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

LAB CHRONICLE

OrderID:	Q1207	**OrderDate:**	1/28/2025 11:40:00 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
Q1207-04	**JPP-2.1-012725**	**TCLP**			**01/27/25**			**01/28/25**
			TCLP BNA	8270E		01/29/25	02/05/25	
Q1207-08	**JPP-5.1-012725**	**TCLP**			**01/27/25**			**01/28/25**
			TCLP BNA	8270E		01/29/25	02/05/25	
Q1207-12	**JPP-4.5-012725**	**TCLP**			**01/27/25**			**01/28/25**
			TCLP BNA	8270E		01/29/25	02/05/25	
Q1207-16	**JPP-16.2-012725**	**TCLP**			**01/27/25**			**01/28/25**
			TCLP BNA	8270E		01/29/25	02/05/25	
Q1207-20	**JPP-20.2-012725**	**TCLP**			**01/27/25**			**01/28/25**
			TCLP BNA	8270E		01/29/25	02/05/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1207

Client: RU2 Engineering, LLC

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID :								
				0.000				
			Total Svoc :			**0.00**		
			Total Concentration:			**0.00**		

SAMPLE DATA

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	PB166318TB	SDG No.:	Q1207
Lab Sample ID:	PB166318TB	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141448.D	1	01/29/25 12:35	02/05/25 15:43	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	50.0	U	15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	50.0	U	8.40	50.0	ug/L
95-48-7	2-Methylphenol	50.0	U	11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	100	U	11.5	100	ug/L
67-72-1	Hexachloroethane	50.0	U	10.1	50.0	ug/L
98-95-3	Nitrobenzene	50.0	U	12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	50.0	U	12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	50.0	U	8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	50.0	U	10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	50.0	U	15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	50.0	U	11.4	50.0	ug/L
87-86-5	Pentachlorophenol	100	U	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	135		10 - 139	90%	SPK: 150
13127-88-3	Phenol-d6	130		10 - 134	86%	SPK: 150
4165-60-0	Nitrobenzene-d5	96.2		49 - 133	96%	SPK: 100
321-60-8	2-Fluorobiphenyl	97.9		52 - 132	98%	SPK: 100
118-79-6	2,4,6-Tribromophenol	142		44 - 137	95%	SPK: 150
1718-51-0	Terphenyl-d14	96.0		48 - 125	96%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	70000	6.786			
1146-65-2	Naphthalene-d8	275000	8.069			
15067-26-2	Acenaphthene-d10	149000	9.827			
1517-22-2	Phenanthrene-d10	258000	11.31			
1719-03-5	Chrysene-d12	172000	13.957			
1520-96-3	Perylene-d12	140000	15.421			

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Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/29/25
Client Sample ID:	PB166318TB			SDG No.:	Q1207
Lab Sample ID:	PB166318TB			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	100	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
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
BF141448.D	1	01/29/25 12:35	02/05/25 15:43	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-2.1-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-04	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141452.D	1	01/29/25 12:35	02/05/25 17:35	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	50.0	U	15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	50.0	U	8.40	50.0	ug/L
95-48-7	2-Methylphenol	50.0	U	11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	100	U	11.5	100	ug/L
67-72-1	Hexachloroethane	50.0	U	10.1	50.0	ug/L
98-95-3	Nitrobenzene	50.0	U	12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	50.0	U	12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	50.0	U	8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	50.0	U	10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	50.0	U	15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	50.0	U	11.4	50.0	ug/L
87-86-5	Pentachlorophenol	100	U	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	145		10 - 139	96%	SPK: 150
13127-88-3	Phenol-d6	136		10 - 134	91%	SPK: 150
4165-60-0	Nitrobenzene-d5	110		49 - 133	110%	SPK: 100
321-60-8	2-Fluorobiphenyl	109		52 - 132	109%	SPK: 100
118-79-6	2,4,6-Tribromophenol	179		44 - 137	119%	SPK: 150
1718-51-0	Terphenyl-d14	118		48 - 125	118%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	67200	6.793			
1146-65-2	Naphthalene-d8	273000	8.069			
15067-26-2	Acenaphthene-d10	147000	9.828			
1517-22-2	Phenanthrene-d10	254000	11.31			
1719-03-5	Chrysene-d12	151000	13.957			
1520-96-3	Perylene-d12	156000	15.427			

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-2.1-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-04	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141452.D	1	01/29/25 12:35	02/05/25 17:35	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-5.1-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-08	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141453.D	1	01/29/25 12:35	02/05/25 18:01	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	50.0	U	15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	50.0	U	8.40	50.0	ug/L
95-48-7	2-Methylphenol	50.0	U	11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	100	U	11.5	100	ug/L
67-72-1	Hexachloroethane	50.0	U	10.1	50.0	ug/L
98-95-3	Nitrobenzene	50.0	U	12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	50.0	U	12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	50.0	U	8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	50.0	U	10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	50.0	U	15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	50.0	U	11.4	50.0	ug/L
87-86-5	Pentachlorophenol	100	U	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	127		10 - 139	84%	SPK: 150
13127-88-3	Phenol-d6	115		10 - 134	76%	SPK: 150
4165-60-0	Nitrobenzene-d5	100		49 - 133	100%	SPK: 100
321-60-8	2-Fluorobiphenyl	96.6		52 - 132	97%	SPK: 100
118-79-6	2,4,6-Tribromophenol	155		44 - 137	103%	SPK: 150
1718-51-0	Terphenyl-d14	105		48 - 125	105%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	79400	6.792			
1146-65-2	Naphthalene-d8	314000	8.069			
15067-26-2	Acenaphthene-d10	170000	9.822			
1517-22-2	Phenanthrene-d10	288000	11.31			
1719-03-5	Chrysene-d12	171000	13.957			
1520-96-3	Perylene-d12	176000	15.427			

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-5.1-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-08	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141453.D	1	01/29/25 12:35	02/05/25 18:01	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-4.5-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-12	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141455.D	1	01/29/25 12:35	02/05/25 18:54	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	50.0	U	15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	50.0	U	8.40	50.0	ug/L
95-48-7	2-Methylphenol	50.0	U	11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	100	U	11.5	100	ug/L
67-72-1	Hexachloroethane	50.0	U	10.1	50.0	ug/L
98-95-3	Nitrobenzene	50.0	U	12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	50.0	U	12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	50.0	U	8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	50.0	U	10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	50.0	U	15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	50.0	U	11.4	50.0	ug/L
87-86-5	Pentachlorophenol	100	U	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	146		10 - 139	98%	SPK: 150
13127-88-3	Phenol-d6	133		10 - 134	89%	SPK: 150
4165-60-0	Nitrobenzene-d5	113		49 - 133	113%	SPK: 100
321-60-8	2-Fluorobiphenyl	112		52 - 132	112%	SPK: 100
118-79-6	2,4,6-Tribromophenol	177		44 - 137	118%	SPK: 150
1718-51-0	Terphenyl-d14	119		48 - 125	119%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	67100	6.787			
1146-65-2	Naphthalene-d8	265000	8.069			
15067-26-2	Acenaphthene-d10	143000	9.822			
1517-22-2	Phenanthrene-d10	243000	11.31			
1719-03-5	Chrysene-d12	147000	13.957			
1520-96-3	Perylene-d12	144000	15.433			

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-4.5-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-12	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141455.D	1	01/29/25 12:35	02/05/25 18:54	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.2-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-16	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141456.D	1	01/29/25 12:35	02/05/25 19:20	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	50.0	U	15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	50.0	U	8.40	50.0	ug/L
95-48-7	2-Methylphenol	50.0	U	11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	100	U	11.5	100	ug/L
67-72-1	Hexachloroethane	50.0	U	10.1	50.0	ug/L
98-95-3	Nitrobenzene	50.0	U	12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	50.0	U	12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	50.0	U	8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	50.0	U	10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	50.0	U	15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	50.0	U	11.4	50.0	ug/L
87-86-5	Pentachlorophenol	100	U	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	141		10 - 139	94%	SPK: 150
13127-88-3	Phenol-d6	129		10 - 134	86%	SPK: 150
4165-60-0	Nitrobenzene-d5	109		49 - 133	109%	SPK: 100
321-60-8	2-Fluorobiphenyl	107		52 - 132	107%	SPK: 100
118-79-6	2,4,6-Tribromophenol	170		44 - 137	114%	SPK: 150
1718-51-0	Terphenyl-d14	116		48 - 125	116%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	70100	6.787			
1146-65-2	Naphthalene-d8	275000	8.069			
15067-26-2	Acenaphthene-d10	149000	9.822			
1517-22-2	Phenanthrene-d10	249000	11.31			
1719-03-5	Chrysene-d12	147000	13.957			
1520-96-3	Perylene-d12	157000	15.427			

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.2-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-16	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141456.D	1	01/29/25 12:35	02/05/25 19:20	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.2-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-20	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
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
BF141454.D	1	01/29/25 12:35	02/05/25 18:27	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	50.0	U	15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	50.0	U	8.40	50.0	ug/L
95-48-7	2-Methylphenol	50.0	U	11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	100	U	11.5	100	ug/L
67-72-1	Hexachloroethane	50.0	U	10.1	50.0	ug/L
98-95-3	Nitrobenzene	50.0	U	12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	50.0	U	12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	50.0	U	8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	50.0	U	10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	50.0	U	15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	50.0	U	11.4	50.0	ug/L
87-86-5	Pentachlorophenol	100	U	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	152		10 - 139	101%	SPK: 150
13127-88-3	Phenol-d6	136		10 - 134	91%	SPK: 150
4165-60-0	Nitrobenzene-d5	116		49 - 133	116%	SPK: 100
321-60-8	2-Fluorobiphenyl	115		52 - 132	115%	SPK: 100
118-79-6	2,4,6-Tribromophenol	184		44 - 137	123%	SPK: 150
1718-51-0	Terphenyl-d14	125		48 - 125	125%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	67600	6.792			
1146-65-2	Naphthalene-d8	272000	8.069			
15067-26-2	Acenaphthene-d10	146000	9.822			
1517-22-2	Phenanthrene-d10	252000	11.31			
1719-03-5	Chrysene-d12	149000	13.957			
1520-96-3	Perylene-d12	148000	15.421			

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Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/28/25
Client Sample ID:	JPP-20.2-012725			SDG No.:	Q1207
Lab Sample ID:	Q1207-20			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	100	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
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
BF141454.D	1	01/29/25 12:35	02/05/25 18:27	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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Surrogate Summary

SW-846

SDG No.: Q1207

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB166318TB	PB166318TB	2-Fluorophenol	150	135	90		10	139
		Phenol-d6	150	130	86		10	134
		Nitrobenzene-d5	100	96.2	96		49	133
		2-Fluorobiphenyl	100	97.9	98		52	132
		2,4,6-Tribromophenol	150	142	95		44	137
		Terphenyl-d14	100	96.0	96		48	125
PB166354BL	PB166354BL	2-Fluorophenol	150	125	83		10	139
		Phenol-d6	150	122	81		10	134
		Nitrobenzene-d5	100	85.9	86		49	133
		2-Fluorobiphenyl	100	82.9	83		52	132
		2,4,6-Tribromophenol	150	125	84		44	137
		Terphenyl-d14	100	88.0	88		48	125
PB166354BS	PB166354BS	2-Fluorophenol	150	135	90		10	139
		Phenol-d6	150	128	85		10	134
		Nitrobenzene-d5	100	96.9	97		49	133
		2-Fluorobiphenyl	100	96.5	96		52	132
		2,4,6-Tribromophenol	150	159	106		44	137
		Terphenyl-d14	100	95.9	96		48	125
Q1205-02MS	VNJ-236MS	2-Fluorophenol	150	125	84		10	139
		Phenol-d6	150	121	81		10	134
		Nitrobenzene-d5	100	89.2	89		49	133
		2-Fluorobiphenyl	100	86.4	86		52	132
		2,4,6-Tribromophenol	150	126	84		44	137
		Terphenyl-d14	100	75.4	75		48	125
Q1205-02MSD	VNJ-236MSD	2-Fluorophenol	150	112	75		10	139
		Phenol-d6	150	103	69		10	134
		Nitrobenzene-d5	100	85.5	86		49	133
		2-Fluorobiphenyl	100	80.9	81		52	132
		2,4,6-Tribromophenol	150	119	79		44	137
		Terphenyl-d14	100	69.4	69		48	125
Q1207-04	JPP-2.1-012725	2-Fluorophenol	150	145	96		10	139
		Phenol-d6	150	136	91		10	134
		Nitrobenzene-d5	100	110	110		49	133
		2-Fluorobiphenyl	100	109	109		52	132
		2,4,6-Tribromophenol	150	179	119		44	137
		Terphenyl-d14	100	118	118		48	125
Q1207-08	JPP-5.1-012725	2-Fluorophenol	150	127	84		10	139
		Phenol-d6	150	115	76		10	134
		Nitrobenzene-d5	100	100	100		49	133
		2-Fluorobiphenyl	100	96.6	97		52	132
		2,4,6-Tribromophenol	150	155	103		44	137
		Terphenyl-d14	100	105	105		48	125
Q1207-12	JPP-4.5-012725	2-Fluorophenol	150	146	98		10	139
		Phenol-d6	150	133	89		10	134
		Nitrobenzene-d5	100	113	113		49	133
		2-Fluorobiphenyl	100	112	112		52	132
		2,4,6-Tribromophenol	150	177	118		44	137
		Terphenyl-d14	100	119	119		48	125
Q1207-16	JPP-16.2-012725	2-Fluorophenol	150	141	94		10	139
		Phenol-d6	150	129	86		10	134
		Nitrobenzene-d5	100	109	109		49	133

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Surrogate Summary

SW-846

SDG No.: Q1207

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q1207-16	JPP-16.2-012725	2-Fluorobiphenyl	100	107	107		52	132
		2,4,6-Tribromophenol	150	170	114		44	137
		Terphenyl-d14	100	116	116		48	125
Q1207-20	JPP-20.2-012725	2-Fluorophenol	150	152	101		10	139
		Phenol-d6	150	136	91		10	134
		Nitrobenzene-d5	100	116	116		49	133
		2-Fluorobiphenyl	100	115	115		52	132
		2,4,6-Tribromophenol	150	184	123		44	137
		Terphenyl-d14	100	125	125		48	125

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1207

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: Q1205-02MS		**Client Sample ID: VNJ-236MS**						**DataFile: BF141347.D**			
Pyridine	500	0	240	ug/L	48				10	109	
1,4-Dichlorobenzene	500	0	370	ug/L	74				55	125	
2-Methylphenol	500	0	430	ug/L	86				37	126	
3+4-Methylphenols	500	0	480	ug/L	96				31	127	
Hexachloroethane	500	0	380	ug/L	76				49	110	
Nitrobenzene	500	0	420	ug/L	84				62	112	
Hexachlorobutadiene	500	0	400	ug/L	80				52	125	
2,4,6-Trichlorophenol	500	0	470	ug/L	94				78	112	
2,4,5-Trichlorophenol	500	0	470	ug/L	94				71	111	
2,4-Dinitrotoluene	500	0	450	ug/L	90				50	142	
Hexachlorobenzene	500	0	490	ug/L	98				72	115	
Pentachlorophenol	1000	0	940	ug/L	94				25	139	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1207

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: Q1205-02MSD		**Client Sample ID: VNJ-236MSD**						**DataFile:**	**BF141348.D**		
Pyridine	500	0	360	ug/L	72		40	*	10	109	20
1,4-Dichlorobenzene	500	0	360	ug/L	72		3		55	125	20
2-Methylphenol	500	0	370	ug/L	74		15		37	126	20
3+4-Methylphenols	500	0	400	ug/L	80		18		31	127	20
Hexachloroethane	500	0	360	ug/L	72		5		49	110	20
Nitrobenzene	500	0	360	ug/L	72		15		62	112	20
Hexachlorobutadiene	500	0	360	ug/L	72		11		52	125	20
2,4,6-Trichlorophenol	500	0	390	ug/L	78		19		78	112	20
2,4,5-Trichlorophenol	500	0	380	ug/L	76		21	*	71	111	20
2,4-Dinitrotoluene	500	0	370	ug/L	74		20		50	142	20
Hexachlorobenzene	500	0	410	ug/L	82		18		72	115	20
Pentachlorophenol	1000	0	770	ug/L	77		20		25	139	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1207

Client: RU2 Engineering, LLC

Analytical Method: 8270E **DataFile:** BF141445.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB166354BS	Pyridine	50	38.6	ug/L	77				29	97	
	1,4-Dichlorobenzene	50	46.7	ug/L	93				76	103	
	2-Methylphenol	50	45.8	ug/L	92				69	109	
	3+4-Methylphenols	50	48.2	ug/L	96				67	106	
	Hexachloroethane	50	48.9	ug/L	98				76	118	
	Nitrobenzene	50	47.0	ug/L	94				58	106	
	Hexachlorobutadiene	50	49.7	ug/L	99				69	101	
	2,4,6-Trichlorophenol	50	50.3	ug/L	101				61	110	
	2,4,5-Trichlorophenol	50	49.8	ug/L	100				70	106	
	2,4-Dinitrotoluene	50	52.3	ug/L	105				60	115	
	Hexachlorobenzene	50	49.8	ug/L	100				73	106	
	Pentachlorophenol	100	100	ug/L	100				47	114	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166354BL

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

Lab File ID: BF141337.D Lab Sample ID: PB166354BL

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

Matrix: (soil/water) water Date Analyzed: 01/31/2025

Level: (low/med) LOW Time Analyzed: 17:46

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VNJ-236MS	Q1205-02MS	BF141347.D	01/31/2025
VNJ-236MSD	Q1205-02MSD	BF141348.D	01/31/2025
PB166354BS	PB166354BS	BF141445.D	02/05/2025
PB166318TB	PB166318TB	BF141448.D	02/05/2025
JPP-2.1-012725	Q1207-04	BF141452.D	02/05/2025
JPP-5.1-012725	Q1207-08	BF141453.D	02/05/2025
JPP-20.2-012725	Q1207-20	BF141454.D	02/05/2025
JPP-4.5-012725	Q1207-12	BF141455.D	02/05/2025
JPP-16.2-012725	Q1207-16	BF141456.D	02/05/2025

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1207 SDG NO.: Q1207

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	83.6
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.: Q1207 SDG NO.: Q1207

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	74.1
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
PB166354BL	PB166354BL	BF141337.D	01/31/2025	17:46
VNJ-236MS	Q1205-02MS	BF141347.D	01/31/2025	22:16
VNJ-236MSD	Q1205-02MSD	BF141348.D	01/31/2025	22:43

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1207 SDG NO.: Q1207

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	75.4
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
PB166354BS	PB166354BS	BF141445.D	02/05/2025	14:24

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM SAS No.: Q1207 SDG NO.: Q1207

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

Instrument ID: BNA_F DFTPP Injection Time: 14:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	40.8
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	36.3
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	47.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.3
275	10.0 - 60.0% of mass 198	26.9
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	12.6
442	Greater than 50% of mass 198	82.1
443	15.0 - 24.0% of mass 442	14.9 (18.2) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141447.D	02/05/2025	15:16
PB166318TB	PB166318TB	BF141448.D	02/05/2025	15:43
JPP-2.1-012725	Q1207-04	BF141452.D	02/05/2025	17:35
JPP-5.1-012725	Q1207-08	BF141453.D	02/05/2025	18:01
JPP-20.2-012725	Q1207-20	BF141454.D	02/05/2025	18:27
JPP-4.5-012725	Q1207-12	BF141455.D	02/05/2025	18:54
JPP-16.2-012725	Q1207-16	BF141456.D	02/05/2025	19:20

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

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	PB166354BL	138010	6.80	554699	8.08	302564	9.83
02	VNJ-236MS	142849	6.80	564006	8.08	294756	9.84
03	VNJ-236MSD	153925	6.80	605647	8.08	316012	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.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

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	PB166354BL	518908	11.32	314414	13.96	272271	15.43
02	VNJ-236MS	431674	11.33	275611	13.97	282127	15.42
03	VNJ-236MSD	461856	11.33	294849	13.97	278615	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.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

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	PB166354BS	68626	6.79	266966	8.08	145742	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.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

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	PB166354BS	256036	11.32	181162	13.96	151994	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.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

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

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

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

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	82418	6.792	312528	8.08	169230	9.83
	UPPER LIMIT	164836	7.292	625056	8.575	338460	10.328
	LOWER LIMIT	41209	6.292	156264	7.575	84615	9.328
	EPA SAMPLE NO.						
01	PB166318TB	70021	6.79	275257	8.07	148604	9.83
02	JPP-2.1-012725	67166	6.79	273499	8.07	146857	9.83
03	JPP-5.1-012725	79438	6.79	313809	8.07	169630	9.82
04	JPP-4.5-012725	67139	6.79	265210	8.07	142949	9.82
05	JPP-16.2-012725	70116	6.79	274847	8.07	148681	9.82
06	JPP-20.2-012725	67649	6.79	271784	8.07	146327	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.: Q1207 SAS No.: Q1207 SDG NO.: Q1207

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

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

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

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	293274	11.316	189132	13.963	170936	15.421
	UPPER LIMIT	586548	11.816	378264	14.463	341872	15.921
	LOWER LIMIT	146637	10.816	94566	13.463	85468	14.921
	EPA SAMPLE NO.						
01	PB166318TB	258070	11.31	172413	13.96	140295	15.42
02	JPP-2.1-012725	254047	11.31	150906	13.96	156406	15.43
03	JPP-5.1-012725	288034	11.31	170634	13.96	176168	15.43
04	JPP-4.5-012725	242726	11.31	146889	13.96	144251	15.43
05	JPP-16.2-012725	249488	11.31	146891	13.96	157396	15.43
06	JPP-20.2-012725	252173	11.31	148665	13.96	147857	15.42

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

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

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

QC SAMPLE DATA

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166354BL	SDG No.:	Q1207
Lab Sample ID:	PB166354BL	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141337.D	1	01/29/25 12:35	01/31/25 17:46	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	5.00	U	1.60	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	5.00	U	0.84	5.00	ug/L
95-48-7	2-Methylphenol	5.00	U	1.10	5.00	ug/L
65794-96-9	3+4-Methylphenols	10.0	U	1.20	10.0	ug/L
67-72-1	Hexachloroethane	5.00	U	1.00	5.00	ug/L
98-95-3	Nitrobenzene	5.00	U	1.30	5.00	ug/L
87-68-3	Hexachlorobutadiene	5.00	U	1.30	5.00	ug/L
88-06-2	2,4,6-Trichlorophenol	5.00	U	0.89	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	5.00	U	1.00	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	5.00	U	1.50	5.00	ug/L
118-74-1	Hexachlorobenzene	5.00	U	1.10	5.00	ug/L
87-86-5	Pentachlorophenol	10.0	U	1.90	10.0	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	125		10 - 139	83%	SPK: 150
13127-88-3	Phenol-d6	122		10 - 134	81%	SPK: 150
4165-60-0	Nitrobenzene-d5	85.9		49 - 133	86%	SPK: 100
321-60-8	2-Fluorobiphenyl	82.9		52 - 132	83%	SPK: 100
118-79-6	2,4,6-Tribromophenol	125		44 - 137	84%	SPK: 150
1718-51-0	Terphenyl-d14	88.0		48 - 125	88%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	138000	6.799			
1146-65-2	Naphthalene-d8	555000	8.075			
15067-26-2	Acenaphthene-d10	303000	9.834			
1517-22-2	Phenanthrene-d10	519000	11.322			
1719-03-5	Chrysene-d12	314000	13.963			
1520-96-3	Perylene-d12	272000	15.427			

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Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	
Client Sample ID:	PB166354BL			SDG No.:	Q1207
Lab Sample ID:	PB166354BL			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141337.D	1	01/29/25 12:35	01/31/25 17:46	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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:	PB166354BS	SDG No.:	Q1207
Lab Sample ID:	PB166354BS	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141445.D	1	01/29/25 12:35	02/05/25 14:24	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	38.6		1.60	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	46.7		0.84	5.00	ug/L
95-48-7	2-Methylphenol	45.8		1.10	5.00	ug/L
65794-96-9	3+4-Methylphenols	48.2		1.20	10.0	ug/L
67-72-1	Hexachloroethane	48.9		1.00	5.00	ug/L
98-95-3	Nitrobenzene	47.0		1.30	5.00	ug/L
87-68-3	Hexachlorobutadiene	49.7		1.30	5.00	ug/L
88-06-2	2,4,6-Trichlorophenol	50.3		0.89	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	49.8		1.00	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	52.3		1.50	5.00	ug/L
118-74-1	Hexachlorobenzene	49.8		1.10	5.00	ug/L
87-86-5	Pentachlorophenol	100	E	1.90	10.0	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	135		10 - 139	90%	SPK: 150
13127-88-3	Phenol-d6	128		10 - 134	85%	SPK: 150
4165-60-0	Nitrobenzene-d5	96.9		49 - 133	97%	SPK: 100
321-60-8	2-Fluorobiphenyl	96.5		52 - 132	96%	SPK: 100
118-79-6	2,4,6-Tribromophenol	159		44 - 137	106%	SPK: 150
1718-51-0	Terphenyl-d14	95.9		48 - 125	96%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	68600	6.787			
1146-65-2	Naphthalene-d8	267000	8.075			
15067-26-2	Acenaphthene-d10	146000	9.828			
1517-22-2	Phenanthrene-d10	256000	11.316			
1719-03-5	Chrysene-d12	181000	13.963			
1520-96-3	Perylene-d12	152000	15.427			

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Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	
Client Sample ID:	PB166354BS			SDG No.:	Q1207
Lab Sample ID:	PB166354BS			Matrix:	TCLP
Analytical Method:	SW8270			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	TCLP BNA
Extraction Type :			Decanted : N	Level :	LOW
Injection Volume :			GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141445.D	1	01/29/25 12:35	02/05/25 14:24	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	VNJ-236MS	SDG No.:	Q1207
Lab Sample ID:	Q1205-02MS	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141347.D	1	01/29/25 12:35	01/31/25 22:16	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	240		15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	370		8.40	50.0	ug/L
95-48-7	2-Methylphenol	430		11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	480		11.5	100	ug/L
67-72-1	Hexachloroethane	380		10.1	50.0	ug/L
98-95-3	Nitrobenzene	420		12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	400		12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	470		8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	470		10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	450		15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	490		11.4	50.0	ug/L
87-86-5	Pentachlorophenol	940	E	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	125		10 - 139	84%	SPK: 150
13127-88-3	Phenol-d6	121		10 - 134	81%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.2		49 - 133	89%	SPK: 100
321-60-8	2-Fluorobiphenyl	86.4		52 - 132	86%	SPK: 100
118-79-6	2,4,6-Tribromophenol	126		44 - 137	84%	SPK: 150
1718-51-0	Terphenyl-d14	75.4		48 - 125	75%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	143000	6.798			
1146-65-2	Naphthalene-d8	564000	8.081			
15067-26-2	Acenaphthene-d10	295000	9.839			
1517-22-2	Phenanthrene-d10	432000	11.327			
1719-03-5	Chrysene-d12	276000	13.968			
1520-96-3	Perylene-d12	282000	15.421			

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	VNJ-236MS	SDG No.:	Q1207
Lab Sample ID:	Q1205-02MS	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141347.D	1	01/29/25 12:35	01/31/25 22:16	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	VNJ-236MSD	SDG No.:	Q1207
Lab Sample ID:	Q1205-02MSD	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141348.D	1	01/29/25 12:35	01/31/25 22:43	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	360		15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	360		8.40	50.0	ug/L
95-48-7	2-Methylphenol	370		11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	400		11.5	100	ug/L
67-72-1	Hexachloroethane	360		10.1	50.0	ug/L
98-95-3	Nitrobenzene	360		12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	360		12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	390		8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	380		10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	370		15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	410		11.4	50.0	ug/L
87-86-5	Pentachlorophenol	770		18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	112		10 - 139	75%	SPK: 150
13127-88-3	Phenol-d6	103		10 - 134	69%	SPK: 150
4165-60-0	Nitrobenzene-d5	85.5		49 - 133	86%	SPK: 100
321-60-8	2-Fluorobiphenyl	80.9		52 - 132	81%	SPK: 100
118-79-6	2,4,6-Tribromophenol	119		44 - 137	79%	SPK: 150
1718-51-0	Terphenyl-d14	69.4		48 - 125	69%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	154000	6.798			
1146-65-2	Naphthalene-d8	606000	8.081			
15067-26-2	Acenaphthene-d10	316000	9.839			
1517-22-2	Phenanthrene-d10	462000	11.327			
1719-03-5	Chrysene-d12	295000	13.968			
1520-96-3	Perylene-d12	279000	15.421			

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	VNJ-236MSD	SDG No.:	Q1207
Lab Sample ID:	Q1205-02MSD	Matrix:	TCLP
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	TCLP BNA
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141348.D	1	01/29/25 12:35	01/31/25 22:43	PB166354

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

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

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7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1207 SAS No.: Q1207 SDG No.: Q1207

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
Pyridine	1.380	1.326		-3.9	
2-Fluorophenol	1.303	1.218		-6.5	
Phenol-d6	1.657	1.534		-7.4	
1,4-Dichlorobenzene	1.547	1.437		-7.2	20.0
2-Methylphenol	1.135	1.062		-6.4	
3+4-Methylphenols	1.393	1.318		-5.4	
Nitrobenzene-d5	0.379	0.348		-8.2	
Hexachloroethane	0.571	0.536		-6.1	
Nitrobenzene	0.393	0.365		-7.1	
Hexachlorobutadiene	0.194	0.179		-7.7	20.0
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	
2,4-Dinitrotoluene	0.406	0.427		5.2	
2,4,6-Tribromophenol	0.183	0.177		-3.3	
Hexachlorobenzene	0.238	0.232		-2.5	
Pentachlorophenol	0.139	0.186		33.8	20.0
Terphenyl-d14	1.297	1.177		-9.3	

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.: Q1207 SAS No.: Q1207 SDG No.: Q1207

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
Pyridine	1.380	1.235		-10.5	
2-Fluorophenol	1.303	1.295		-0.6	
Phenol-d6	1.657	1.600		-3.4	
1,4-Dichlorobenzene	1.547	1.578		2.0	20.0
2-Methylphenol	1.135	1.083		-4.6	
3+4-Methylphenols	1.393	1.395		0.1	
Nitrobenzene-d5	0.379	0.397		4.5	
Hexachloroethane	0.571	0.582		1.9	
Nitrobenzene	0.393	0.403		2.5	
Hexachlorobutadiene	0.194	0.212		9.3	20.0
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	
2,4-Dinitrotoluene	0.406	0.428		5.4	
2,4,6-Tribromophenol	0.183	0.197		7.7	
Hexachlorobenzene	0.238	0.246		3.4	
Pentachlorophenol	0.139	0.151		8.6	20.0
Terphenyl-d14	1.297	1.290		-0.5	

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.: Q1207 SAS No.: Q1207 SDG No.: Q1207

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

Lab File ID: BF141447.D Init. Calib. Date(s): 01/29/2025 01/29/2025

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

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.380	1.287		-6.7	
2-Fluorophenol	1.303	1.309		0.5	
Phenol-d6	1.657	1.599		-3.5	
1,4-Dichlorobenzene	1.547	1.560		0.8	20.0
2-Methylphenol	1.135	1.070		-5.7	
3+4-Methylphenols	1.393	1.393		0.0	
Nitrobenzene-d5	0.379	0.401		5.8	
Hexachloroethane	0.571	0.587		2.8	
Nitrobenzene	0.393	0.410		4.3	
Hexachlorobutadiene	0.194	0.212		9.3	20.0
2,4,6-Trichlorophenol	0.372	0.384		3.2	20.0
2-Fluorobiphenyl	1.299	1.332		2.5	
2,4,5-Trichlorophenol	0.405	0.414		2.2	
2,4-Dinitrotoluene	0.406	0.439		8.1	
2,4,6-Tribromophenol	0.183	0.203		10.9	
Hexachlorobenzene	0.238	0.245		2.9	
Pentachlorophenol	0.139	0.152		9.4	20.0
Terphenyl-d14	1.297	1.301		0.3	

All other compounds must meet a minimum RRF of 0.010.