

LAB CHRONICLE

OrderID:	Q1241	OrderDate:	1/30/2025 2:58:00 PM
Client:	RU2 Engineering, LLC	Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	Location:	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1241-04	JPP-3.5-013025	TCLP	TCLP BNA	8270E	01/30/25	02/03/25	02/04/25	01/30/25
Q1241-08	JPP-5.3-013025	TCLP	TCLP BNA	8270E	01/30/25	02/03/25	02/04/25	01/30/25
Q1241-12	JPP-5.2-013025	TCLP	TCLP BNA	8270E	01/30/25	02/03/25	02/04/25	01/30/25
Q1241-16	JPP-5.4-013025	TCLP	TCLP BNA	8270E	01/30/25	02/03/25	02/04/25	01/30/25
Q1241-20	JPP-51.4-013025	TCLP	TCLP BNA	8270E	01/30/25	02/03/25	02/04/25	01/30/25



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

Hit Summary Sheet
SW-846

SDG No.: Q1241
Client: RU2 Engineering, LLC

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



SAMPLE DATA

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	02/03/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/03/25
Client Sample ID:	PB166423TB	SDG No.:	Q1241
Lab Sample ID:	PB166423TB	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
BF141401.D	1	02/03/25 08:36	02/04/25 12:02	PB166483

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	137		10 - 139	92%	SPK: 150
13127-88-3	Phenol-d6	134		10 - 134	89%	SPK: 150
4165-60-0	Nitrobenzene-d5	95.6		49 - 133	96%	SPK: 100
321-60-8	2-Fluorobiphenyl	95.3		52 - 132	95%	SPK: 100
118-79-6	2,4,6-Tribromophenol	149		44 - 137	100%	SPK: 150
1718-51-0	Terphenyl-d14	84.4		48 - 125	84%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	79600	6.787			
1146-65-2	Naphthalene-d8	321000	8.069			
15067-26-2	Acenaphthene-d10	179000	9.828			
1517-22-2	Phenanthrene-d10	312000	11.31			
1719-03-5	Chrysene-d12	245000	13.957			
1520-96-3	Perylene-d12	193000	15.41			

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	02/03/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/03/25
Client Sample ID:	PB166423TB	SDG No.:	Q1241
Lab Sample ID:	PB166423TB	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
BF141401.D	1	02/03/25 08:36	02/04/25 12:02	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-04	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
BF141420.D	1	02/03/25 08:36	02/04/25 20:26	PB166483

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	114		10 - 139	76%	SPK: 150
13127-88-3	Phenol-d6	104		10 - 134	69%	SPK: 150
4165-60-0	Nitrobenzene-d5	85.7		49 - 133	86%	SPK: 100
321-60-8	2-Fluorobiphenyl	85.2		52 - 132	85%	SPK: 100
118-79-6	2,4,6-Tribromophenol	147		44 - 137	98%	SPK: 150
1718-51-0	Terphenyl-d14	69.6		48 - 125	70%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	77100	6.787			
1146-65-2	Naphthalene-d8	307000	8.069			
15067-26-2	Acenaphthene-d10	173000	9.822			
1517-22-2	Phenanthrene-d10	313000	11.31			
1719-03-5	Chrysene-d12	294000	13.951			
1520-96-3	Perylene-d12	253000	15.41			

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-04	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
BF141420.D	1	02/03/25 08:36	02/04/25 20:26	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

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N = Presumptive Evidence of a Compound

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D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-08	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
BF141415.D	1	02/03/25 08:36	02/04/25 18:15	PB166483

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	140		10 - 139	94%	SPK: 150
13127-88-3	Phenol-d6	126		10 - 134	84%	SPK: 150
4165-60-0	Nitrobenzene-d5	103		49 - 133	103%	SPK: 100
321-60-8	2-Fluorobiphenyl	103		52 - 132	103%	SPK: 100
118-79-6	2,4,6-Tribromophenol	178		44 - 137	119%	SPK: 150
1718-51-0	Terphenyl-d14	83.1		48 - 125	83%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	73900	6.787			
1146-65-2	Naphthalene-d8	297000	8.069			
15067-26-2	Acenaphthene-d10	164000	9.822			
1517-22-2	Phenanthrene-d10	297000	11.31			
1719-03-5	Chrysene-d12	269000	13.957			
1520-96-3	Perylene-d12	202000	15.416			

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-08	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
BF141415.D	1	02/03/25 08:36	02/04/25 18:15	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

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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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.2-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-12	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
BF141416.D	1	02/03/25 08:36	02/04/25 18:41	PB166483

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	134		10 - 139	89%	SPK: 150
13127-88-3	Phenol-d6	121		10 - 134	81%	SPK: 150
4165-60-0	Nitrobenzene-d5	104		49 - 133	104%	SPK: 100
321-60-8	2-Fluorobiphenyl	100		52 - 132	100%	SPK: 100
118-79-6	2,4,6-Tribromophenol	175		44 - 137	117%	SPK: 150
1718-51-0	Terphenyl-d14	80.5		48 - 125	81%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	74900	6.787			
1146-65-2	Naphthalene-d8	293000	8.069			
15067-26-2	Acenaphthene-d10	166000	9.822			
1517-22-2	Phenanthrene-d10	299000	11.31			
1719-03-5	Chrysene-d12	279000	13.951			
1520-96-3	Perylene-d12	232000	15.416			

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.2-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-12	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
BF141416.D	1	02/03/25 08:36	02/04/25 18:41	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

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N = Presumptive Evidence of a Compound

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D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-16	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
BF141417.D	1	02/03/25 08:36	02/04/25 19:07	PB166483

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	85%	SPK: 150
13127-88-3	Phenol-d6	115		10 - 134	77%	SPK: 150
4165-60-0	Nitrobenzene-d5	96.3		49 - 133	96%	SPK: 100
321-60-8	2-Fluorobiphenyl	94.6		52 - 132	95%	SPK: 100
118-79-6	2,4,6-Tribromophenol	164		44 - 137	110%	SPK: 150
1718-51-0	Terphenyl-d14	75.5		48 - 125	75%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	87700	6.787			
1146-65-2	Naphthalene-d8	357000	8.069			
15067-26-2	Acenaphthene-d10	198000	9.822			
1517-22-2	Phenanthrene-d10	359000	11.31			
1719-03-5	Chrysene-d12	324000	13.957			
1520-96-3	Perylene-d12	258000	15.421			

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-16	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
BF141417.D	1	02/03/25 08:36	02/04/25 19:07	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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LOQ = Limit of Quantitation

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-20	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
BF141418.D	1	02/03/25 08:36	02/04/25 19:34	PB166483

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	120		10 - 139	80%	SPK: 150
13127-88-3	Phenol-d6	106		10 - 134	71%	SPK: 150
4165-60-0	Nitrobenzene-d5	96.0		49 - 133	96%	SPK: 100
321-60-8	2-Fluorobiphenyl	94.3		52 - 132	94%	SPK: 100
118-79-6	2,4,6-Tribromophenol	153		44 - 137	102%	SPK: 150
1718-51-0	Terphenyl-d14	74.1		48 - 125	74%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	78600	6.787			
1146-65-2	Naphthalene-d8	316000	8.069			
15067-26-2	Acenaphthene-d10	176000	9.822			
1517-22-2	Phenanthrene-d10	315000	11.31			
1719-03-5	Chrysene-d12	287000	13.957			
1520-96-3	Perylene-d12	238000	15.415			

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-20	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
BF141418.D	1	02/03/25 08:36	02/04/25 19:34	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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

Surrogate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166423TB	PB166423TB	2-Fluorophenol	150	137	92		10	139
		Phenol-d6	150	134	89		10	134
		Nitrobenzene-d5	100	95.6	96		49	133
		2-Fluorobiphenyl	100	95.3	95		52	132
		2,4,6-Tribromophenol	150	149	100		44	137
		Terphenyl-d14	100	84.4	84		48	125
PB166483BL	PB166483BL	2-Fluorophenol	150	142	95		10	139
		Phenol-d6	150	136	91		10	134
		Nitrobenzene-d5	100	96.4	96		49	133
		2-Fluorobiphenyl	100	98.2	98		52	132
		2,4,6-Tribromophenol	150	150	100		44	137
		Terphenyl-d14	100	85.6	86		48	125
PB166483BS	PB166483BS	2-Fluorophenol	150	145	97		10	139
		Phenol-d6	150	136	91		10	134
		Nitrobenzene-d5	100	100	100		49	133
		2-Fluorobiphenyl	100	100	100		52	132
		2,4,6-Tribromophenol	150	160	107		44	137
		Terphenyl-d14	100	91.8	92		48	125
Q1239-02MS	286MS	2-Fluorophenol	150	133	89		10	139
		Phenol-d6	150	122	81		10	134
		Nitrobenzene-d5	100	102	102		49	133
		2-Fluorobiphenyl	100	102	102		52	132
		2,4,6-Tribromophenol	150	174	116		44	137
		Terphenyl-d14	100	88.5	89		48	125
Q1239-02MSD	286MSD	2-Fluorophenol	150	140	94		10	139
		Phenol-d6	150	129	86		10	134
		Nitrobenzene-d5	100	107	107		49	133
		2-Fluorobiphenyl	100	105	105		52	132
		2,4,6-Tribromophenol	150	176	118		44	137
		Terphenyl-d14	100	89.1	89		48	125
Q1241-04	JPP-3.5-013025	2-Fluorophenol	150	114	76		10	139
		Phenol-d6	150	104	69		10	134
		Nitrobenzene-d5	100	85.7	86		49	133
		2-Fluorobiphenyl	100	85.2	85		52	132
		2,4,6-Tribromophenol	150	147	98		44	137
		Terphenyl-d14	100	69.6	70		48	125
Q1241-08	JPP-5.3-013025	2-Fluorophenol	150	140	94		10	139
		Phenol-d6	150	126	84		10	134
		Nitrobenzene-d5	100	103	103		49	133
		2-Fluorobiphenyl	100	103	103		52	132
		2,4,6-Tribromophenol	150	178	119		44	137
		Terphenyl-d14	100	83.1	83		48	125
Q1241-12	JPP-5.2-013025	2-Fluorophenol	150	134	89		10	139
		Phenol-d6	150	121	81		10	134
		Nitrobenzene-d5	100	104	104		49	133
		2-Fluorobiphenyl	100	100	100		52	132
		2,4,6-Tribromophenol	150	175	117		44	137
		Terphenyl-d14	100	80.5	81		48	125
Q1241-16	JPP-5.4-013025	2-Fluorophenol	150	127	85		10	139
		Phenol-d6	150	115	77		10	134
		Nitrobenzene-d5	100	96.3	96		49	133

Surrogate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
Q1241-16	JPP-5.4-013025	2-Fluorobiphenyl	100	94.6	95		52	132
		2,4,6-Tribromophenol	150	164	110		44	137
		Terphenyl-d14	100	75.5	75		48	125
Q1241-20	JPP-51.4-013025	2-Fluorophenol	150	120	80		10	139
		Phenol-d6	150	106	71		10	134
		Nitrobenzene-d5	100	96.0	96		49	133
		2-Fluorobiphenyl	100	94.3	94		52	132
		2,4,6-Tribromophenol	150	153	102		44	137
		Terphenyl-d14	100	74.1	74		48	125

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID:	Q1239-02MS	Client Sample ID:	286MS					DataFile:	BF141413.D		
Pyridine	500	0	300	ug/L	60				10	109	
1,4-Dichlorobenzene	500	0	450	ug/L	90				55	125	
2-Methylphenol	500	0	450	ug/L	90				37	126	
3+4-Methylphenols	500	0	470	ug/L	94				31	127	
Hexachloroethane	500	0	470	ug/L	94				49	110	
Nitrobenzene	500	0	460	ug/L	92				62	112	
Hexachlorobutadiene	500	0	490	ug/L	98				52	125	
2,4,6-Trichlorophenol	500	0	480	ug/L	96				78	112	
2,4,5-Trichlorophenol	500	0	490	ug/L	98				71	111	
2,4-Dinitrotoluene	500	0	510	ug/L	102				50	142	
Hexachlorobenzene	500	0	480	ug/L	96				72	115	
Pentachlorophenol	1000	0	1100	ug/L	110				25	139	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID:	Q1239-02MSD	Client Sample ID:	286MSD					DataFile:	BF141414.D		
Pyridine	500	0	330	ug/L	66		10		10	109	20
1,4-Dichlorobenzene	500	0	480	ug/L	96		6		55	125	20
2-Methylphenol	500	0	480	ug/L	96		6		37	126	20
3+4-Methylphenols	500	0	500	ug/L	100		6		31	127	20
Hexachloroethane	500	0	500	ug/L	100		6		49	110	20
Nitrobenzene	500	0	470	ug/L	94		2		62	112	20
Hexachlorobutadiene	500	0	500	ug/L	100		2		52	125	20
2,4,6-Trichlorophenol	500	0	500	ug/L	100		4		78	112	20
2,4,5-Trichlorophenol	500	0	510	ug/L	102		4		71	111	20
2,4-Dinitrotoluene	500	0	540	ug/L	108		6		50	142	20
Hexachlorobenzene	500	0	500	ug/L	100		4		72	115	20
Pentachlorophenol	1000	0	1200	ug/L	120		9		25	139	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1241

Client: RU2 Engineering, LLC

Analytical Method: 8270E DataFile: BF141400.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB166483BS	Pyridine	50	39.3	ug/L	79				29	97	
	1,4-Dichlorobenzene	50	44.7	ug/L	89				76	103	
	2-Methylphenol	50	43.6	ug/L	87				69	109	
	3+4-Methylphenols	50	46.4	ug/L	93				67	106	
	Hexachloroethane	50	45.0	ug/L	90				76	118	
	Nitrobenzene	50	43.8	ug/L	88				58	106	
	Hexachlorobutadiene	50	46.6	ug/L	93				69	101	
	2,4,6-Trichlorophenol	50	47.5	ug/L	95				61	110	
	2,4,5-Trichlorophenol	50	45.8	ug/L	92				70	106	
	2,4-Dinitrotoluene	50	47.5	ug/L	95				60	115	
	Hexachlorobenzene	50	47.0	ug/L	94				73	106	
	Pentachlorophenol	100	110	ug/L	110				47	114	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166483BL

Lab Name: CHEMTECH

Contract: RUTW01

Lab Code: CHEM Case No.: Q1241

SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: BF141399.D

Lab Sample ID: PB166483BL

Instrument ID: BNA_F

Date Extracted: 02/03/2025

Matrix: (soil/water) water

Date Analyzed: 02/04/2025

Level: (low/med) LOW

Time Analyzed: 11:08

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166483BS	PB166483BS	BF141400.D	02/04/2025
286MS	Q1239-02MS	BF141413.D	02/04/2025
286MSD	Q1239-02MSD	BF141414.D	02/04/2025
JPP-3.5-013025	Q1241-04	BF141420.D	02/04/2025
JPP-5.3-013025	Q1241-08	BF141415.D	02/04/2025
JPP-5.2-013025	Q1241-12	BF141416.D	02/04/2025
JPP-5.4-013025	Q1241-16	BF141417.D	02/04/2025
JPP-51.4-013025	Q1241-20	BF141418.D	02/04/2025
PB166423TB	PB166423TB	BF141401.D	02/04/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: RUTW01

Lab Code: CHEM

SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: BF141289.D

DFTPP Injection Date: 01/29/2025

Instrument ID: BNA_F

DFTPP Injection Time: 10:03

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

1-Value is % mass 69

2-Value is % mass 442

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

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: RUTW01

Lab Code: CHEM

SAS No.: Q1241

SDG NO.: Q1241

Lab File ID: BF141397.D

DFTPP Injection Date: 02/04/2025

Instrument ID: BNA_F

DFTPP Injection Time: 10:16

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

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141398.D	02/04/2025	10:42
PB166483BL	PB166483BL	BF141399.D	02/04/2025	11:08
PB166483BS	PB166483BS	BF141400.D	02/04/2025	11:35
PB166423TB	PB166423TB	BF141401.D	02/04/2025	12:02

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: RUTW01

Lab Code: CHEM

SAS No.: Q1241 SDG NO.: Q1241

Lab File ID: BF141409.D

DFTPP Injection Date: 02/04/2025

Instrument ID: BNA_F

DFTPP Injection Time: 15:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	41.7
68	Less than 2.0% of mass 69	0.6 (1.7) 1
69	Mass 69 relative abundance	36.7
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	48.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	27.1
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	12.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.1 (18.5) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141410.D	02/04/2025	15:58
286MS	Q1239-02MS	BF141413.D	02/04/2025	17:22
286MSD	Q1239-02MSD	BF141414.D	02/04/2025	17:49
JPP-5.3-013025	Q1241-08	BF141415.D	02/04/2025	18:15
JPP-5.2-013025	Q1241-12	BF141416.D	02/04/2025	18:41
JPP-5.4-013025	Q1241-16	BF141417.D	02/04/2025	19:07
JPP-51.4-013025	Q1241-20	BF141418.D	02/04/2025	19:34
JPP-3.5-013025	Q1241-04	BF141420.D	02/04/2025	20:26

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

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

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

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	87552	6.793	331835	8.08	180473	9.83
UPPER LIMIT	175104	7.293	663670	8.575	360946	10.328
LOWER LIMIT	43776	6.293	165918	7.575	90236.5	9.328
EPA SAMPLE NO.						
01 PB166483BL	74401	6.79	304159	8.07	164089	9.83
02 PB166483BS	76563	6.79	300075	8.08	160616	9.83
03 PB166423TB	79603	6.79	321231	8.07	179300	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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

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

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

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	318826	11.316	235294	13.963	201713	15.421
UPPER LIMIT	637652	11.816	470588	14.463	403426	15.921
LOWER LIMIT	159413	10.816	117647	13.463	100857	14.921
EPA SAMPLE NO.						
01 PB166483BL	292057	11.32	229065	13.96	190566	15.42
02 PB166483BS	270383	11.32	215739	13.96	184626	15.42
03 PB166423TB	311828	11.31	245488	13.96	193327	15.41

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

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

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

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	89972	6.792	349697	8.08	187729	9.83
UPPER LIMIT	179944	7.292	699394	8.575	375458	10.328
LOWER LIMIT	44986	6.292	174849	7.575	93864.5	9.328
EPA SAMPLE NO.						
01 286MS	71735	6.79	282983	8.08	159062	9.83
02 286MSD	70255	6.79	281307	8.08	157470	9.83
03 JPP-3.5-013025	77065	6.79	307470	8.07	173301	9.82
04 JPP-5.3-013025	73941	6.79	297316	8.07	163635	9.82
05 JPP-5.2-013025	74884	6.79	293134	8.07	165955	9.82
06 JPP-5.4-013025	87662	6.79	356625	8.07	198235	9.82
07 JPP-51.4-013025	78587	6.79	315506	8.07	176087	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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

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

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

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	325046	11.316	235785	13.963	203742	15.421
UPPER LIMIT	650092	11.816	471570	14.463	407484	15.921
LOWER LIMIT	162523	10.816	117893	13.463	101871	14.921
EPA SAMPLE NO.						
01 286MS	284462	11.32	237860	13.96	195020	15.43
02 286MSD	281416	11.32	237517	13.96	188623	15.43
03 JPP-3.5-013025	313120	11.31	293695	13.95	253130	15.41
04 JPP-5.3-013025	296531	11.31	268605	13.96	202288	15.42
05 JPP-5.2-013025	299114	11.31	278625	13.95	231582	15.42
06 JPP-5.4-013025	358571	11.31	323769	13.96	258055	15.42
07 JPP-51.4-013025	315081	11.31	286835	13.96	237589	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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166483BL	SDG No.:	Q1241
Lab Sample ID:	PB166483BL	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
BF141399.D	1	02/03/25 08:36	02/04/25 11:08	PB166483

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	142		10 - 139	95%	SPK: 150
13127-88-3	Phenol-d6	136		10 - 134	91%	SPK: 150
4165-60-0	Nitrobenzene-d5	96.4		49 - 133	96%	SPK: 100
321-60-8	2-Fluorobiphenyl	98.2		52 - 132	98%	SPK: 100
118-79-6	2,4,6-Tribromophenol	150		44 - 137	100%	SPK: 150
1718-51-0	Terphenyl-d14	85.6		48 - 125	86%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	74400	6.786			
1146-65-2	Naphthalene-d8	304000	8.069			
15067-26-2	Acenaphthene-d10	164000	9.827			
1517-22-2	Phenanthrene-d10	292000	11.316			
1719-03-5	Chrysene-d12	229000	13.957			
1520-96-3	Perylene-d12	191000	15.415			

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166483BL	SDG No.:	Q1241
Lab Sample ID:	PB166483BL	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
BF141399.D	1	02/03/25 08:36	02/04/25 11:08	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166483BS	SDG No.:	Q1241
Lab Sample ID:	PB166483BS	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
BF141400.D	1	02/03/25 08:36	02/04/25 11:35	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	39.3		1.60	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	44.7		0.84	5.00	ug/L
95-48-7	2-Methylphenol	43.6		1.10	5.00	ug/L
65794-96-9	3+4-Methylphenols	46.4		1.20	10.0	ug/L
67-72-1	Hexachloroethane	45.0		1.00	5.00	ug/L
98-95-3	Nitrobenzene	43.8		1.30	5.00	ug/L
87-68-3	Hexachlorobutadiene	46.6		1.30	5.00	ug/L
88-06-2	2,4,6-Trichlorophenol	47.5		0.89	5.00	ug/L
95-95-4	2,4,5-Trichlorophenol	45.8		1.00	5.00	ug/L
121-14-2	2,4-Dinitrotoluene	47.5		1.50	5.00	ug/L
118-74-1	Hexachlorobenzene	47.0		1.10	5.00	ug/L
87-86-5	Pentachlorophenol	110	E	1.90	10.0	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	145		10 - 139	97%	SPK: 150
13127-88-3	Phenol-d6	136		10 - 134	91%	SPK: 150
4165-60-0	Nitrobenzene-d5	100		49 - 133	100%	SPK: 100
321-60-8	2-Fluorobiphenyl	100		52 - 132	100%	SPK: 100
118-79-6	2,4,6-Tribromophenol	160		44 - 137	107%	SPK: 150
1718-51-0	Terphenyl-d14	91.8		48 - 125	92%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	76600		6.787		
1146-65-2	Naphthalene-d8	300000		8.075		
15067-26-2	Acenaphthene-d10	161000		9.828		
1517-22-2	Phenanthrene-d10	270000		11.316		
1719-03-5	Chrysene-d12	216000		13.963		
1520-96-3	Perylene-d12	185000		15.415		

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166483BS	SDG No.:	Q1241
Lab Sample ID:	PB166483BS	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
BF141400.D	1	02/03/25 08:36	02/04/25 11:35	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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

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:	286MS	SDG No.:	Q1241
Lab Sample ID:	Q1239-02MS	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
BF141413.D	1	02/03/25 08:36	02/04/25 17:22	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	300		15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	450		8.40	50.0	ug/L
95-48-7	2-Methylphenol	450		11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	470		11.5	100	ug/L
67-72-1	Hexachloroethane	470		10.1	50.0	ug/L
98-95-3	Nitrobenzene	460		12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	490		12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	480		8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	490		10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	510		15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	480		11.4	50.0	ug/L
87-86-5	Pentachlorophenol	1100	E	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	133		10 - 139	89%	SPK: 150
13127-88-3	Phenol-d6	122		10 - 134	81%	SPK: 150
4165-60-0	Nitrobenzene-d5	102		49 - 133	102%	SPK: 100
321-60-8	2-Fluorobiphenyl	102		52 - 132	102%	SPK: 100
118-79-6	2,4,6-Tribromophenol	174		44 - 137	116%	SPK: 150
1718-51-0	Terphenyl-d14	88.5		48 - 125	89%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	71700		6.792		
1146-65-2	Naphthalene-d8	283000		8.075		
15067-26-2	Acenaphthene-d10	159000		9.828		
1517-22-2	Phenanthrene-d10	284000		11.316		
1719-03-5	Chrysene-d12	238000		13.963		
1520-96-3	Perylene-d12	195000		15.427		

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:	286MS	SDG No.:	Q1241
Lab Sample ID:	Q1239-02MS	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
BF141413.D	1	02/03/25 08:36	02/04/25 17:22	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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

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:	286MSD	SDG No.:	Q1241
Lab Sample ID:	Q1239-02MSD	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
BF141414.D	1	02/03/25 08:36	02/04/25 17:49	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	330		15.5	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	480		8.40	50.0	ug/L
95-48-7	2-Methylphenol	480		11.3	50.0	ug/L
65794-96-9	3+4-Methylphenols	500		11.5	100	ug/L
67-72-1	Hexachloroethane	500		10.1	50.0	ug/L
98-95-3	Nitrobenzene	470		12.7	50.0	ug/L
87-68-3	Hexachlorobutadiene	500		12.7	50.0	ug/L
88-06-2	2,4,6-Trichlorophenol	500		8.90	50.0	ug/L
95-95-4	2,4,5-Trichlorophenol	510		10.1	50.0	ug/L
121-14-2	2,4-Dinitrotoluene	540		15.2	50.0	ug/L
118-74-1	Hexachlorobenzene	500		11.4	50.0	ug/L
87-86-5	Pentachlorophenol	1200	E	18.5	100	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	140		10 - 139	94%	SPK: 150
13127-88-3	Phenol-d6	129		10 - 134	86%	SPK: 150
4165-60-0	Nitrobenzene-d5	107		49 - 133	107%	SPK: 100
321-60-8	2-Fluorobiphenyl	105		52 - 132	105%	SPK: 100
118-79-6	2,4,6-Tribromophenol	176		44 - 137	118%	SPK: 150
1718-51-0	Terphenyl-d14	89.1		48 - 125	89%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	70300		6.793		
1146-65-2	Naphthalene-d8	281000		8.075		
15067-26-2	Acenaphthene-d10	157000		9.828		
1517-22-2	Phenanthrene-d10	281000		11.316		
1719-03-5	Chrysene-d12	238000		13.963		
1520-96-3	Perylene-d12	189000		15.427		

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:	286MSD	SDG No.:	Q1241
Lab Sample ID:	Q1239-02MSD	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
BF141414.D	1	02/03/25 08:36	02/04/25 17:49	PB166483

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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

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 =BF141297.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	

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 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	

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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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

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

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

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

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

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Pyridine	1.380	1.270		-8.0	
2-Fluorophenol	1.303	1.302		-0.1	
Phenol-d6	1.657	1.560		-5.9	
1,4-Dichlorobenzene	1.547	1.539		-0.5	20.0
2-Methylphenol	1.135	1.074		-5.4	
3+4-Methylphenols	1.393	1.375		-1.3	
Nitrobenzene-d5	0.379	0.391		3.2	
Hexachloroethane	0.571	0.583		2.1	
Nitrobenzene	0.393	0.398		1.3	
Hexachlorobutadiene	0.194	0.208		7.2	20.0
2,4,6-Trichlorophenol	0.372	0.382		2.7	20.0
2-Fluorobiphenyl	1.299	1.328		2.2	
2,4,5-Trichlorophenol	0.405	0.421		4.0	
2,4-Dinitrotoluene	0.406	0.441		8.6	
2,4,6-Tribromophenol	0.183	0.202		10.4	
Hexachlorobenzene	0.238	0.243		2.1	
Pentachlorophenol	0.139	0.161		15.8	20.0
Terphenyl-d14	1.297	1.200		-7.5	

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: RUTW01

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

Instrument ID: BNA_F Calibration Date/Time: 02/04/2025 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
Pyridine	1.380	1.264		-8.4	
2-Fluorophenol	1.303	1.284		-1.5	
Phenol-d6	1.657	1.572		-5.1	
1,4-Dichlorobenzene	1.547	1.553		0.4	20.0
2-Methylphenol	1.135	1.080		-4.8	
3+4-Methylphenols	1.393	1.396		0.2	
Nitrobenzene-d5	0.379	0.388		2.4	
Hexachloroethane	0.571	0.577		1.1	
Nitrobenzene	0.393	0.393		0.0	
Hexachlorobutadiene	0.194	0.208		7.2	20.0
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	
2,4-Dinitrotoluene	0.406	0.439		8.1	
2,4,6-Tribromophenol	0.183	0.206		12.6	
Hexachlorobenzene	0.238	0.248		4.2	
Pentachlorophenol	0.139	0.158		13.7	20.0
Terphenyl-d14	1.297	1.228		-5.3	

All other compounds must meet a minimum RRF of 0.010.