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

LAB CHRONICLE

OrderID:	Q1232	**OrderDate:**	1/30/2025 11:55:00 AM
Client:	RU2 Engineering, LLC	**Project:**	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	**Location:**	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1232-03	**JPP-46.2-012925**	**SOIL**			**01/29/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/04/25	
Q1232-03DL	**JPP-46.2-012925DL**	**SOIL**			**01/29/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/04/25	
Q1232-04	**JPP-46.2-012925**	**TCLP**			**01/29/25**			**01/30/25**
			TCLP BNA	8270E		01/31/25	02/03/25	
Q1232-07	**JPP-46.1-012925**	**SOIL**			**01/29/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/07/25	
Q1232-08	**JPP-46.1-012925**	**TCLP**			**01/29/25**			**01/30/25**
			TCLP BNA	8270E		01/31/25	02/03/25	
Q1232-11	**JPP-42.1-012925**	**SOIL**			**01/29/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/07/25	
Q1232-12	**JPP-42.1-012925**	**TCLP**			**01/29/25**			**01/30/25**
			TCLP BNA	8270E		01/31/25	02/03/25	
Q1232-15	**JPP-42.2-012925**	**SOIL**			**01/29/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/07/25	
Q1232-15DL	**JPP-42.2-012925DL**	**SOIL**			**01/29/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/10/25	
Q1232-16	**JPP-42.2-012925**	**TCLP**			**01/29/25**			**01/30/25**
			TCLP BNA	8270E		01/31/25	02/03/25	
Q1232-19	**JPP-51.1-012925**	**SOIL**			**01/29/25**			**01/30/25**
			SVOC-TCL BNA -20	8270E		01/31/25	02/08/25	
Q1232-20	**JPP-51.1-012925**	**TCLP**			**01/29/25**			**01/30/25**

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TCLP BNA	8270E	01/31/25	02/03/25

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Hit Summary Sheet
SW-846

SDG No.: Q1232

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID :	**JPP-46.2-012925**								
Q1232-03	JPP-46.2-012925	SOIL	Naphthalene		110.000	J	92.4	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Acenaphthene		310.000		90.8	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Dibenzofuran		180.000	J	94.5	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Fluorene		300.000		95.7	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Phenanthrene		4,400.000	E	94	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Anthracene		1,100.000		94.5	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Carbazole		250.000		89.9	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Fluoranthene		8,100.000	E	91.4	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Pyrene		6,000.000	E	92.9	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzo(a)anthracene		4,300.000	E	90.3	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Chrysene		3,800.000	E	89	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Bis(2-ethylhexyl)phthalate		130.000	J	100	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzo(b)fluoranthene		5,100.000	E	90.8	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzo(k)fluoranthene		2,100.000		92.4	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzo(a)pyrene		4,600.000	E	100	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Indeno(1,2,3-cd)pyrene		2,000.000		87.4	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Dibenzo(a,h)anthracene		600.000		90.9	190	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzo(g,h,i)perylene		2,400.000		89.6	190	ug/Kg
			Total Svoc :		**45,780.00**				
Q1232-03	JPP-46.2-012925	SOIL	11H-Benzo[a]fluoren-11-one	*	100.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	11H-Benzo[b]fluorene	*	210.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	1-Isopropenylnaphthalene	*	130.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	4H-Cyclopenta[def]phenanthrene	*	270.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzo[b]naphtho[2,1-d]thiophene	*	110.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzo[b]triphenylene	*	500.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzo[e]pyrene	*	870.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Benzophenone	*	380.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Cyclopenta[cd]pyrene	*	130.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Dibenzo[def,mno]chrysene	*	730.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Fluoranthene, 2-methyl-	*	150.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Phenanthrene, 2-methyl-	*	160.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Phenanthrene, 4-methyl-	*	110.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Picene	*	380.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Pyrene, 1-methyl-	*	180.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Supraene	*	420.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	unknown13.739	*	110.000	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	unknown14.733	*	250.000	J	0	0	ug/Kg

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Hit Summary Sheet
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SDG No.: Q1232

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1232-03	JPP-46.2-012925	SOIL	Naphthalene, 2,3-dimethyl-	*	97.400	J	0	0	ug/Kg
Q1232-03	JPP-46.2-012925	SOIL	Perylene	*	3,400.000	J	0	0	ug/Kg
			Total Tics :		**8,687.40**				
			Total Concentration:		**54,467.40**				
Client ID :	**JPP-46.2-012925DL**								
Q1232-03DL	JPP-46.2-012925DL	SOIL	Phenanthrene		4,700.000	D	470	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Anthracene		1,100.000	D	470	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Fluoranthene		9,000.000	D	460	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Pyrene		7,100.000	D	460	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Benzo(a)anthracene		4,200.000	D	450	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Chrysene		3,900.000	D	440	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Benzo(b)fluoranthene		4,600.000	D	450	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Benzo(k)fluoranthene		2,000.000	D	460	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Benzo(a)pyrene		4,600.000	D	520	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Indeno(1,2,3-cd)pyrene		2,200.000	D	440	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Dibenzo(a,h)anthracene		690.000	JD	450	950	ug/Kg
Q1232-03DL	JPP-46.2-012925DL	SOIL	Benzo(g,h,i)perylene		2,500.000	D	450	950	ug/Kg
			Total Svoc :		**46,590.00**				
			Total Concentration:		**46,590.00**				
Client ID :	**JPP-46.1-012925**								
Q1232-07	JPP-46.1-012925	SOIL	Naphthalene		180.000	J	180	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Acenaphthene		380.000		170	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Dibenzofuran		260.000	J	180	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Fluorene		500.000		180	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Phenanthrene		3,700.000		180	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Anthracene		1,300.000		180	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Carbazole		420.000		170	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Fluoranthene		3,900.000		170	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Pyrene		3,700.000		180	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Benzo(a)anthracene		2,200.000		170	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Chrysene		1,700.000		170	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Benzo(b)fluoranthene		1,900.000		170	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Benzo(k)fluoranthene		810.000		180	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Benzo(a)pyrene		1,700.000		200	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Indeno(1,2,3-cd)pyrene		690.000		170	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Dibenzo(a,h)anthracene		250.000	J	170	360	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Benzo(g,h,i)perylene		760.000		170	360	ug/Kg
			Total Svoc :		**24,350.00**				
Q1232-07	JPP-46.1-012925	SOIL	11H-Benzo[b]fluorene	*	400.000	J	0	0	ug/Kg

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Hit Summary Sheet
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SDG No.: Q1232

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1232-07	JPP-46.1-012925	SOIL	4H-Cyclopenta[def]phenanthrene	*	440.000	J	0	0	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Cyclohexanone	*	200.000	J	0	0	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Fluoranthene, 2-methyl-	*	250.000	J	0	0	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Anthracene, 2-methyl-	*	180.000	J	0	0	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Benzo[e]pyrene	*	1,000.000	J	0	0	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Benzophenone	*	360.000	J	0	0	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Pyrene, 1-methyl-	*	200.000	J	0	0	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	unknown13.192	*	220.000	J	0	0	ug/Kg
Q1232-07	JPP-46.1-012925	SOIL	Phenanthrene, 2-methyl-	*	240.000	J	0	0	ug/Kg
			Total Tics :		**3,490.00**				
			Total Concentration:		**27,840.00**				
Client ID :	**JPP-42.1-012925**								
Q1232-11	JPP-42.1-012925	SOIL	Acenaphthene		250.000	J	180	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Fluorene		210.000	J	190	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Phenanthrene		2,100.000		190	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Anthracene		630.000		190	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Fluoranthene		2,700.000		190	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Pyrene		2,900.000		190	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Benzo(a)anthracene		1,500.000		180	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Chrysene		1,200.000		180	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Benzo(b)fluoranthene		1,400.000		180	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Benzo(k)fluoranthene		800.000		190	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Benzo(a)pyrene		1,400.000		210	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Indeno(1,2,3-cd)pyrene		590.000		180	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Dibenzo(a,h)anthracene		190.000	J	180	390	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Benzo(g,h,i)perylene		720.000		180	390	ug/Kg
			Total Svoc :		**16,590.00**				
Q1232-11	JPP-42.1-012925	SOIL	Anthracene, 2-methyl-	*	180.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	(1S,4aS,4bS,7S,8aS,10aS)-7-Isopı	*	260.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	11H-Benzo[b]fluorene	*	200.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	530.000	AB	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	4b,8-Dimethyl-2-isopropylphenan	*	380.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	4H-Cyclopenta[def]phenanthrene	*	810.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Dibenzothiophene	*	230.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Dodecane	*	220.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Eicosane	*	350.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Benzophenone	*	350.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Pyrene, 4,5-dihydro-	*	160.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Retene	*	800.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Tetradecane	*	250.000	J	0	0	ug/Kg

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Hit Summary Sheet
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SDG No.: Q1232

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1232-11	JPP-42.1-012925	SOIL	Tridecane	*	250.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Undecane	*	260.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	unknown12.410	*	220.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Naphthalene, 2-phenyl-	*	250.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Phenanthrene, 1-methyl-	*	380.000	J	0	0	ug/Kg
Q1232-11	JPP-42.1-012925	SOIL	Phenanthrene, 2-methyl-	*	310.000	J	0	0	ug/Kg
			Total Tics :		**6,390.00**				
			Total Concentration:		**22,980.00**				
Client ID :	**JPP-42.2-012925**								
Q1232-15	JPP-42.2-012925	SOIL	Acenaphthene		180.000		86.8	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Dibenzofuran		100.000	J	90.3	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Fluorene		180.000		91.5	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Phenanthrene		2,200.000		89.9	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Anthracene		730.000		90.3	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Carbazole		86.600	J	85.9	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Fluoranthene		4,400.000	E	87.4	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Pyrene		4,600.000	E	88.8	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzo(a)anthracene		2,900.000	E	86.3	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Chrysene		2,100.000		85	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Bis(2-ethylhexyl)phthalate		140.000	J	97.3	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzo(b)fluoranthene		3,200.000	E	86.8	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzo(k)fluoranthene		1,300.000		88.4	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzo(a)pyrene		3,000.000	E	99.5	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Indeno(1,2,3-cd)pyrene		1,500.000		83.5	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Dibenzo(a,h)anthracene		450.000		86.9	180	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzo(g,h,i)perylene		1,600.000		85.7	180	ug/Kg
			Total Svoc :		**28,666.60**				
Q1232-15	JPP-42.2-012925	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	120.000	AB	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	4H-Cyclopenta[def]phenanthrene	*	250.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzo[b]naphtho[2,1-d]thiophene	*	78.800	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzo[e]pyrene	*	520.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzophenone	*	320.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Benzene, [1-(2,4-cyclopentadien-1	*	78.800	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Cyclopenta(cd)pyrene, 3,4-dihydr	*	77.700	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Naphthalene, 2,7-dimethyl-	*	120.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Naphthalene, 2-phenyl-	*	88.400	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Perylene	*	2,100.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Phenanthrene, 1-methyl-	*	130.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Phenanthrene, 2,5-dimethyl-	*	73.500	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Phenanthrene, 2-methyl-	*	79.500	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.: Q1232

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1232-15	JPP-42.2-012925	SOIL	Pyrene, 1-methyl-	*	150.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	unknown12.404	*	76.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	11H-Benzo[a]fluorene	*	98.400	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	11H-Benzo[b]fluorene	*	190.000	J	0	0	ug/Kg
Q1232-15	JPP-42.2-012925	SOIL	Fluoranthene, 2-methyl-	*	130.000	J	0	0	ug/Kg
			Total Tics :		**4,681.10**				
			Total Concentration:		**33,347.70**				
Client ID :	**JPP-42.2-012925DL**								
Q1232-15DL	JPP-42.2-012925DL	SOIL	Phenanthrene		2,300.000	D	450	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Anthracene		760.000	JD	450	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Fluoranthene		4,600.000	D	440	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Pyrene		3,700.000	D	440	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Benzo(a)anthracene		2,800.000	D	430	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Chrysene		2,400.000	D	430	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Benzo(b)fluoranthene		3,300.000	D	430	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Benzo(k)fluoranthene		1,500.000	D	440	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Benzo(a)pyrene		3,100.000	D	500	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Indeno(1,2,3-cd)pyrene		1,300.000	D	420	910	ug/Kg
Q1232-15DL	JPP-42.2-012925DL	SOIL	Benzo(g,h,i)perylene		1,400.000	D	430	910	ug/Kg
			Total Svoc :		**27,160.00**				
			Total Concentration:		**27,160.00**				
Client ID :	**JPP-51.1-012925**								
Q1232-19	JPP-51.1-012925	SOIL	Acenaphthylene		180.000	J	180	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Acenaphthene		450.000		170	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Dibenzofuran		210.000	J	180	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Fluorene		340.000	J	180	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Phenanthrene		4,000.000		180	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Anthracene		1,100.000		180	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Carbazole		260.000	J	170	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Fluoranthene		4,900.000		170	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Pyrene		5,400.000		170	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Benzo(a)anthracene		3,200.000		170	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Chrysene		2,700.000		170	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Bis(2-ethylhexyl)phthalate		280.000	J	190	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Benzo(b)fluoranthene		2,900.000		170	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Benzo(k)fluoranthene		1,500.000		170	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Benzo(a)pyrene		2,900.000		200	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Indeno(1,2,3-cd)pyrene		1,200.000		160	360	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Dibenzo(a,h)anthracene		430.000		170	360	ug/Kg

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Hit Summary Sheet
SW-846

SDG No.: Q1232

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1232-19	JPP-51.1-012925	SOIL	Benzo(g,h,i)perylene		1,400.000		170	360	ug/Kg
			Total Svoc :		**33,350.00**				
Q1232-19	JPP-51.1-012925	SOIL	11H-Benzo[a]fluorene	*	370.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	1H-Cyclopropa[l]phenanthrene,1a	*	970.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	3-Methyl-4-p-tolylhydrazono-2-py	*	280.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	4b,8-Dimethyl-2-isopropylphenan	*	500.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	4H-Cyclopenta[def]phenanthrene	*	1,700.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	9,10-Anthracenedione	*	240.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Anthracene, 1,2,3,4-tetrahydro-	*	300.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Benzo[e]pyrene	*	2,300.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Benzophenone	*	360.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Cyclopenta(def)phenanthrenone	*	430.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Dibenzothiophene	*	280.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Naphthalene, 1-phenyl-	*	240.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Naphthalene, 2-phenyl-	*	570.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Phenanthrene, 1-methyl-	*	740.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Phenanthrene, 2,5-dimethyl-	*	560.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Phenanthrene, 2-methyl-	*	390.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Pyrene, 1-methyl-	*	300.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	Tridecane, 3-methyl-	*	280.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	unknown12.016	*	330.000	J	0	0	ug/Kg
Q1232-19	JPP-51.1-012925	SOIL	unknown12.410	*	400.000	J	0	0	ug/Kg
			Total Tics :		**11,540.00**				
			Total Concentration:		**44,890.00**				

SAMPLE DATA

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

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.2-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.2
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
BF141390.D	1	01/31/25 10:20	02/04/25 00:49	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	370	U	200	370	ug/Kg
108-95-2	Phenol	190	U	92.8	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	190	U	93.7	190	ug/Kg
95-57-8	2-Chlorophenol	190	U	93.5	190	ug/Kg
95-48-7	2-Methylphenol	190	U	90.2	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	190	U	100	190	ug/Kg
98-86-2	Acetophenone	190	UQ	97.3	190	ug/Kg
65794-96-9	3+4-Methylphenols	370	U	89.3	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	89.5	U	45.1	89.5	ug/Kg
67-72-1	Hexachloroethane	190	U	92.9	190	ug/Kg
98-95-3	Nitrobenzene	190	U	100	190	ug/Kg
78-59-1	Isophorone	190	U	94.7	190	ug/Kg
88-75-5	2-Nitrophenol	190	U	110	190	ug/Kg
105-67-9	2,4-Dimethylphenol	190	U	100	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	190	U	96.0	190	ug/Kg
120-83-2	2,4-Dichlorophenol	190	U	84.5	190	ug/Kg
91-20-3	Naphthalene	110	J	92.4	190	ug/Kg
106-47-8	4-Chloroaniline	190	U	92.4	190	ug/Kg
87-68-3	Hexachlorobutadiene	190	U	93.2	190	ug/Kg
105-60-2	Caprolactam	370	U	97.1	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	190	U	86.7	190	ug/Kg
91-57-6	2-Methylnaphthalene	190	U	92.3	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	370	UQ	170	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	190	U	79.9	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	190	U	82.8	190	ug/Kg
92-52-4	1,1-Biphenyl	190	U	97.8	190	ug/Kg
91-58-7	2-Chloronaphthalene	190	U	93.2	190	ug/Kg
88-74-4	2-Nitroaniline	190	U	110	190	ug/Kg
131-11-3	Dimethylphthalate	190	U	91.4	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.2-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.2
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
BF141390.D	1	01/31/25 10:20	02/04/25 00:49	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	190	U	96.8	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	190	U	93.1	190	ug/Kg
99-09-2	3-Nitroaniline	190	U	99.8	190	ug/Kg
83-32-9	Acenaphthene	310		90.8	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	180	J	94.5	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	190	U	96.5	190	ug/Kg
84-66-2	Diethylphthalate	190	U	89.6	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	190	U	95.8	190	ug/Kg
86-73-7	Fluorene	300		95.7	190	ug/Kg
100-01-6	4-Nitroaniline	190	U	120	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	370	U	130	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	190	U	91.3	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	190	U	88.3	190	ug/Kg
118-74-1	Hexachlorobenzene	190	U	95.1	190	ug/Kg
1912-24-9	Atrazine	190	U	100	190	ug/Kg
87-86-5	Pentachlorophenol	370	U	86.5	370	ug/Kg
85-01-8	Phenanthrene	4400	E	94.0	190	ug/Kg
120-12-7	Anthracene	1100		94.5	190	ug/Kg
86-74-8	Carbazole	250		89.9	190	ug/Kg
84-74-2	Di-n-butylphthalate	190	U	94.3	190	ug/Kg
206-44-0	Fluoranthene	8100	E	91.4	190	ug/Kg
129-00-0	Pyrene	6000	E	92.9	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	4300	E	90.3	190	ug/Kg
218-01-9	Chrysene	3800	E	89.0	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	5100	E	90.8	190	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.2-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.2
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
BF141390.D	1	01/31/25 10:20	02/04/25 00:49	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	2100		92.4	190	ug/Kg
50-32-8	Benzo(a)pyrene	4600	E	100	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2000		87.4	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	600		90.9	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	2400		89.6	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	190	U	97.1	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	83.6	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	87.2		18 - 112	58%	SPK: 150
13127-88-3	Phenol-d6	83.3		15 - 107	56%	SPK: 150
4165-60-0	Nitrobenzene-d5	63.4		18 - 107	63%	SPK: 100
321-60-8	2-Fluorobiphenyl	62.4		20 - 109	62%	SPK: 100
118-79-6	2,4,6-Tribromophenol	79.0		10 - 116	53%	SPK: 150
1718-51-0	Terphenyl-d14	45.3		10 - 105	45%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	82600	6.793			
1146-65-2	Naphthalene-d8	314000	8.075			
15067-26-2	Acenaphthene-d10	148000	9.828			
1517-22-2	Phenanthrene-d10	202000	11.316			
1719-03-5	Chrysene-d12	155000	13.969			
1520-96-3	Perylene-d12	127000	15.416			
TENTATIVE IDENTIFIED COMPOUNDS						
000581-40-8	Naphthalene, 2,3-dimethyl-	97.4	J		9.49	ug/Kg
001855-47-6	1-Isopropenylnaphthalene	130	J		10.4	ug/Kg
000119-61-9	Benzophenone	380	J		10.5	ug/Kg
000832-64-4	Phenanthrene, 4-methyl-	110	J		11.8	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	160	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	270	J		11.9	ug/Kg
033543-31-6	Fluoranthene, 2-methyl-	150	J		13.0	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.2-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-03	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.2
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
BF141390.D	1	01/31/25 10:20	02/04/25 00:49	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000243-17-4	11H-Benzo[b]fluorene	210	J		13.1	ug/Kg
002381-21-7	Pyrene, 1-methyl-	180	J		13.2	ug/Kg
000479-79-8	11H-Benzo[a]fluoren-11-one	100	J		13.6	ug/Kg
000239-35-0	Benzo[b]naphtho[2,1-d]thiophene	110	J		13.7	ug/Kg
	unknown13.739	110	J		13.7	ug/Kg
027208-37-3	Cyclopenta[cd]pyrene	130	J		13.8	ug/Kg
	unknown14.733	250	J		14.7	ug/Kg
007683-64-9	Supraene	420	J		14.8	ug/Kg
000192-97-2	Benzo[e]pyrene	870	J		15.1	ug/Kg
000198-55-0	Perylene	3400	J		15.3	ug/Kg
000215-58-7	Benzo[b]triphenylene	500	J		17.0	ug/Kg
000213-46-7	Picene	380	J		17.1	ug/Kg
000191-26-4	Dibenzo[def,mno]chrysene	730	J		17.5	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:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.2-012925DL	SDG No.:	Q1232
Lab Sample ID:	Q1232-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.2
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
BF141426.D	5	01/31/25 10:20	02/04/25 23:04	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1800	UD	1000	1800	ug/Kg
108-95-2	Phenol	950	UD	460	950	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	950	UD	470	950	ug/Kg
95-57-8	2-Chlorophenol	950	UD	470	950	ug/Kg
95-48-7	2-Methylphenol	950	UD	450	950	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	950	UD	510	950	ug/Kg
98-86-2	Acetophenone	950	UDQ	490	950	ug/Kg
65794-96-9	3+4-Methylphenols	1800	UD	450	1800	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	450	UD	230	450	ug/Kg
67-72-1	Hexachloroethane	950	UD	460	950	ug/Kg
98-95-3	Nitrobenzene	950	UD	510	950	ug/Kg
78-59-1	Isophorone	950	UD	470	950	ug/Kg
88-75-5	2-Nitrophenol	950	UD	530	950	ug/Kg
105-67-9	2,4-Dimethylphenol	950	UD	520	950	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	950	UD	480	950	ug/Kg
120-83-2	2,4-Dichlorophenol	950	UD	420	950	ug/Kg
91-20-3	Naphthalene	950	UD	460	950	ug/Kg
106-47-8	4-Chloroaniline	950	UD	460	950	ug/Kg
87-68-3	Hexachlorobutadiene	950	UD	470	950	ug/Kg
105-60-2	Caprolactam	1800	UD	490	1800	ug/Kg
59-50-7	4-Chloro-3-methylphenol	950	UD	430	950	ug/Kg
91-57-6	2-Methylnaphthalene	950	UD	460	950	ug/Kg
77-47-4	Hexachlorocyclopentadiene	1800	UDQ	870	1800	ug/Kg
88-06-2	2,4,6-Trichlorophenol	950	UD	400	950	ug/Kg
95-95-4	2,4,5-Trichlorophenol	950	UD	410	950	ug/Kg
92-52-4	1,1-Biphenyl	950	UD	490	950	ug/Kg
91-58-7	2-Chloronaphthalene	950	UD	470	950	ug/Kg
88-74-4	2-Nitroaniline	950	UD	530	950	ug/Kg
131-11-3	Dimethylphthalate	950	UD	460	950	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.2-012925DL	SDG No.:	Q1232
Lab Sample ID:	Q1232-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.2
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
BF141426.D	5	01/31/25 10:20	02/04/25 23:04	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	950	UD	480	950	ug/Kg
606-20-2	2,6-Dinitrotoluene	950	UD	470	950	ug/Kg
99-09-2	3-Nitroaniline	950	UD	500	950	ug/Kg
83-32-9	Acenaphthene	950	UD	450	950	ug/Kg
51-28-5	2,4-Dinitrophenol	1800	UD	1400	1800	ug/Kg
100-02-7	4-Nitrophenol	1800	UD	650	1800	ug/Kg
132-64-9	Dibenzofuran	950	UD	470	950	ug/Kg
121-14-2	2,4-Dinitrotoluene	950	UD	480	950	ug/Kg
84-66-2	Diethylphthalate	950	UD	450	950	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	950	UD	480	950	ug/Kg
86-73-7	Fluorene	950	UD	480	950	ug/Kg
100-01-6	4-Nitroaniline	950	UD	600	950	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1800	UD	650	1800	ug/Kg
86-30-6	n-Nitrosodiphenylamine	950	UD	460	950	ug/Kg
101-55-3	4-Bromophenyl-phenylether	950	UD	440	950	ug/Kg
118-74-1	Hexachlorobenzene	950	UD	480	950	ug/Kg
1912-24-9	Atrazine	950	UD	510	950	ug/Kg
87-86-5	Pentachlorophenol	1800	UD	430	1800	ug/Kg
85-01-8	Phenanthrene	4700	D	470	950	ug/Kg
120-12-7	Anthracene	1100	D	470	950	ug/Kg
86-74-8	Carbazole	950	UD	450	950	ug/Kg
84-74-2	Di-n-butylphthalate	950	UD	470	950	ug/Kg
206-44-0	Fluoranthene	9000	D	460	950	ug/Kg
129-00-0	Pyrene	7100	D	460	950	ug/Kg
85-68-7	Butylbenzylphthalate	950	UD	540	950	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1800	UD	550	1800	ug/Kg
56-55-3	Benzo(a)anthracene	4200	D	450	950	ug/Kg
218-01-9	Chrysene	3900	D	440	950	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	950	UD	510	950	ug/Kg
117-84-0	Di-n-octyl phthalate	1800	UD	620	1800	ug/Kg
205-99-2	Benzo(b)fluoranthene	4600	D	450	950	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.2-012925DL	SDG No.:	Q1232
Lab Sample ID:	Q1232-03DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	89.2
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
BF141426.D	5	01/31/25 10:20	02/04/25 23:04	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	2000	D	460	950	ug/Kg
50-32-8	Benzo(a)pyrene	4600	D	520	950	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2200	D	440	950	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	690	JD	450	950	ug/Kg
191-24-2	Benzo(g,h,i)perylene	2500	D	450	950	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	950	UD	490	950	ug/Kg
123-91-1	1,4-Dioxane	950	UD	620	950	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	950	UD	420	950	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	82.1		18 - 112	55%	SPK: 150
13127-88-3	Phenol-d6	83.1		15 - 107	55%	SPK: 150
4165-60-0	Nitrobenzene-d5	57.2		18 - 107	57%	SPK: 100
321-60-8	2-Fluorobiphenyl	56.3		20 - 109	56%	SPK: 100
118-79-6	2,4,6-Tribromophenol	78.8		10 - 116	53%	SPK: 150
1718-51-0	Terphenyl-d14	51.6		10 - 105	52%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	75600	6.787			
1146-65-2	Naphthalene-d8	307000	8.069			
15067-26-2	Acenaphthene-d10	169000	9.822			
1517-22-2	Phenanthrene-d10	294000	11.31			
1719-03-5	Chrysene-d12	204000	13.957			
1520-96-3	Perylene-d12	215000	15.415			

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:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	94
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
BF141523.D	2	01/31/25 10:20	02/07/25 22:07	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	700	U	390	700	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	180	360	ug/Kg
65794-96-9	3+4-Methylphenols	700	U	170	700	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	170	U	85.7	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	180	J	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	700	U	180	700	ug/Kg
59-50-7	4-Chloro-3-methylphenol	360	U	160	360	ug/Kg
91-57-6	2-Methylnaphthalene	360	U	180	360	ug/Kg
77-47-4	Hexachlorocyclopentadiene	700	UQ	330	700	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	170	360	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	94
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
BF141523.D	2	01/31/25 10:20	02/07/25 22:07	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	360	U	180	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	380		170	360	ug/Kg
51-28-5	2,4-Dinitrophenol	700	U	520	700	ug/Kg
100-02-7	4-Nitrophenol	700	U	250	700	ug/Kg
132-64-9	Dibenzofuran	260	J	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	500		180	360	ug/Kg
100-01-6	4-Nitroaniline	360	U	230	360	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	700	U	250	700	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	190	360	ug/Kg
87-86-5	Pentachlorophenol	700	U	160	700	ug/Kg
85-01-8	Phenanthrene	3700		180	360	ug/Kg
120-12-7	Anthracene	1300		180	360	ug/Kg
86-74-8	Carbazole	420		170	360	ug/Kg
84-74-2	Di-n-butylphthalate	360	U	180	360	ug/Kg
206-44-0	Fluoranthene	3900		170	360	ug/Kg
129-00-0	Pyrene	3700		180	360	ug/Kg
85-68-7	Butylbenzylphthalate	360	U	210	360	ug/Kg
91-94-1	3,3-Dichlorobenzidine	700	U	210	700	ug/Kg
56-55-3	Benzo(a)anthracene	2200		170	360	ug/Kg
218-01-9	Chrysene	1700		170	360	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	360	U	190	360	ug/Kg
117-84-0	Di-n-octyl phthalate	700	U	230	700	ug/Kg
205-99-2	Benzo(b)fluoranthene	1900		170	360	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	94
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
BF141523.D	2	01/31/25 10:20	02/07/25 22:07	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	810		180	360	ug/Kg
50-32-8	Benzo(a)pyrene	1700		200	360	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	690		170	360	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	250	J	170	360	ug/Kg
191-24-2	Benzo(g,h,i)perylene	760		170	360	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	360	U	180	360	ug/Kg
123-91-1	1,4-Dioxane	360	U	230	360	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	360	U	160	360	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	73.5		18 - 112	49%	SPK: 150
13127-88-3	Phenol-d6	71.7		15 - 107	48%	SPK: 150
4165-60-0	Nitrobenzene-d5	51.3		18 - 107	51%	SPK: 100
321-60-8	2-Fluorobiphenyl	59.7		20 - 109	60%	SPK: 100
118-79-6	2,4,6-Tribromophenol	58.2		10 - 116	39%	SPK: 150
1718-51-0	Terphenyl-d14	65.5		10 - 105	66%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	83700	6.793			
1146-65-2	Naphthalene-d8	306000	8.075			
15067-26-2	Acenaphthene-d10	148000	9.828			
1517-22-2	Phenanthrene-d10	234000	11.316			
1719-03-5	Chrysene-d12	140000	13.963			
1520-96-3	Perylene-d12	112000	15.433			
TENTATIVE IDENTIFIED COMPOUNDS						
000108-94-1	Cyclohexanone	200	J		5.66	ug/Kg
000119-61-9	Benzophenone	360	J		10.5	ug/Kg
000613-12-7	Anthracene, 2-methyl-	180	J		11.8	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	240	J		11.8	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	440	J		11.9	ug/Kg
002381-21-7	Pyrene, 1-methyl-	200	J		13.0	ug/Kg
000243-17-4	11H-Benzo[b]fluorene	400	J		13.1	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-46.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-07	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	94
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
BF141523.D	2	01/31/25 10:20	02/07/25 22:07	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
033543-31-6	Fluoranthene, 2-methyl-	250	J		13.2	ug/Kg
	unknown13.192	220	J		13.2	ug/Kg
000192-97-2	Benzo[e]pyrene	1000	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:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-11	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.1
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141527.D	2	01/31/25 10:20	02/07/25 23:53	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	750	U	410	750	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	180	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	750	U	180	750	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	180	U	91.3	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	190	390	ug/Kg
88-75-5	2-Nitrophenol	390	U	210	390	ug/Kg
105-67-9	2,4-Dimethylphenol	390	U	210	390	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	390	U	190	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	750	U	200	750	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	750	UQ	350	750	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:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-11	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.1
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141527.D	2	01/31/25 10:20	02/07/25 23:53	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	200	390	ug/Kg
83-32-9	Acenaphthene	250	J	180	390	ug/Kg
51-28-5	2,4-Dinitrophenol	750	U	550	750	ug/Kg
100-02-7	4-Nitrophenol	750	U	260	750	ug/Kg
132-64-9	Dibenzofuran	390	U	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	190	390	ug/Kg
86-73-7	Fluorene	210	J	190	390	ug/Kg
100-01-6	4-Nitroaniline	390	U	240	390	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	750	U	270	750	ug/Kg
86-30-6	n-Nitrosodiphenylamine	390	U	180	390	ug/Kg
101-55-3	4-Bromophenyl-phenylether	390	U	180	390	ug/Kg
118-74-1	Hexachlorobenzene	390	U	190	390	ug/Kg
1912-24-9	Atrazine	390	U	210	390	ug/Kg
87-86-5	Pentachlorophenol	750	U	180	750	ug/Kg
85-01-8	Phenanthrene	2100		190	390	ug/Kg
120-12-7	Anthracene	630		190	390	ug/Kg
86-74-8	Carbazole	390	U	180	390	ug/Kg
84-74-2	Di-n-butylphthalate	390	U	190	390	ug/Kg
206-44-0	Fluoranthene	2700		190	390	ug/Kg
129-00-0	Pyrene	2900		190	390	ug/Kg
85-68-7	Butylbenzylphthalate	390	U	220	390	ug/Kg
91-94-1	3,3-Dichlorobenzidine	750	U	220	750	ug/Kg
56-55-3	Benzo(a)anthracene	1500		180	390	ug/Kg
218-01-9	Chrysene	1200		180	390	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	390	U	210	390	ug/Kg
117-84-0	Di-n-octyl phthalate	750	U	250	750	ug/Kg
205-99-2	Benzo(b)fluoranthene	1400		180	390	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-11	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.1
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141527.D	2	01/31/25 10:20	02/07/25 23:53	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	800		190	390	ug/Kg
50-32-8	Benzo(a)pyrene	1400		210	390	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	590		180	390	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	190	J	180	390	ug/Kg
191-24-2	Benzo(g,h,i)perylene	720		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	33.3		18 - 112	22%	SPK: 150
13127-88-3	Phenol-d6	87.4		15 - 107	58%	SPK: 150
4165-60-0	Nitrobenzene-d5	64.2		18 - 107	64%	SPK: 100
321-60-8	2-Fluorobiphenyl	73.5		20 - 109	73%	SPK: 100
118-79-6	2,4,6-Tribromophenol	14.0	*	10 - 116	9%	SPK: 150
1718-51-0	Terphenyl-d14	79.0		10 - 105	79%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	81100	6.793			
1146-65-2	Naphthalene-d8	300000	8.075			
15067-26-2	Acenaphthene-d10	147000	9.828			
1517-22-2	Phenanthrene-d10	226000	11.316			
1719-03-5	Chrysene-d12	133000	13.963			
1520-96-3	Perylene-d12	108000	15.439			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	530	AB		4.98	ug/Kg
000629-50-5	Tridecane	250	J		8.66	ug/Kg
000629-59-4	Tetradecane	250	J		9.23	ug/Kg
000112-40-3	Dodecane	220	J		10.3	ug/Kg
000119-61-9	Benzophenone	350	J		10.5	ug/Kg
000112-95-8	Eicosane	350	J		10.7	ug/Kg
001120-21-4	Undecane	260	J		11.2	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-11	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	88.1
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141527.D	2	01/31/25 10:20	02/07/25 23:53	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000132-65-0	Dibenzothiophene	230	J		11.2	ug/Kg
006628-98-4	Pyrene, 4,5-dihydro-	160	J		11.6	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	310	J		11.8	ug/Kg
000832-69-9	Phenanthrene, 1-methyl-	380	J		11.8	ug/Kg
000613-12-7	Anthracene, 2-methyl-	180	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	810	J		11.9	ug/Kg
000612-94-2	Naphthalene, 2-phenyl-	250	J		12.1	ug/Kg
002221-95-6	(1S,4aS,4bS,7S,8aS,10aS)-7-Isoprop	260	J		12.2	ug/Kg
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthr	380	J		12.3	ug/Kg
	unknown12.410	220	J		12.4	ug/Kg
000483-65-8	Retene	800	J		13.0	ug/Kg
000243-17-4	11H-Benzo[b]fluorene	200	J		13.1	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:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.2-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-15	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.09 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
BF141519.D	1	01/31/25 10:20	02/07/25 20:21	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	350	U	190	350	ug/Kg
108-95-2	Phenol	180	U	88.7	180	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	180	U	89.5	180	ug/Kg
95-57-8	2-Chlorophenol	180	U	89.3	180	ug/Kg
95-48-7	2-Methylphenol	180	U	86.2	180	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	180	U	97.2	180	ug/Kg
98-86-2	Acetophenone	180	UQ	93.0	180	ug/Kg
65794-96-9	3+4-Methylphenols	350	U	85.4	350	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	85.6	U	43.1	85.6	ug/Kg
67-72-1	Hexachloroethane	180	U	88.8	180	ug/Kg
98-95-3	Nitrobenzene	180	U	97.1	180	ug/Kg
78-59-1	Isophorone	180	U	90.5	180	ug/Kg
88-75-5	2-Nitrophenol	180	U	100	180	ug/Kg
105-67-9	2,4-Dimethylphenol	180	U	99.7	180	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	180	U	91.8	180	ug/Kg
120-83-2	2,4-Dichlorophenol	180	U	80.8	180	ug/Kg
91-20-3	Naphthalene	180	U	88.4	180	ug/Kg
106-47-8	4-Chloroaniline	180	U	88.4	180	ug/Kg
87-68-3	Hexachlorobutadiene	180	U	89.1	180	ug/Kg
105-60-2	Caprolactam	350	U	92.9	350	ug/Kg
59-50-7	4-Chloro-3-methylphenol	180	U	82.9	180	ug/Kg
91-57-6	2-Methylnaphthalene	180	U	88.3	180	ug/Kg
77-47-4	Hexachlorocyclopentadiene	350	UQ	170	350	ug/Kg
88-06-2	2,4,6-Trichlorophenol	180	U	76.4	180	ug/Kg
95-95-4	2,4,5-Trichlorophenol	180	U	79.2	180	ug/Kg
92-52-4	1,1-Biphenyl	180	U	93.5	180	ug/Kg
91-58-7	2-Chloronaphthalene	180	U	89.1	180	ug/Kg
88-74-4	2-Nitroaniline	180	U	100	180	ug/Kg
131-11-3	Dimethylphthalate	180	U	87.4	180	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.2-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-15	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.09 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
BF141519.D	1	01/31/25 10:20	02/07/25 20:21	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	180	U	92.5	180	ug/Kg
606-20-2	2,6-Dinitrotoluene	180	U	89.0	180	ug/Kg
99-09-2	3-Nitroaniline	180	U	95.4	180	ug/Kg
83-32-9	Acenaphthene	180		86.8	180	ug/Kg
51-28-5	2,4-Dinitrophenol	350	U	260	350	ug/Kg
100-02-7	4-Nitrophenol	350	U	120	350	ug/Kg
132-64-9	Dibenzofuran	100	J	90.3	180	ug/Kg
121-14-2	2,4-Dinitrotoluene	180	U	92.2	180	ug/Kg
84-66-2	Diethylphthalate	180	U	85.7	180	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	180	U	91.6	180	ug/Kg
86-73-7	Fluorene	180		91.5	180	ug/Kg
100-01-6	4-Nitroaniline	180	U	110	180	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	350	U	130	350	ug/Kg
86-30-6	n-Nitrosodiphenylamine	180	U	87.3	180	ug/Kg
101-55-3	4-Bromophenyl-phenylether	180	U	84.4	180	ug/Kg
118-74-1	Hexachlorobenzene	180	U	90.9	180	ug/Kg
1912-24-9	Atrazine	180	U	97.8	180	ug/Kg
87-86-5	Pentachlorophenol	350	U	82.7	350	ug/Kg
85-01-8	Phenanthrene	2200		89.9	180	ug/Kg
120-12-7	Anthracene	730		90.3	180	ug/Kg
86-74-8	Carbazole	86.6	J	85.9	180	ug/Kg
84-74-2	Di-n-butylphthalate	180	U	90.2	180	ug/Kg
206-44-0	Fluoranthene	4400	E	87.4	180	ug/Kg
129-00-0	Pyrene	4600	E	88.8	180	ug/Kg
85-68-7	Butylbenzylphthalate	180	U	100	180	ug/Kg
91-94-1	3,3-Dichlorobenzidine	350	U	110	350	ug/Kg
56-55-3	Benzo(a)anthracene	2900	E	86.3	180	ug/Kg
218-01-9	Chrysene	2100		85.0	180	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	140	J	97.3	180	ug/Kg
117-84-0	Di-n-octyl phthalate	350	U	120	350	ug/Kg
205-99-2	Benzo(b)fluoranthene	3200	E	86.8	180	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.2-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-15	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.09 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
BF141519.D	1	01/31/25 10:20	02/07/25 20:21	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1300		88.4	180	ug/Kg
50-32-8	Benzo(a)pyrene	3000	E	99.5	180	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1500		83.5	180	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	450		86.9	180	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1600		85.7	180	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	180	U	92.9	180	ug/Kg
123-91-1	1,4-Dioxane	180	U	120	180	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	180	U	79.9	180	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	70.7		18 - 112	47%	SPK: 150
13127-88-3	Phenol-d6	78.6		15 - 107	52%	SPK: 150
4165-60-0	Nitrobenzene-d5	55.7		18 - 107	56%	SPK: 100
321-60-8	2-Fluorobiphenyl	62.5		20 - 109	63%	SPK: 100
118-79-6	2,4,6-Tribromophenol	29.1		10 - 116	19%	SPK: 150
1718-51-0	Terphenyl-d14	63.8		10 - 105	64%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	70000	6.792			
1146-65-2	Naphthalene-d8	264000	8.075			
15067-26-2	Acenaphthene-d10	131000	9.827			
1517-22-2	Phenanthrene-d10	202000	11.316			
1719-03-5	Chrysene-d12	129000	13.963			
1520-96-3	Perylene-d12	98600	15.421			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	120	AB		4.99	ug/Kg
000582-16-1	Naphthalene, 2,7-dimethyl-	120	J		9.49	ug/Kg
002320-32-3	Benzene, [1-(2,4-cyclopentadien-1-	78.8	J		10.4	ug/Kg
000119-61-9	Benzophenone	320	J		10.5	ug/Kg
002531-84-2	Phenanthrene, 2-methyl-	79.5	J		11.8	ug/Kg
000832-69-9	Phenanthrene, 1-methyl-	130	J		11.8	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	250	J		11.9	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.2-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-15	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.09 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
BF141519.D	1	01/31/25 10:20	02/07/25 20:21	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000612-94-2	Naphthalene, 2-phenyl-	88.4	J		12.1	ug/Kg
003674-66-6	Phenanthrene, 2,5-dimethyl-	73.5	J		12.4	ug/Kg
	unknown12.404	76.0	J		12.4	ug/Kg
002381-21-7	Pyrene, 1-methyl-	150	J		13.0	ug/Kg
000243-17-4	11H-Benzo[b]fluorene	190	J		13.1	ug/Kg
000238-84-6	11H-Benzo[a]fluorene	98.4	J		13.2	ug/Kg
033543-31-6	Fluoranthene, 2-methyl-	130	J		13.2	ug/Kg
000239-35-0	Benzo[b]naphtho[2,1-d]thiophene	78.8	J		13.7	ug/Kg
025732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	77.7	J		14.1	ug/Kg
000192-97-2	Benzo[e]pyrene	520	J		15.1	ug/Kg
000198-55-0	Perylene	2100	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:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.2-012925DL	SDG No.:	Q1232
Lab Sample ID:	Q1232-15DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.09 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
BF141547.D	5	01/31/25 10:20	02/10/25 20:45	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1800	UD	970	1800	ug/Kg
108-95-2	Phenol	910	UD	440	910	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	910	UD	450	910	ug/Kg
95-57-8	2-Chlorophenol	910	UD	450	910	ug/Kg
95-48-7	2-Methylphenol	910	UD	430	910	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	910	UD	490	910	ug/Kg
98-86-2	Acetophenone	910	UDQ	460	910	ug/Kg
65794-96-9	3+4-Methylphenols	1800	UD	430	1800	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	430	UD	220	430	ug/Kg
67-72-1	Hexachloroethane	910	UD	440	910	ug/Kg
98-95-3	Nitrobenzene	910	UD	490	910	ug/Kg
78-59-1	Isophorone	910	UD	450	910	ug/Kg
88-75-5	2-Nitrophenol	910	UD	510	910	ug/Kg
105-67-9	2,4-Dimethylphenol	910	UD	500	910	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	910	UD	460	910	ug/Kg
120-83-2	2,4-Dichlorophenol	910	UD	400	910	ug/Kg
91-20-3	Naphthalene	910	UD	440	910	ug/Kg
106-47-8	4-Chloroaniline	910	UD	440	910	ug/Kg
87-68-3	Hexachlorobutadiene	910	UD	450	910	ug/Kg
105-60-2	Caprolactam	1800	UD	460	1800	ug/Kg
59-50-7	4-Chloro-3-methylphenol	910	UD	410	910	ug/Kg
91-57-6	2-Methylnaphthalene	910	UD	440	910	ug/Kg
77-47-4	Hexachlorocyclopentadiene	1800	UDQ	830	1800	ug/Kg
88-06-2	2,4,6-Trichlorophenol	910	UD	380	910	ug/Kg
95-95-4	2,4,5-Trichlorophenol	910	UD	400	910	ug/Kg
92-52-4	1,1-Biphenyl	910	UD	470	910	ug/Kg
91-58-7	2-Chloronaphthalene	910	UD	450	910	ug/Kg
88-74-4	2-Nitroaniline	910	UD	510	910	ug/Kg
131-11-3	Dimethylphthalate	910	UD	440	910	ug/Kg

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Fax : 908 789 8922

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.2-012925DL	SDG No.:	Q1232
Lab Sample ID:	Q1232-15DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.09 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
BF141547.D	5	01/31/25 10:20	02/10/25 20:45	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	910	UD	460	910	ug/Kg
606-20-2	2,6-Dinitrotoluene	910	UD	450	910	ug/Kg
99-09-2	3-Nitroaniline	910	UD	480	910	ug/Kg
83-32-9	Acenaphthene	910	UD	430	910	ug/Kg
51-28-5	2,4-Dinitrophenol	1800	UD	1300	1800	ug/Kg
100-02-7	4-Nitrophenol	1800	UD	620	1800	ug/Kg
132-64-9	Dibenzofuran	910	UD	450	910	ug/Kg
121-14-2	2,4-Dinitrotoluene	910	UD	460	910	ug/Kg
84-66-2	Diethylphthalate	910	UD	430	910	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	910	UD	460	910	ug/Kg
86-73-7	Fluorene	910	UD	460	910	ug/Kg
100-01-6	4-Nitroaniline	910	UD	570	910	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1800	UD	630	1800	ug/Kg
86-30-6	n-Nitrosodiphenylamine	910	UD	440	910	ug/Kg
101-55-3	4-Bromophenyl-phenylether	910	UD	420	910	ug/Kg
118-74-1	Hexachlorobenzene	910	UD	450	910	ug/Kg
1912-24-9	Atrazine	910	UD	490	910	ug/Kg
87-86-5	Pentachlorophenol	1800	UD	410	1800	ug/Kg
85-01-8	Phenanthrene	2300	D	450	910	ug/Kg
120-12-7	Anthracene	760	JD	450	910	ug/Kg
86-74-8	Carbazole	910	UD	430	910	ug/Kg
84-74-2	Di-n-butylphthalate	910	UD	450	910	ug/Kg
206-44-0	Fluoranthene	4600	D	440	910	ug/Kg
129-00-0	Pyrene	3700	D	440	910	ug/Kg
85-68-7	Butylbenzylphthalate	910	UD	520	910	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1800	UD	530	1800	ug/Kg
56-55-3	Benzo(a)anthracene	2800	D	430	910	ug/Kg
218-01-9	Chrysene	2400	D	430	910	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	910	UD	490	910	ug/Kg
117-84-0	Di-n-octyl phthalate	1800	UD	590	1800	ug/Kg
205-99-2	Benzo(b)fluoranthene	3300	D	430	910	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-42.2-012925DL	SDG No.:	Q1232
Lab Sample ID:	Q1232-15DL	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.2
Sample Wt/Vol:	30.09 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
BF141547.D	5	01/31/25 10:20	02/10/25 20:45	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1500	D	440	910	ug/Kg
50-32-8	Benzo(a)pyrene	3100	D	500	910	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1300	D	420	910	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	910	UD	430	910	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1400	D	430	910	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	910	UD	460	910	ug/Kg
123-91-1	1,4-Dioxane	910	UD	590	910	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	910	UD	400	910	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	67.9		18 - 112	45%	SPK: 150
13127-88-3	Phenol-d6	78.0		15 - 107	52%	SPK: 150
4165-60-0	Nitrobenzene-d5	54.7		18 - 107	55%	SPK: 100
321-60-8	2-Fluorobiphenyl	65.0		20 - 109	65%	SPK: 100
118-79-6	2,4,6-Tribromophenol	22.2		10 - 116	15%	SPK: 150
1718-51-0	Terphenyl-d14	48.4		10 - 105	48%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	73500	6.787			
1146-65-2	Naphthalene-d8	290000	8.069			
15067-26-2	Acenaphthene-d10	147000	9.822			
1517-22-2	Phenanthrene-d10	203000	11.31			
1719-03-5	Chrysene-d12	173000	13.951			
1520-96-3	Perylene-d12	151000	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:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-19	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	95.1
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
BF141528.D	2	01/31/25 10:20	02/08/25 00:20	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	690	U	380	690	ug/Kg
108-95-2	Phenol	360	U	170	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	180	360	ug/Kg
65794-96-9	3+4-Methylphenols	690	U	170	690	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	170	U	84.6	170	ug/Kg
67-72-1	Hexachloroethane	360	U	170	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	170	360	ug/Kg
106-47-8	4-Chloroaniline	360	U	170	360	ug/Kg
87-68-3	Hexachlorobutadiene	360	U	170	360	ug/Kg
105-60-2	Caprolactam	690	U	180	690	ug/Kg
59-50-7	4-Chloro-3-methylphenol	360	U	160	360	ug/Kg
91-57-6	2-Methylnaphthalene	360	U	170	360	ug/Kg
77-47-4	Hexachlorocyclopentadiene	690	UQ	330	690	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	180	360	ug/Kg
91-58-7	2-Chloronaphthalene	360	U	170	360	ug/Kg
88-74-4	2-Nitroaniline	360	U	200	360	ug/Kg
131-11-3	Dimethylphthalate	360	U	170	360	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-19	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	95.1
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
BF141528.D	2	01/31/25 10:20	02/08/25 00:20	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	180	J	180	360	ug/Kg
606-20-2	2,6-Dinitrotoluene	360	U	170	360	ug/Kg
99-09-2	3-Nitroaniline	360	U	190	360	ug/Kg
83-32-9	Acenaphthene	450		170	360	ug/Kg
51-28-5	2,4-Dinitrophenol	690	U	510	690	ug/Kg
100-02-7	4-Nitrophenol	690	U	240	690	ug/Kg
132-64-9	Dibenzofuran	210	J	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	340	J	180	360	ug/Kg
100-01-6	4-Nitroaniline	360	U	220	360	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	690	U	250	690	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	190	360	ug/Kg
87-86-5	Pentachlorophenol	690	U	160	690	ug/Kg
85-01-8	Phenanthrene	4000		180	360	ug/Kg
120-12-7	Anthracene	1100		180	360	ug/Kg
86-74-8	Carbazole	260	J	170	360	ug/Kg
84-74-2	Di-n-butylphthalate	360	U	180	360	ug/Kg
206-44-0	Fluoranthene	4900		170	360	ug/Kg
129-00-0	Pyrene	5400		170	360	ug/Kg
85-68-7	Butylbenzylphthalate	360	U	200	360	ug/Kg
91-94-1	3,3-Dichlorobenzidine	690	U	210	690	ug/Kg
56-55-3	Benzo(a)anthracene	3200		170	360	ug/Kg
218-01-9	Chrysene	2700		170	360	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	280	J	190	360	ug/Kg
117-84-0	Di-n-octyl phthalate	690	U	230	690	ug/Kg
205-99-2	Benzo(b)fluoranthene	2900		170	360	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-19	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	95.1
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
BF141528.D	2	01/31/25 10:20	02/08/25 00:20	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1500		170	360	ug/Kg
50-32-8	Benzo(a)pyrene	2900		200	360	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1200		160	360	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	430		170	360	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1400		170	360	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	360	U	180	360	ug/Kg
123-91-1	1,4-Dioxane	360	U	230	360	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	360	U	160	360	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	89.4		18 - 112	60%	SPK: 150
13127-88-3	Phenol-d6	85.6		15 - 107	57%	SPK: 150
4165-60-0	Nitrobenzene-d5	57.6		18 - 107	58%	SPK: 100
321-60-8	2-Fluorobiphenyl	68.8		20 - 109	69%	SPK: 100
118-79-6	2,4,6-Tribromophenol	72.9		10 - 116	49%	SPK: 150
1718-51-0	Terphenyl-d14	75.2		10 - 105	75%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	82100	6.792			
1146-65-2	Naphthalene-d8	311000	8.075			
15067-26-2	Acenaphthene-d10	153000	9.827			
1517-22-2	Phenanthrene-d10	233000	11.316			
1719-03-5	Chrysene-d12	137000	13.974			
1520-96-3	Perylene-d12	111000	15.457			
TENTATIVE IDENTIFIED COMPOUNDS						
000119-61-9	Benzophenone	360	J		10.5	ug/Kg
006418-41-3	Tridecane, 3-methyl-	280	J		10.7	ug/Kg
002141-42-6	Anthracene, 1,2,3,4-tetrahydro-	300	J		11.2	ug/Kg
000132-65-0	Dibenzothiophene	280	J		11.2	ug/Kg
000605-02-7	Naphthalene, 1-phenyl-	240	J		11.6	ug/Kg
000832-69-9	Phenanthrene, 1-methyl-	740	J		11.8	ug/Kg
000949-41-7	1H-Cyclopropa[l]phenanthrene,1a,9b	970	J		11.9	ug/Kg

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.1-012925	SDG No.:	Q1232
Lab Sample ID:	Q1232-19	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	95.1
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
BF141528.D	2	01/31/25 10:20	02/08/25 00:20	PB166418

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
002531-84-2	Phenanthrene, 2-methyl-	390	J		11.9	ug/Kg
000203-64-5	4H-Cyclopenta[def]phenanthrene	1700	J		11.9	ug/Kg
	unknown12.016	330	J		12.0	ug/Kg
000612-94-2	Naphthalene, 2-phenyl-	570	J		12.1	ug/Kg
000084-65-1	9,10-Anthracenedione	240	J		12.1	ug/Kg
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthr	500	J		12.3	ug/Kg
003674-66-6	Phenanthrene, 2,5-dimethyl-	560	J		12.4	ug/Kg
	unknown12.410	400	J		12.4	ug/Kg
005737-13-3	Cyclopenta(def)phenanthrenone	430	J		12.5	ug/Kg
002381-21-7	Pyrene, 1-methyl-	300	J		13.0	ug/Kg
000238-84-6	11H-Benzo[a]fluorene	370	J		13.1	ug/Kg
065078-61-7	3-Methyl-4-p-tolylhydrazono-2-pyra	280	J		13.2	ug/Kg
000192-97-2	Benzo[e]pyrene	2300	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

QC SUMMARY

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

Surrogate Summary

SW-846

SDG No.: Q1232

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
Q1232-03	JPP-46.2-012925	2-Fluorophenol	150	87.2	58		18	112
		Phenol-d6	150	83.3	56		15	107
		Nitrobenzene-d5	100	63.4	63		18	107
		2-Fluorobiphenyl	100	62.4	62		20	109
		2,4,6-Tribromophenol	150	79.0	53		10	116
		Terphenyl-d14	100	45.3	45		10	105
Q1232-03DL	JPP-46.2-012925DL	2-Fluorophenol	150	82.1	55		18	112
		Phenol-d6	150	83.1	55		15	107
		Nitrobenzene-d5	100	57.2	57		18	107
		2-Fluorobiphenyl	100	56.3	56		20	109
		2,4,6-Tribromophenol	150	78.8	53		10	116
		Terphenyl-d14	100	51.6	52		10	105
Q1232-07	JPP-46.1-012925	2-Fluorophenol	150	73.5	49		18	112
		Phenol-d6	150	71.7	48		15	107
		Nitrobenzene-d5	100	51.3	51		18	107
		2-Fluorobiphenyl	100	59.7	60		20	109
		2,4,6-Tribromophenol	150	58.2	39		10	116
		Terphenyl-d14	100	65.5	66		10	105
Q1232-11	JPP-42.1-012925	2-Fluorophenol	150	33.3	22		18	112
		Phenol-d6	150	87.4	58		15	107
		Nitrobenzene-d5	100	64.2	64		18	107
		2-Fluorobiphenyl	100	73.5	73		20	109
		2,4,6-Tribromophenol	150	14.0	9	*	10	116
		Terphenyl-d14	100	79.0	79		10	105
Q1232-15	JPP-42.2-012925	2-Fluorophenol	150	70.7	47		18	112
		Phenol-d6	150	78.6	52		15	107
		Nitrobenzene-d5	100	55.7	56		18	107
		2-Fluorobiphenyl	100	62.5	63		20	109
		2,4,6-Tribromophenol	150	29.1	19		10	116
		Terphenyl-d14	100	63.8	64		10	105
Q1232-15DL	JPP-42.2-012925DL	2-Fluorophenol	150	67.9	45		18	112
		Phenol-d6	150	78.0	52		15	107
		Nitrobenzene-d5	100	54.7	55		18	107
		2-Fluorobiphenyl	100	65.0	65		20	109
		2,4,6-Tribromophenol	150	22.2	15		10	116
		Terphenyl-d14	100	48.4	48		10	105
Q1232-19	JPP-51.1-012925	2-Fluorophenol	150	89.4	60		18	112
		Phenol-d6	150	85.6	57		15	107
		Nitrobenzene-d5	100	57.6	58		18	107

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Surrogate Summary

SW-846

SDG No.: Q1232

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q1232-19	JPP-51.1-012925	2-Fluorobiphenyl	100	68.8	69		20	109
		2,4,6-Tribromophenol	150	72.9	49		10	116
		Terphenyl-d14	100	75.2	75		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

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1232

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.: Q1232

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.: Q1232

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.: Q1232

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.: Q1232

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.: Q1232

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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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-46.1-012925	Q1232-07	BF141523.D	02/07/2025
JPP-42.2-012925	Q1232-15	BF141519.D	02/07/2025
JPP-42.1-012925	Q1232-11	BF141527.D	02/07/2025
JPP-51.1-012925	Q1232-19	BF141528.D	02/08/2025
357MS	Q1239-10MS	BF141345.D	01/31/2025
357MSD	Q1239-10MSD	BF141346.D	01/31/2025
JPP-46.2-012925	Q1232-03	BF141390.D	02/04/2025

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1232 SDG NO.: Q1232

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.: Q1232 SDG NO.: Q1232

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.: Q1232 SDG NO.: Q1232

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

Instrument ID: BNA_F DFTPP Injection Time: 16:43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	44.1
68	Less than 2.0% of mass 69	0.8 (2) 1
69	Mass 69 relative abundance	37.8
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	50.3
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	26.7
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	12.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.7 (19.5) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141373.D	02/03/2025	17:14
JPP-46.2-012925	Q1232-03	BF141390.D	02/04/2025	00:49

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1232 SDG NO.: Q1232

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-46.2-012925DL	Q1232-03DL	BF141426.D	02/04/2025	23:04

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1232 SDG NO.: Q1232

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.: Q1232 SDG NO.: Q1232

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.: Q1232 SDG NO.: Q1232

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-42.2-012925	Q1232-15	BF141519.D	02/07/2025	20:21
JPP-46.1-012925	Q1232-07	BF141523.D	02/07/2025	22:07
JPP-42.1-012925	Q1232-11	BF141527.D	02/07/2025	23:53
JPP-51.1-012925	Q1232-19	BF141528.D	02/08/2025	00:20

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1232 SDG NO.: Q1232

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-42.2-012925DL	Q1232-15DL	BF141547.D	02/10/2025	20:45

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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

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

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	104167	6.798	414412	8.08	226326	9.83
	UPPER LIMIT	208334	7.298	828824	8.581	452652	10.333
	LOWER LIMIT	52083.5	6.298	207206	7.581	113163	9.333
	EPA SAMPLE NO.						
01	JPP-46.2-012925	82605	6.79	314257	8.08	148040	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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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

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

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	383558	11.322	233911	13.963	231577	15.415
	UPPER LIMIT	767116	11.822	467822	14.463	463154	15.915
	LOWER LIMIT	191779	10.822	116956	13.463	115789	14.915
	EPA SAMPLE NO.						
01	JPP-46.2-012925	202244	11.32	154541	13.97	126974	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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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-46.2-012925DL	75582	6.79	307005	8.07	169441	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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Fax : 908 789 8922

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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-46.2-012925DL	294483	11.31	204133	13.96	214815	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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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-42.2-012925	70012	6.79	264489	8.08	130756	9.83
02	JPP-51.1-012925	82126	6.79	311011	8.08	153227	9.83
03	JPP-46.1-012925	83684	6.79	306437	8.08	148193	9.83
04	JPP-42.1-012925	81132	6.79	300029	8.08	147138	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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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-42.2-012925	201587	11.32	129006	13.96	98648	15.42
02	JPP-51.1-012925	233464	11.32	136681	13.97	111370	15.46
03	JPP-46.1-012925	233826	11.32	140011	13.96	112168	15.43
04	JPP-42.1-012925	226182	11.32	133028	13.96	108190	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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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-42.2-012925DL	73453	6.79	289682	8.07	146988	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.: Q1232 SAS No.: Q1232 SDG NO.: Q1232

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-42.2-012925DL	202539	11.31	173399	13.95	150535	15.40

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

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

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

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.:	Q1232
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.:	Q1232
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.:	Q1232
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.:	Q1232
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.:	Q1232
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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Fax : 908 789 8922

Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	
Client Sample ID:	PB166418BS			SDG No.:	Q1232
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.:	Q1232
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

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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.:	Q1232
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.:	Q1232
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.:	Q1232
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.:	Q1232
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.:	Q1232
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

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:	357MSD	SDG No.:	Q1232
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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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

Lab File ID: BF141373.D Init. Calib. Date(s): 01/29/2025 01/29/2025

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

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.303	1.302		-0.1	
Benzaldehyde	0.960	1.038		8.1	
Phenol-d6	1.657	1.598		-3.6	
Phenol	1.757	1.694		-3.6	20.0
bis(2-Chloroethyl)ether	1.347	1.310		-2.7	
2-Chlorophenol	1.396	1.391		-0.4	
2-Methylphenol	1.135	1.109		-2.3	
2,2-oxybis(1-Chloropropane)	2.342	2.192		-6.4	
Acetophenone	0.475	0.486		2.3	
3+4-Methylphenols	1.393	1.420		1.9	
n-Nitroso-di-n-propylamine	0.985	0.981	0.050	-0.4	
Nitrobenzene-d5	0.379	0.382		0.8	
Hexachloroethane	0.571	0.590		3.3	
Nitrobenzene	0.393	0.389		-1.0	
Isophorone	0.656	0.653		-0.5	
2-Nitrophenol	0.185	0.188		1.6	20.0
2,4-Dimethylphenol	0.236	0.237		0.4	
bis(2-Chloroethoxy)methane	0.418	0.408		-2.4	
2,4-Dichlorophenol	0.289	0.293		1.4	20.0
Naphthalene	1.057	1.046		-1.0	
4-Chloroaniline	0.358	0.293		-18.2	
Hexachlorobutadiene	0.194	0.204		5.2	20.0
Caprolactam	0.094	0.096		2.1	
4-Chloro-3-methylphenol	0.310	0.318		2.6	20.0
2-Methylnaphthalene	0.672	0.672		0.0	
Hexachlorocyclopentadiene	0.168	0.186	0.050	10.7	
2,4,6-Trichlorophenol	0.372	0.380		2.2	20.0
2-Fluorobiphenyl	1.299	1.292		-0.5	
2,4,5-Trichlorophenol	0.405	0.413		2.0	
1,1-Biphenyl	1.560	1.536		-1.5	
2-Chloronaphthalene	1.216	1.196		-1.6	
2-Nitroaniline	0.382	0.388		1.6	
Dimethylphthalate	1.351	1.357		0.4	
Acenaphthylene	1.702	1.683		-1.1	
2,6-Dinitrotoluene	0.314	0.315		0.3	
3-Nitroaniline	0.307	0.310		1.0	
Acenaphthene	1.216	1.226		0.8	20.0
2,4-Dinitrophenol	0.146	0.170	0.050	16.4	
4-Nitrophenol	0.225	0.235	0.050	4.4	

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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

Lab File ID: BF141373.D Init. Calib. Date(s): 01/29/2025 01/29/2025

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

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.627	1.608		-1.2	
2,4-Dinitrotoluene	0.406	0.423		4.2	
Diethylphthalate	1.310	1.346		2.7	
4-Chlorophenyl-phenylether	0.617	0.621		0.6	
Fluorene	1.262	1.286		1.9	
4-Nitroaniline	0.302	0.327		8.3	
4,6-Dinitro-2-methylphenol	0.118	0.140		18.6	
n-Nitrosodiphenylamine	0.647	0.642		-0.8	20.0
2,4,6-Tribromophenol	0.183	0.194		6.0	
4-Bromophenyl-phenylether	0.224	0.234		4.5	
Hexachlorobenzene	0.238	0.244		2.5	
Atrazine	0.216	0.216		0.0	
Pentachlorophenol	0.139	0.157		12.9	20.0
Phenanthrene	1.075	1.095		1.9	
Anthracene	1.053	1.082		2.8	
Carbazole	0.934	0.977		4.6	
Di-n-butylphthalate	1.132	1.197		5.7	
Fluoranthene	1.062	1.123		5.7	20.0
Pyrene	1.920	1.838		-4.3	
Terphenyl-d14	1.297	1.274		-1.8	
Butylbenzylphthalate	0.671	0.703		4.8	
3,3-Dichlorobenzidine	0.439	0.424		-3.4	
Benzo(a)anthracene	1.380	1.292		-6.4	
Chrysene	1.265	1.240		-2.0	
Bis(2-ethylhexyl)phthalate	0.851	0.932		9.5	
Di-n-octyl phthalate	1.321	1.473		11.5	20.0
Benzo(b)fluoranthene	1.258	1.234		-1.9	
Benzo(k)fluoranthene	1.114	1.155		3.7	
Benzo(a)pyrene	1.063	1.088		2.4	20.0
Indeno(1,2,3-cd)pyrene	1.291	1.353		4.8	
Dibenzo(a,h)anthracene	1.039	1.102		6.1	
Benzo(g,h,i)perylene	1.080	1.119		3.6	
1,2,4,5-Tetrachlorobenzene	0.569	0.571		0.4	
1,4-Dioxane	0.573	0.582		1.6	20.0
2,3,4,6-Tetrachlorophenol	0.319	0.336		5.3	

All other compounds must meet a minimum RRF of 0.010.

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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

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

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

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

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

All other compounds must meet a minimum RRF of 0.010.

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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.