

LAB CHRONICLE

OrderID:	Q2413	OrderDate:	6/24/2025 3:05:00 PM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	D41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2413-01	TP-35	SOIL	SVOC-TCL BNA -20	8270E	06/23/25	06/26/25	06/27/25	06/24/25
Q2413-02	TP-34	SOIL	SVOC-TCL BNA -20	8270E	06/23/25	06/26/25	06/27/25	06/24/25
Q2413-03	TP-77	SOIL	SVOC-TCL BNA -20	8270E	06/23/25	06/26/25	06/27/25	06/24/25
Q2413-04	TP-74	SOIL	SVOC-TCL BNA -20	8270E	06/23/25	06/26/25	06/27/25	06/24/25
Q2413-05	TP-73	SOIL	SVOC-TCL BNA -20	8270E	06/23/25	06/26/25	06/27/25	06/24/25
Q2413-06	TP-72	SOIL	SVOC-TCL BNA -20	8270E	06/24/25	06/26/25	06/27/25	06/24/25

Hit Summary Sheet SW-846

SDG No.: Q2413
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-35								
Q2413-01	TP-35	SOIL	Phenanthrene	160.000	J	23.5	190	ug/Kg
Q2413-01	TP-35	SOIL	Fluoranthene	440.000		33.7	190	ug/Kg
Q2413-01	TP-35	SOIL	Pyrene	250.000		40.4	190	ug/Kg
Q2413-01	TP-35	SOIL	Benzo(a)anthracene	250.000		25.8	190	ug/Kg
Q2413-01	TP-35	SOIL	Chrysene	220.000		22.4	190	ug/Kg
Q2413-01	TP-35	SOIL	Benzo(b)fluoranthene	320.000		21.3	190	ug/Kg
Q2413-01	TP-35	SOIL	Benzo(k)fluoranthene	130.000	J	25.2	190	ug/Kg
Q2413-01	TP-35	SOIL	Benzo(a)pyrene	220.000		33.1	190	ug/Kg
Q2413-01	TP-35	SOIL	Indeno(1,2,3-cd)pyrene	83.100	J	32.7	190	ug/Kg
Q2413-01	TP-35	SOIL	Benzo(g,h,i)perylene	85.000	J	28.9	190	ug/Kg
Total Svoc :				2,158.10				
Q2413-01	TP-35	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	230.000	A	0	0	ug/Kg
Q2413-01	TP-35	SOIL	Benzo[e]pyrene *	160.000	J	0	0	ug/Kg
Q2413-01	TP-35	SOIL	Benzophenone *	260.000	J	0	0	ug/Kg
Q2413-01	TP-35	SOIL	n-Hexadecanoic acid *	140.000	J	0	0	ug/Kg
Q2413-01	TP-35	SOIL	Pentafluoropropionic acid, heptad *	110.000	J	0	0	ug/Kg
Total Tics :				900.00				
Total Concentration:				3,058.10				
Client ID : TP-34								
Q2413-02	TP-34	SOIL	Fluoranthene	130.000	J	32.6	180	ug/Kg
Q2413-02	TP-34	SOIL	Pyrene	75.500	J	39.1	180	ug/Kg
Q2413-02	TP-34	SOIL	Benzo(a)anthracene	100.000	J	25	180	ug/Kg
Q2413-02	TP-34	SOIL	Chrysene	83.400	J	21.6	180	ug/Kg
Q2413-02	TP-34	SOIL	Benzo(b)fluoranthene	200.000		20.6	180	ug/Kg
Q2413-02	TP-34	SOIL	Benzo(a)pyrene	120.000	J	32	180	ug/Kg
Total Svoc :				708.90				
Q2413-02	TP-34	SOIL	Benzo[e]pyrene *	96.300	J	0	0	ug/Kg
Q2413-02	TP-34	SOIL	Benzophenone *	260.000	J	0	0	ug/Kg
Q2413-02	TP-34	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	230.000	A	0	0	ug/Kg
Q2413-02	TP-34	SOIL	Trifluoroacetoxy hexadecane *	120.000	J	0	0	ug/Kg
Q2413-02	TP-34	SOIL	n-Hexadecanoic acid *	130.000	J	0	0	ug/Kg
Total Tics :				836.30				
Total Concentration:				1,545.20				
Client ID : TP-77								
Q2413-03	TP-77	SOIL	Fluoranthene	75.700	J	32.7	190	ug/Kg
Total Svoc :				75.70				
Q2413-03	TP-77	SOIL	n-Hexadecanoic acid *	150.000	J	0	0	ug/Kg

A
B
C
D
E
F
G

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units	
Q2413-03	TP-77	SOIL	1-Hexacosene	*	140.000	J	0	0	ug/Kg
Q2413-03	TP-77	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	230.000	A	0	0	ug/Kg
Q2413-03	TP-77	SOIL	Benzo[j]fluoranthene	*	110.000	J	0	0	ug/Kg
Q2413-03	TP-77	SOIL	Benzophenone	*	280.000	J	0	0	ug/Kg

Client ID : TP-74

Total Svoc : 155.40

Total Tics :	660.70
Total Concentration:	816.10

Client ID : TP-73

Total Svoc : 130.00

Total Tics :	3,870.80
Total Concentration:	4.000.80

Client ID : TP-72

Hit Summary Sheet SW-846

SDG No.: Q2413
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2413-06	TP-72	SOIL	11-Methyltricosane	*	250.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	1-Ethyl-4-methylcyclohexane	*	100.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	330.000	A 0	0	ug/Kg
Q2413-06	TP-72	SOIL	5-Eicosene, (E)-	*	290.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Benzophenone	*	320.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	cis-3-Nonene	*	90.400	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1,2,4-trimethyl-	*	87.300	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1,2,4-trimethyl-, (1.	*	130.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1,2-dimethyl-, trans	*	78.100	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1,3,5-trimethyl-, (1.	*	150.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1-ethyl-2-methyl-	*	120.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Docosane	*	200.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Heptadecane	*	93.800	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Hexacosane	*	150.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	n-Hexadecanoic acid	*	170.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Nonadecane	*	120.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Nonane	*	160.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Octadecane	*	83.100	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Tricosane	*	230.000	J 0	0	ug/Kg
Q2413-06	TP-72	SOIL	Tridecane	*	92.700	J 0	0	ug/Kg

Total Tics : 3,245.40

Total Concentration: 3,245.40



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	88.8
Sample Wt/Vol:	30.07 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142889.D	1	06/26/25 09:20	06/27/25 13:19	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	180	U	180	370	ug/Kg
108-95-2	Phenol	24.8	U	24.8	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	27.3	U	27.3	190	ug/Kg
95-57-8	2-Chlorophenol	27.4	U	27.4	190	ug/Kg
95-48-7	2-Methylphenol	33.6	U	33.6	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	42.1	U	42.1	190	ug/Kg
98-86-2	Acetophenone	33.1	U	33.1	190	ug/Kg
65794-96-9	3+4-Methylphenols	46.2	U	46.2	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	53.3	U	53.3	89.9	ug/Kg
67-72-1	Hexachloroethane	19.8	U	19.8	190	ug/Kg
98-95-3	Nitrobenzene	20.6	U	20.6	190	ug/Kg
78-59-1	Isophorone	36.9	U	36.9	190	ug/Kg
88-75-5	2-Nitrophenol	65.4	U	65.4	190	ug/Kg
105-67-9	2,4-Dimethylphenol	72.8	U	72.8	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	34.6	U	34.6	190	ug/Kg
120-83-2	2,4-Dichlorophenol	31.8	U	31.8	190	ug/Kg
91-20-3	Naphthalene	25.5	U	25.5	190	ug/Kg
106-47-8	4-Chloroaniline	39.8	U	39.8	190	ug/Kg
87-68-3	Hexachlorobutadiene	28.4	U	28.4	190	ug/Kg
105-60-2	Caprolactam	58.5	U	58.5	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	32.2	U	32.2	190	ug/Kg
91-57-6	2-Methylnaphthalene	28.8	U	28.8	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.2	U	22.2	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	32.7	U	32.7	190	ug/Kg
92-52-4	1,1-Biphenyl	24.5	U	24.5	190	ug/Kg
91-58-7	2-Chloronaphthalene	25.3	U	25.3	190	ug/Kg
88-74-4	2-Nitroaniline	54.0	U	54.0	190	ug/Kg
131-11-3	Dimethylphthalate	30.4	U	30.4	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	88.8
Sample Wt/Vol:	30.07 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142889.D	1	06/26/25 09:20	06/27/25 13:19	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	32.5	U	32.5	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	37.7	U	37.7	190	ug/Kg
99-09-2	3-Nitroaniline	51.7	U	51.7	190	ug/Kg
83-32-9	Acenaphthene	23.9	U	23.9	190	ug/Kg
51-28-5	2,4-Dinitrophenol	260	U	260	370	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	370	ug/Kg
132-64-9	Dibenzofuran	25.5	U	25.5	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	56.3	U	56.3	190	ug/Kg
84-66-2	Diethylphthalate	31.8	U	31.8	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.0	U	30.0	190	ug/Kg
86-73-7	Fluorene	28.4	U	28.4	190	ug/Kg
100-01-6	4-Nitroaniline	72.1	U	72.1	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	37.0	U	37.0	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	31.2	U	31.2	190	ug/Kg
118-74-1	Hexachlorobenzene	28.4	U	28.4	190	ug/Kg
1912-24-9	Atrazine	38.2	U	38.2	190	ug/Kg
87-86-5	Pentachlorophenol	57.6	U	57.6	370	ug/Kg
85-01-8	Phenanthrene	160	J	23.5	190	ug/Kg
120-12-7	Anthracene	37.4	U	37.4	190	ug/Kg
86-74-8	Carbazole	35.1	U	35.1	190	ug/Kg
84-74-2	Di-n-butylphthalate	53.8	U	53.8	190	ug/Kg
206-44-0	Fluoranthene	440		33.7	190	ug/Kg
129-00-0	Pyrene	250		40.4	190	ug/Kg
85-68-7	Butylbenzylphthalate	80.2	U	80.2	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	41.2	U	41.2	370	ug/Kg
56-55-3	Benzo(a)anthracene	250		25.8	190	ug/Kg
218-01-9	Chrysene	220		22.4	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	66.5	U	66.5	190	ug/Kg
117-84-0	Di-n-octyl phthalate	97.5	U	97.5	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	320		21.3	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	88.8
Sample Wt/Vol:	30.07 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142889.D	1	06/26/25 09:20	06/27/25 13:19	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	130	J	25.2	190	ug/Kg
50-32-8	Benzo(a)pyrene	220		33.1	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	83.1	J	32.7	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	30.8	U	30.8	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	85.0	J	28.9	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	28.8	U	28.8	190	ug/Kg
123-91-1	1,4-Dioxane	50.8	U	50.8	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	30.8	U	30.8	190	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	81.2		18 - 112	54%	SPK: 150
13127-88-3	Phenol-d6	82.7		15 - 107	55%	SPK: 150
4165-60-0	Nitrobenzene-d5	52.3		18 - 107	52%	SPK: 100
321-60-8	2-Fluorobiphenyl	51.7		20 - 109	52%	SPK: 100
118-79-6	2,4,6-Tribromophenol	76.5		10 - 116	51%	SPK: 150
1718-51-0	Terphenyl-d14	38.7		10 - 105	39%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	69800	6.875
1146-65-2	Naphthalene-d8	264000	8.157
15067-26-2	Acenaphthene-d10	134000	9.916
1517-22-2	Phenanthrene-d10	200000	11.404
1719-03-5	Chrysene-d12	149000	14.051
1520-96-3	Perylene-d12	153000	15.545

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	230	A	5.09	ug/Kg
000119-61-9	Benzophenone	260	J	10.6	ug/Kg
000057-10-3	n-Hexadecanoic acid	140	J	11.9	ug/Kg
959218-78-1	Pentafluoropropionic acid, heptade	110	J	13.9	ug/Kg
000192-97-2	Benzo[e]pyrene	160	J	15.4	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	88.8
Sample Wt/Vol:	30.07	Units:	g
Soil Aliquot Vol:		Final Vol:	1000 uL
Extraction Type :		Test:	SVOC-TCL BNA -20
	Decanted :	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
BF142889.D	1	06/26/25 09:20	06/27/25 13:19	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
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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:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	92
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142892.D	1	06/26/25 09:20	06/27/25 14:47	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	170	U	170	360	ug/Kg
108-95-2	Phenol	24.0	U	24.0	180	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	26.4	U	26.4	180	ug/Kg
95-57-8	2-Chlorophenol	26.5	U	26.5	180	ug/Kg
95-48-7	2-Methylphenol	32.5	U	32.5	180	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	40.7	U	40.7	180	ug/Kg
98-86-2	Acetophenone	32.0	U	32.0	180	ug/Kg
65794-96-9	3+4-Methylphenols	44.6	U	44.6	360	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	51.5	U	51.5	86.9	ug/Kg
67-72-1	Hexachloroethane	19.1	U	19.1	180	ug/Kg
98-95-3	Nitrobenzene	19.9	U	19.9	180	ug/Kg
78-59-1	Isophorone	35.6	U	35.6	180	ug/Kg
88-75-5	2-Nitrophenol	63.2	U	63.2	180	ug/Kg
105-67-9	2,4-Dimethylphenol	70.4	U	70.4	180	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.4	U	33.4	180	ug/Kg
120-83-2	2,4-Dichlorophenol	30.7	U	30.7	180	ug/Kg
91-20-3	Naphthalene	24.6	U	24.6	180	ug/Kg
106-47-8	4-Chloroaniline	38.4	U	38.4	180	ug/Kg
87-68-3	Hexachlorobutadiene	27.5	U	27.5	180	ug/Kg
105-60-2	Caprolactam	56.6	U	56.6	360	ug/Kg
59-50-7	4-Chloro-3-methylphenol	31.2	U	31.2	180	ug/Kg
91-57-6	2-Methylnaphthalene	27.8	U	27.8	180	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	360	ug/Kg
88-06-2	2,4,6-Trichlorophenol	21.5	U	21.5	180	ug/Kg
95-95-4	2,4,5-Trichlorophenol	31.6	U	31.6	180	ug/Kg
92-52-4	1,1-Biphenyl	23.7	U	23.7	180	ug/Kg
91-58-7	2-Chloronaphthalene	24.4	U	24.4	180	ug/Kg
88-74-4	2-Nitroaniline	52.2	U	52.2	180	ug/Kg
131-11-3	Dimethylphthalate	29.4	U	29.4	180	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	92
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142892.D	1	06/26/25 09:20	06/27/25 14:47	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	31.4	U	31.4	180	ug/Kg
606-20-2	2,6-Dinitrotoluene	36.5	U	36.5	180	ug/Kg
99-09-2	3-Nitroaniline	50.0	U	50.0	180	ug/Kg
83-32-9	Acenaphthene	23.1	U	23.1	180	ug/Kg
51-28-5	2,4-Dinitrophenol	250	U	250	360	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	360	ug/Kg
132-64-9	Dibenzofuran	24.6	U	24.6	180	ug/Kg
121-14-2	2,4-Dinitrotoluene	54.4	U	54.4	180	ug/Kg
84-66-2	Diethylphthalate	30.7	U	30.7	180	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	29.0	U	29.0	180	ug/Kg
86-73-7	Fluorene	27.5	U	27.5	180	ug/Kg
100-01-6	4-Nitroaniline	69.7	U	69.7	180	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	110	U	110	360	ug/Kg
86-30-6	n-Nitrosodiphenylamine	35.7	U	35.7	180	ug/Kg
101-55-3	4-Bromophenyl-phenylether	30.2	U	30.2	180	ug/Kg
118-74-1	Hexachlorobenzene	27.5	U	27.5	180	ug/Kg
1912-24-9	Atrazine	36.9	U	36.9	180	ug/Kg
87-86-5	Pentachlorophenol	55.7	U	55.7	360	ug/Kg
85-01-8	Phenanthrene	22.7	U	22.7	180	ug/Kg
120-12-7	Anthracene	36.2	U	36.2	180	ug/Kg
86-74-8	Carbazole	33.9	U	33.9	180	ug/Kg
84-74-2	Di-n-butylphthalate	52.0	U	52.0	180	ug/Kg
206-44-0	Fluoranthene	130	J	32.6	180	ug/Kg
129-00-0	Pyrene	75.5	J	39.1	180	ug/Kg
85-68-7	Butylbenzylphthalate	77.5	U	77.5	180	ug/Kg
91-94-1	3,3-Dichlorobenzidine	39.9	U	39.9	360	ug/Kg
56-55-3	Benzo(a)anthracene	100	J	25.0	180	ug/Kg
218-01-9	Chrysene	83.4	J	21.6	180	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	64.3	U	64.3	180	ug/Kg
117-84-0	Di-n-octyl phthalate	94.3	U	94.3	360	ug/Kg
205-99-2	Benzo(b)fluoranthene	200		20.6	180	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	92
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142892.D	1	06/26/25 09:20	06/27/25 14:47	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	24.3	U	24.3	180	ug/Kg
50-32-8	Benzo(a)pyrene	120	J	32.0	180	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	31.6	U	31.6	180	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	29.8	U	29.8	180	ug/Kg
191-24-2	Benzo(g,h,i)perylene	27.9	U	27.9	180	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	27.8	U	27.8	180	ug/Kg
123-91-1	1,4-Dioxane	49.1	U	49.1	180	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	29.8	U	29.8	180	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	81.5		18 - 112	54%	SPK: 150
13127-88-3	Phenol-d6	82.0		15 - 107	55%	SPK: 150
4165-60-0	Nitrobenzene-d5	53.4		18 - 107	53%	SPK: 100
321-60-8	2-Fluorobiphenyl	55.9		20 - 109	56%	SPK: 100
118-79-6	2,4,6-Tribromophenol	76.9		10 - 116	51%	SPK: 150
1718-51-0	Terphenyl-d14	36.2		10 - 105	36%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	74200	6.875
1146-65-2	Naphthalene-d8	268000	8.157
15067-26-2	Acenaphthene-d10	125000	9.916
1517-22-2	Phenanthrene-d10	186000	11.404
1719-03-5	Chrysene-d12	169000	14.051
1520-96-3	Perylene-d12	135000	15.545

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	230	A	5.09	ug/Kg
000119-61-9	Benzophenone	260	J	10.6	ug/Kg
000057-10-3	n-Hexadecanoic acid	130	J	11.9	ug/Kg
006222-03-3	Trifluoroacetoxy hexadecane	120	J	13.9	ug/Kg
000192-97-2	Benzo[e]pyrene	96.3	J	15.4	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	92
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142892.D	1	06/26/25 09:20	06/27/25 14:47	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
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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:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	91.4
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142890.D	1	06/26/25 09:20	06/27/25 13:48	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	170	U	170	360	ug/Kg
108-95-2	Phenol	24.1	U	24.1	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	26.5	U	26.5	190	ug/Kg
95-57-8	2-Chlorophenol	26.6	U	26.6	190	ug/Kg
95-48-7	2-Methylphenol	32.6	U	32.6	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	40.9	U	40.9	190	ug/Kg
98-86-2	Acetophenone	32.2	U	32.2	190	ug/Kg
65794-96-9	3+4-Methylphenols	44.8	U	44.8	360	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	51.7	U	51.7	87.3	ug/Kg
67-72-1	Hexachloroethane	19.2	U	19.2	190	ug/Kg
98-95-3	Nitrobenzene	20.0	U	20.0	190	ug/Kg
78-59-1	Isophorone	35.8	U	35.8	190	ug/Kg
88-75-5	2-Nitrophenol	63.5	U	63.5	190	ug/Kg
105-67-9	2,4-Dimethylphenol	70.7	U	70.7	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.6	U	33.6	190	ug/Kg
120-83-2	2,4-Dichlorophenol	30.9	U	30.9	190	ug/Kg
91-20-3	Naphthalene	24.8	U	24.8	190	ug/Kg
106-47-8	4-Chloroaniline	38.6	U	38.6	190	ug/Kg
87-68-3	Hexachlorobutadiene	27.6	U	27.6	190	ug/Kg
105-60-2	Caprolactam	56.9	U	56.9	360	ug/Kg
59-50-7	4-Chloro-3-methylphenol	31.3	U	31.3	190	ug/Kg
91-57-6	2-Methylnaphthalene	27.9	U	27.9	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	360	ug/Kg
88-06-2	2,4,6-Trichlorophenol	21.6	U	21.6	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	31.8	U	31.8	190	ug/Kg
92-52-4	1,1-Biphenyl	23.8	U	23.8	190	ug/Kg
91-58-7	2-Chloronaphthalene	24.6	U	24.6	190	ug/Kg
88-74-4	2-Nitroaniline	52.5	U	52.5	190	ug/Kg
131-11-3	Dimethylphthalate	29.6	U	29.6	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	91.4
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142890.D	1	06/26/25 09:20	06/27/25 13:48	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	31.5	U	31.5	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	36.7	U	36.7	190	ug/Kg
99-09-2	3-Nitroaniline	50.2	U	50.2	190	ug/Kg
83-32-9	Acenaphthene	23.2	U	23.2	190	ug/Kg
51-28-5	2,4-Dinitrophenol	250	U	250	360	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	360	ug/Kg
132-64-9	Dibenzofuran	24.8	U	24.8	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	54.7	U	54.7	190	ug/Kg
84-66-2	Diethylphthalate	30.9	U	30.9	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	29.1	U	29.1	190	ug/Kg
86-73-7	Fluorene	27.6	U	27.6	190	ug/Kg
100-01-6	4-Nitroaniline	70.1	U	70.1	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	110	U	110	360	ug/Kg
86-30-6	n-Nitrosodiphenylamine	35.9	U	35.9	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	30.3	U	30.3	190	ug/Kg
118-74-1	Hexachlorobenzene	27.6	U	27.6	190	ug/Kg
1912-24-9	Atrazine	37.1	U	37.1	190	ug/Kg
87-86-5	Pentachlorophenol	56.0	U	56.0	360	ug/Kg
85-01-8	Phenanthrene	22.8	U	22.8	190	ug/Kg
120-12-7	Anthracene	36.3	U	36.3	190	ug/Kg
86-74-8	Carbazole	34.0	U	34.0	190	ug/Kg
84-74-2	Di-n-butylphthalate	52.3	U	52.3	190	ug/Kg
206-44-0	Fluoranthene	75.7	J	32.7	190	ug/Kg
129-00-0	Pyrene	39.3	U	39.3	190	ug/Kg
85-68-7	Butylbenzylphthalate	77.9	U	77.9	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	40.0	U	40.0	360	ug/Kg
56-55-3	Benzo(a)anthracene	25.1	U	25.1	190	ug/Kg
218-01-9	Chrysene	21.7	U	21.7	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	64.6	U	64.6	190	ug/Kg
117-84-0	Di-n-octyl phthalate	94.7	U	94.7	360	ug/Kg
205-99-2	Benzo(b)fluoranthene	20.7	U	20.7	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	91.4
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142890.D	1	06/26/25 09:20	06/27/25 13:48	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	24.4	U	24.4	190	ug/Kg
50-32-8	Benzo(a)pyrene	32.2	U	32.2	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	31.8	U	31.8	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	29.9	U	29.9	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	28.0	U	28.0	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	27.9	U	27.9	190	ug/Kg
123-91-1	1,4-Dioxane	49.3	U	49.3	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	29.9	U	29.9	190	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	83.0		18 - 112	55%	SPK: 150
13127-88-3	Phenol-d6	82.9		15 - 107	55%	SPK: 150
4165-60-0	Nitrobenzene-d5	52.6		18 - 107	53%	SPK: 100
321-60-8	2-Fluorobiphenyl	55.1		20 - 109	55%	SPK: 100
118-79-6	2,4,6-Tribromophenol	73.8		10 - 116	49%	SPK: 150
1718-51-0	Terphenyl-d14	38.3		10 - 105	38%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	71700	6.875	
1146-65-2	Naphthalene-d8	267000	8.157	
15067-26-2	Acenaphthene-d10	131000	9.916	
1517-22-2	Phenanthrene-d10	190000	11.404	
1719-03-5	Chrysene-d12	154000	14.051	
1520-96-3	Perylene-d12	153000	15.545	

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	230	A	5.09	ug/Kg
000119-61-9	Benzophenone	280	J	10.6	ug/Kg
000057-10-3	n-Hexadecanoic acid	150	J	11.9	ug/Kg
018835-33-1	1-Hexacosene	140	J	13.9	ug/Kg
000205-82-3	Benzo[j]fluoranthene	110	J	15.1	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	91.4
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142890.D	1	06/26/25 09:20	06/27/25 13:48	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
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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:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.5
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142891.D	1	06/26/25 09:20	06/27/25 14:17	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	170	U	170	370	ug/Kg
108-95-2	Phenol	24.7	U	24.7	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	27.1	U	27.1	190	ug/Kg
95-57-8	2-Chlorophenol	27.2	U	27.2	190	ug/Kg
95-48-7	2-Methylphenol	33.4	U	33.4	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	41.8	U	41.8	190	ug/Kg
98-86-2	Acetophenone	32.9	U	32.9	190	ug/Kg
65794-96-9	3+4-Methylphenols	45.8	U	45.8	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	52.9	U	52.9	89.2	ug/Kg
67-72-1	Hexachloroethane	19.6	U	19.6	190	ug/Kg
98-95-3	Nitrobenzene	20.4	U	20.4	190	ug/Kg
78-59-1	Isophorone	36.6	U	36.6	190	ug/Kg
88-75-5	2-Nitrophenol	64.9	U	64.9	190	ug/Kg
105-67-9	2,4-Dimethylphenol	72.3	U	72.3	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	34.4	U	34.4	190	ug/Kg
120-83-2	2,4-Dichlorophenol	31.6	U	31.6	190	ug/Kg
91-20-3	Naphthalene	25.3	U	25.3	190	ug/Kg
106-47-8	4-Chloroaniline	39.5	U	39.5	190	ug/Kg
87-68-3	Hexachlorobutadiene	28.2	U	28.2	190	ug/Kg
105-60-2	Caprolactam	58.1	U	58.1	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	32.0	U	32.0	190	ug/Kg
91-57-6	2-Methylnaphthalene	28.6	U	28.6	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.1	U	22.1	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	32.5	U	32.5	190	ug/Kg
92-52-4	1,1-Biphenyl	24.3	U	24.3	190	ug/Kg
91-58-7	2-Chloronaphthalene	25.1	U	25.1	190	ug/Kg
88-74-4	2-Nitroaniline	53.7	U	53.7	190	ug/Kg
131-11-3	Dimethylphthalate	30.2	U	30.2	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.5
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142891.D	1	06/26/25 09:20	06/27/25 14:17	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	32.2	U	32.2	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	37.5	U	37.5	190	ug/Kg
99-09-2	3-Nitroaniline	51.3	U	51.3	190	ug/Kg
83-32-9	Acenaphthene	23.8	U	23.8	190	ug/Kg
51-28-5	2,4-Dinitrophenol	260	U	260	370	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	370	ug/Kg
132-64-9	Dibenzofuran	25.3	U	25.3	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	55.9	U	55.9	190	ug/Kg
84-66-2	Diethylphthalate	31.6	U	31.6	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	29.8	U	29.8	190	ug/Kg
86-73-7	Fluorene	28.2	U	28.2	190	ug/Kg
100-01-6	4-Nitroaniline	71.6	U	71.6	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	110	U	110	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	36.7	U	36.7	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	31.0	U	31.0	190	ug/Kg
118-74-1	Hexachlorobenzene	28.2	U	28.2	190	ug/Kg
1912-24-9	Atrazine	37.9	U	37.9	190	ug/Kg
87-86-5	Pentachlorophenol	57.2	U	57.2	370	ug/Kg
85-01-8	Phenanthrene	23.3	U	23.3	190	ug/Kg
120-12-7	Anthracene	37.1	U	37.1	190	ug/Kg
86-74-8	Carbazole	34.8	U	34.8	190	ug/Kg
84-74-2	Di-n-butylphthalate	53.4	U	53.4	190	ug/Kg
206-44-0	Fluoranthene	79.0	J	33.5	190	ug/Kg
129-00-0	Pyrene	40.2	U	40.2	190	ug/Kg
85-68-7	Butylbenzylphthalate	79.6	U	79.6	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	40.9	U	40.9	370	ug/Kg
56-55-3	Benzo(a)anthracene	25.7	U	25.7	190	ug/Kg
218-01-9	Chrysene	22.2	U	22.2	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	66.0	U	66.0	190	ug/Kg
117-84-0	Di-n-octyl phthalate	96.8	U	96.8	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	76.4	J	21.2	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.5
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142891.D	1	06/26/25 09:20	06/27/25 14:17	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.0	U	25.0	190	ug/Kg
50-32-8	Benzo(a)pyrene	32.9	U	32.9	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	32.5	U	32.5	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	30.6	U	30.6	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	28.7	U	28.7	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	28.6	U	28.6	190	ug/Kg
123-91-1	1,4-Dioxane	50.4	U	50.4	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	30.6	U	30.6	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	74.7		18 - 112	50%	SPK: 150
13127-88-3	Phenol-d6	74.3		15 - 107	50%	SPK: 150
4165-60-0	Nitrobenzene-d5	48.7		18 - 107	49%	SPK: 100
321-60-8	2-Fluorobiphenyl	48.2		20 - 109	48%	SPK: 100
118-79-6	2,4,6-Tribromophenol	67.0		10 - 116	45%	SPK: 150
1718-51-0	Terphenyl-d14	32.5		10 - 105	32%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	74000	6.875			
1146-65-2	Naphthalene-d8	273000	8.157			
15067-26-2	Acenaphthene-d10	136000	9.916			
1517-22-2	Phenanthrene-d10	197000	11.404			
1719-03-5	Chrysene-d12	162000	14.051			
1520-96-3	Perylene-d12	156000	15.545			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	210	A		5.09	ug/Kg
000119-61-9	Benzophenone	250	J		10.6	ug/Kg
000057-10-3	n-Hexadecanoic acid	110	J		11.9	ug/Kg
959010-23-2	Trifluoroacetic acid, pentadecyl e	90.7	J		13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.5
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:		Final Vol:	1000 uL
Extraction Type :		Test:	SVOC-TCL BNA -20
	Decanted :	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
BF142891.D	1	06/26/25 09:20	06/27/25 14:17	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
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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:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	77.1
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142886.D	1	06/26/25 09:20	06/27/25 11:52	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	200	U	200	430	ug/Kg
108-95-2	Phenol	28.6	U	28.6	220	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	31.5	U	31.5	220	ug/Kg
95-57-8	2-Chlorophenol	31.6	U	31.6	220	ug/Kg
95-48-7	2-Methylphenol	38.7	U	38.7	220	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	48.6	U	48.6	220	ug/Kg
98-86-2	Acetophenone	38.2	U	38.2	220	ug/Kg
65794-96-9	3+4-Methylphenols	53.3	U	53.3	430	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	61.4	U	61.4	100	ug/Kg
67-72-1	Hexachloroethane	22.8	U	22.8	220	ug/Kg
98-95-3	Nitrobenzene	23.7	U	23.7	220	ug/Kg
78-59-1	Isophorone	42.5	U	42.5	220	ug/Kg
88-75-5	2-Nitrophenol	75.4	U	75.4	220	ug/Kg
105-67-9	2,4-Dimethylphenol	84.0	U	84.0	220	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	39.9	U	39.9	220	ug/Kg
120-83-2	2,4-Dichlorophenol	36.7	U	36.7	220	ug/Kg
91-20-3	Naphthalene	29.4	U	29.4	220	ug/Kg
106-47-8	4-Chloroaniline	45.9	U	45.9	220	ug/Kg
87-68-3	Hexachlorobutadiene	32.8	U	32.8	220	ug/Kg
105-60-2	Caprolactam	67.5	U	67.5	430	ug/Kg
59-50-7	4-Chloro-3-methylphenol	37.2	U	37.2	220	ug/Kg
91-57-6	2-Methylnaphthalene	33.2	U	33.2	220	ug/Kg
77-47-4	Hexachlorocyclopentadiene	150	U	150	430	ug/Kg
88-06-2	2,4,6-Trichlorophenol	25.7	U	25.7	220	ug/Kg
95-95-4	2,4,5-Trichlorophenol	37.7	U	37.7	220	ug/Kg
92-52-4	1,1-Biphenyl	28.2	U	28.2	220	ug/Kg
91-58-7	2-Chloronaphthalene	29.2	U	29.2	220	ug/Kg
88-74-4	2-Nitroaniline	62.3	U	62.3	220	ug/Kg
131-11-3	Dimethylphthalate	35.1	U	35.1	220	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	77.1
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142886.D	1	06/26/25 09:20	06/27/25 11:52	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	37.4	U	37.4	220	ug/Kg
606-20-2	2,6-Dinitrotoluene	43.5	U	43.5	220	ug/Kg
99-09-2	3-Nitroaniline	59.6	U	59.6	220	ug/Kg
83-32-9	Acenaphthene	27.6	U	27.6	220	ug/Kg
51-28-5	2,4-Dinitrophenol	300	U	300	430	ug/Kg
100-02-7	4-Nitrophenol	140	U	140	430	ug/Kg
132-64-9	Dibenzofuran	29.4	U	29.4	220	ug/Kg
121-14-2	2,4-Dinitrotoluene	64.9	U	64.9	220	ug/Kg
84-66-2	Diethylphthalate	130	J	36.7	220	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	34.6	U	34.6	220	ug/Kg
86-73-7	Fluorene	32.8	U	32.8	220	ug/Kg
100-01-6	4-Nitroaniline	83.2	U	83.2	220	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	130	U	130	430	ug/Kg
86-30-6	n-Nitrosodiphenylamine	42.6	U	42.6	220	ug/Kg
101-55-3	4-Bromophenyl-phenylether	36.0	U	36.0	220	ug/Kg
118-74-1	Hexachlorobenzene	32.8	U	32.8	220	ug/Kg
1912-24-9	Atrazine	44.1	U	44.1	220	ug/Kg
87-86-5	Pentachlorophenol	66.5	U	66.5	430	ug/Kg
85-01-8	Phenanthrene	27.1	U	27.1	220	ug/Kg
120-12-7	Anthracene	43.1	U	43.1	220	ug/Kg
86-74-8	Carbazole	40.4	U	40.4	220	ug/Kg
84-74-2	Di-n-butylphthalate	62.1	U	62.1	220	ug/Kg
206-44-0	Fluoranthene	38.9	U	38.9	220	ug/Kg
129-00-0	Pyrene	46.6	U	46.6	220	ug/Kg
85-68-7	Butylbenzylphthalate	92.5	U	92.5	220	ug/Kg
91-94-1	3,3-Dichlorobenzidine	47.6	U	47.6	430	ug/Kg
56-55-3	Benzo(a)anthracene	29.8	U	29.8	220	ug/Kg
218-01-9	Chrysene	25.8	U	25.8	220	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	76.7	U	76.7	220	ug/Kg
117-84-0	Di-n-octyl phthalate	110	U	110	430	ug/Kg
205-99-2	Benzo(b)fluoranthene	24.6	U	24.6	220	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	77.1
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142886.D	1	06/26/25 09:20	06/27/25 11:52	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	29.0	U	29.0	220	ug/Kg
50-32-8	Benzo(a)pyrene	38.2	U	38.2	220	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	37.7	U	37.7	220	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	35.5	U	35.5	220	ug/Kg
191-24-2	Benzo(g,h,i)perylene	33.3	U	33.3	220	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.2	U	33.2	220	ug/Kg
123-91-1	1,4-Dioxane	58.6	U	58.6	220	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	35.5	U	35.5	220	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	79.3		18 - 112	53%	SPK: 150
13127-88-3	Phenol-d6	81.1		15 - 107	54%	SPK: 150
4165-60-0	Nitrobenzene-d5	50.3		18 - 107	50%	SPK: 100
321-60-8	2-Fluorobiphenyl	51.8		20 - 109	52%	SPK: 100
118-79-6	2,4,6-Tribromophenol	76.8		10 - 116	51%	SPK: 150
1718-51-0	Terphenyl-d14	34.5		10 - 105	34%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	71500	6.875
1146-65-2	Naphthalene-d8	270000	8.157
15067-26-2	Acenaphthene-d10	132000	9.916
1517-22-2	Phenanthrene-d10	195000	11.404
1719-03-5	Chrysene-d12	151000	14.051
1520-96-3	Perylene-d12	152000	15.545

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	270	A	5.09	ug/Kg
000119-61-9	Benzophenone	350	J	10.6	ug/Kg
082304-66-3	7,9-Di-tert-butyl-1-oxaspiro(4,5)d	90.7	J	11.8	ug/Kg
000057-10-3	n-Hexadecanoic acid	480	J	11.9	ug/Kg
000057-11-4	Octadecanoic acid	120	J	12.7	ug/Kg
079392-43-1	Octadecyl trifluoroacetate	440	J	13.9	ug/Kg
1000406-04-8	Pentadecafluorooctanoic acid, octa	540	J	14.5	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	77.1
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142886.D	1	06/26/25 09:20	06/27/25 11:52	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000630-02-4	Octacosane	160	J		15.2	ug/Kg
000295-48-7	Cyclopentadecane	120	J		15.2	ug/Kg
000638-66-4	Octadecanal	98.5	J		15.8	ug/Kg
007098-22-8	Tetratetracontane	180	J		16.0	ug/Kg
000557-61-9	Octacosanol	170	J		16.1	ug/Kg
067860-04-2	Oxirane, heptadecyl-	91.6	J		16.8	ug/Kg
000489-39-4	Aromandendrene	220	J		17.2	ug/Kg
	unknown17.645	110	J		17.6	ug/Kg
	unknown17.727	170	J		17.7	ug/Kg
137235-51-9	1,2,4,8-Tetramethylbicyclo[6.3.0]u	260	J		18.0	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142893.D	1	06/26/25 09:20	06/27/25 15:15	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	180	U	180	380	ug/Kg
108-95-2	Phenol	25.4	U	25.4	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	27.9	U	27.9	200	ug/Kg
95-57-8	2-Chlorophenol	28.0	U	28.0	200	ug/Kg
95-48-7	2-Methylphenol	34.3	U	34.3	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.1	U	43.1	200	ug/Kg
98-86-2	Acetophenone	33.9	U	33.9	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.2	U	47.2	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.4	U	54.4	91.9	ug/Kg
67-72-1	Hexachloroethane	20.2	U	20.2	200	ug/Kg
98-95-3	Nitrobenzene	21.0	U	21.0	200	ug/Kg
78-59-1	Isophorone	37.7	U	37.7	200	ug/Kg
88-75-5	2-Nitrophenol	66.9	U	66.9	200	ug/Kg
105-67-9	2,4-Dimethylphenol	74.4	U	74.4	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.4	U	35.4	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.5	U	32.5	200	ug/Kg
91-20-3	Naphthalene	26.1	U	26.1	200	ug/Kg
106-47-8	4-Chloroaniline	40.7	U	40.7	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.1	U	29.1	200	ug/Kg
105-60-2	Caprolactam	59.8	U	59.8	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.0	U	33.0	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.4	U	29.4	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.7	U	22.7	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.4	U	33.4	200	ug/Kg
92-52-4	1,1-Biphenyl	25.0	U	25.0	200	ug/Kg
91-58-7	2-Chloronaphthalene	25.8	U	25.8	200	ug/Kg
88-74-4	2-Nitroaniline	55.3	U	55.3	200	ug/Kg
131-11-3	Dimethylphthalate	31.1	U	31.1	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142893.D	1	06/26/25 09:20	06/27/25 15:15	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.2	U	33.2	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.6	U	38.6	200	ug/Kg
99-09-2	3-Nitroaniline	52.8	U	52.8	200	ug/Kg
83-32-9	Acenaphthene	24.5	U	24.5	200	ug/Kg
51-28-5	2,4-Dinitrophenol	260	U	260	380	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	380	ug/Kg
132-64-9	Dibenzofuran	26.1	U	26.1	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	57.5	U	57.5	200	ug/Kg
84-66-2	Diethylphthalate	32.5	U	32.5	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.7	U	30.7	200	ug/Kg
86-73-7	Fluorene	29.1	U	29.1	200	ug/Kg
100-01-6	4-Nitroaniline	73.7	U	73.7	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	37.8	U	37.8	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	31.9	U	31.9	200	ug/Kg
118-74-1	Hexachlorobenzene	29.1	U	29.1	200	ug/Kg
1912-24-9	Atrazine	39.1	U	39.1	200	ug/Kg
87-86-5	Pentachlorophenol	58.9	U	58.9	380	ug/Kg
85-01-8	Phenanthrene	24.0	U	24.0	200	ug/Kg
120-12-7	Anthracene	38.3	U	38.3	200	ug/Kg
86-74-8	Carbazole	35.8	U	35.8	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.0	U	55.0	200	ug/Kg
206-44-0	Fluoranthene	34.5	U	34.5	200	ug/Kg
129-00-0	Pyrene	41.4	U	41.4	200	ug/Kg
85-68-7	Butylbenzylphthalate	82.0	U	82.0	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.2	U	42.2	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.4	U	26.4	200	ug/Kg
218-01-9	Chrysene	22.9	U	22.9	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.0	U	68.0	200	ug/Kg
117-84-0	Di-n-octyl phthalate	99.7	U	99.7	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	21.8	U	21.8	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142893.D	1	06/26/25 09:20	06/27/25 15:15	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.7	U	25.7	200	ug/Kg
50-32-8	Benzo(a)pyrene	33.9	U	33.9	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.4	U	33.4	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.5	U	31.5	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.5	U	29.5	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.4	U	29.4	200	ug/Kg
123-91-1	1,4-Dioxane	51.9	U	51.9	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.5	U	31.5	200	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	82.7		18 - 112	55%	SPK: 150
13127-88-3	Phenol-d6	81.6		15 - 107	54%	SPK: 150
4165-60-0	Nitrobenzene-d5	54.7		18 - 107	55%	SPK: 100
321-60-8	2-Fluorobiphenyl	56.7		20 - 109	57%	SPK: 100
118-79-6	2,4,6-Tribromophenol	81.3		10 - 116	54%	SPK: 150
1718-51-0	Terphenyl-d14	39.0		10 - 105	39%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	68400	6.875
1146-65-2	Naphthalene-d8	241000	8.163
15067-26-2	Acenaphthene-d10	110000	9.916
1517-22-2	Phenanthrene-d10	175000	11.41
1719-03-5	Chrysene-d12	164000	14.057
1520-96-3	Perylene-d12	111000	15.551

TENTATIVE IDENTIFIED COMPOUNDS

006876-23-9	Cyclohexane, 1,2-dimethyl-, trans-	78.1	J	4.53	ug/Kg
001795-27-3	Cyclohexane, 1,3,5-trimethyl-, (1.	150	J	5.01	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	330	A	5.09	ug/Kg
007667-60-9	Cyclohexane, 1,2,4-trimethyl-, (1.	130	J	5.29	ug/Kg
002234-75-5	Cyclohexane, 1,2,4-trimethyl-	87.3	J	5.57	ug/Kg
020237-46-1	cis-3-Nonene	90.4	J	5.65	ug/Kg
003728-56-1	1-Ethyl-4-methylcyclohexane	100	J	5.69	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142893.D	1	06/26/25 09:20	06/27/25 15:15	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000111-84-2	Nonane	160	J		5.78	ug/Kg
003728-54-9	Cyclohexane, 1-ethyl-2-methyl-	120	J		5.90	ug/Kg
000119-61-9	Benzophenone	320	J		10.6	ug/Kg
000629-50-5	Tridecane	92.7	J		10.8	ug/Kg
000057-10-3	n-Hexadecanoic acid	170	J		11.9	ug/Kg
000629-78-7	Heptadecane	93.8	J		12.9	ug/Kg
000593-45-3	Octadecane	83.1	J		13.2	ug/Kg
000629-92-5	Nonadecane	120	J		13.6	ug/Kg
074685-30-6	5-Eicosene, (E)-	290	J		13.9	ug/Kg
000629-97-0	Docosane	200	J		14.2	ug/Kg
000638-67-5	Tricosane	230	J		14.5	ug/Kg
000630-01-3	Hexacosane	150	J		14.8	ug/Kg
027538-41-6	11-Methyltricosane	250	J		15.2	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168625BL	PB168625BL	2-Fluorophenol	150	127	84		18	112
		Phenol-d6	150	127	85		15	107
		Nitrobenzene-d5	100	81.6	82		18	107
		2-Fluorobiphenyl	100	77.4	77		20	109
		2,4,6-Tribromophenol	150	134	89		10	116
		Terphenyl-d14	100	78.5	78		10	105
PB168625BS	PB168625BS	2-Fluorophenol	150	121	81		18	112
		Phenol-d6	150	122	81		15	107
		Nitrobenzene-d5	100	77.0	77		18	107
		2-Fluorobiphenyl	100	74.7	75		20	109
		2,4,6-Tribromophenol	150	132	88		10	116
		Terphenyl-d14	100	78.2	78		10	105
Q2413-01	TP-35	2-Fluorophenol	150	81.2	54		18	112
		Phenol-d6	150	82.7	55		15	107
		Nitrobenzene-d5	100	52.3	52		18	107
		2-Fluorobiphenyl	100	51.7	52		20	109
		2,4,6-Tribromophenol	150	76.5	51		10	116
		Terphenyl-d14	100	38.7	39		10	105
Q2413-02	TP-34	2-Fluorophenol	150	81.5	54		18	112
		Phenol-d6	150	82.0	55		15	107
		Nitrobenzene-d5	100	53.4	53		18	107
		2-Fluorobiphenyl	100	55.9	56		20	109
		2,4,6-Tribromophenol	150	76.9	51		10	116
		Terphenyl-d14	100	36.2	36		10	105
Q2413-03	TP-77	2-Fluorophenol	150	83.0	55		18	112
		Phenol-d6	150	82.9	55		15	107
		Nitrobenzene-d5	100	52.6	53		18	107
		2-Fluorobiphenyl	100	55.1	55		20	109
		2,4,6-Tribromophenol	150	73.8	49		10	116
		Terphenyl-d14	100	38.3	38		10	105
Q2413-04	TP-74	2-Fluorophenol	150	74.7	50		18	112
		Phenol-d6	150	74.3	50		15	107
		Nitrobenzene-d5	100	48.7	49		18	107
		2-Fluorobiphenyl	100	48.2	48		20	109
		2,4,6-Tribromophenol	150	67.0	45		10	116
		Terphenyl-d14	100	32.5	32		10	105
Q2413-05	TP-73	2-Fluorophenol	150	79.3	53		18	112
		Phenol-d6	150	81.1	54		15	107
		Nitrobenzene-d5	100	50.3	50		18	107
		2-Fluorobiphenyl	100	51.8	52		20	109
		2,4,6-Tribromophenol	150	76.8	51		10	116
		Terphenyl-d14	100	34.5	34		10	105
Q2413-06	TP-72	2-Fluorophenol	150	82.7	55		18	112
		Phenol-d6	150	81.6	54		15	107
		Nitrobenzene-d5	100	54.7	55		18	107
		2-Fluorobiphenyl	100	56.7	57		20	109
		2,4,6-Tribromophenol	150	81.3	54		10	116
		Terphenyl-d14	100	39.0	39		10	105
Q2416-01MS	MH-G/HMS	2-Fluorophenol	150	72.2	48		18	112
		Phenol-d6	150	75.2	50		15	107
		Nitrobenzene-d5	100	45.0	45		18	107

Surrogate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
Q2416-01MS	MH-G/HMS	2-Fluorobiphenyl	100	46.3	46		20	109
		2,4,6-Tribromophenol	150	68.4	46		10	116
		Terphenyl-d14	100	45.4	45		10	105
Q2416-01MSD	MH-G/HMSD	2-Fluorophenol	150	73.8	49		18	112
		Phenol-d6	150	76.1	51		15	107
		Nitrobenzene-d5	100	46.2	46		18	107
		2-Fluorobiphenyl	100	46.1	46		20	109
		2,4,6-Tribromophenol	150	70.7	47		10	116
		Terphenyl-d14	100	45.3	45		10	105

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID:	Q2416-01MS	Client Sample ID:	MH-G/HMS					DataFile:	BF142872.D		
Benzaldehyde	1100	0	640	ug/Kg	58				10	171	
Phenol	1100	0	900	ug/Kg	82				51	122	
bis(2-Chloroethyl)ether	1100	0	940	ug/Kg	85				54	125	
2-Chlorophenol	1100	0	960	ug/Kg	87				51	121	
2-Methylphenol	1100	0	950	ug/Kg	86				47	125	
2,2-oxybis(1-Chloropropane)	1100	0	890	ug/Kg	81				46	119	
Acetophenone	1100	0	950	ug/Kg	86				55	128	
3+4-Methylphenols	1100	0	960	ug/Kg	87				49	125	
N-Nitroso-di-n-propylamine	1100	0	940	ug/Kg	85				59	119	
Hexachloroethane	1100	0	940	ug/Kg	85				51	116	
Nitrobenzene	1100	0	940	ug/Kg	85				47	124	
Isophorone	1100	0	940	ug/Kg	85				49	127	
2-Nitrophenol	1100	0	990	ug/Kg	90				43	131	
2,4-Dimethylphenol	1100	0	940	ug/Kg	85				63	151	
bis(2-Chloroethoxy)methane	1100	0	940	ug/Kg	85				51	119	
2,4-Dichlorophenol	1100	0	950	ug/Kg	86				50	122	
Naphthalene	1100	0	940	ug/Kg	85				51	121	
4-Chloroaniline	1100	0	220	ug/Kg	20				10	100	
Hexachlorobutadiene	1100	0	940	ug/Kg	85				44	126	
Caprolactam	1100	0	1000	ug/Kg	91				51	134	
4-Chloro-3-methylphenol	1100	0	970	ug/Kg	88				57	132	
2-Methylnaphthalene	1100	0	940	ug/Kg	85				59	123	
Hexachlorocyclopentadiene	2200	0	1700	ug/Kg	77				10	175	
2,4,6-Trichlorophenol	1100	0	920	ug/Kg	84				33	141	
2,4,5-Trichlorophenol	1100	0	940	ug/Kg	85				38	135	
1,1-Biphenyl	1100	0	950	ug/Kg	86				55	131	
2-Chloronaphthalene	1100	0	940	ug/Kg	85				48	124	
2-Nitroaniline	1100	0	1000	ug/Kg	91				47	134	
Dimethylphthalate	1100	0	990	ug/Kg	90				54	120	
Acenaphthylene	1100	0	940	ug/Kg	85				57	125	
2,6-Dinitrotoluene	1100	0	1000	ug/Kg	91				48	127	
3-Nitroaniline	1100	0	480	ug/Kg	44				10	112	
Acenaphthene	1100	0	900	ug/Kg	82				70	121	
2,4-Dinitrophenol	2200	0	160	ug/Kg	7	*			10	155	
4-Nitrophenol	2200	0	1700	ug/Kg	77				10	175	
Dibenzofuran	1100	0	940	ug/Kg	85				52	114	
2,4-Dinitrotoluene	1100	0	1000	ug/Kg	91				41	140	
Diethylphthalate	1100	0	1000	ug/Kg	91				51	119	
4-Chlorophenyl-phenylether	1100	0	950	ug/Kg	86				48	122	
Fluorene	1100	0	950	ug/Kg	86				53	118	
4-Nitroaniline	1100	0	970	ug/Kg	88				29	140	
4,6-Dinitro-2-methylphenol	1100	0	200	ug/Kg	18				10	160	
N-Nitrosodiphenylamine	1100	0	970	ug/Kg	88				73	118	
4-Bromophenyl-phenylether	1100	0	980	ug/Kg	89				65	121	
Hexachlorobenzene	1100	0	970	ug/Kg	88				67	118	
Atrazine	1100	0	1200	ug/Kg	109				45	175	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Pentachlorophenol	2200	0	800	ug/Kg	36				13	153	
Phenanthrene	1100	0	950	ug/Kg	86				52	128	
Anthracene	1100	0	950	ug/Kg	86				62	124	
Carbazole	1100	0	960	ug/Kg	87				59	119	
Di-n-butylphthalate	1100	0	1100	ug/Kg	100				55	125	
Fluoranthene	1100	0	890	ug/Kg	81				44	125	
Pyrene	1100	0	900	ug/Kg	82				37	122	
Butylbenzylphthalate	1100	0	1200	ug/Kg	109				44	135	
3,3-Dichlorobenzidine	1100	0	230	ug/Kg	21				15	112	
Benzo(a)anthracene	1100	0	960	ug/Kg	87				53	119	
Chrysene	1100	0	940	ug/Kg	85				57	121	
bis(2-Ethylhexyl)phthalate	1100	0	1000	ug/Kg	91				42	169	
Di-n-octyl phthalate	1100	0	870	ug/Kg	79				51	156	
Benzo(b)fluoranthene	1100	0	1000	ug/Kg	91				52	117	
Benzo(k)fluoranthene	1100	0	960	ug/Kg	87				57	134	
Benzo(a)pyrene	1100	0	980	ug/Kg	89				70	142	
Indeno(1,2,3-cd)pyrene	1100	0	660	ug/Kg	60				40	129	
Dibenz(a,h)anthracene	1100	0	660	ug/Kg	60				43	123	
Benzo(g,h,i)perylene	1100	0	590	ug/Kg	54				24	125	
1,2,4,5-Tetrachlorobenzene	1100	0	940	ug/Kg	85				52	134	
1,4-Dioxane	1100	0	820	ug/Kg	75				46	112	
2,3,4,6-Tetrachlorophenol	1100	0	810	ug/Kg	74				24	146	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID:	Q2416-01MSD	Client Sample ID:	MH-G/HMSD				DataFile:	BF142873.D			
Benzaldehyde	1100	0	650	ug/Kg	59	2			10	171	20
Phenol	1100	0	920	ug/Kg	84	2			51	122	20
bis(2-Chloroethyl)ether	1100	0	950	ug/Kg	86	1			54	125	20
2-Chlorophenol	1100	0	960	ug/Kg	87	0			51	121	20
2-Methylphenol	1100	0	970	ug/Kg	88	2			47	125	20
2,2-oxybis(1-Chloropropane)	1100	0	910	ug/Kg	83	2			46	119	20
Acetophenone	1100	0	970	ug/Kg	88	2			55	128	20
3+4-Methylphenols	1100	0	980	ug/Kg	89	2			49	125	20
N-Nitroso-di-n-propylamine	1100	0	980	ug/Kg	89	5			59	119	20
Hexachloroethane	1100	0	950	ug/Kg	86	1			51	116	20
Nitrobenzene	1100	0	960	ug/Kg	87	2			47	124	20
Isophorone	1100	0	970	ug/Kg	88	3			49	127	20
2-Nitrophenol	1100	0	1000	ug/Kg	91	1			43	131	20
2,4-Dimethylphenol	1100	0	970	ug/Kg	88	3			63	151	20
bis(2-Chloroethoxy)methane	1100	0	970	ug/Kg	88	3			51	119	20
2,4-Dichlorophenol	1100	0	970	ug/Kg	88	2			50	122	20
Naphthalene	1100	0	960	ug/Kg	87	2			51	121	20
4-Chloroaniline	1100	0	240	ug/Kg	22	10			10	100	20
Hexachlorobutadiene	1100	0	950	ug/Kg	86	1			44	126	20
Caprolactam	1100	0	1100	ug/Kg	100	9			51	134	20
4-Chloro-3-methylphenol	1100	0	1000	ug/Kg	91	3			57	132	20
2-Methylnaphthalene	1100	0	970	ug/Kg	88	3			59	123	20
Hexachlorocyclopentadiene	2200	0	1700	ug/Kg	77	0			10	175	20
2,4,6-Trichlorophenol	1100	0	920	ug/Kg	84	0			33	141	20
2,4,5-Trichlorophenol	1100	0	950	ug/Kg	86	1			38	135	20
1,1-Biphenyl	1100	0	960	ug/Kg	87	1			55	131	20
2-Chloronaphthalene	1100	0	940	ug/Kg	85	0			48	124	20
2-Nitroaniline	1100	0	1000	ug/Kg	91	0			47	134	20
Dimethylphthalate	1100	0	1000	ug/Kg	91	1			54	120	20
Acenaphthylene	1100	0	950	ug/Kg	86	1			57	125	20
2,6-Dinitrotoluene	1100	0	1000	ug/Kg	91	0			48	127	20
3-Nitroaniline	1100	0	490	ug/Kg	45	2			10	112	20
Acenaphthene	1100	0	930	ug/Kg	85	4			70	121	20
2,4-Dinitrophenol	2200	0	500	ug/Kg	23	107	*		10	155	20
4-Nitrophenol	2200	0	1800	ug/Kg	82	6			10	175	20
Dibenzofuran	1100	0	950	ug/Kg	86	1			52	114	20
2,4-Dinitrotoluene	1100	0	1000	ug/Kg	91	0			41	140	20
Diethylphthalate	1100	0	1000	ug/Kg	91	0			51	119	20
4-Chlorophenyl-phenylether	1100	0	950	ug/Kg	86	0			48	122	20
Fluorene	1100	0	960	ug/Kg	87	1			53	118	20
4-Nitroaniline	1100	0	980	ug/Kg	89	1			29	140	20
4,6-Dinitro-2-methylphenol	1100	0	400	ug/Kg	36	67	*		10	160	20
N-Nitrosodiphenylamine	1100	0	980	ug/Kg	89	1			73	118	20
4-Bromophenyl-phenylether	1100	0	1000	ug/Kg	91	2			65	121	20
Hexachlorobenzene	1100	0	970	ug/Kg	88	0			67	118	20
Atrazine	1100	0	1200	ug/Kg	109	0			45	175	20

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Pentachlorophenol	2200	0	1200	ug/Kg	55	42	*		13	153	20
Phenanthrene	1100	0	970	ug/Kg	88	2			52	128	20
Anthracene	1100	0	970	ug/Kg	88	2			62	124	20
Carbazole	1100	0	970	ug/Kg	88	1			59	119	20
Di-n-butylphthalate	1100	0	1200	ug/Kg	109	9			55	125	20
Fluoranthene	1100	0	950	ug/Kg	86	6			44	125	20
Pyrene	1100	0	890	ug/Kg	81	1			37	122	20
Butylbenzylphthalate	1100	0	1200	ug/Kg	109	0			44	135	20
3,3-Dichlorobenzidine	1100	0	220	ug/Kg	20	5			15	112	20
Benzo(a)anthracene	1100	0	970	ug/Kg	88	1			53	119	20
Chrysene	1100	0	970	ug/Kg	88	3			57	121	20
bis(2-Ethylhexyl)phthalate	1100	0	1000	ug/Kg	91	0			42	169	20
Di-n-octyl phthalate	1100	0	900	ug/Kg	82	4			51	156	20
Benzo(b)fluoranthene	1100	0	1100	ug/Kg	100	9			52	117	20
Benzo(k)fluoranthene	1100	0	1000	ug/Kg	91	4			57	134	20
Benzo(a)pyrene	1100	0	1000	ug/Kg	91	2			70	142	20
Indeno(1,2,3-cd)pyrene	1100	0	730	ug/Kg	66	10			40	129	20
Dibenz(a,h)anthracene	1100	0	730	ug/Kg	66	10			43	123	20
Benzo(g,h,i)perylene	1100	0	660	ug/Kg	60	11			24	125	20
1,2,4,5-Tetrachlorobenzene	1100	0	950	ug/Kg	86	1			52	134	20
1,4-Dioxane	1100	0	840	ug/Kg	76	1			46	112	20
2,3,4,6-Tetrachlorophenol	1100	0	880	ug/Kg	80	8			24	146	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8270E

DataFile: BF142885.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168625BS	Benzaldehyde	1700	940	ug/Kg	55				10	133	
	Phenol	1700	1400	ug/Kg	82				62	112	
	bis(2-Chloroethyl)ether	1700	1400	ug/Kg	82				60	101	
	2-Chlorophenol	1700	1400	ug/Kg	82				65	112	
	2-Methylphenol	1700	1400	ug/Kg	82				61	108	
	2,2-oxybis(1-Chloropropane)	1700	1400	ug/Kg	82				51	100	
	Acetophenone	1700	1400	ug/Kg	82				66	98	
	3+4-Methylphenols	1700	1500	ug/Kg	88				58	111	
	N-Nitroso-di-n-propylamine	1700	1400	ug/Kg	82				63	95	
	Hexachloroethane	1700	1400	ug/Kg	82				72	108	
	Nitrobenzene	1700	1400	ug/Kg	82				57	101	
	Isophorone	1700	1400	ug/Kg	82				59	99	
	2-Nitrophenol	1700	1500	ug/Kg	88				61	111	
	2,4-Dimethylphenol	1700	1400	ug/Kg	82				46	141	
	bis(2-Chloroethoxy)methane	1700	1400	ug/Kg	82				66	97	
	2,4-Dichlorophenol	1700	1500	ug/Kg	88				62	107	
	Naphthalene	1700	1400	ug/Kg	82				62	100	
	4-Chloroaniline	1700	920	ug/Kg	54				16	100	
	Hexachlorobutadiene	1700	1400	ug/Kg	82				53	98	
	Caprolactam	1700	1700	ug/Kg	100				67	110	
	4-Chloro-3-methylphenol	1700	1500	ug/Kg	88				58	112	
	2-Methylnaphthalene	1700	1400	ug/Kg	82				60	104	
	Hexachlorocyclopentadiene	3300	2800	ug/Kg	85				45	165	
	2,4,6-Trichlorophenol	1700	1400	ug/Kg	82				59	102	
	2,4,5-Trichlorophenol	1700	1400	ug/Kg	82				61	98	
	1,1-Biphenyl	1700	1400	ug/Kg	82				57	103	
	2-Chloronaphthalene	1700	1400	ug/Kg	82				58	99	
	2-Nitroaniline	1700	1500	ug/Kg	88				66	101	
	Dimethylphthalate	1700	1500	ug/Kg	88				61	99	
	Acenaphthylene	1700	1400	ug/Kg	82				63	101	
	2,6-Dinitrotoluene	1700	1500	ug/Kg	88				61	104	
	3-Nitroaniline	1700	1000	ug/Kg	59				28	100	
	Acenaphthene	1700	1600	ug/Kg	94				57	104	
	2,4-Dinitrophenol	3300	3300	ug/Kg	100				37	128	
	4-Nitrophenol	3300	3100	ug/Kg	94				48	119	
	Dibenzofuran	1700	1400	ug/Kg	82				63	99	
	2,4-Dinitrotoluene	1700	1600	ug/Kg	94				60	106	
	Diethylphthalate	1700	1500	ug/Kg	88				60	101	
	4-Chlorophenyl-phenylether	1700	1400	ug/Kg	82				58	98	
	Fluorene	1700	1400	ug/Kg	82				61	101	
	4-Nitroaniline	1700	1500	ug/Kg	88				64	103	
	4,6-Dinitro-2-methylphenol	1700	1500	ug/Kg	88				76	113	
	N-Nitrosodiphenylamine	1700	1400	ug/Kg	82				71	99	
	4-Bromophenyl-phenylether	1700	1400	ug/Kg	82				66	102	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8270E

DataFile: BF142885.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168625BS	Hexachlorobenzene	1700	1400	ug/Kg	82				64	98	
	Atrazine	1700	1700	ug/Kg	100				47	152	
	Pentachlorophenol	3300	3000	ug/Kg	91				67	105	
	Phenanthrene	1700	1400	ug/Kg	82				59	103	
	Anthracene	1700	1400	ug/Kg	82				61	105	
	Carbazole	1700	1500	ug/Kg	88				61	99	
	Di-n-butylphthalate	1700	1700	ug/Kg	100				58	104	
	Fluoranthene	1700	1500	ug/Kg	88				57	107	
	Pyrene	1700	1400	ug/Kg	82				59	103	
	Butylbenzylphthalate	1700	1700	ug/Kg	100				55	103	
	3,3-Dichlorobenzidine	1700	760	ug/Kg	45				42	91	
	Benzo(a)anthracene	1700	1500	ug/Kg	88				60	102	
	Chrysene	1700	1500	ug/Kg	88				59	101	
	bis(2-Ethylhexyl)phthalate	1700	1500	ug/Kg	88				54	135	
	Di-n-octyl phthalate	1700	1400	ug/Kg	82				52	137	
	Benzo(b)fluoranthene	1700	1500	ug/Kg	88				62	109	
	Benzo(k)fluoranthene	1700	1500	ug/Kg	88				62	109	
	Benzo(a)pyrene	1700	1500	ug/Kg	88				63	103	
	Indeno(1,2,3-cd)pyrene	1700	1400	ug/Kg	82				63	101	
	Dibenz(a,h)anthracene	1700	1300	ug/Kg	76				61	112	
	Benzo(g,h,i)perylene	1700	1400	ug/Kg	82				70	108	
	1,2,4,5-Tetrachlorobenzene	1700	1400	ug/Kg	82				53	101	
	1,4-Dioxane	1700	1100	ug/Kg	65				50	96	
	2,3,4,6-Tetrachlorophenol	1700	1500	ug/Kg	88				59	108	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168625BL

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: BF142884.D

Lab Sample ID: PB168625BL

Instrument ID: BNA_F

Date Extracted: 06/26/2025

Matrix: (soil/water) SOIL

Date Analyzed: 06/27/2025

Level: (low/med) LOW

Time Analyzed: 10:49

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168625BS	PB168625BS	BF142885.D	06/27/2025
TP-35	Q2413-01	BF142889.D	06/27/2025
TP-34	Q2413-02	BF142892.D	06/27/2025
TP-73	Q2413-05	BF142886.D	06/27/2025
TP-77	Q2413-03	BF142890.D	06/27/2025
TP-74	Q2413-04	BF142891.D	06/27/2025
TP-72	Q2413-06	BF142893.D	06/27/2025
MH-G/HMS	Q2416-01MS	BF142872.D	06/26/2025
MH-G/HMSD	Q2416-01MSD	BF142873.D	06/26/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: BF142787.D

DFTPP Injection Date: 06/19/2025

Instrument ID: BNA_F

DFTPP Injection Time: 16:37

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.6 (1.8) 1
69	Mass 69 relative abundance	30.9
70	Less than 2.0% of mass 69	0.1 (0.5) 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	5.8
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	15
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.1 (19.1) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BF142788.D	06/19/2025	17:07
SSTDICC005	SSTDICC005	BF142789.D	06/19/2025	17:38
SSTDICC010	SSTDICC010	BF142790.D	06/19/2025	18:08
SSTDICC020	SSTDICC020	BF142791.D	06/19/2025	18:39
SSTDICCC040	SSTDICCC040	BF142792.D	06/19/2025	19:09
SSTDICC050	SSTDICC050	BF142793.D	06/19/2025	19:40
SSTDICC060	SSTDICC060	BF142794.D	06/19/2025	20:10
SSTDICC080	SSTDICC080	BF142795.D	06/19/2025	20:40

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: BF142856.D

DFTPP Injection Date: 06/26/2025

Instrument ID: BNA_F

DFTPP Injection Time: 09:10

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.6 (1.8) 1
69	Mass 69 relative abundance	33.7
70	Less than 2.0% of mass 69	0.2 (0.6) 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	6.9
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	15.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.4 (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
SSTDCCC040	SSTDCCC040	BF142857.D	06/26/2025	09:39
MH-G/HMS	Q2416-01MS	BF142872.D	06/26/2025	17:06
MH-G/HMSD	Q2416-01MSD	BF142873.D	06/26/2025	17:36

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: BF142881.D

DFTPP Injection Date: 06/27/2025

Instrument ID: BNA_F

DFTPP Injection Time: 09:21

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.6 (1.8) 1
69	Mass 69 relative abundance	32.3
70	Less than 2.0% of mass 69	0.1 (0.4) 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	6.4
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	15.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.2 (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	BF142882.D	06/27/2025	09:51
PB168625BL	PB168625BL	BF142884.D	06/27/2025	10:49
PB168625BS	PB168625BS	BF142885.D	06/27/2025	11:19
TP-73	Q2413-05	BF142886.D	06/27/2025	11:52
TP-35	Q2413-01	BF142889.D	06/27/2025	13:19
TP-77	Q2413-03	BF142890.D	06/27/2025	13:48
TP-74	Q2413-04	BF142891.D	06/27/2025	14:17
TP-34	Q2413-02	BF142892.D	06/27/2025	14:47
TP-72	Q2413-06	BF142893.D	06/27/2025	15:15

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG NO.: Q2413

EPA Sample No.: SSTDCCC040 Date Analyzed: 06/26/2025

Lab File ID: BF142857.D Time Analyzed: 09:39

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	77664	6.875	293795	8.16	161192	9.92
UPPER LIMIT	155328	7.375	587590	8.663	322384	10.422
LOWER LIMIT	38832	6.375	146898	7.663	80596	9.422
EPA SAMPLE NO.						
01 MH-G/HMS	84939	6.88	322606	8.16	168684	9.92
02 MH-G/HMSD	79872	6.88	303973	8.16	162686	9.92

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.: Q2413 SAS No.: Q2413 SDG NO.: Q2413

EPA Sample No.: SSTDCCC040 Date Analyzed: 06/26/2025

Lab File ID: BF142857.D Time Analyzed: 09:39

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	275904	11.41	159836	14.057	144296	15.545
UPPER LIMIT	551808	11.91	319672	14.557	288592	16.045
LOWER LIMIT	137952	10.91	79918	13.557	72148	15.045
EPA SAMPLE NO.						
01 MH-G/HMS	277774	11.41	149832	14.06	169288	15.55
02 MH-G/HMSD	266635	11.41	149914	14.06	166770	15.55

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.: Q2413 SAS No.: Q2413 SDG NO.: Q2413

EPA Sample No.: SSTDCCC040 Date Analyzed: 06/27/2025

Lab File ID: BF142882.D Time Analyzed: 09:51

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	70500	6.875	264550	8.16	140000	9.92
UPPER LIMIT	141000	7.375	529100	8.663	280000	10.422
LOWER LIMIT	35250	6.375	132275	7.663	70000	9.422
EPA SAMPLE NO.						
01 PB168625BL	77055	6.88	295430	8.16	162519	9.92
02 PB168625BS	79288	6.88	306414	8.16	167156	9.92
03 TP-73	71511	6.88	269771	8.16	131916	9.92
04 TP-35	69777	6.88	263920	8.16	134370	9.92
05 TP-34	74176	6.88	267947	8.16	125086	9.92
06 TP-77	71725	6.88	266677	8.16	131150	9.92
07 TP-74	73989	6.88	272969	8.16	135853	9.92
08 TP-72	68428	6.88	240509	8.16	109896	9.92

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.: Q2413 SAS No.: Q2413 SDG NO.: Q2413

EPA Sample No.: SSTDCCC040 Date Analyzed: 06/27/2025

Lab File ID: BF142882.D Time Analyzed: 09:51

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	234291	11.41	139168	14.057	151209	15.545
UPPER LIMIT	468582	11.91	278336	14.557	302418	16.045
LOWER LIMIT	117146	10.91	69584	13.557	75604.5	15.045
EPA SAMPLE NO.						
01 PB168625BL	284575	11.40	168482	14.05	158706	15.55
02 PB168625BS	286462	11.41	164874	14.06	166752	15.55
03 TP-73	195199	11.40	151359	14.05	151859	15.55
04 TP-35	199779	11.40	149012	14.05	152863	15.55
05 TP-34	186159	11.40	169043	14.05	135290	15.55
06 TP-77	189644	11.40	153845	14.05	153297	15.55
07 TP-74	197144	11.40	161564	14.05	156020	15.55
08 TP-72	174745	11.41	163929	14.06	110583	15.55

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:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168625BL	SDG No.:	Q2413
Lab Sample ID:	PB168625BL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142884.D	1	06/26/25 09:20	06/27/25 10:49	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	160	U	160	330	ug/Kg
108-95-2	Phenol	22.1	U	22.1	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	24.3	U	24.3	170	ug/Kg
95-57-8	2-Chlorophenol	24.4	U	24.4	170	ug/Kg
95-48-7	2-Methylphenol	29.9	U	29.9	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	37.5	U	37.5	170	ug/Kg
98-86-2	Acetophenone	29.5	U	29.5	170	ug/Kg
65794-96-9	3+4-Methylphenols	41.1	U	41.1	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	47.4	U	47.4	80.0	ug/Kg
67-72-1	Hexachloroethane	17.6	U	17.6	170	ug/Kg
98-95-3	Nitrobenzene	18.3	U	18.3	170	ug/Kg
78-59-1	Isophorone	32.8	U	32.8	170	ug/Kg
88-75-5	2-Nitrophenol	58.2	U	58.2	170	ug/Kg
105-67-9	2,4-Dimethylphenol	64.8	U	64.8	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	30.8	U	30.8	170	ug/Kg
120-83-2	2,4-Dichlorophenol	28.3	U	28.3	170	ug/Kg
91-20-3	Naphthalene	22.7	U	22.7	170	ug/Kg
106-47-8	4-Chloroaniline	35.4	U	35.4	170	ug/Kg
87-68-3	Hexachlorobutadiene	25.3	U	25.3	170	ug/Kg
105-60-2	Caprolactam	52.1	U	52.1	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	28.7	U	28.7	170	ug/Kg
91-57-6	2-Methylnaphthalene	25.6	U	25.6	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	120	U	120	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	19.8	U	19.8	170	ug/Kg
95-95-4	2,4,5-Trichlorophenol	29.1	U	29.1	170	ug/Kg
92-52-4	1,1-Biphenyl	21.8	U	21.8	170	ug/Kg
91-58-7	2-Chloronaphthalene	22.5	U	22.5	170	ug/Kg
88-74-4	2-Nitroaniline	48.1	U	48.1	170	ug/Kg
131-11-3	Dimethylphthalate	27.1	U	27.1	170	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168625BL	SDG No.:	Q2413
Lab Sample ID:	PB168625BL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142884.D	1	06/26/25 09:20	06/27/25 10:49	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	28.9	U	28.9	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	33.6	U	33.6	170	ug/Kg
99-09-2	3-Nitroaniline	46.0	U	46.0	170	ug/Kg
83-32-9	Acenaphthene	21.3	U	21.3	170	ug/Kg
51-28-5	2,4-Dinitrophenol	230	U	230	330	ug/Kg
100-02-7	4-Nitrophenol	110	U	110	330	ug/Kg
132-64-9	Dibenzofuran	22.7	U	22.7	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	50.1	U	50.1	170	ug/Kg
84-66-2	Diethylphthalate	28.3	U	28.3	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	26.7	U	26.7	170	ug/Kg
86-73-7	Fluorene	25.3	U	25.3	170	ug/Kg
100-01-6	4-Nitroaniline	64.2	U	64.2	170	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	100	U	100	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	32.9	U	32.9	170	ug/Kg
101-55-3	4-Bromophenyl-phenylether	27.8	U	27.8	170	ug/Kg
118-74-1	Hexachlorobenzene	25.3	U	25.3	170	ug/Kg
1912-24-9	Atrazine	34.0	U	34.0	170	ug/Kg
87-86-5	Pentachlorophenol	51.3	U	51.3	330	ug/Kg
85-01-8	Phenanthrene	20.9	U	20.9	170	ug/Kg
120-12-7	Anthracene	33.3	U	33.3	170	ug/Kg
86-74-8	Carbazole	31.2	U	31.2	170	ug/Kg
84-74-2	Di-n-butylphthalate	47.9	U	47.9	170	ug/Kg
206-44-0	Fluoranthene	30.0	U	30.0	170	ug/Kg
129-00-0	Pyrene	36.0	U	36.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	71.4	U	71.4	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	36.7	U	36.7	330	ug/Kg
56-55-3	Benzo(a)anthracene	23.0	U	23.0	170	ug/Kg
218-01-9	Chrysene	19.9	U	19.9	170	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	59.2	U	59.2	170	ug/Kg
117-84-0	Di-n-octyl phthalate	86.8	U	86.8	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	19.0	U	19.0	170	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168625BL	SDG No.:	Q2413
Lab Sample ID:	PB168625BL	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142884.D	1	06/26/25 09:20	06/27/25 10:49	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	22.4	U	22.4	170	ug/Kg
50-32-8	Benzo(a)pyrene	29.5	U	29.5	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	29.1	U	29.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	27.4	U	27.4	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	25.7	U	25.7	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	25.6	U	25.6	170	ug/Kg
123-91-1	1,4-Dioxane	45.2	U	45.2	170	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	27.4	U	27.4	170	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	127		18 - 112	84%	SPK: 150
13127-88-3	Phenol-d6	127		15 - 107	85%	SPK: 150
4165-60-0	Nitrobenzene-d5	81.6		18 - 107	82%	SPK: 100
321-60-8	2-Fluorobiphenyl	77.4		20 - 109	77%	SPK: 100
118-79-6	2,4,6-Tribromophenol	134		10 - 116	89%	SPK: 150
1718-51-0	Terphenyl-d14	78.5		10 - 105	78%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	77100	6.875
1146-65-2	Naphthalene-d8	295000	8.157
15067-26-2	Acenaphthene-d10	163000	9.916
1517-22-2	Phenanthrene-d10	285000	11.404
1719-03-5	Chrysene-d12	168000	14.051
1520-96-3	Perylene-d12	159000	15.545

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:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168625BS	SDG No.:	Q2413
Lab Sample ID:	PB168625BS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142885.D	1	06/26/25 09:20	06/27/25 11:19	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	940		160	330	ug/Kg
108-95-2	Phenol	1400		22.1	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1400		24.3	170	ug/Kg
95-57-8	2-Chlorophenol	1400		24.4	170	ug/Kg
95-48-7	2-Methylphenol	1400		29.9	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1400		37.5	170	ug/Kg
98-86-2	Acetophenone	1400		29.5	170	ug/Kg
65794-96-9	3+4-Methylphenols	1500		41.1	330	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1400		47.4	79.9	ug/Kg
67-72-1	Hexachloroethane	1400		17.6	170	ug/Kg
98-95-3	Nitrobenzene	1400		18.3	170	ug/Kg
78-59-1	Isophorone	1400		32.8	170	ug/Kg
88-75-5	2-Nitrophenol	1500		58.2	170	ug/Kg
105-67-9	2,4-Dimethylphenol	1400		64.8	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1400		30.8	170	ug/Kg
120-83-2	2,4-Dichlorophenol	1500		28.3	170	ug/Kg
91-20-3	Naphthalene	1400		22.7	170	ug/Kg
106-47-8	4-Chloroaniline	920		35.4	170	ug/Kg
87-68-3	Hexachlorobutadiene	1400		25.3	170	ug/Kg
105-60-2	Caprolactam	1700		52.1	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1500		28.7	170	ug/Kg
91-57-6	2-Methylnaphthalene	1400		25.6	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	2800	E	120	330	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1400		19.8	170	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1400		29.1	170	ug/Kg
92-52-4	1,1-Biphenyl	1400		21.8	170	ug/Kg
91-58-7	2-Chloronaphthalene	1400		22.5	170	ug/Kg
88-74-4	2-Nitroaniline	1500		48.1	170	ug/Kg
131-11-3	Dimethylphthalate	1500		27.1	170	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168625BS	SDG No.:	Q2413
Lab Sample ID:	PB168625BS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142885.D	1	06/26/25 09:20	06/27/25 11:19	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1400		28.9	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	1500		33.6	170	ug/Kg
99-09-2	3-Nitroaniline	1000		46.0	170	ug/Kg
83-32-9	Acenaphthene	1600		21.3	170	ug/Kg
51-28-5	2,4-Dinitrophenol	3300	E	230	330	ug/Kg
100-02-7	4-Nitrophenol	3100	E	110	330	ug/Kg
132-64-9	Dibenzofuran	1400		22.7	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	1600		50.1	170	ug/Kg
84-66-2	Diethylphthalate	1500		28.3	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1400		26.7	170	ug/Kg
86-73-7	Fluorene	1400		25.3	170	ug/Kg
100-01-6	4-Nitroaniline	1500		64.2	170	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1500		100	330	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1400		32.9	170	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1400		27.8	170	ug/Kg
118-74-1	Hexachlorobenzene	1400		25.3	170	ug/Kg
1912-24-9	Atrazine	1700		34.0	170	ug/Kg
87-86-5	Pentachlorophenol	3000	E	51.3	330	ug/Kg
85-01-8	Phenanthrene	1400		20.9	170	ug/Kg
120-12-7	Anthracene	1400		33.3	170	ug/Kg
86-74-8	Carbazole	1500		31.2	170	ug/Kg
84-74-2	Di-n-butylphthalate	1700		47.9	170	ug/Kg
206-44-0	Fluoranthene	1500		30.0	170	ug/Kg
129-00-0	Pyrene	1400		36.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	1700		71.4	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	760		36.7	330	ug/Kg
56-55-3	Benzo(a)anthracene	1500		23.0	170	ug/Kg
218-01-9	Chrysene	1500		19.9	170	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1500		59.2	170	ug/Kg
117-84-0	Di-n-octyl phthalate	1400		86.7	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	1500		19.0	170	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168625BS	SDG No.:	Q2413
Lab Sample ID:	PB168625BS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142885.D	1	06/26/25 09:20	06/27/25 11:19	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1500		22.4	170	ug/Kg
50-32-8	Benzo(a)pyrene	1500		29.5	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1400		29.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1300		27.4	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1400		25.7	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1400		25.6	170	ug/Kg
123-91-1	1,4-Dioxane	1100		45.2	170	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1500		27.4	170	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	121		18 - 112	81%	SPK: 150
13127-88-3	Phenol-d6	122		15 - 107	81%	SPK: 150
4165-60-0	Nitrobenzene-d5	77.0		18 - 107	77%	SPK: 100
321-60-8	2-Fluorobiphenyl	74.7		20 - 109	75%	SPK: 100
118-79-6	2,4,6-Tribromophenol	132		10 - 116	88%	SPK: 150
1718-51-0	Terphenyl-d14	78.2		10 - 105	78%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	79300	6.875			
1146-65-2	Naphthalene-d8	306000	8.163			
15067-26-2	Acenaphthene-d10	167000	9.922			
1517-22-2	Phenanthrene-d10	286000	11.41			
1719-03-5	Chrysene-d12	165000	14.057			
1520-96-3	Perylene-d12	167000	15.545			

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:	CDM Smith	Date Collected:	06/25/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	MH-G/HMS	SDG No.:	Q2413
Lab Sample ID:	Q2416-01MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.7
Sample Wt/Vol:	50.09 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142872.D	1	06/26/25 09:20	06/26/25 17:06	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	640		100	220	ug/Kg
108-95-2	Phenol	900		14.8	110	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	940		16.2	110	ug/Kg
95-57-8	2-Chlorophenol	960		16.3	110	ug/Kg
95-48-7	2-Methylphenol	950		20.0	110	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	890		25.0	110	ug/Kg
98-86-2	Acetophenone	950		19.7	110	ug/Kg
65794-96-9	3+4-Methylphenols	960		27.4	220	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	940		31.6	53.4	ug/Kg
67-72-1	Hexachloroethane	940		11.8	110	ug/Kg
98-95-3	Nitrobenzene	940		12.2	110	ug/Kg
78-59-1	Isophorone	940		21.9	110	ug/Kg
88-75-5	2-Nitrophenol	990		38.9	110	ug/Kg
105-67-9	2,4-Dimethylphenol	940		43.3	110	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	940		20.6	110	ug/Kg
120-83-2	2,4-Dichlorophenol	950		18.9	110	ug/Kg
91-20-3	Naphthalene	940		15.2	110	ug/Kg
106-47-8	4-Chloroaniline	220		23.6	110	ug/Kg
87-68-3	Hexachlorobutadiene	940		16.9	110	ug/Kg
105-60-2	Caprolactam	1000		34.8	220	ug/Kg
59-50-7	4-Chloro-3-methylphenol	970		19.2	110	ug/Kg
91-57-6	2-Methylnaphthalene	940		17.1	110	ug/Kg
77-47-4	Hexachlorocyclopentadiene	1700		77.5	220	ug/Kg
88-06-2	2,4,6-Trichlorophenol	920		13.2	110	ug/Kg
95-95-4	2,4,5-Trichlorophenol	940		19.4	110	ug/Kg
92-52-4	1,1-Biphenyl	950		14.6	110	ug/Kg
91-58-7	2-Chloronaphthalene	940		15.0	110	ug/Kg
88-74-4	2-Nitroaniline	1000		32.1	110	ug/Kg
131-11-3	Dimethylphthalate	990		18.1	110	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/25/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	MH-G/HMS	SDG No.:	Q2413
Lab Sample ID:	Q2416-01MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.7
Sample Wt/Vol:	50.09 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142872.D	1	06/26/25 09:20	06/26/25 17:06	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	940		19.3	110	ug/Kg
606-20-2	2,6-Dinitrotoluene	1000		22.4	110	ug/Kg
99-09-2	3-Nitroaniline	480		30.7	110	ug/Kg
83-32-9	Acenaphthene	900		14.2	110	ug/Kg
51-28-5	2,4-Dinitrophenol	160	J	150	220	ug/Kg
100-02-7	4-Nitrophenol	1700		71.4	220	ug/Kg
132-64-9	Dibenzofuran	940		15.2	110	ug/Kg
121-14-2	2,4-Dinitrotoluene	1000		33.5	110	ug/Kg
84-66-2	Diethylphthalate	1000		18.9	110	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	950		17.8	110	ug/Kg
86-73-7	Fluorene	950		16.9	110	ug/Kg
100-01-6	4-Nitroaniline	970		42.9	110	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	200	J	68.8	220	ug/Kg
86-30-6	n-Nitrosodiphenylamine	970		22.0	110	ug/Kg
101-55-3	4-Bromophenyl-phenylether	980		18.6	110	ug/Kg
118-74-1	Hexachlorobenzene	970		16.9	110	ug/Kg
1912-24-9	Atrazine	1200		22.7	110	ug/Kg
87-86-5	Pentachlorophenol	800		34.3	220	ug/Kg
85-01-8	Phenanthrene	950		14.0	110	ug/Kg
120-12-7	Anthracene	950		22.2	110	ug/Kg
86-74-8	Carbazole	960		20.8	110	ug/Kg
84-74-2	Di-n-butylphthalate	1100		32.0	110	ug/Kg
206-44-0	Fluoranthene	890		20.0	110	ug/Kg
129-00-0	Pyrene	900		24.0	110	ug/Kg
85-68-7	Butylbenzylphthalate	1200		47.7	110	ug/Kg
91-94-1	3,3-Dichlorobenzidine	230		24.5	220	ug/Kg
56-55-3	Benzo(a)anthracene	960		15.4	110	ug/Kg
218-01-9	Chrysene	940		13.3	110	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1000		39.5	110	ug/Kg
117-84-0	Di-n-octyl phthalate	870		58.0	220	ug/Kg
205-99-2	Benzo(b)fluoranthene	1000		12.7	110	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/25/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	MH-G/HMS	SDG No.:	Q2413
Lab Sample ID:	Q2416-01MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.7
Sample Wt/Vol:	50.09 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142872.D	1	06/26/25 09:20	06/26/25 17:06	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	960		15.0	110	ug/Kg
50-32-8	Benzo(a)pyrene	980		19.7	110	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	660		19.4	110	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	660		18.3	110	ug/Kg
191-24-2	Benzo(g,h,i)perylene	590		17.2	110	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	940		17.1	110	ug/Kg
123-91-1	1,4-Dioxane	820		30.2	110	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	810		18.3	110	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	72.2		18 - 112	48%	SPK: 150
13127-88-3	Phenol-d6	75.2		15 - 107	50%	SPK: 150
4165-60-0	Nitrobenzene-d5	45.0		18 - 107	45%	SPK: 100
321-60-8	2-Fluorobiphenyl	46.3		20 - 109	46%	SPK: 100
118-79-6	2,4,6-Tribromophenol	68.4		10 - 116	46%	SPK: 150
1718-51-0	Terphenyl-d14	45.4		10 - 105	45%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	84900	6.875			
1146-65-2	Naphthalene-d8	323000	8.163			
15067-26-2	Acenaphthene-d10	169000	9.922			
1517-22-2	Phenanthrene-d10	278000	11.41			
1719-03-5	Chrysene-d12	150000	14.057			
1520-96-3	Perylene-d12	169000	15.545			

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:	CDM Smith	Date Collected:	06/25/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	MH-G/HMSD	SDG No.:	Q2413
Lab Sample ID:	Q2416-01MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.7
Sample Wt/Vol:	50.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142873.D	1	06/26/25 09:20	06/26/25 17:36	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	650		100	220	ug/Kg
108-95-2	Phenol	920		14.8	110	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	950		16.2	110	ug/Kg
95-57-8	2-Chlorophenol	960		16.3	110	ug/Kg
95-48-7	2-Methylphenol	970		20.0	110	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	910		25.1	110	ug/Kg
98-86-2	Acetophenone	970		19.7	110	ug/Kg
65794-96-9	3+4-Methylphenols	980		27.5	220	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	980		31.7	53.5	ug/Kg
67-72-1	Hexachloroethane	950		11.8	110	ug/Kg
98-95-3	Nitrobenzene	960		12.2	110	ug/Kg
78-59-1	Isophorone	970		21.9	110	ug/Kg
88-75-5	2-Nitrophenol	1000		38.9	110	ug/Kg
105-67-9	2,4-Dimethylphenol	970		43.3	110	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	970		20.6	110	ug/Kg
120-83-2	2,4-Dichlorophenol	970		18.9	110	ug/Kg
91-20-3	Naphthalene	960		15.2	110	ug/Kg
106-47-8	4-Chloroaniline	240		23.7	110	ug/Kg
87-68-3	Hexachlorobutadiene	950		16.9	110	ug/Kg
105-60-2	Caprolactam	1100		34.8	220	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1000		19.2	110	ug/Kg
91-57-6	2-Methylnaphthalene	970		17.1	110	ug/Kg
77-47-4	Hexachlorocyclopentadiene	1700		77.5	220	ug/Kg
88-06-2	2,4,6-Trichlorophenol	920		13.2	110	ug/Kg
95-95-4	2,4,5-Trichlorophenol	950		19.4	110	ug/Kg
92-52-4	1,1-Biphenyl	960		14.6	110	ug/Kg
91-58-7	2-Chloronaphthalene	940		15.0	110	ug/Kg
88-74-4	2-Nitroaniline	1000		32.1	110	ug/Kg
131-11-3	Dimethylphthalate	1000		18.1	110	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/25/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	MH-G/HMSD	SDG No.:	Q2413
Lab Sample ID:	Q2416-01MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.7
Sample Wt/Vol:	50.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142873.D	1	06/26/25 09:20	06/26/25 17:36	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	950		19.3	110	ug/Kg
606-20-2	2,6-Dinitrotoluene	1000		22.5	110	ug/Kg
99-09-2	3-Nitroaniline	490		30.7	110	ug/Kg
83-32-9	Acenaphthene	930		14.2	110	ug/Kg
51-28-5	2,4-Dinitrophenol	500		150	220	ug/Kg
100-02-7	4-Nitrophenol	1800	E	71.5	220	ug/Kg
132-64-9	Dibenzofuran	950		15.2	110	ug/Kg
121-14-2	2,4-Dinitrotoluene	1000		33.5	110	ug/Kg
84-66-2	Diethylphthalate	1000		18.9	110	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	950		17.8	110	ug/Kg
86-73-7	Fluorene	960		16.9	110	ug/Kg
100-01-6	4-Nitroaniline	980		42.9	110	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	400		68.8	220	ug/Kg
86-30-6	n-Nitrosodiphenylamine	980		22.0	110	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1000		18.6	110	ug/Kg
118-74-1	Hexachlorobenzene	970		16.9	110	ug/Kg
1912-24-9	Atrazine	1200		22.7	110	ug/Kg
87-86-5	Pentachlorophenol	1200		34.3	220	ug/Kg
85-01-8	Phenanthrene	970		14.0	110	ug/Kg
120-12-7	Anthracene	970		22.3	110	ug/Kg
86-74-8	Carbazole	970		20.9	110	ug/Kg
84-74-2	Di-n-butylphthalate	1200		32.0	110	ug/Kg
206-44-0	Fluoranthene	950		20.1	110	ug/Kg
129-00-0	Pyrene	890		24.1	110	ug/Kg
85-68-7	Butylbenzylphthalate	1200		47.7	110	ug/Kg
91-94-1	3,3-Dichlorobenzidine	220		24.5	220	ug/Kg
56-55-3	Benzo(a)anthracene	970		15.4	110	ug/Kg
218-01-9	Chrysene	970		13.3	110	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1000		39.6	110	ug/Kg
117-84-0	Di-n-octyl phthalate	900		58.0	220	ug/Kg
205-99-2	Benzo(b)fluoranthene	1100		12.7	110	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/25/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	MH-G/HMSD	SDG No.:	Q2413
Lab Sample ID:	Q2416-01MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	89.7
Sample Wt/Vol:	50.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142873.D	1	06/26/25 09:20	06/26/25 17:36	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1000		15.0	110	ug/Kg
50-32-8	Benzo(a)pyrene	1000		19.7	110	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	730		19.4	110	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	730		18.3	110	ug/Kg
191-24-2	Benzo(g,h,i)perylene	660		17.2	110	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	950		17.1	110	ug/Kg
123-91-1	1,4-Dioxane	840		30.2	110	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	880		18.3	110	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	73.8		18 - 112	49%	SPK: 150
13127-88-3	Phenol-d6	76.1		15 - 107	51%	SPK: 150
4165-60-0	Nitrobenzene-d5	46.2		18 - 107	46%	SPK: 100
321-60-8	2-Fluorobiphenyl	46.1		20 - 109	46%	SPK: 100
118-79-6	2,4,6-Tribromophenol	70.7		10 - 116	47%	SPK: 150
1718-51-0	Terphenyl-d14	45.3		10 - 105	45%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	79900	6.875			
1146-65-2	Naphthalene-d8	304000	8.163			
15067-26-2	Acenaphthene-d10	163000	9.922			
1517-22-2	Phenanthrene-d10	267000	11.41			
1719-03-5	Chrysene-d12	150000	14.057			
1520-96-3	Perylene-d12	167000	15.545			

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-BF061925.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Jun 20 05:06:14 2025
 Response Via : Initial Calibration

Calibration Files

2.5 =BF142788.D 5 =BF142789.D 10 =BF142790.D 20 =BF142791.D 40 =BF142792.D 50 =BF142793.D 60 =BF142794.D 80 =BF142795.D

	Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----									
2)	1,4-Dioxane	0.479	0.499	0.471	0.461	0.509	0.479	0.467	0.480		3.60
3)	Pyridine	1.190	1.195	1.190	1.164	1.303	1.209	1.181	1.205		3.78
4)	n-Nitrosodimet...	0.610	0.617	0.596	0.668	0.632	0.614	0.623			3.98
5) S	2-Fluorophenol	2.475	2.460	2.460	2.299	2.525	2.342	2.256	2.403		4.26
6)	Aniline	1.951	1.944	1.891	1.818	1.982	1.869	1.746	1.886		4.41
7) S	Phenol-d6	3.024	2.962	2.846	2.681	2.959	2.760	2.610	2.834		5.53
8)	2-Chlorophenol	1.362	1.303	1.292	1.245	1.366	1.272	1.231	1.296		4.08
9)	Benzaldehyde	0.988	0.943	0.757	0.832	0.684		0.841			15.02
10) C	Phenol	1.648	1.653	1.591	1.516	1.651	1.530	1.437	1.575		5.31
11)	bis(2-Chloroet...	1.167	1.133	1.134	1.072	1.183	1.116	1.077	1.126		3.71
12)	1,3-Dichlorobe...	1.536	1.499	1.470	1.377	1.500	1.414	1.348	1.449		4.85
13) C	1,4-Dichlorobe...	1.563	1.496	1.472	1.409	1.523	1.425	1.347	1.462		5.04
14)	1,2-Dichlorobe...	1.458	1.422	1.409	1.331	1.451	1.353	1.284	1.387		4.72
15)	Benzyl Alcohol	1.023	1.025	0.976	1.106	1.032	0.985	1.025			4.51
16)	2,2'-oxybis(1-...	1.975	1.869	1.815	1.723	1.879	1.758	1.644	1.809		6.12
17)	2-Methylphenol	1.015	0.997	0.980	0.938	1.043	0.972	0.929	0.982		4.13
18)	Hexachloroethane	0.533	0.521	0.507	0.499	0.539	0.498	0.484	0.511		3.89
19) P	n-Nitroso-di-n...	0.831	0.879	0.840	0.833	0.787	0.847	0.812	0.766	0.824	4.30
20)	3+4-Methylphenols	1.292	1.262	1.176	1.312	1.197	1.108	1.224			6.36
21) I	Naphthalene-d8	-----ISTD-----									
22)	Acetophenone	0.464	0.451	0.459	0.418	0.461	0.428	0.406	0.441		5.28
23) S	Nitrobenzene-d5	0.738	0.724	0.747	0.708	0.771	0.724	0.694	0.729		3.48
24)	Nitrobenzene	0.345	0.325	0.332	0.319	0.349	0.326	0.314	0.330		3.88
25)	Isophorone	0.611	0.582	0.592	0.555	0.616	0.584	0.554	0.585		4.17
26) C	2-Nitrophenol	0.169	0.172	0.182	0.178	0.194	0.186	0.176	0.180		4.85
27)	2,4-Dimethylph...	0.322	0.310	0.318	0.300	0.329	0.307	0.294	0.311		3.99
28)	bis(2-Chloroet...	0.386	0.373	0.383	0.355	0.390	0.366	0.351	0.372		4.09
29) C	2,4-Dichloroph...	0.291	0.280	0.290	0.273	0.298	0.277	0.268	0.282		3.77
30)	1,2,4-Trichlor...	0.324	0.316	0.318	0.299	0.324	0.301	0.292	0.310		4.26
31)	Naphthalene	1.051	1.002	1.004	0.934	1.017	0.943	0.902	0.979		5.46
32)	Benzoic acid	0.118	0.147	0.157	0.181	0.180	0.169	0.159			15.08
33)	4-Chloroaniline	0.414	0.408	0.409	0.379	0.421	0.393	0.363	0.398		5.26
34) C	Hexachlorobuta...	0.195	0.188	0.198	0.184	0.200	0.184	0.179	0.190		4.30
35)	Caprolactam	0.073	0.075	0.072	0.081	0.078	0.069	0.075			5.84
36) C	4-Chloro-3-met...	0.300	0.275	0.286	0.269	0.298	0.278	0.260	0.281		5.24
37)	2-Methylnaphth...	0.655	0.621	0.629	0.579	0.631	0.583	0.550	0.607		6.12
38)	1-Methylnaphth...	0.684	0.645	0.650	0.598	0.654	0.604	0.563	0.628		6.56

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF061925.M

39) I	Acenaphthene-d10	-----ISTD-----									
40)	1,2,4,5-Tetrac...	0.626	0.609	0.602	0.557	0.598	0.577	0.563	0.590	4.27	
41) P	Hexachlorocycl...	0.235	0.308	0.336	0.365	0.376	0.389	0.335	17.02		
42) S	2,4,6-Tribromo...	0.415	0.414	0.428	0.400	0.438	0.411	0.374	0.412	4.96	
43) C	2,4,6-Trichlor...	0.385	0.380	0.394	0.365	0.408	0.389	0.371	0.385	3.71	
44)	2,4,5-Trichlor...	0.407	0.403	0.421	0.391	0.416	0.407	0.388	0.405	2.95	
45) S	2-Fluorobiphenyl	3.480	3.272	3.184	2.861	2.999	2.816	2.702	3.045	9.15	
46)	1,1'-Biphenyl	1.701	1.616	1.637	1.505	1.609	1.525	1.466	1.580	5.27	
47)	2-Chloronaphth...	1.300	1.202	1.208	1.129	1.209	1.145	1.106	1.186	5.50	
48)	2-Nitroaniline	0.321	0.329	0.337	0.324	0.358	0.337	0.320	0.332	3.93	
49)	Acenaphthylene	2.110	2.006	2.011	1.861	1.995	1.891	1.787	1.952	5.64	
50)	Dimethylphthalate	1.372	1.334	1.330	1.228	1.335	1.277	1.186	1.295	5.17	
51)	2,6-Dinitrotol...	0.297	0.279	0.290	0.277	0.294	0.284	0.268	0.284	3.57	
52) C	Acenaphthene	1.247	1.199	1.241	1.142	1.228	1.172	1.107	1.191	4.44	
53)	3-Nitroaniline	0.311	0.311	0.316	0.302	0.338	0.320	0.292	0.313	4.52	
54) P	2,4-Dinitrophenol	0.095	0.129	0.142	0.173	0.163	0.152	0.142	19.61		
55)	Dibenzofuran	1.844	1.772	1.763	1.626	1.752	1.660	1.537	1.708	6.13	
56) P	4-Nitrophenol	0.189	0.218	0.208	0.238	0.229	0.203	0.214	8.25		
57)	2,4-Dinitrotol...	0.373	0.378	0.397	0.367	0.407	0.383	0.338	0.378	5.90	
58)	Fluorene	1.464	1.412	1.395	1.260	1.362	1.260	1.183	1.334	7.58	
59)	2,3,4,6-Tetrac...	0.327	0.327	0.339	0.312	0.345	0.331	0.304	0.326	4.43	
60)	Diethylphthalate	1.328	1.302	1.319	1.211	1.318	1.266	1.141	1.269	5.50	
61)	4-Chlorophenyl...	0.713	0.656	0.669	0.599	0.640	0.609	0.568	0.636	7.64	
62)	4-Nitroaniline	0.279	0.276	0.297	0.272	0.316	0.300	0.264	0.286	6.48	
63)	Azobenzene	1.215	1.149	1.167	1.081	1.176	1.122	1.032	1.134	5.47	
64) I	Phenanthrene-d10	-----ISTD-----									
65)	4,6-Dinitro-2-...	0.099	0.119	0.119	0.134	0.130	0.125	0.121	10.04		
66) c	n-Nitrosodiphe...	0.736	0.686	0.710	0.670	0.717	0.671	0.662	0.693	4.07	
67)	4-Bromophenyl-...	0.231	0.221	0.235	0.218	0.236	0.228	0.225	0.228	3.03	
68)	Hexachlorobenzene	0.263	0.248	0.257	0.241	0.262	0.252	0.247	0.253	3.29	
69)	Atrazine	0.176	0.172	0.180	0.174	0.195	0.183	0.174	0.179	4.48	
70) C	Pentachlorophenol	0.102	0.119	0.125	0.142	0.135	0.133	0.126	11.30		
71)	Phenanthrene	1.183	1.113	1.115	1.031	1.122	1.028	0.992	1.083	6.24	
72)	Anthracene	1.226	1.123	1.149	1.064	1.140	1.065	1.011	1.111	6.35	
73)	Carbazole	1.040	0.986	0.999	0.900	1.002	0.920	0.866	0.959	6.67	
74)	Di-n-butylphth...	0.997	1.006	1.045	0.946	1.073	0.989	0.936	0.999	4.92	
75) C	Fluoranthene	1.136	1.088	1.090	0.954	1.059	0.972	0.899	1.028	8.44	
76) I	Chrysene-d12	-----ISTD-----									
77)	Benzidine	0.745	0.860	0.773	0.824	0.719	0.587	0.751	12.71		
78)	Pyrene	2.110	1.940	1.968	1.742	2.030	1.863	1.468	1.875	11.43	
79) S	Terphenyl-d14	3.383	3.111	3.066	2.655	3.070	2.772	2.208	2.895	13.30	
80)	Butylbenzylpht...	0.478	0.470	0.538	0.547	0.613	0.597	0.563	0.544	10.01	
81)	Benzo(a)anthra...	1.392	1.358	1.366	1.265	1.403	1.376	1.284	1.349	3.98	
82)	3,3'-Dichlorob...	0.398	0.440	0.429	0.476	0.445	0.438	0.438	5.73		
83)	Chrysene	1.243	1.191	1.208	1.164	1.295	1.177	1.150	1.204	4.17	
84)	Bis(2-ethylhex...	0.650	0.675	0.767	0.803	0.861	0.843	0.878	0.782	11.52	
85) c	Di-n-octyl pht...	1.207	1.352	1.463	1.610	1.569	1.651	1.475	11.54		

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF061925.M

86) I	Perylene-d12	-----ISTD-----								
87)	Indeno(1,2,3-c...	1.528	1.488	1.545	1.474	1.648	1.539	1.442	1.523	4.38
88)	Benzo(b)fluora...	1.164	1.220	1.226	1.072	1.152	1.197	1.070	1.157	5.61
89)	Benzo(k)fluora...	1.206	1.004	1.035	1.037	1.193	1.038	1.068	1.083	7.55
90) C	Benzo(a)pyrene	1.142	1.065	1.124	1.069	1.201	1.141	1.084	1.118	4.37
91)	Dibenzo(a,h)an...	1.249	1.214	1.293	1.180	1.337	1.240	1.152	1.238	5.13
92)	Benzo(g,h,i)pe...	1.239	1.198	1.266	1.188	1.332	1.255	1.161	1.234	4.66

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413

Instrument ID: BNA_F Calibration Date/Time: 06/26/2025 09:39

Lab File ID: BF142857.D Init. Calib. Date(s): 06/19/2025 06/19/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 17:07 20:40

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.201	1.244		3.6	
Benzaldehyde	0.841	0.756		-10.1	
Phenol-d6	1.417	1.459		3.0	
Phenol	1.575	1.619		2.8	20.0
bis(2-Chloroethyl)ether	1.126	1.173		4.2	
2-Chlorophenol	1.296	1.352		4.3	
2-Methylphenol	0.982	1.017		3.6	
2,2-oxybis(1-Chloropropane)	1.809	1.816		0.4	
Acetophenone	0.441	0.456		3.4	
3+4-Methylphenols	1.224	1.278		4.4	
n-Nitroso-di-n-propylamine	0.824	0.847	0.050	2.8	
Nitrobenzene-d5	0.365	0.443		21.4	
Hexachloroethane	0.511	0.530		3.7	
Nitrobenzene	0.330	0.344		4.2	
Isophorone	0.585	0.615		5.1	
2-Nitrophenol	0.180	0.193		7.2	20.0
2,4-Dimethylphenol	0.311	0.323		3.9	
bis(2-Chloroethoxy)methane	0.372	0.389		4.6	
2,4-Dichlorophenol	0.282	0.301		6.7	20.0
Naphthalene	0.979	1.015		3.7	
4-Chloroaniline	0.398	0.413		3.8	
Hexachlorobutadiene	0.190	0.198		4.2	20.0
Caprolactam	0.075	0.085		13.3	
4-Chloro-3-methylphenol	0.281	0.301		7.1	20.0
2-Methylnaphthalene	0.607	0.638		5.1	
Hexachlorocyclopentadiene	0.335	0.315	0.050	-6.0	
2,4,6-Trichlorophenol	0.385	0.387		0.5	20.0
2-Fluorobiphenyl	1.522	1.697		11.5	
2,4,5-Trichlorophenol	0.405	0.414		2.2	
1,1-Biphenyl	1.580	1.562		-1.1	
2-Chloronaphthalene	1.186	1.175		-0.9	
2-Nitroaniline	0.332	0.348		4.8	
Dimethylphthalate	1.295	1.362		5.2	
Acenaphthylene	1.952	1.953		0.1	
2,6-Dinitrotoluene	0.284	0.300		5.6	
3-Nitroaniline	0.313	0.339		8.3	
Acenaphthene	1.191	1.201		0.8	20.0
2,4-Dinitrophenol	0.142	0.164	0.050	15.5	
4-Nitrophenol	0.214	0.232	0.050	8.4	

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413

Instrument ID: BNA_F Calibration Date/Time: 06/26/2025 09:39

Lab File ID: BF142857.D Init. Calib. Date(s): 06/19/2025 06/19/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 17:07 20:40

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.708	1.724		0.9	
2,4-Dinitrotoluene	0.378	0.411		8.7	
Diethylphthalate	1.269	1.362		7.3	
4-Chlorophenyl-phenylether	0.636	0.652		2.5	
Fluorene	1.334	1.364		2.2	
4-Nitroaniline	0.286	0.329		15.0	
4,6-Dinitro-2-methylphenol	0.121	0.131		8.3	
n-Nitrosodiphenylamine	0.693	0.693		0.0	20.0
2,4,6-Tribromophenol	0.206	0.223		8.3	
4-Bromophenyl-phenylether	0.228	0.233		2.2	
Hexachlorobenzene	0.253	0.261		3.2	
Atrazine	0.179	0.208		16.2	
Pentachlorophenol	0.126	0.138		9.5	20.0
Phenanthrene	1.083	1.100		1.6	
Anthracene	1.111	1.136		2.3	
Carbazole	0.959	1.025		6.9	
Di-n-butylphthalate	0.999	1.187		18.8	
Fluoranthene	1.028	1.123		9.2	20.0
Pyrene	1.875	1.932		3.0	
Terphenyl-d14	1.447	1.677		15.9	
Butylbenzylphthalate	0.544	0.638		17.3	
3,3-Dichlorobenzidine	0.438	0.428		-2.3	
Benzo (a) anthracene	1.349	1.377		2.1	
Chrysene	1.204	1.250		3.8	
Bis(2-ethylhexyl)phthalate	0.782	0.763		-2.4	
Di-n-octyl phthalate	1.475	1.247		-15.5	20.0
Benzo (b) fluoranthene	1.157	1.283		10.9	
Benzo (k) fluoranthene	1.083	1.100		1.6	
Benzo (a) pyrene	1.118	1.173		4.9	20.0
Indeno (1,2,3-cd) pyrene	1.523	1.584		4.0	
Dibenzo (a,h) anthracene	1.238	1.292		4.4	
Benzo (g,h,i) perylene	1.234	1.288		4.4	
1,2,4,5-Tetrachlorobenzene	0.590	0.588		-0.3	
1,4-Dioxane	0.480	0.489		1.9	20.0
2,3,4,6-Tetrachlorophenol	0.326	0.337		3.4	

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413

Instrument ID: BNA_F Calibration Date/Time: 06/27/2025 09:51

Lab File ID: BF142882.D Init. Calib. Date(s): 06/19/2025 06/19/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 17:07 20:40

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.201	1.268		5.6	
Benzaldehyde	0.841	0.751		-10.7	
Phenol-d6	1.417	1.473		4.0	
Phenol	1.575	1.619		2.8	20.0
bis(2-Chloroethyl)ether	1.126	1.162		3.2	
2-Chlorophenol	1.296	1.373		5.9	
2-Methylphenol	0.982	1.026		4.5	
2,2-oxybis(1-Chloropropane)	1.809	1.791		-1.0	
Acetophenone	0.441	0.458		3.9	
3+4-Methylphenols	1.224	1.279		4.5	
n-Nitroso-di-n-propylamine	0.824	0.862	0.050	4.6	
Nitrobenzene-d5	0.365	0.451		23.6	
Hexachloroethane	0.511	0.545		6.7	
Nitrobenzene	0.330	0.342		3.6	
Isophorone	0.585	0.610		4.3	
2-Nitrophenol	0.180	0.196		8.9	20.0
2,4-Dimethylphenol	0.311	0.329		5.8	
bis(2-Chloroethoxy)methane	0.372	0.388		4.3	
2,4-Dichlorophenol	0.282	0.296		5.0	20.0
Naphthalene	0.979	1.021		4.3	
4-Chloroaniline	0.398	0.419		5.3	
Hexachlorobutadiene	0.190	0.197		3.7	20.0
Caprolactam	0.075	0.086		14.7	
4-Chloro-3-methylphenol	0.281	0.297		5.7	20.0
2-Methylnaphthalene	0.607	0.630		3.8	
Hexachlorocyclopentadiene	0.335	0.307	0.050	-8.4	
2,4,6-Trichlorophenol	0.385	0.393		2.1	20.0
2-Fluorobiphenyl	1.522	1.783		17.1	
2,4,5-Trichlorophenol	0.405	0.419		3.5	
1,1-Biphenyl	1.580	1.619		2.5	
2-Chloronaphthalene	1.186	1.205		1.6	
2-Nitroaniline	0.332	0.350		5.4	
Dimethylphthalate	1.295	1.378		6.4	
Acenaphthylene	1.952	2.007		2.8	
2,6-Dinitrotoluene	0.284	0.300		5.6	
3-Nitroaniline	0.313	0.334		6.7	
Acenaphthene	1.191	1.235		3.7	20.0
2,4-Dinitrophenol	0.142	0.145	0.050	2.1	
4-Nitrophenol	0.214	0.216	0.050	0.9	

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413

Instrument ID: BNA_F Calibration Date/Time: 06/27/2025 09:51

Lab File ID: BF142882.D Init. Calib. Date(s): 06/19/2025 06/19/2025

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 17:07 20:40

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

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.708	1.749		2.4	
2,4-Dinitrotoluene	0.378	0.410		8.5	
Diethylphthalate	1.269	1.368		7.8	
4-Chlorophenyl-phenylether	0.636	0.666		4.7	
Fluorene	1.334	1.383		3.7	
4-Nitroaniline	0.286	0.323		12.9	
4,6-Dinitro-2-methylphenol	0.121	0.130		7.4	
n-Nitrosodiphenylamine	0.693	0.709		2.3	20.0
2,4,6-Tribromophenol	0.206	0.217		5.3	
4-Bromophenyl-phenylether	0.228	0.236		3.5	
Hexachlorobenzene	0.253	0.258		2.0	
Atrazine	0.179	0.204		14.0	
Pentachlorophenol	0.126	0.126		0.0	20.0
Phenanthrene	1.083	1.105		2.0	
Anthracene	1.111	1.136		2.3	
Carbazole	0.959	1.002		4.5	
Di-n-butylphthalate	0.999	1.136		13.7	
Fluoranthene	1.028	1.075		4.6	20.0
Pyrene	1.875	1.800		-4.0	
Terphenyl-d14	1.447	1.565		8.2	
Butylbenzylphthalate	0.544	0.620		14.0	
3,3-Dichlorobenzidine	0.438	0.468		6.8	
Benzo (a) anthracene	1.349	1.390		3.0	
Chrysene	1.204	1.236		2.7	
Bis(2-ethylhexyl)phthalate	0.782	0.880		12.5	
Di-n-octyl phthalate	1.475	1.541		4.5	20.0
Benzo (b) fluoranthene	1.157	1.220		5.4	
Benzo (k) fluoranthene	1.083	1.142		5.4	
Benzo (a) pyrene	1.118	1.169		4.6	20.0
Indeno (1,2,3-cd) pyrene	1.523	1.469		-3.5	
Dibenzo (a,h) anthracene	1.238	1.198		-3.2	
Benzo (g,h,i) perylene	1.234	1.183		-4.1	
1,2,4,5-Tetrachlorobenzene	0.590	0.606		2.7	
1,4-Dioxane	0.480	0.483		0.6	20.0
2,3,4,6-Tetrachlorophenol	0.326	0.340		4.3	

All other compounds must meet a minimum RRF of 0.010.