20 - 109	63%	SPK: 100
118-79-6	2,4,6-Tribromophenol	68.3		10 - 116	46%	SPK: 150
1718-51-0	Terphenyl-d14	67.7		10 - 105	68%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	86600	6.792			
1146-65-2	Naphthalene-d8	321000	8.075			
15067-26-2	Acenaphthene-d10	156000	9.828			
1517-22-2	Phenanthrene-d10	244000	11.316			
1719-03-5	Chrysene-d12	144000	13.968			
1520-96-3	Perylene-d12	116000	15.439			
TENTATIVE IDENTIFIED COMPOUNDS						
000080-56-8	.alpha.-Pinene	430	J		6.06	ug/Kg
000119-61-9	Benzophenone	220	J		10.5	ug/Kg
000832-69-9	Phenanthrene, 1-methyl-	190	J		11.8	ug/Kg
000949-41-7	1H-Cyclopropa[l]phenanthrene,1a,9b	600	J		11.8	ug/Kg
000613-12-7	Anthracene, 2-methyl-	180	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	570	J		11.9	ug/Kg
006572-60-7	Tricyclo[8.2.2.2(4,7)]hexadeca-2,4	210	J		12.1	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-19	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141524.D	2	01/31/25 10:20	02/07/25 22:33	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthr	490	J		12.3	ug/Kg
003674-66-6	Phenanthrene, 2,5-dimethyl-	160	J		12.4	ug/Kg
000483-65-8	Retene	300	J		13.0	ug/Kg
000243-17-4	11H-Benzo[b]fluorene	190	J		13.1	ug/Kg
002381-21-7	Pyrene, 1-methyl-	270	J		13.2	ug/Kg
001235-74-1	Methyl dehydroabietate	200	J		13.4	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

QC SUMMARY

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

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB166418BL	PB166418BL	2-Fluorophenol	150	134	89		18	112
		Phenol-d6	150	129	86		15	107
		Nitrobenzene-d5	100	96.1	96		18	107
		2-Fluorobiphenyl	100	96.5	97		20	109
		2,4,6-Tribromophenol	150	147	98		10	116
		Terphenyl-d14	100	94.3	94		10	105
PB166418BS	PB166418BS	2-Fluorophenol	150	139	92		18	112
		Phenol-d6	150	133	89		15	107
		Nitrobenzene-d5	100	97.1	97		18	107
		2-Fluorobiphenyl	100	98.9	99		20	109
		2,4,6-Tribromophenol	150	160	106		10	116
		Terphenyl-d14	100	96.1	96		10	105
Q1239-10MS	357MS	2-Fluorophenol	150	80.0	53		18	112
		Phenol-d6	150	78.3	52		15	107
		Nitrobenzene-d5	100	54.3	54		18	107
		2-Fluorobiphenyl	100	53.2	53		20	109
		2,4,6-Tribromophenol	150	80.6	54		10	116
		Terphenyl-d14	100	46.0	46		10	105
Q1239-10MSD	357MSD	2-Fluorophenol	150	84.0	56		18	112
		Phenol-d6	150	82.0	55		15	107
		Nitrobenzene-d5	100	57.9	58		18	107
		2-Fluorobiphenyl	100	55.5	55		20	109
		2,4,6-Tribromophenol	150	84.1	56		10	116
		Terphenyl-d14	100	49.7	50		10	105
Q1241-03	JPP-3.5-013025	2-Fluorophenol	150	90.2	60		18	112
		Phenol-d6	150	89.1	59		15	107
		Nitrobenzene-d5	100	65.0	65		18	107
		2-Fluorobiphenyl	100	57.3	57		20	109
		2,4,6-Tribromophenol	150	79.0	53		10	116
		Terphenyl-d14	100	54.5	55		10	105
Q1241-03DL	JPP-3.5-013025DL	2-Fluorophenol	150	101	67		18	112
		Phenol-d6	150	100	67		15	107
		Nitrobenzene-d5	100	67.9	68		18	107
		2-Fluorobiphenyl	100	64.9	65		20	109
		2,4,6-Tribromophenol	150	78.9	53		10	116
		Terphenyl-d14	100	44.5	44		10	105
Q1241-07	JPP-5.3-013025	2-Fluorophenol	150	77.0	51		18	112
		Phenol-d6	150	86.8	58		15	107
		Nitrobenzene-d5	100	64.3	64		18	107
		2-Fluorobiphenyl	100	60.7	61		20	109
		2,4,6-Tribromophenol	150	63.1	42		10	116
		Terphenyl-d14	100	48.7	49		10	105
Q1241-11	JPP-5.2-013025	2-Fluorophenol	150	17.5	12	*	18	112
		Phenol-d6	150	74.0	49		15	107
		Nitrobenzene-d5	100	62.2	62		18	107
		2-Fluorobiphenyl	100	68.7	69		20	109
		2,4,6-Tribromophenol	150	5.35	4	*	10	116
		Terphenyl-d14	100	66.4	66		10	105
Q1241-15	JPP-5.4-013025	2-Fluorophenol	150	87.8	59		18	112
		Phenol-d6	150	87.7	58		15	107
		Nitrobenzene-d5	100	58.4	58		18	107

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Surrogate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q1241-15	JPP-5.4-013025	2-Fluorobiphenyl	100	65.2	65		20	109
		2,4,6-Tribromophenol	150	68.6	46		10	116
		Terphenyl-d14	100	64.6	65		10	105
Q1241-15DL	JPP-5.4-013025DL	2-Fluorophenol	150	122	81		18	112
		Phenol-d6	150	124	83		15	107
		Nitrobenzene-d5	100	83.8	84		18	107
		2-Fluorobiphenyl	100	92.2	92		20	109
		2,4,6-Tribromophenol	150	86.3	58		10	116
		Terphenyl-d14	100	64.5	64		10	105
Q1241-19	JPP-51.4-013025	2-Fluorophenol	150	81.4	54		18	112
		Phenol-d6	150	77.7	52		15	107
		Nitrobenzene-d5	100	52.9	53		18	107
		2-Fluorobiphenyl	100	62.9	63		20	109
		2,4,6-Tribromophenol	150	68.3	46		10	116
		Terphenyl-d14	100	67.7	68		10	105

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1241

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: Q1239-10MS		**Client Sample ID: 357MS**						**DataFile:**	**BF141345.D**		
Benzaldehyde	1200	0	1000	ug/Kg	83				10	86	
Phenol	1200	0	880	ug/Kg	73				67	126	
bis(2-Chloroethyl)ether	1200	0	900	ug/Kg	75				54	125	
2-Chlorophenol	1200	0	900	ug/Kg	75	*			79	107	
2-Methylphenol	1200	0	860	ug/Kg	72				66	122	
2,2-oxybis(1-Chloropropane)	1200	0	880	ug/Kg	73				65	110	
Acetophenone	1200	0	990	ug/Kg	83				75	111	
3+4-Methylphenols	1200	0	920	ug/Kg	77				66	104	
N-Nitroso-di-n-propylamine	1200	0	900	ug/Kg	75				59	119	
Hexachloroethane	1200	0	860	ug/Kg	72				65	117	
Nitrobenzene	1200	0	840	ug/Kg	70				70	119	
Isophorone	1200	0	900	ug/Kg	75	*			76	122	
2-Nitrophenol	1200	0	900	ug/Kg	75				54	145	
2,4-Dimethylphenol	1200	0	1100	ug/Kg	92				44	135	
bis(2-Chloroethoxy)methane	1200	0	880	ug/Kg	73				68	112	
2,4-Dichlorophenol	1200	0	900	ug/Kg	75				72	118	
Naphthalene	1200	0	850	ug/Kg	71	*			72	110	
4-Chloroaniline	1200	0	210	ug/Kg	18				10	91	
Hexachlorobutadiene	1200	0	840	ug/Kg	70				66	114	
Caprolactam	1200	0	990	ug/Kg	83				51	134	
4-Chloro-3-methylphenol	1200	0	870	ug/Kg	73				57	132	
2-Methylnaphthalene	1200	0	840	ug/Kg	70				59	123	
Hexachlorocyclopentadiene	2400	0	3200	ug/Kg	133				10	175	
2,4,6-Trichlorophenol	1200	0	920	ug/Kg	77				72	117	
2,4,5-Trichlorophenol	1200	0	890	ug/Kg	74				72	117	
1,1-Biphenyl	1200	0	990	ug/Kg	83				75	113	
2-Chloronaphthalene	1200	0	850	ug/Kg	71				67	118	
2-Nitroaniline	1200	0	900	ug/Kg	75				69	127	
Dimethylphthalate	1200	0	910	ug/Kg	76				70	113	
Acenaphthylene	1200	0	940	ug/Kg	78	*			79	118	
2,6-Dinitrotoluene	1200	0	860	ug/Kg	72				70	125	
3-Nitroaniline	1200	0	530	ug/Kg	44				30	99	
Acenaphthene	1200	0	980	ug/Kg	82				70	121	
2,4-Dinitrophenol	2400	0	2200	ug/Kg	92				10	155	
4-Nitrophenol	2400	0	1600	ug/Kg	67				45	133	
Dibenzofuran	1200	0	870	ug/Kg	73				72	110	
2,4-Dinitrotoluene	1200	0	880	ug/Kg	73				55	128	
Diethylphthalate	1200	0	900	ug/Kg	75				70	112	
4-Chlorophenyl-phenylether	1200	0	850	ug/Kg	71				71	108	
Fluorene	1200	0	850	ug/Kg	71				68	116	
4-Nitroaniline	1200	0	800	ug/Kg	67				55	120	
4,6-Dinitro-2-methylphenol	1200	0	1100	ug/Kg	92				10	160	
N-Nitrosodiphenylamine	1200	0	990	ug/Kg	83				73	118	
4-Bromophenyl-phenylether	1200	0	970	ug/Kg	81				65	121	
Hexachlorobenzene	1200	0	940	ug/Kg	78				67	118	
Atrazine	1200	0	1000	ug/Kg	83				79	127	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Pentachlorophenol	2400	0	1800	ug/Kg	75				47	128	
Phenanthrene	1200	0	940	ug/Kg	78				52	128	
Anthracene	1200	0	950	ug/Kg	79				62	124	
Carbazole	1200	0	850	ug/Kg	71				59	119	
Di-n-butylphthalate	1200	0	960	ug/Kg	80				69	118	
Fluoranthene	1200	0	840	ug/Kg	70				44	125	
Pyrene	1200	0	740	ug/Kg	62				26	142	
Butylbenzylphthalate	1200	0	860	ug/Kg	72				64	126	
3,3-Dichlorobenzidine	1200	0	670	ug/Kg	56				33	116	
Benzo(a)anthracene	1200	0	860	ug/Kg	72				71	114	
Chrysene	1200	0	910	ug/Kg	76				57	121	
bis(2-Ethylhexyl)phthalate	1200	0	890	ug/Kg	74				42	169	
Di-n-octyl phthalate	1200	0	1000	ug/Kg	83				23	175	
Benzo(b)fluoranthene	1200	0	1000	ug/Kg	83				67	121	
Benzo(k)fluoranthene	1200	0	890	ug/Kg	74				57	134	
Benzo(a)pyrene	1200	0	990	ug/Kg	83				70	142	
Indeno(1,2,3-cd)pyrene	1200	0	720	ug/Kg	60				40	129	
Dibenz(a,h)anthracene	1200	0	730	ug/Kg	61				43	123	
Benzo(g,h,i)perylene	1200	0	640	ug/Kg	53				24	125	
1,2,4,5-Tetrachlorobenzene	1200	0	960	ug/Kg	80				69	124	
1,4-Dioxane	1200	0	900	ug/Kg	75				46	112	
2,3,4,6-Tetrachlorophenol	1200	0	930	ug/Kg	78				69	112	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1241

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: Q1239-10MSD		**Client Sample ID: 357MSD**						**DataFile: BF141346.D**			
Benzaldehyde	1200	0	1100	ug/Kg	92	*	10		10	86	20
Phenol	1200	0	920	ug/Kg	77		5		67	126	20
bis(2-Chloroethyl)ether	1200	0	940	ug/Kg	78		4		54	125	20
2-Chlorophenol	1200	0	950	ug/Kg	79		5		79	107	20
2-Methylphenol	1200	0	900	ug/Kg	75		4		66	122	20
2,2-oxybis(1-Chloropropane)	1200	0	920	ug/Kg	77		5		65	110	20
Acetophenone	1200	0	1100	ug/Kg	92		10		75	111	20
3+4-Methylphenols	1200	0	970	ug/Kg	81		5		66	104	20
N-Nitroso-di-n-propylamine	1200	0	940	ug/Kg	78		4		59	119	20
Hexachloroethane	1200	0	910	ug/Kg	76		5		65	117	20
Nitrobenzene	1200	0	910	ug/Kg	76		8		70	119	20
Isophorone	1200	0	960	ug/Kg	80		6		76	122	20
2-Nitrophenol	1200	0	970	ug/Kg	81		8		54	145	20
2,4-Dimethylphenol	1200	0	1200	ug/Kg	100		8		44	135	20
bis(2-Chloroethoxy)methane	1200	0	950	ug/Kg	79		8		68	112	20
2,4-Dichlorophenol	1200	0	950	ug/Kg	79		5		72	118	20
Naphthalene	1200	0	900	ug/Kg	75		5		72	110	20
4-Chloroaniline	1200	0	240	ug/Kg	20		11		10	91	20
Hexachlorobutadiene	1200	0	890	ug/Kg	74		6		66	114	20
Caprolactam	1200	0	1100	ug/Kg	92		10		51	134	20
4-Chloro-3-methylphenol	1200	0	930	ug/Kg	78		7		57	132	20
2-Methylnaphthalene	1200	0	890	ug/Kg	74		6		59	123	20
Hexachlorocyclopentadiene	2400	0	3400	ug/Kg	142		7		10	175	20
2,4,6-Trichlorophenol	1200	0	970	ug/Kg	81		5		72	117	20
2,4,5-Trichlorophenol	1200	0	950	ug/Kg	79		7		72	117	20
1,1-Biphenyl	1200	0	1000	ug/Kg	83		0		75	113	20
2-Chloronaphthalene	1200	0	900	ug/Kg	75		5		67	118	20
2-Nitroaniline	1200	0	950	ug/Kg	79		5		69	127	20
Dimethylphthalate	1200	0	970	ug/Kg	81		6		70	113	20
Acenaphthylene	1200	0	990	ug/Kg	83		6		79	118	20
2,6-Dinitrotoluene	1200	0	910	ug/Kg	76		5		70	125	20
3-Nitroaniline	1200	0	550	ug/Kg	46		4		30	99	20
Acenaphthene	1200	0	1000	ug/Kg	83		1		70	121	20
2,4-Dinitrophenol	2400	0	2300	ug/Kg	96		4		10	155	20
4-Nitrophenol	2400	0	1700	ug/Kg	71		6		45	133	20
Dibenzofuran	1200	0	920	ug/Kg	77		5		72	110	20
2,4-Dinitrotoluene	1200	0	930	ug/Kg	78		7		55	128	20
Diethylphthalate	1200	0	950	ug/Kg	79		5		70	112	20
4-Chlorophenyl-phenylether	1200	0	900	ug/Kg	75		5		71	108	20
Fluorene	1200	0	900	ug/Kg	75		5		68	116	20
4-Nitroaniline	1200	0	870	ug/Kg	73		9		55	120	20
4,6-Dinitro-2-methylphenol	1200	0	1200	ug/Kg	100		8		10	160	20
N-Nitrosodiphenylamine	1200	0	1100	ug/Kg	92		10		73	118	20
4-Bromophenyl-phenylether	1200	0	1000	ug/Kg	83		2		65	121	20
Hexachlorobenzene	1200	0	990	ug/Kg	83		6		67	118	20
Atrazine	1200	0	1100	ug/Kg	92		10		79	127	20

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1241

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	2400	0	2000	ug/Kg	83		10		47	128	20
Phenanthrene	1200	0	1000	ug/Kg	83		6		52	128	20
Anthracene	1200	0	1000	ug/Kg	83		5		62	124	20
Carbazole	1200	0	920	ug/Kg	77		8		59	119	20
Di-n-butylphthalate	1200	0	1000	ug/Kg	83		4		69	118	20
Fluoranthene	1200	0	920	ug/Kg	77		10		44	125	20
Pyrene	1200	0	810	ug/Kg	68		9		26	142	20
Butylbenzylphthalate	1200	0	930	ug/Kg	78		8		64	126	20
3,3-Dichlorobenzidine	1200	0	750	ug/Kg	63		12		33	116	20
Benzo(a)anthracene	1200	0	930	ug/Kg	78		8		71	114	20
Chrysene	1200	0	980	ug/Kg	82		8		57	121	20
bis(2-Ethylhexyl)phthalate	1200	0	970	ug/Kg	81		9		42	169	20
Di-n-octyl phthalate	1200	0	1100	ug/Kg	92		10		23	175	20
Benzo(b)fluoranthene	1200	0	990	ug/Kg	83		0		67	121	20
Benzo(k)fluoranthene	1200	0	1100	ug/Kg	92		22	*	57	134	20
Benzo(a)pyrene	1200	0	1100	ug/Kg	92		10		70	142	20
Indeno(1,2,3-cd)pyrene	1200	0	770	ug/Kg	64		6		40	129	20
Dibenz(a,h)anthracene	1200	0	780	ug/Kg	65		6		43	123	20
Benzo(g,h,i)perylene	1200	0	690	ug/Kg	58		9		24	125	20
1,2,4,5-Tetrachlorobenzene	1200	0	1000	ug/Kg	83		4		69	124	20
1,4-Dioxane	1200	0	950	ug/Kg	79		5		46	112	20
2,3,4,6-Tetrachlorophenol	1200	0	1000	ug/Kg	83		6		69	112	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: 8270E **DataFile:** BF141441.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB166418BS	Benzaldehyde	1700	1700	ug/Kg	100				10	133	
	Phenol	1700	1400	ug/Kg	82				62	112	
	bis(2-Chloroethyl)ether	1700	1400	ug/Kg	82				60	101	
	2-Chlorophenol	1700	1500	ug/Kg	88				65	112	
	2-Methylphenol	1700	1400	ug/Kg	82				61	108	
	2,2-oxybis(1-Chloropropane)	1700	1300	ug/Kg	76				51	100	
	Acetophenone	1700	1700	ug/Kg	100		*		66	98	
	3+4-Methylphenols	1700	1500	ug/Kg	88				58	111	
	N-Nitroso-di-n-propylamine	1700	1400	ug/Kg	82				63	95	
	Hexachloroethane	1700	1500	ug/Kg	88				72	108	
	Nitrobenzene	1700	1400	ug/Kg	82				57	101	
	Isophorone	1700	1500	ug/Kg	88				59	99	
	2-Nitrophenol	1700	1500	ug/Kg	88				61	111	
	2,4-Dimethylphenol	1700	1800	ug/Kg	106				46	141	
	bis(2-Chloroethoxy)methane	1700	1300	ug/Kg	76				66	97	
	2,4-Dichlorophenol	1700	1500	ug/Kg	88				62	107	
	Naphthalene	1700	1400	ug/Kg	82				62	100	
	4-Chloroaniline	1700	580	ug/Kg	34				16	100	
	Hexachlorobutadiene	1700	1500	ug/Kg	88				53	98	
	Caprolactam	1700	1600	ug/Kg	94				67	110	
	4-Chloro-3-methylphenol	1700	1500	ug/Kg	88				58	112	
	2-Methylnaphthalene	1700	1400	ug/Kg	82				60	104	
	Hexachlorocyclopentadiene	3300	6300	ug/Kg	191		*		45	165	
	2,4,6-Trichlorophenol	1700	1500	ug/Kg	88				59	102	
	2,4,5-Trichlorophenol	1700	1400	ug/Kg	82				61	98	
	1,1-Biphenyl	1700	1600	ug/Kg	94				57	103	
	2-Chloronaphthalene	1700	1400	ug/Kg	82				58	99	
	2-Nitroaniline	1700	1500	ug/Kg	88				66	101	
	Dimethylphthalate	1700	1500	ug/Kg	88				61	99	
	Acenaphthylene	1700	1600	ug/Kg	94				63	101	
	2,6-Dinitrotoluene	1700	1400	ug/Kg	82				61	104	
	3-Nitroaniline	1700	750	ug/Kg	44				28	100	
	Acenaphthene	1700	1700	ug/Kg	100				57	104	
	2,4-Dinitrophenol	3300	3700	ug/Kg	112				37	128	
	4-Nitrophenol	3300	3200	ug/Kg	97				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	1500	ug/Kg	88				58	98	
	Fluorene	1700	1500	ug/Kg	88				61	101	
	4-Nitroaniline	1700	1500	ug/Kg	88				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.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: 8270E **DataFile:** BF141441.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB166418BS	Hexachlorobenzene	1700	1500	ug/Kg	88				64	98	
	Atrazine	1700	1700	ug/Kg	100				47	152	
	Pentachlorophenol	3300	3100	ug/Kg	94				67	105	
	Phenanthrene	1700	1500	ug/Kg	88				59	103	
	Anthracene	1700	1600	ug/Kg	94				61	105	
	Carbazole	1700	1600	ug/Kg	94				61	99	
	Di-n-butylphthalate	1700	1500	ug/Kg	88				58	104	
	Fluoranthene	1700	1600	ug/Kg	94				57	107	
	Pyrene	1700	1400	ug/Kg	82				59	103	
	Butylbenzylphthalate	1700	1500	ug/Kg	88				55	103	
	3,3-Dichlorobenzidine	1700	710	ug/Kg	42				42	91	
	Benzo(a)anthracene	1700	1500	ug/Kg	88				60	102	
	Chrysene	1700	1400	ug/Kg	82				59	101	
	bis(2-Ethylhexyl)phthalate	1700	1500	ug/Kg	88				54	135	
	Di-n-octyl phthalate	1700	1400	ug/Kg	82				52	137	
	Benzo(b)fluoranthene	1700	1400	ug/Kg	82				62	109	
	Benzo(k)fluoranthene	1700	1600	ug/Kg	94				62	109	
	Benzo(a)pyrene	1700	1600	ug/Kg	94				63	103	
	Indeno(1,2,3-cd)pyrene	1700	1500	ug/Kg	88				63	101	
	Dibenz(a,h)anthracene	1700	1500	ug/Kg	88				61	112	
	Benzo(g,h,i)perylene	1700	1400	ug/Kg	82				70	108	
	1,2,4,5-Tetrachlorobenzene	1700	1600	ug/Kg	94				53	101	
	1,4-Dioxane	1700	1300	ug/Kg	76				50	96	
	2,3,4,6-Tetrachlorophenol	1700	1600	ug/Kg	94				59	108	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166418BL

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: BF141440.D Lab Sample ID: PB166418BL

Instrument ID: BNA_F Date Extracted: 01/31/2025

Matrix: (soil/water) SOIL Date Analyzed: 02/05/2025

Level: (low/med) LOW Time Analyzed: 12:13

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166418BS	PB166418BS	BF141441.D	02/05/2025
JPP-3.5-013025	Q1241-03	BF141518.D	02/07/2025
JPP-5.2-013025	Q1241-11	BF141521.D	02/07/2025
JPP-51.4-013025	Q1241-19	BF141524.D	02/07/2025
JPP-5.4-013025	Q1241-15	BF141525.D	02/07/2025
357MS	Q1239-10MS	BF141345.D	01/31/2025
357MSD	Q1239-10MSD	BF141346.D	01/31/2025
JPP-5.3-013025	Q1241-07	BF141433.D	02/05/2025

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1241 SDG NO.: Q1241

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.: Q1241 SDG NO.: Q1241

Lab File ID: BF141335.D DFTPP Injection Date: 01/31/2025

Instrument ID: BNA_F DFTPP Injection Time: 16:53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	46.2
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	38.1
70	Less than 2.0% of mass 69	0.3 (0.7) 1
127	10.0 - 80.0% of mass 198	49
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	2.8
441	Present, but less than mass 443	11.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.6 (19.7) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141336.D	01/31/2025	17:19
357MS	Q1239-10MS	BF141345.D	01/31/2025	21:23
357MSD	Q1239-10MSD	BF141346.D	01/31/2025	21:50

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: BF141409.D DFTPP Injection Date: 02/04/2025

Instrument ID: BNA_F DFTPP Injection Time: 15:32

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	0.6 (1.7) 1
69	Mass 69 relative abundance	36.7
70	Less than 2.0% of mass 69	0.2 (0.6) 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	6.8
275	10.0 - 60.0% of mass 198	27.1
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	12.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.1 (18.5) 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	BF141410.D	02/04/2025	15:58
JPP-5.3-013025	Q1241-07	BF141433.D	02/05/2025	02:07

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: BF141434.D DFTPP Injection Date: 02/05/2025

Instrument ID: BNA_F DFTPP Injection Time: 09:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	42.7
68	Less than 2.0% of mass 69	0.7 (2) 1
69	Mass 69 relative abundance	35.1
70	Less than 2.0% of mass 69	0.1 (0.4) 1
127	10.0 - 80.0% of mass 198	48.7
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	6.4
275	10.0 - 60.0% of mass 198	26.8
365	Greater than 1% of mass 198	2.8
441	Present, but less than mass 443	12.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.5 (19.2) 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	BF141435.D	02/05/2025	10:02
PB166418BL	PB166418BL	BF141440.D	02/05/2025	12:13
PB166418BS	PB166418BS	BF141441.D	02/05/2025	12:39

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1241 SDG NO.: Q1241

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.: Q1241 SDG NO.: Q1241

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

Instrument ID: BNA_F DFTPP Injection Time: 14:07

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

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141506.D	02/07/2025	14:33
JPP-3.5-013025	Q1241-03	BF141518.D	02/07/2025	19:54
JPP-5.2-013025	Q1241-11	BF141521.D	02/07/2025	21:13
JPP-51.4-013025	Q1241-19	BF141524.D	02/07/2025	22:33
JPP-5.4-013025	Q1241-15	BF141525.D	02/07/2025	23:00

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1241 SDG NO.: Q1241

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

Instrument ID: BNA_F DFTPP Injection Time: 11:08

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

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141531.D	02/10/2025	11:34
JPP-3.5-013025DL	Q1241-03DL	BF141546.D	02/10/2025	20:19
JPP-5.4-013025DL	Q1241-15DL	BF141549.D	02/10/2025	21:38

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

EPA Sample No.: SSTDCCC040 Date Analyzed: 01/31/2025

Lab File ID: BF141336.D Time Analyzed: 17:19

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	140033	6.798	558386	8.08	299701	9.84
	UPPER LIMIT	280066	7.298	1116770	8.581	599402	10.339
	LOWER LIMIT	70016.5	6.298	279193	7.581	149851	9.339
	EPA SAMPLE NO.						
01	357MS	151192	6.80	601644	8.08	313664	9.84
02	357MSD	149445	6.80	587795	8.08	309142	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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

EPA Sample No.: SSTDCCC040 Date Analyzed: 01/31/2025

Lab File ID: BF141336.D Time Analyzed: 17:19

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	493954	11.322	281629	13.968	286623	15.433
	UPPER LIMIT	987908	11.822	563258	14.468	573246	15.933
	LOWER LIMIT	246977	10.822	140815	13.468	143312	14.933
	EPA SAMPLE NO.						
01	357MS	473142	11.32	293043	13.97	307605	15.43
02	357MSD	457150	11.32	288493	13.97	294341	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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

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

Lab File ID: BF141410.D Time Analyzed: 15:58

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	89972	6.792	349697	8.08	187729	9.83
	UPPER LIMIT	179944	7.292	699394	8.575	375458	10.328
	LOWER LIMIT	44986	6.292	174849	7.575	93864.5	9.328
	EPA SAMPLE NO.						
01	JPP-5.3-013025	80166	6.79	313710	8.08	169555	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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

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

Lab File ID: BF141410.D Time Analyzed: 15:58

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	325046	11.316	235785	13.963	203742	15.421
	UPPER LIMIT	650092	11.816	471570	14.463	407484	15.921
	LOWER LIMIT	162523	10.816	117893	13.463	101871	14.921
	EPA SAMPLE NO.						
01	JPP-5.3-013025	249652	11.32	170048	13.96	132625	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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

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

Lab File ID: BF141435.D Time Analyzed: 10:02

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	78610	6.792	301871	8.08	162758	9.83
	UPPER LIMIT	157220	7.292	603742	8.575	325516	10.328
	LOWER LIMIT	39305	6.292	150936	7.575	81379	9.328
	EPA SAMPLE NO.						
01	PB166418BL	76450	6.79	302478	8.07	163001	9.83
02	PB166418BS	69377	6.79	275008	8.08	148846	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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

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

Lab File ID: BF141435.D Time Analyzed: 10:02

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	271503	11.316	168458	13.963	170248	15.427
	UPPER LIMIT	543006	11.816	336916	14.463	340496	15.927
	LOWER LIMIT	135752	10.816	84229	13.463	85124	14.927
	EPA SAMPLE NO.						
01	PB166418BL	280778	11.32	198135	13.96	160441	15.43
02	PB166418BS	260150	11.32	177509	13.96	152303	15.43

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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

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

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

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	91880	6.787	360290	8.08	198348	9.83
	UPPER LIMIT	183760	7.287	720580	8.575	396696	10.328
	LOWER LIMIT	45940	6.287	180145	7.575	99174	9.328
	EPA SAMPLE NO.						
01	JPP-3.5-013025	82982	6.79	313039	8.08	154685	9.83
02	JPP-5.2-013025	79798	6.79	308399	8.08	141432	9.83
03	JPP-5.4-013025	88460	6.79	334845	8.08	160965	9.83
04	JPP-51.4-013025	86637	6.79	320633	8.08	156448	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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

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

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

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	340922	11.316	238177	13.957	192868	15.416
	UPPER LIMIT	681844	11.816	476354	14.457	385736	15.916
	LOWER LIMIT	170461	10.816	119089	13.457	96434	14.916
	EPA SAMPLE NO.						
01	JPP-3.5-013025	230713	11.32	145185	13.97	116043	15.43
02	JPP-5.2-013025	218291	11.32	140468	13.96	106816	15.42
03	JPP-5.4-013025	239283	11.32	139382	13.97	114069	15.45
04	JPP-51.4-013025	243767	11.32	144012	13.97	115869	15.44

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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

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

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

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	91504	6.792	356056	8.08	192109	9.83
	UPPER LIMIT	183008	7.292	712112	8.575	384218	10.327
	LOWER LIMIT	45752	6.292	178028	7.575	96054.5	9.327
	EPA SAMPLE NO.						
01	JPP-3.5-013025DL	76076	6.79	302314	8.07	158827	9.82
02	JPP-5.4-013025DL	77702	6.79	310551	8.07	156153	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.: Q1241 SAS No.: Q1241 SDG NO.: Q1241

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

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

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	313129	11.316	193608	13.963	177316	15.439
	UPPER LIMIT	626258	11.816	387216	14.463	354632	15.939
	LOWER LIMIT	156565	10.816	96804	13.463	88658	14.939
	EPA SAMPLE NO.						
01	JPP-3.5-013025DL	223216	11.31	183040	13.95	164548	15.40
02	JPP-5.4-013025DL	212674	11.31	189599	13.95	157979	15.41

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

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

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

QC SAMPLE DATA

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:	PB166418BL	SDG No.:	Q1241
Lab Sample ID:	PB166418BL	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
BF141440.D	1	01/31/25 10:20	02/05/25 12:13	PB166418

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:	PB166418BL	SDG No.:	Q1241
Lab Sample ID:	PB166418BL	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
BF141440.D	1	01/31/25 10:20	02/05/25 12:13	PB166418

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:	PB166418BL	SDG No.:	Q1241
Lab Sample ID:	PB166418BL	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
BF141440.D	1	01/31/25 10:20	02/05/25 12:13	PB166418

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	134		18 - 112	89%	SPK: 150
13127-88-3	Phenol-d6	129		15 - 107	86%	SPK: 150
4165-60-0	Nitrobenzene-d5	96.1		18 - 107	96%	SPK: 100
321-60-8	2-Fluorobiphenyl	96.5		20 - 109	97%	SPK: 100
118-79-6	2,4,6-Tribromophenol	147		10 - 116	98%	SPK: 150
1718-51-0	Terphenyl-d14	94.3		10 - 105	94%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	76500	6.786			
1146-65-2	Naphthalene-d8	302000	8.069			
15067-26-2	Acenaphthene-d10	163000	9.827			
1517-22-2	Phenanthrene-d10	281000	11.316			
1719-03-5	Chrysene-d12	198000	13.957			
1520-96-3	Perylene-d12	160000	15.433			
TENTATIVE IDENTIFIED COMPOUNDS						
004744-10-9	Propane, 1,1-dimethoxy-	120	J		2.17	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	71.0	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:	PB166418BL			SDG No.:	Q1241
Lab Sample ID:	PB166418BL			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
BF141440.D	1	01/31/25 10:20	02/05/25 12:13	PB166418

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:	PB166418BS	SDG No.:	Q1241
Lab Sample ID:	PB166418BS	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
BF141441.D	1	01/31/25 10:20	02/05/25 12:39	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1700		180	330	ug/Kg
108-95-2	Phenol	1400		82.9	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1400		83.7	170	ug/Kg
95-57-8	2-Chlorophenol	1500		83.5	170	ug/Kg
95-48-7	2-Methylphenol	1400		80.6	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1300		90.9	170	ug/Kg
98-86-2	Acetophenone	1700		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	1400		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	1500		84.6	170	ug/Kg
88-75-5	2-Nitrophenol	1500		94.5	170	ug/Kg
105-67-9	2,4-Dimethylphenol	1800		93.2	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1300		85.8	170	ug/Kg
120-83-2	2,4-Dichlorophenol	1500		75.5	170	ug/Kg
91-20-3	Naphthalene	1400		82.6	170	ug/Kg
106-47-8	4-Chloroaniline	580		82.6	170	ug/Kg
87-68-3	Hexachlorobutadiene	1500		83.3	170	ug/Kg
105-60-2	Caprolactam	1600		86.8	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1500		77.5	170	ug/Kg
91-57-6	2-Methylnaphthalene	1400		82.5	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	6300	E	160	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1500		71.4	170	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1400		74.0	170	ug/Kg
92-52-4	1,1-Biphenyl	1600		87.4	170	ug/Kg
91-58-7	2-Chloronaphthalene	1400		83.3	170	ug/Kg
88-74-4	2-Nitroaniline	1500		95.0	170	ug/Kg
131-11-3	Dimethylphthalate	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:	PB166418BS	SDG No.:	Q1241
Lab Sample ID:	PB166418BS	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
BF141441.D	1	01/31/25 10:20	02/05/25 12:39	PB166418

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	1400		83.2	170	ug/Kg
99-09-2	3-Nitroaniline	750		89.2	170	ug/Kg
83-32-9	Acenaphthene	1700		81.1	170	ug/Kg
51-28-5	2,4-Dinitrophenol	3700	E	240	330	ug/Kg
100-02-7	4-Nitrophenol	3200	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	1500		85.6	170	ug/Kg
86-73-7	Fluorene	1500		85.5	170	ug/Kg
100-01-6	4-Nitroaniline	1500		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	1700		91.4	170	ug/Kg
87-86-5	Pentachlorophenol	3100	E	77.3	330	ug/Kg
85-01-8	Phenanthrene	1500		84.0	170	ug/Kg
120-12-7	Anthracene	1600		84.4	170	ug/Kg
86-74-8	Carbazole	1600		80.3	170	ug/Kg
84-74-2	Di-n-butylphthalate	1500		84.3	170	ug/Kg
206-44-0	Fluoranthene	1600		81.7	170	ug/Kg
129-00-0	Pyrene	1400		83.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	1500		96.8	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	710		98.6	330	ug/Kg
56-55-3	Benzo(a)anthracene	1500		80.7	170	ug/Kg
218-01-9	Chrysene	1400		79.5	170	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1500		91.0	170	ug/Kg
117-84-0	Di-n-octyl phthalate	1400		110	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	1400		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:	PB166418BS	SDG No.:	Q1241
Lab Sample ID:	PB166418BS	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
BF141441.D	1	01/31/25 10:20	02/05/25 12:39	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1600		82.6	170	ug/Kg
50-32-8	Benzo(a)pyrene	1600		93.0	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1500		78.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1500		81.2	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1400		80.1	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1600		86.8	170	ug/Kg
123-91-1	1,4-Dioxane	1300		110	170	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1600		74.7	170	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	139		18 - 112	92%	SPK: 150
13127-88-3	Phenol-d6	133		15 - 107	89%	SPK: 150
4165-60-0	Nitrobenzene-d5	97.1		18 - 107	97%	SPK: 100
321-60-8	2-Fluorobiphenyl	98.9		20 - 109	99%	SPK: 100
118-79-6	2,4,6-Tribromophenol	160		10 - 116	106%	SPK: 150
1718-51-0	Terphenyl-d14	96.1		10 - 105	96%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	69400	6.793			
1146-65-2	Naphthalene-d8	275000	8.075			
15067-26-2	Acenaphthene-d10	149000	9.828			
1517-22-2	Phenanthrene-d10	260000	11.316			
1719-03-5	Chrysene-d12	178000	13.963			
1520-96-3	Perylene-d12	152000	15.427			

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

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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	357MS	SDG No.:	Q1241
Lab Sample ID:	Q1239-10MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
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
BF141345.D	1	01/31/25 10:20	01/31/25 21:23	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1000		130	230	ug/Kg
108-95-2	Phenol	880		58.6	120	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	900		59.2	120	ug/Kg
95-57-8	2-Chlorophenol	900		59.0	120	ug/Kg
95-48-7	2-Methylphenol	860		57.0	120	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	880		64.2	120	ug/Kg
98-86-2	Acetophenone	990		61.4	120	ug/Kg
65794-96-9	3+4-Methylphenols	920		56.4	230	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	900		28.5	56.5	ug/Kg
67-72-1	Hexachloroethane	860		58.7	120	ug/Kg
98-95-3	Nitrobenzene	840		64.2	120	ug/Kg
78-59-1	Isophorone	900		59.8	120	ug/Kg
88-75-5	2-Nitrophenol	900		66.8	120	ug/Kg
105-67-9	2,4-Dimethylphenol	1100		65.9	120	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	880		60.6	120	ug/Kg
120-83-2	2,4-Dichlorophenol	900		53.4	120	ug/Kg
91-20-3	Naphthalene	850		58.4	120	ug/Kg
106-47-8	4-Chloroaniline	210		58.4	120	ug/Kg
87-68-3	Hexachlorobutadiene	840		58.9	120	ug/Kg
105-60-2	Caprolactam	990		61.3	230	ug/Kg
59-50-7	4-Chloro-3-methylphenol	870		54.8	120	ug/Kg
91-57-6	2-Methylnaphthalene	840		58.3	120	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3200	E	110	230	ug/Kg
88-06-2	2,4,6-Trichlorophenol	920		50.5	120	ug/Kg
95-95-4	2,4,5-Trichlorophenol	890		52.3	120	ug/Kg
92-52-4	1,1-Biphenyl	990		61.8	120	ug/Kg
91-58-7	2-Chloronaphthalene	850		58.9	120	ug/Kg
88-74-4	2-Nitroaniline	900		67.1	120	ug/Kg
131-11-3	Dimethylphthalate	910		57.7	120	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	357MS	SDG No.:	Q1241
Lab Sample ID:	Q1239-10MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
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
BF141345.D	1	01/31/25 10:20	01/31/25 21:23	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	940		61.1	120	ug/Kg
606-20-2	2,6-Dinitrotoluene	860		58.8	120	ug/Kg
99-09-2	3-Nitroaniline	530		63.0	120	ug/Kg
83-32-9	Acenaphthene	980		57.3	120	ug/Kg
51-28-5	2,4-Dinitrophenol	2200	E	170	230	ug/Kg
100-02-7	4-Nitrophenol	1600		82.0	230	ug/Kg
132-64-9	Dibenzofuran	870		59.6	120	ug/Kg
121-14-2	2,4-Dinitrotoluene	880		60.9	120	ug/Kg
84-66-2	Diethylphthalate	900		56.6	120	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	850		60.5	120	ug/Kg
86-73-7	Fluorene	850		60.4	120	ug/Kg
100-01-6	4-Nitroaniline	800		75.6	120	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1100		82.7	230	ug/Kg
86-30-6	n-Nitrosodiphenylamine	990		57.7	120	ug/Kg
101-55-3	4-Bromophenyl-phenylether	970		55.8	120	ug/Kg
118-74-1	Hexachlorobenzene	940		60.1	120	ug/Kg
1912-24-9	Atrazine	1000		64.6	120	ug/Kg
87-86-5	Pentachlorophenol	1800		54.6	230	ug/Kg
85-01-8	Phenanthrene	940		59.4	120	ug/Kg
120-12-7	Anthracene	950		59.6	120	ug/Kg
86-74-8	Carbazole	850		56.7	120	ug/Kg
84-74-2	Di-n-butylphthalate	960		59.6	120	ug/Kg
206-44-0	Fluoranthene	840		57.7	120	ug/Kg
129-00-0	Pyrene	740		58.7	120	ug/Kg
85-68-7	Butylbenzylphthalate	860		68.4	120	ug/Kg
91-94-1	3,3-Dichlorobenzidine	670		69.7	230	ug/Kg
56-55-3	Benzo(a)anthracene	860		57.0	120	ug/Kg
218-01-9	Chrysene	910		56.2	120	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	890		64.3	120	ug/Kg
117-84-0	Di-n-octyl phthalate	1000		77.7	230	ug/Kg
205-99-2	Benzo(b)fluoranthene	1000		57.3	120	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	357MS	SDG No.:	Q1241
Lab Sample ID:	Q1239-10MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
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
BF141345.D	1	01/31/25 10:20	01/31/25 21:23	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	890		58.4	120	ug/Kg
50-32-8	Benzo(a)pyrene	990		65.7	120	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	720		55.2	120	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	730		57.4	120	ug/Kg
191-24-2	Benzo(g,h,i)perylene	640		56.6	120	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	960		61.3	120	ug/Kg
123-91-1	1,4-Dioxane	900		77.7	120	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	930		52.8	120	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	80.0		18 - 112	53%	SPK: 150
13127-88-3	Phenol-d6	78.3		15 - 107	52%	SPK: 150
4165-60-0	Nitrobenzene-d5	54.3		18 - 107	54%	SPK: 100
321-60-8	2-Fluorobiphenyl	53.2		20 - 109	53%	SPK: 100
118-79-6	2,4,6-Tribromophenol	80.6		10 - 116	54%	SPK: 150
1718-51-0	Terphenyl-d14	46.0		10 - 105	46%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	151000	6.798			
1146-65-2	Naphthalene-d8	602000	8.08			
15067-26-2	Acenaphthene-d10	314000	9.839			
1517-22-2	Phenanthrene-d10	473000	11.321			
1719-03-5	Chrysene-d12	293000	13.968			
1520-96-3	Perylene-d12	308000	15.427			

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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	357MSD	SDG No.:	Q1241
Lab Sample ID:	Q1239-10MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
Sample Wt/Vol:	50.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141346.D	1	01/31/25 10:20	01/31/25 21:50	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1100		130	230	ug/Kg
108-95-2	Phenol	920		58.6	120	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	940		59.2	120	ug/Kg
95-57-8	2-Chlorophenol	950		59.0	120	ug/Kg
95-48-7	2-Methylphenol	900		57.0	120	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	920		64.3	120	ug/Kg
98-86-2	Acetophenone	1100		61.4	120	ug/Kg
65794-96-9	3+4-Methylphenols	970		56.4	230	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	940		28.5	56.6	ug/Kg
67-72-1	Hexachloroethane	910		58.7	120	ug/Kg
98-95-3	Nitrobenzene	910		64.2	120	ug/Kg
78-59-1	Isophorone	960		59.8	120	ug/Kg
88-75-5	2-Nitrophenol	970		66.8	120	ug/Kg
105-67-9	2,4-Dimethylphenol	1200		65.9	120	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	950		60.7	120	ug/Kg
120-83-2	2,4-Dichlorophenol	950		53.4	120	ug/Kg
91-20-3	Naphthalene	900		58.4	120	ug/Kg
106-47-8	4-Chloroaniline	240		58.4	120	ug/Kg
87-68-3	Hexachlorobutadiene	890		58.9	120	ug/Kg
105-60-2	Caprolactam	1100		61.4	230	ug/Kg
59-50-7	4-Chloro-3-methylphenol	930		54.8	120	ug/Kg
91-57-6	2-Methylnaphthalene	890		58.3	120	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3400	E	110	230	ug/Kg
88-06-2	2,4,6-Trichlorophenol	970		50.5	120	ug/Kg
95-95-4	2,4,5-Trichlorophenol	950		52.3	120	ug/Kg
92-52-4	1,1-Biphenyl	1000		61.8	120	ug/Kg
91-58-7	2-Chloronaphthalene	900		58.9	120	ug/Kg
88-74-4	2-Nitroaniline	950		67.2	120	ug/Kg
131-11-3	Dimethylphthalate	970		57.8	120	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	357MSD	SDG No.:	Q1241
Lab Sample ID:	Q1239-10MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
Sample Wt/Vol:	50.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141346.D	1	01/31/25 10:20	01/31/25 21:50	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	990		61.2	120	ug/Kg
606-20-2	2,6-Dinitrotoluene	910		58.8	120	ug/Kg
99-09-2	3-Nitroaniline	550		63.1	120	ug/Kg
83-32-9	Acenaphthene	1000		57.3	120	ug/Kg
51-28-5	2,4-Dinitrophenol	2300	E	170	230	ug/Kg
100-02-7	4-Nitrophenol	1700		82.0	230	ug/Kg
132-64-9	Dibenzofuran	920		59.7	120	ug/Kg
121-14-2	2,4-Dinitrotoluene	930		61.0	120	ug/Kg
84-66-2	Diethylphthalate	950		56.6	120	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	900		60.5	120	ug/Kg
86-73-7	Fluorene	900		60.5	120	ug/Kg
100-01-6	4-Nitroaniline	870		75.7	120	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1200		82.7	230	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1100		57.7	120	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1000		55.8	120	ug/Kg
118-74-1	Hexachlorobenzene	990		60.1	120	ug/Kg
1912-24-9	Atrazine	1100		64.6	120	ug/Kg
87-86-5	Pentachlorophenol	2000	E	54.7	230	ug/Kg
85-01-8	Phenanthrene	1000		59.4	120	ug/Kg
120-12-7	Anthracene	1000		59.7	120	ug/Kg
86-74-8	Carbazole	920		56.8	120	ug/Kg
84-74-2	Di-n-butylphthalate	1000		59.6	120	ug/Kg
206-44-0	Fluoranthene	920		57.8	120	ug/Kg
129-00-0	Pyrene	810		58.7	120	ug/Kg
85-68-7	Butylbenzylphthalate	930		68.4	120	ug/Kg
91-94-1	3,3-Dichlorobenzidine	750		69.7	230	ug/Kg
56-55-3	Benzo(a)anthracene	930		57.1	120	ug/Kg
218-01-9	Chrysene	980		56.2	120	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	970		64.3	120	ug/Kg
117-84-0	Di-n-octyl phthalate	1100		77.8	230	ug/Kg
205-99-2	Benzo(b)fluoranthene	990		57.3	120	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	357MSD	SDG No.:	Q1241
Lab Sample ID:	Q1239-10MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	84.8
Sample Wt/Vol:	50.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141346.D	1	01/31/25 10:20	01/31/25 21:50	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1100		58.4	120	ug/Kg
50-32-8	Benzo(a)pyrene	1100		65.8	120	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	770		55.2	120	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	780		57.4	120	ug/Kg
191-24-2	Benzo(g,h,i)perylene	690		56.6	120	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1000		61.4	120	ug/Kg
123-91-1	1,4-Dioxane	950		77.8	120	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1000		52.8	120	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	84.0		18 - 112	56%	SPK: 150
13127-88-3	Phenol-d6	82.0		15 - 107	55%	SPK: 150
4165-60-0	Nitrobenzene-d5	57.9		18 - 107	58%	SPK: 100
321-60-8	2-Fluorobiphenyl	55.5		20 - 109	55%	SPK: 100
118-79-6	2,4,6-Tribromophenol	84.1		10 - 116	56%	SPK: 150
1718-51-0	Terphenyl-d14	49.7		10 - 105	50%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	149000	6.798			
1146-65-2	Naphthalene-d8	588000	8.081			
15067-26-2	Acenaphthene-d10	309000	9.839			
1517-22-2	Phenanthrene-d10	457000	11.322			
1719-03-5	Chrysene-d12	288000	13.968			
1520-96-3	Perylene-d12	294000	15.421			

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

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

CALIBRATION SUMMARY

Response Factor Report BNA_F

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

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

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

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

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

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

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

(#) = Out of Range

Response Factor Report BNA_F

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

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

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

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

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

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

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

(#) = Out of Range

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: BNA_F Calibration Date/Time: 01/31/2025 17:19

Lab File ID: BF141336.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	1.218		-6.5	
Benzaldehyde	0.960	0.972		1.3	
Phenol-d6	1.657	1.534		-7.4	
Phenol	1.757	1.652		-6.0	20.0
bis(2-Chloroethyl)ether	1.347	1.267		-5.9	
2-Chlorophenol	1.396	1.307		-6.4	
2-Methylphenol	1.135	1.062		-6.4	
2,2-oxybis(1-Chloropropane)	2.342	2.199		-6.1	
Acetophenone	0.475	0.424		-10.7	
3+4-Methylphenols	1.393	1.318		-5.4	
n-Nitroso-di-n-propylamine	0.985	0.946	0.050	-4.0	
Nitrobenzene-d5	0.379	0.348		-8.2	
Hexachloroethane	0.571	0.536		-6.1	
Nitrobenzene	0.393	0.365		-7.1	
Isophorone	0.656	0.622		-5.2	
2-Nitrophenol	0.185	0.175		-5.4	20.0
2,4-Dimethylphenol	0.236	0.224		-5.1	
bis(2-Chloroethoxy)methane	0.418	0.386		-7.7	
2,4-Dichlorophenol	0.289	0.272		-5.9	20.0
Naphthalene	1.057	0.966		-8.6	
4-Chloroaniline	0.358	0.329		-8.1	
Hexachlorobutadiene	0.194	0.179		-7.7	20.0
Caprolactam	0.094	0.091		-3.2	
4-Chloro-3-methylphenol	0.310	0.341		10.0	20.0
2-Methylnaphthalene	0.672	0.618		-8.0	
Hexachlorocyclopentadiene	0.168	0.159	0.050	-5.4	
2,4,6-Trichlorophenol	0.372	0.365		-1.9	20.0
2-Fluorobiphenyl	1.299	1.148		-11.6	
2,4,5-Trichlorophenol	0.405	0.381		-5.9	
1,1-Biphenyl	1.560	1.427		-8.5	
2-Chloronaphthalene	1.216	1.102		-9.4	
2-Nitroaniline	0.382	0.366		-4.2	
Dimethylphthalate	1.351	1.290		-4.5	
Acenaphthylene	1.702	1.577		-7.3	
2,6-Dinitrotoluene	0.314	0.300		-4.5	
3-Nitroaniline	0.307	0.292		-4.9	
Acenaphthene	1.216	1.127		-7.3	20.0
2,4-Dinitrophenol	0.146	0.150	0.050	2.7	
4-Nitrophenol	0.225	0.300	0.050	33.3	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: BNA_F Calibration Date/Time: 01/31/2025 17:19

Lab File ID: BF141336.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	1.481		-9.0	
2,4-Dinitrotoluene	0.406	0.427		5.2	
Diethylphthalate	1.310	1.249		-4.7	
4-Chlorophenyl-phenylether	0.617	0.562		-8.9	
Fluorene	1.262	1.151		-8.8	
4-Nitroaniline	0.302	0.288		-4.6	
4,6-Dinitro-2-methylphenol	0.118	0.131		11.0	
n-Nitrosodiphenylamine	0.647	0.627		-3.1	20.0
2,4,6-Tribromophenol	0.183	0.177		-3.3	
4-Bromophenyl-phenylether	0.224	0.220		-1.8	
Hexachlorobenzene	0.238	0.232		-2.5	
Atrazine	0.216	0.184		-14.8	
Pentachlorophenol	0.139	0.186		33.8	20.0
Phenanthrene	1.075	1.016		-5.5	
Anthracene	1.053	0.999		-5.1	
Carbazole	0.934	0.892		-4.5	
Di-n-butylphthalate	1.132	1.116		-1.4	
Fluoranthene	1.062	1.011		-4.8	20.0
Pyrene	1.920	1.949		1.5	
Terphenyl-d14	1.297	1.177		-9.3	
Butylbenzylphthalate	0.671	0.656		-2.2	
3,3-Dichlorobenzidine	0.439	0.397		-9.6	
Benzo(a)anthracene	1.380	1.181		-14.4	
Chrysene	1.265	1.179		-6.8	
Bis(2-ethylhexyl)phthalate	0.851	0.815		-4.2	
Di-n-octyl phthalate	1.321	1.285		-2.7	20.0
Benzo(b)fluoranthene	1.258	1.168		-7.2	
Benzo(k)fluoranthene	1.114	1.042		-6.5	
Benzo(a)pyrene	1.063	0.991		-6.8	20.0
Indeno(1,2,3-cd)pyrene	1.291	1.238		-4.1	
Dibenzo(a,h)anthracene	1.039	0.999		-3.8	
Benzo(g,h,i)perylene	1.080	1.050		-2.8	
1,2,4,5-Tetrachlorobenzene	0.569	0.515		-9.5	
1,4-Dioxane	0.573	0.545		-4.9	20.0
2,3,4,6-Tetrachlorophenol	0.319	0.310		-2.8	

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.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: BNA_F Calibration Date/Time: 02/04/2025 15:58

Lab File ID: BF141410.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	1.284		-1.5	
Benzaldehyde	0.960	1.013		5.5	
Phenol-d6	1.657	1.572		-5.1	
Phenol	1.757	1.636		-6.9	20.0
bis(2-Chloroethyl)ether	1.347	1.259		-6.5	
2-Chlorophenol	1.396	1.368		-2.0	
2-Methylphenol	1.135	1.080		-4.8	
2,2-oxybis(1-Chloropropane)	2.342	2.088		-10.8	
Acetophenone	0.475	0.494		4.0	
3+4-Methylphenols	1.393	1.396		0.2	
n-Nitroso-di-n-propylamine	0.985	0.944	0.050	-4.2	
Nitrobenzene-d5	0.379	0.388		2.4	
Hexachloroethane	0.571	0.577		1.1	
Nitrobenzene	0.393	0.393		0.0	
Isophorone	0.656	0.640		-2.4	
2-Nitrophenol	0.185	0.192		3.8	20.0
2,4-Dimethylphenol	0.236	0.228		-3.4	
bis(2-Chloroethoxy)methane	0.418	0.398		-4.8	
2,4-Dichlorophenol	0.289	0.292		1.0	20.0
Naphthalene	1.057	1.049		-0.8	
4-Chloroaniline	0.358	0.319		-10.9	
Hexachlorobutadiene	0.194	0.208		7.2	20.0
Caprolactam	0.094	0.093		-1.1	
4-Chloro-3-methylphenol	0.310	0.319		2.9	20.0
2-Methylnaphthalene	0.672	0.673		0.1	
Hexachlorocyclopentadiene	0.168	0.185	0.050	10.1	
2,4,6-Trichlorophenol	0.372	0.385		3.5	20.0
2-Fluorobiphenyl	1.299	1.327		2.2	
2,4,5-Trichlorophenol	0.405	0.420		3.7	
1,1-Biphenyl	1.560	1.554		-0.4	
2-Chloronaphthalene	1.216	1.203		-1.1	
2-Nitroaniline	0.382	0.396		3.7	
Dimethylphthalate	1.351	1.359		0.6	
Acenaphthylene	1.702	1.720		1.1	
2,6-Dinitrotoluene	0.314	0.322		2.5	
3-Nitroaniline	0.307	0.312		1.6	
Acenaphthene	1.216	1.251		2.9	20.0
2,4-Dinitrophenol	0.146	0.175	0.050	19.9	
4-Nitrophenol	0.225	0.248	0.050	10.2	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: BNA_F Calibration Date/Time: 02/04/2025 15:58

Lab File ID: BF141410.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	1.657		1.8	
2,4-Dinitrotoluene	0.406	0.439		8.1	
Diethylphthalate	1.310	1.369		4.5	
4-Chlorophenyl-phenylether	0.617	0.644		4.4	
Fluorene	1.262	1.315		4.2	
4-Nitroaniline	0.302	0.342		13.2	
4,6-Dinitro-2-methylphenol	0.118	0.142		20.3	
n-Nitrosodiphenylamine	0.647	0.643		-0.6	20.0
2,4,6-Tribromophenol	0.183	0.206		12.6	
4-Bromophenyl-phenylether	0.224	0.229		2.2	
Hexachlorobenzene	0.238	0.248		4.2	
Atrazine	0.216	0.211		-2.3	
Pentachlorophenol	0.139	0.158		13.7	20.0
Phenanthrene	1.075	1.113		3.5	
Anthracene	1.053	1.102		4.7	
Carbazole	0.934	1.020		9.2	
Di-n-butylphthalate	1.132	1.231		8.7	
Fluoranthene	1.062	1.232		16.0	20.0
Pyrene	1.920	1.732		-9.8	
Terphenyl-d14	1.297	1.228		-5.3	
Butylbenzylphthalate	0.671	0.671		0.0	
3,3-Dichlorobenzidine	0.439	0.410		-6.6	
Benzo(a)anthracene	1.380	1.278		-7.4	
Chrysene	1.265	1.238		-2.1	
Bis(2-ethylhexyl)phthalate	0.851	0.877		3.1	
Di-n-octyl phthalate	1.321	1.327		0.5	20.0
Benzo(b)fluoranthene	1.258	1.276		1.4	
Benzo(k)fluoranthene	1.114	1.215		9.1	
Benzo(a)pyrene	1.063	1.092		2.7	20.0
Indeno(1,2,3-cd)pyrene	1.291	1.304		1.0	
Dibenzo(a,h)anthracene	1.039	1.055		1.5	
Benzo(g,h,i)perylene	1.080	1.076		-0.4	
1,2,4,5-Tetrachlorobenzene	0.569	0.587		3.2	
1,4-Dioxane	0.573	0.535		-6.6	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.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: BNA_F Calibration Date/Time: 02/05/2025 10:02

Lab File ID: BF141435.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	1.295		-0.6	
Benzaldehyde	0.960	0.988		2.9	
Phenol-d6	1.657	1.600		-3.4	
Phenol	1.757	1.663		-5.3	20.0
bis(2-Chloroethyl)ether	1.347	1.263		-6.2	
2-Chlorophenol	1.396	1.383		-0.9	
2-Methylphenol	1.135	1.083		-4.6	
2,2-oxybis(1-Chloropropane)	2.342	2.038		-13.0	
Acetophenone	0.475	0.493		3.8	
3+4-Methylphenols	1.393	1.395		0.1	
n-Nitroso-di-n-propylamine	0.985	0.951	0.050	-3.5	
Nitrobenzene-d5	0.379	0.397		4.5	
Hexachloroethane	0.571	0.582		1.9	
Nitrobenzene	0.393	0.403		2.5	
Isophorone	0.656	0.632		-3.7	
2-Nitrophenol	0.185	0.191		3.2	20.0
2,4-Dimethylphenol	0.236	0.229		-3.0	
bis(2-Chloroethoxy)methane	0.418	0.393		-6.0	
2,4-Dichlorophenol	0.289	0.297		2.8	20.0
Naphthalene	1.057	1.058		0.1	
4-Chloroaniline	0.358	0.335		-6.4	
Hexachlorobutadiene	0.194	0.212		9.3	20.0
Caprolactam	0.094	0.092		-2.1	
4-Chloro-3-methylphenol	0.310	0.323		4.2	20.0
2-Methylnaphthalene	0.672	0.670		-0.3	
Hexachlorocyclopentadiene	0.168	0.166	0.050	-1.2	
2,4,6-Trichlorophenol	0.372	0.385		3.5	20.0
2-Fluorobiphenyl	1.299	1.338		3.0	
2,4,5-Trichlorophenol	0.405	0.418		3.2	
1,1-Biphenyl	1.560	1.536		-1.5	
2-Chloronaphthalene	1.216	1.222		0.5	
2-Nitroaniline	0.382	0.396		3.7	
Dimethylphthalate	1.351	1.345		-0.4	
Acenaphthylene	1.702	1.696		-0.4	
2,6-Dinitrotoluene	0.314	0.319		1.6	
3-Nitroaniline	0.307	0.309		0.7	
Acenaphthene	1.216	1.232		1.3	20.0
2,4-Dinitrophenol	0.146	0.160	0.050	9.6	
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.: Q1241 SAS No.: Q1241 SDG No.: Q1241

Instrument ID: BNA_F Calibration Date/Time: 02/05/2025 10:02

Lab File ID: BF141435.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	1.626		-0.1	
2,4-Dinitrotoluene	0.406	0.428		5.4	
Diethylphthalate	1.310	1.326		1.2	
4-Chlorophenyl-phenylether	0.617	0.644		4.4	
Fluorene	1.262	1.312		4.0	
4-Nitroaniline	0.302	0.314		4.0	
4,6-Dinitro-2-methylphenol	0.118	0.135		14.4	
n-Nitrosodiphenylamine	0.647	0.657		1.5	20.0
2,4,6-Tribromophenol	0.183	0.197		7.7	
4-Bromophenyl-phenylether	0.224	0.231		3.1	
Hexachlorobenzene	0.238	0.246		3.4	
Atrazine	0.216	0.200		-7.4	
Pentachlorophenol	0.139	0.151		8.6	20.0
Phenanthrene	1.075	1.115		3.7	
Anthracene	1.053	1.101		4.6	
Carbazole	0.934	1.005		7.6	
Di-n-butylphthalate	1.132	1.165		2.9	
Fluoranthene	1.062	1.154		8.7	20.0
Pyrene	1.920	1.874		-2.4	
Terphenyl-d14	1.297	1.290		-0.5	
Butylbenzylphthalate	0.671	0.667		-0.6	
3,3-Dichlorobenzidine	0.439	0.419		-4.6	
Benzo(a)anthracene	1.380	1.310		-5.1	
Chrysene	1.265	1.242		-1.8	
Bis(2-ethylhexyl)phthalate	0.851	0.821		-3.5	
Di-n-octyl phthalate	1.321	1.243		-5.9	20.0
Benzo(b)fluoranthene	1.258	1.327		5.5	
Benzo(k)fluoranthene	1.114	1.082		-2.9	
Benzo(a)pyrene	1.063	1.102		3.7	20.0
Indeno(1,2,3-cd)pyrene	1.291	1.411		9.3	
Dibenzo(a,h)anthracene	1.039	1.133		9.0	
Benzo(g,h,i)perylene	1.080	1.191		10.3	
1,2,4,5-Tetrachlorobenzene	0.569	0.579		1.8	
1,4-Dioxane	0.573	0.500		-12.7	20.0
2,3,4,6-Tetrachlorophenol	0.319	0.335		5.0	

All other compounds must meet a minimum RRF of 0.010.

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

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

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

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

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

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

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

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

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

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

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

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

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

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

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

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

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

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

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241 SDG No.: Q1241

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

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

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

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

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

All other compounds must meet a minimum RRF of 0.010.