

Hit Summary Sheet SW-846

SDG No.: Q2032
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-11								
Q2032-01	TP-11	SOIL	Bis(2-ethylhexyl)phthalate	190.000	J	77.4	220	ug/Kg
Total Svoc :				190.00				
Q2032-01	TP-11	SOIL	Isopropyl Alcohol	*	160.000	J	0	ug/Kg
Q2032-01	TP-11	SOIL	n-Hexadecanoic acid	*	380.000	J	0	ug/Kg
Q2032-01	TP-11	SOIL	Octadecanoic acid	*	140.000	J	0	ug/Kg
Q2032-01	TP-11	SOIL	Trichloroacetic acid, hexadecyl es	*	130.000	J	0	ug/Kg
Q2032-01	TP-11	SOIL	unknown10.028	*	130.000	J	0	ug/Kg
Q2032-01	TP-11	SOIL	1-Phenoxypropan-2-ol	*	170.000	J	0	ug/Kg
Q2032-01	TP-11	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	240.000	AB	0	ug/Kg
Total Tics :				1,350.00				
Total Concentration:				1,540.00				
Client ID : TP-29								
Q2032-02	TP-29	SOIL	(S)-(+)-1,2-Propanediol	*	88.100	J	0	ug/Kg
Q2032-02	TP-29	SOIL	1-Heneicosanol	*	98.500	J	0	ug/Kg
Q2032-02	TP-29	SOIL	1-Phenoxypropan-2-ol	*	98.500	J	0	ug/Kg
Q2032-02	TP-29	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB	0	ug/Kg
Q2032-02	TP-29	SOIL	n-Hexadecanoic acid	*	130.000	J	0	ug/Kg
Q2032-02	TP-29	SOIL	unknown10.033	*	2,100.000	J	0	ug/Kg
Total Tics :				2,765.10				
Total Concentration:				2,765.10				
Client ID : TP-29-99								
Q2032-03	TP-29-99	SOIL	1-Propanol, 3-phenoxy-	*	120.000	J	0	ug/Kg
Q2032-03	TP-29-99	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB	0	ug/Kg
Q2032-03	TP-29-99	SOIL	Heptafluorobutyric acid, hexadecyl	*	120.000	J	0	ug/Kg
Q2032-03	TP-29-99	SOIL	n-Hexadecanoic acid	*	150.000	J	0	ug/Kg
Q2032-03	TP-29-99	SOIL	unknown10.034	*	1,200.000	J	0	ug/Kg
Q2032-03	TP-29-99	SOIL	unknown3.422	*	150.000	J	0	ug/Kg
Total Tics :				1,990.00				
Total Concentration:				1,990.00				
Client ID : TP-24								
Q2032-04	TP-24	SOIL	1-Phenoxypropan-2-ol	*	180.000	J	0	ug/Kg
Q2032-04	TP-24	SOIL	1-Tetracosene	*	220.000	J	0	ug/Kg
Q2032-04	TP-24	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	310.000	AB	0	ug/Kg
Q2032-04	TP-24	SOIL	Benzophenone	*	96.400	J	0	ug/Kg
Q2032-04	TP-24	SOIL	n-Hexadecanoic acid	*	1,200.000	J	0	ug/Kg
Q2032-04	TP-24	SOIL	Octadecanoic acid	*	1,400.000	J	0	ug/Kg

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SDG No.: Q2032
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2032-04	TP-24	SOIL	Pentadecanoic acid	*	390.000	J 0	0	ug/Kg
Q2032-04	TP-24	SOIL	Propylene Glycol	*	130.000	J 0	0	ug/Kg
Q2032-04	TP-24	SOIL	unknown14.498	*	680.000	J 0	0	ug/Kg
Q2032-04	TP-24	SOIL	unknown14.522	*	1,000.000	J 0	0	ug/Kg
Total Tics :				5,606.40				
Total Concentration:				5,606.40				
Client ID : TP-37								
Q2032-07	TP-37	SOIL	1-Phenoxypropan-2-ol	*	130.000	J 0	0	ug/Kg
Q2032-07	TP-37	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB 0	0	ug/Kg
Q2032-07	TP-37	SOIL	n-Hexadecanoic acid	*	240.000	J 0	0	ug/Kg
Q2032-07	TP-37	SOIL	Trichloroacetic acid, hexadecyl es	*	230.000	J 0	0	ug/Kg
Q2032-07	TP-37	SOIL	unknown10.028	*	140.000	J 0	0	ug/Kg
Q2032-07	TP-37	SOIL	unknown3.422	*	170.000	J 0	0	ug/Kg
Total Tics :				1,160.00				
Total Concentration:				1,160.00				
Client ID : TP-32								
Q2032-08	TP-32	SOIL	1-Propanol, 3-phenoxy-	*	95.100	J 0	0	ug/Kg
Q2032-08	TP-32	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB 0	0	ug/Kg
Q2032-08	TP-32	SOIL	Heptafluorobutyric acid, hexadecy	*	160.000	J 0	0	ug/Kg
Q2032-08	TP-32	SOIL	n-Hexadecanoic acid	*	380.000	J 0	0	ug/Kg
Q2032-08	TP-32	SOIL	Octadecanoic acid	*	110.000	J 0	0	ug/Kg
Q2032-08	TP-32	SOIL	unknown10.034	*	1,700.000	J 0	0	ug/Kg
Q2032-08	TP-32	SOIL	unknown3.422	*	100.000	J 0	0	ug/Kg
Total Tics :				2,795.10				
Total Concentration:				2,795.10				
Client ID : FB-05132025								
Q2032-11	FB-05132025	WATER	2-Pentanone, 4-hydroxy-4-methyl	*	3.700	AB 0	0	ug/L
Q2032-11	FB-05132025	WATER	9-Octadecenoic acid, (E)-	*	2.800	J 0	0	ug/L
Total Tics :				6.50				
Total Concentration:				6.50				



SAMPLE DATA

A

B

C

D

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-11	SDG No.:	Q2032
Lab Sample ID:	Q2032-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	76.3
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
BF142446.D	1	05/16/25 10:00	05/19/25 12:39	PB168041

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	28.9	U	28.9	220	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	31.8	U	31.8	220	ug/Kg
95-57-8	2-Chlorophenol	31.9	U	31.9	220	ug/Kg
95-48-7	2-Methylphenol	39.1	U	39.1	220	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	49.0	U	49.0	220	ug/Kg
98-86-2	Acetophenone	38.6	U	38.6	220	ug/Kg
65794-96-9	3+4-Methylphenols	53.7	U	53.7	430	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	62.0	U	62.0	100	ug/Kg
67-72-1	Hexachloroethane	23.0	U	23.0	220	ug/Kg
98-95-3	Nitrobenzene	23.9	U	23.9	220	ug/Kg
78-59-1	Isophorone	42.9	U	42.9	220	ug/Kg
88-75-5	2-Nitrophenol	76.1	U	76.1	220	ug/Kg
105-67-9	2,4-Dimethylphenol	84.7	U	84.7	220	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	40.3	U	40.3	220	ug/Kg
120-83-2	2,4-Dichlorophenol	37.0	U	37.0	220	ug/Kg
91-20-3	Naphthalene	29.7	U	29.7	220	ug/Kg
106-47-8	4-Chloroaniline	46.3	U	46.3	220	ug/Kg
87-68-3	Hexachlorobutadiene	33.1	U	33.1	220	ug/Kg
105-60-2	Caprolactam	68.1	UQ	68.1	430	ug/Kg
59-50-7	4-Chloro-3-methylphenol	37.5	U	37.5	220	ug/Kg
91-57-6	2-Methylnaphthalene	33.5	U	33.5	220	ug/Kg
77-47-4	Hexachlorocyclopentadiene	150	U	150	430	ug/Kg
88-06-2	2,4,6-Trichlorophenol	25.9	U	25.9	220	ug/Kg
95-95-4	2,4,5-Trichlorophenol	38.1	U	38.1	220	ug/Kg
92-52-4	1,1-Biphenyl	28.5	U	28.5	220	ug/Kg
91-58-7	2-Chloronaphthalene	29.4	U	29.4	220	ug/Kg
88-74-4	2-Nitroaniline	62.9	U	62.9	220	ug/Kg
131-11-3	Dimethylphthalate	35.4	U	35.4	220	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-11	SDG No.:	Q2032
Lab Sample ID:	Q2032-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	76.3
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
BF142446.D	1	05/16/25 10:00	05/19/25 12:39	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	37.8	U	37.8	220	ug/Kg
606-20-2	2,6-Dinitrotoluene	43.9	U	43.9	220	ug/Kg
99-09-2	3-Nitroaniline	60.1	U	60.1	220	ug/Kg
83-32-9	Acenaphthene	27.9	U	27.9	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	29.7	U	29.7	220	ug/Kg
121-14-2	2,4-Dinitrotoluene	65.5	U	65.5	220	ug/Kg
84-66-2	Diethylphthalate	37.0	U	37.0	220	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	34.9	U	34.9	220	ug/Kg
86-73-7	Fluorene	33.1	U	33.1	220	ug/Kg
100-01-6	4-Nitroaniline	83.9	U	83.9	220	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	130	U	130	430	ug/Kg
86-30-6	n-Nitrosodiphenylamine	43.0	U	43.0	220	ug/Kg
101-55-3	4-Bromophenyl-phenylether	36.4	U	36.4	220	ug/Kg
118-74-1	Hexachlorobenzene	33.1	U	33.1	220	ug/Kg
1912-24-9	Atrazine	44.5	U	44.5	220	ug/Kg
87-86-5	Pentachlorophenol	67.1	U	67.1	430	ug/Kg
85-01-8	Phenanthrene	27.3	U	27.3	220	ug/Kg
120-12-7	Anthracene	43.5	U	43.5	220	ug/Kg
86-74-8	Carbazole	40.8	U	40.8	220	ug/Kg
84-74-2	Di-n-butylphthalate	62.6	U	62.6	220	ug/Kg
206-44-0	Fluoranthene	39.2	U	39.2	220	ug/Kg
129-00-0	Pyrene	47.1	U	47.1	220	ug/Kg
85-68-7	Butylbenzylphthalate	93.4	U	93.4	220	ug/Kg
91-94-1	3,3-Dichlorobenzidine	48.0	U	48.0	430	ug/Kg
56-55-3	Benzo(a)anthracene	30.1	U	30.1	220	ug/Kg
218-01-9	Chrysene	26.0	U	26.0	220	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	190	J	77.4	220	ug/Kg
117-84-0	Di-n-octyl phthalate	110	U	110	430	ug/Kg
205-99-2	Benzo(b)fluoranthene	24.8	U	24.8	220	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-11	SDG No.:	Q2032
Lab Sample ID:	Q2032-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	76.3
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
BF142446.D	1	05/16/25 10:00	05/19/25 12:39	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	29.3	U	29.3	220	ug/Kg
50-32-8	Benzo(a)pyrene	38.6	U	38.6	220	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	38.1	U	38.1	220	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	35.8	U	35.8	220	ug/Kg
191-24-2	Benzo(g,h,i)perylene	33.6	U	33.6	220	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	33.5	U	33.5	220	ug/Kg
123-91-1	1,4-Dioxane	59.1	U	59.1	220	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	35.8	U	35.8	220	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	73.1		18 - 112	49%	SPK: 150
13127-88-3	Phenol-d6	74.1		15 - 107	49%	SPK: 150
4165-60-0	Nitrobenzene-d5	50.9		18 - 107	51%	SPK: 100
321-60-8	2-Fluorobiphenyl	47.7		20 - 109	48%	SPK: 100
118-79-6	2,4,6-Tribromophenol	90.1		10 - 116	60%	SPK: 150
1718-51-0	Terphenyl-d14	50.0		10 - 105	50%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	142000	6.904
1146-65-2	Naphthalene-d8	540000	8.186
15067-26-2	Acenaphthene-d10	301000	9.939
1517-22-2	Phenanthrene-d10	542000	11.427
1719-03-5	Chrysene-d12	308000	14.063
1520-96-3	Perylene-d12	297000	15.557

TENTATIVE IDENTIFIED COMPOUNDS

000067-63-0	Isopropyl Alcohol	160	J	3.43	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	240	AB	5.12	ug/Kg
000770-35-4	1-Phenoxypropan-2-ol	170	J	8.49	ug/Kg
	unknown10.028	130	J	10.0	ug/Kg
000057-10-3	n-Hexadecanoic acid	380	J	12.0	ug/Kg
000057-11-4	Octadecanoic acid	140	J	12.7	ug/Kg
074339-54-1	Trichloroacetic acid, hexadecyl es	130	J	13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-11	SDG No.:	Q2032
Lab Sample ID:	Q2032-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	76.3
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
BF142446.D	1	05/16/25 10:00	05/19/25 12:39	PB168041

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:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29	SDG No.:	Q2032
Lab Sample ID:	Q2032-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.1
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142447.D	1	05/16/25 10:00	05/19/25 13:08	PB168041

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	25.6	U	25.6	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.2	U	28.2	200	ug/Kg
95-57-8	2-Chlorophenol	28.3	U	28.3	200	ug/Kg
95-48-7	2-Methylphenol	34.7	U	34.7	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.5	U	43.5	200	ug/Kg
98-86-2	Acetophenone	34.2	U	34.2	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.6	U	47.6	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.9	U	54.9	92.7	ug/Kg
67-72-1	Hexachloroethane	20.4	U	20.4	200	ug/Kg
98-95-3	Nitrobenzene	21.2	U	21.2	200	ug/Kg
78-59-1	Isophorone	38.0	U	38.0	200	ug/Kg
88-75-5	2-Nitrophenol	67.5	U	67.5	200	ug/Kg
105-67-9	2,4-Dimethylphenol	75.1	U	75.1	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.7	U	35.7	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.8	U	32.8	200	ug/Kg
91-20-3	Naphthalene	26.3	U	26.3	200	ug/Kg
106-47-8	4-Chloroaniline	41.0	U	41.0	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.3	U	29.3	200	ug/Kg
105-60-2	Caprolactam	60.4	UQ	60.4	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.3	U	33.3	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.7	U	29.7	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.0	U	23.0	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.7	U	33.7	200	ug/Kg
92-52-4	1,1-Biphenyl	25.3	U	25.3	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.1	U	26.1	200	ug/Kg
88-74-4	2-Nitroaniline	55.8	U	55.8	200	ug/Kg
131-11-3	Dimethylphthalate	31.4	U	31.4	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29	SDG No.:	Q2032
Lab Sample ID:	Q2032-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.1
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
Prep Method :	SW3541	Level :	LOW
		Final Vol:	1000
		Test:	SVOC-TCL BNA -20
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142447.D	1	05/16/25 10:00	05/19/25 13:08	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.5	U	33.5	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.9	U	38.9	200	ug/Kg
99-09-2	3-Nitroaniline	53.3	U	53.3	200	ug/Kg
83-32-9	Acenaphthene	24.7	U	24.7	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	380	ug/Kg
100-02-7	4-Nitrophenol	120	U	120	380	ug/Kg
132-64-9	Dibenzofuran	26.3	U	26.3	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	58.1	U	58.1	200	ug/Kg
84-66-2	Diethylphthalate	32.8	U	32.8	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.9	U	30.9	200	ug/Kg
86-73-7	Fluorene	29.3	U	29.3	200	ug/Kg
100-01-6	4-Nitroaniline	74.4	U	74.4	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.1	U	38.1	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.2	U	32.2	200	ug/Kg
118-74-1	Hexachlorobenzene	29.3	U	29.3	200	ug/Kg
1912-24-9	Atrazine	39.4	U	39.4	200	ug/Kg
87-86-5	Pentachlorophenol	59.5	U	59.5	380	ug/Kg
85-01-8	Phenanthrene	24.2	U	24.2	200	ug/Kg
120-12-7	Anthracene	38.6	U	38.6	200	ug/Kg
86-74-8	Carbazole	36.2	U	36.2	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.5	U	55.5	200	ug/Kg
206-44-0	Fluoranthene	34.8	U	34.8	200	ug/Kg
129-00-0	Pyrene	41.7	U	41.7	200	ug/Kg
85-68-7	Butylbenzylphthalate	82.8	U	82.8	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.5	U	42.5	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.7	U	26.7	200	ug/Kg
218-01-9	Chrysene	23.1	U	23.1	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.6	U	68.6	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	22.0	U	22.0	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29	SDG No.:	Q2032
Lab Sample ID:	Q2032-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.1
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142447.D	1	05/16/25 10:00	05/19/25 13:08	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	26.0	U	26.0	200	ug/Kg
50-32-8	Benzo(a)pyrene	34.2	U	34.2	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.7	U	33.7	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.8	U	31.8	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.8	U	29.8	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.7	U	29.7	200	ug/Kg
123-91-1	1,4-Dioxane	52.4	U	52.4	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.8	U	31.8	200	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	72.0		18 - 112	48%	SPK: 150
13127-88-3	Phenol-d6	72.9		15 - 107	49%	SPK: 150
4165-60-0	Nitrobenzene-d5	47.6		18 - 107	48%	SPK: 100
321-60-8	2-Fluorobiphenyl	41.5		20 - 109	42%	SPK: 100
118-79-6	2,4,6-Tribromophenol	82.5		10 - 116	55%	SPK: 150
1718-51-0	Terphenyl-d14	43.7		10 - 105	44%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	142000	6.904
1146-65-2	Naphthalene-d8	553000	8.186
15067-26-2	Acenaphthene-d10	298000	9.939
1517-22-2	Phenanthrene-d10	494000	11.427
1719-03-5	Chrysene-d12	264000	14.068
1520-96-3	Perylene-d12	297000	15.557

TENTATIVE IDENTIFIED COMPOUNDS

004254-15-3	(S)-(+)-1,2-Propanediol	88.1	J	3.43	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	250	AB	5.12	ug/Kg
000770-35-4	1-Phenoxypropan-2-ol	98.5	J	8.49	ug/Kg
	unknown10.033	2100	J	10.0	ug/Kg
000057-10-3	n-Hexadecanoic acid	130	J	11.9	ug/Kg
015594-90-8	1-Heneicosanol	98.5	J	13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29	SDG No.:	Q2032
Lab Sample ID:	Q2032-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.1
Sample Wt/Vol:	30.06	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
BF142447.D	1	05/16/25 10:00	05/19/25 13:08	PB168041

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:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29-99	SDG No.:	Q2032
Lab Sample ID:	Q2032-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.8
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
BF142448.D	1	05/16/25 10:00	05/19/25 13:37	PB168041

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	25.5	U	25.5	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.0	U	28.0	200	ug/Kg
95-57-8	2-Chlorophenol	28.1	U	28.1	200	ug/Kg
95-48-7	2-Methylphenol	34.4	U	34.4	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.2	U	43.2	200	ug/Kg
98-86-2	Acetophenone	34.0	U	34.0	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.3	U	47.3	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.6	U	54.6	92.1	ug/Kg
67-72-1	Hexachloroethane	20.3	U	20.3	200	ug/Kg
98-95-3	Nitrobenzene	21.1	U	21.1	200	ug/Kg
78-59-1	Isophorone	37.8	U	37.8	200	ug/Kg
88-75-5	2-Nitrophenol	67.0	U	67.0	200	ug/Kg
105-67-9	2,4-Dimethylphenol	74.6	U	74.6	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.5	U	35.5	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.6	U	32.6	200	ug/Kg
91-20-3	Naphthalene	26.1	U	26.1	200	ug/Kg
106-47-8	4-Chloroaniline	40.8	U	40.8	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.1	U	29.1	200	ug/Kg
105-60-2	Caprolactam	60.0	UQ	60.0	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.1	U	33.1	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.5	U	29.5	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.8	U	22.8	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.5	U	33.5	200	ug/Kg
92-52-4	1,1-Biphenyl	25.1	U	25.1	200	ug/Kg
91-58-7	2-Chloronaphthalene	25.9	U	25.9	200	ug/Kg
88-74-4	2-Nitroaniline	55.4	U	55.4	200	ug/Kg
131-11-3	Dimethylphthalate	31.2	U	31.2	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29-99	SDG No.:	Q2032
Lab Sample ID:	Q2032-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.8
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
BF142448.D	1	05/16/25 10:00	05/19/25 13:37	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.3	U	33.3	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.7	U	38.7	200	ug/Kg
99-09-2	3-Nitroaniline	53.0	U	53.0	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	57.7	U	57.7	200	ug/Kg
84-66-2	Diethylphthalate	32.6	U	32.6	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.8	U	30.8	200	ug/Kg
86-73-7	Fluorene	29.1	U	29.1	200	ug/Kg
100-01-6	4-Nitroaniline	73.9	U	73.9	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	37.9	U	37.9	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.0	U	32.0	200	ug/Kg
118-74-1	Hexachlorobenzene	29.1	U	29.1	200	ug/Kg
1912-24-9	Atrazine	39.2	U	39.2	200	ug/Kg
87-86-5	Pentachlorophenol	59.1	U	59.1	380	ug/Kg
85-01-8	Phenanthrene	24.1	U	24.1	200	ug/Kg
120-12-7	Anthracene	38.4	U	38.4	200	ug/Kg
86-74-8	Carbazole	35.9	U	35.9	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.2	U	55.2	200	ug/Kg
206-44-0	Fluoranthene	34.6	U	34.6	200	ug/Kg
129-00-0	Pyrene	41.5	U	41.5	200	ug/Kg
85-68-7	Butylbenzylphthalate	82.2	U	82.2	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.3	U	42.3	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.5	U	26.5	200	ug/Kg
218-01-9	Chrysene	22.9	U	22.9	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.2	U	68.2	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	21.9	U	21.9	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29-99	SDG No.:	Q2032
Lab Sample ID:	Q2032-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.8
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
BF142448.D	1	05/16/25 10:00	05/19/25 13:37	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.8	U	25.8	200	ug/Kg
50-32-8	Benzo(a)pyrene	34.0	U	34.0	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.5	U	33.5	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.6	U	31.6	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.6	U	29.6	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.5	U	29.5	200	ug/Kg
123-91-1	1,4-Dioxane	52.1	U	52.1	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.6	U	31.6	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	78.5		18 - 112	52%	SPK: 150
13127-88-3	Phenol-d6	77.9		15 - 107	52%	SPK: 150
4165-60-0	Nitrobenzene-d5	49.8		18 - 107	50%	SPK: 100
321-60-8	2-Fluorobiphenyl	49.1		20 - 109	49%	SPK: 100
118-79-6	2,4,6-Tribromophenol	88.2		10 - 116	59%	SPK: 150
1718-51-0	Terphenyl-d14	45.3		10 - 105	45%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	127000	6.898			
1146-65-2	Naphthalene-d8	534000	8.181			
15067-26-2	Acenaphthene-d10	245000	9.939			
1517-22-2	Phenanthrene-d10	429000	11.422			
1719-03-5	Chrysene-d12	249000	14.063			
1520-96-3	Perylene-d12	250000	15.551			
TENTATIVE IDENTIFIED COMPOUNDS						
	unknown3.422	150	J		3.42	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	250	AB		5.12	ug/Kg
006180-61-6	1-Propanol, 3-phenoxy-	120	J		8.49	ug/Kg
	unknown10.034	1200	J		10.0	ug/Kg
000057-10-3	n-Hexadecanoic acid	150	J		11.9	ug/Kg
006385-15-5	Heptafluorobutyric acid, hexadecyl	120	J		13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29-99	SDG No.:	Q2032
Lab Sample ID:	Q2032-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.8
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
BF142448.D	1	05/16/25 10:00	05/19/25 13:37	PB168041

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:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-24	SDG No.:	Q2032
Lab Sample ID:	Q2032-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	74.2
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024690.D	1	05/16/25 10:00	05/19/25 15:35	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	210	U	210	440	ug/Kg
108-95-2	Phenol	29.7	U	29.7	230	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	32.7	U	32.7	230	ug/Kg
95-57-8	2-Chlorophenol	32.8	U	32.8	230	ug/Kg
95-48-7	2-Methylphenol	40.2	U	40.2	230	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	50.5	U	50.5	230	ug/Kg
98-86-2	Acetophenone	39.7	U	39.7	230	ug/Kg
65794-96-9	3+4-Methylphenols	55.3	U	55.3	440	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	63.8	U	63.8	110	ug/Kg
67-72-1	Hexachloroethane	23.7	U	23.7	230	ug/Kg
98-95-3	Nitrobenzene	24.6	U	24.6	230	ug/Kg
78-59-1	Isophorone	44.1	U	44.1	230	ug/Kg
88-75-5	2-Nitrophenol	78.3	U	78.3	230	ug/Kg
105-67-9	2,4-Dimethylphenol	87.2	U	87.2	230	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	41.4	U	41.4	230	ug/Kg
120-83-2	2,4-Dichlorophenol	38.1	U	38.1	230	ug/Kg
91-20-3	Naphthalene	30.5	U	30.5	230	ug/Kg
106-47-8	4-Chloroaniline	47.6	U	47.6	230	ug/Kg
87-68-3	Hexachlorobutadiene	34.0	U	34.0	230	ug/Kg
105-60-2	Caprolactam	70.1	UQ	70.1	440	ug/Kg
59-50-7	4-Chloro-3-methylphenol	38.6	U	38.6	230	ug/Kg
91-57-6	2-Methylnaphthalene	34.4	U	34.4	230	ug/Kg
77-47-4	Hexachlorocyclopentadiene	160	U	160	440	ug/Kg
88-06-2	2,4,6-Trichlorophenol	26.6	U	26.6	230	ug/Kg
95-95-4	2,4,5-Trichlorophenol	39.2	U	39.2	230	ug/Kg
92-52-4	1,1-Biphenyl	29.3	U	29.3	230	ug/Kg
91-58-7	2-Chloronaphthalene	30.3	U	30.3	230	ug/Kg
88-74-4	2-Nitroaniline	64.7	U	64.7	230	ug/Kg
131-11-3	Dimethylphthalate	36.5	U	36.5	230	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-24	SDG No.:	Q2032
Lab Sample ID:	Q2032-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	74.2
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024690.D	1	05/16/25 10:00	05/19/25 15:35	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	38.9	U	38.9	230	ug/Kg
606-20-2	2,6-Dinitrotoluene	45.2	U	45.2	230	ug/Kg
99-09-2	3-Nitroaniline	61.9	U	61.9	230	ug/Kg
83-32-9	Acenaphthene	28.7	U	28.7	230	ug/Kg
51-28-5	2,4-Dinitrophenol	310	U	310	440	ug/Kg
100-02-7	4-Nitrophenol	140	U	140	440	ug/Kg
132-64-9	Dibenzofuran	30.5	U	30.5	230	ug/Kg
121-14-2	2,4-Dinitrotoluene	67.4	U	67.4	230	ug/Kg
84-66-2	Diethylphthalate	38.1	U	38.1	230	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	35.9	U	35.9	230	ug/Kg
86-73-7	Fluorene	34.0	U	34.0	230	ug/Kg
100-01-6	4-Nitroaniline	86.4	U	86.4	230	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	140	U	140	440	ug/Kg
86-30-6	n-Nitrosodiphenylamine	44.3	U	44.3	230	ug/Kg
101-55-3	4-Bromophenyl-phenylether	37.4	U	37.4	230	ug/Kg
118-74-1	Hexachlorobenzene	34.0	U	34.0	230	ug/Kg
1912-24-9	Atrazine	45.7	U	45.7	230	ug/Kg
87-86-5	Pentachlorophenol	69.0	U	69.0	440	ug/Kg
85-01-8	Phenanthrene	28.1	U	28.1	230	ug/Kg
120-12-7	Anthracene	44.8	U	44.8	230	ug/Kg
86-74-8	Carbazole	42.0	U	42.0	230	ug/Kg
84-74-2	Di-n-butylphthalate	64.4	U	64.4	230	ug/Kg
206-44-0	Fluoranthene	40.4	U	40.4	230	ug/Kg
129-00-0	Pyrene	48.4	U	48.4	230	ug/Kg
85-68-7	Butylbenzylphthalate	96.1	U	96.1	230	ug/Kg
91-94-1	3,3-Dichlorobenzidine	49.4	U	49.4	440	ug/Kg
56-55-3	Benzo(a)anthracene	30.9	U	30.9	230	ug/Kg
218-01-9	Chrysene	26.8	U	26.8	230	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	79.7	U	79.7	230	ug/Kg
117-84-0	Di-n-octyl phthalate	120	U	120	440	ug/Kg
205-99-2	Benzo(b)fluoranthene	25.6	U	25.6	230	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-24	SDG No.:	Q2032
Lab Sample ID:	Q2032-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	74.2
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024690.D	1	05/16/25 10:00	05/19/25 15:35	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	30.1	U	30.1	230	ug/Kg
50-32-8	Benzo(a)pyrene	39.7	U	39.7	230	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	39.2	U	39.2	230	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	36.9	U	36.9	230	ug/Kg
191-24-2	Benzo(g,h,i)perylene	34.6	U	34.6	230	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	34.4	U	34.4	230	ug/Kg
123-91-1	1,4-Dioxane	60.8	U	60.8	230	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	36.9	U	36.9	230	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	114		18 - 112	76%	SPK: 150
13127-88-3	Phenol-d6	107		15 - 107	71%	SPK: 150
4165-60-0	Nitrobenzene-d5	65.4		18 - 107	65%	SPK: 100
321-60-8	2-Fluorobiphenyl	67.0		20 - 109	67%	SPK: 100
118-79-6	2,4,6-Tribromophenol	113		10 - 116	75%	SPK: 150
1718-51-0	Terphenyl-d14	60.4		10 - 105	60%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	142000	7.651
1146-65-2	Naphthalene-d8	538000	10.422
15067-26-2	Acenaphthene-d10	309000	14.286
1517-22-2	Phenanthrene-d10	586000	17.092
1719-03-5	Chrysene-d12	715000	21.521
1520-96-3	Perylene-d12	916000	24.815

TENTATIVE IDENTIFIED COMPOUNDS

000057-55-6	Propylene Glycol	130	J	3.47	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	310	AB	4.82	ug/Kg
000770-35-4	1-Phenoxypropan-2-ol	180	J	11.2	ug/Kg
	unknown14.498	680	J	14.5	ug/Kg
	unknown14.522	1000	J	14.5	ug/Kg
000119-61-9	Benzophenone	96.4	J	15.7	ug/Kg
000057-11-4	Octadecanoic acid	1400	J	16.0	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-24	SDG No.:	Q2032
Lab Sample ID:	Q2032-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	74.2
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Extraction Type :		Decanted :	N
Injection Volume :		Level :	LOW
		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024690.D	1	05/16/25 10:00	05/19/25 15:35	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000057-10-3	n-Hexadecanoic acid	1200	J		18.0	ug/Kg
001002-84-2	Pentadecanoic acid	390	J		19.4	ug/Kg
010192-32-2	1-Tetracosene	220	J		21.2	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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-37	SDG No.:	Q2032
Lab Sample ID:	Q2032-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	82.5
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
BF142450.D	1	05/16/25 10:00	05/19/25 14:35	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	190	U	190	400	ug/Kg
108-95-2	Phenol	26.8	U	26.8	210	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	29.4	U	29.4	210	ug/Kg
95-57-8	2-Chlorophenol	29.5	U	29.5	210	ug/Kg
95-48-7	2-Methylphenol	36.2	U	36.2	210	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	45.4	U	45.4	210	ug/Kg
98-86-2	Acetophenone	35.7	U	35.7	210	ug/Kg
65794-96-9	3+4-Methylphenols	49.8	U	49.8	400	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	57.4	U	57.4	96.9	ug/Kg
67-72-1	Hexachloroethane	21.3	U	21.3	210	ug/Kg
98-95-3	Nitrobenzene	22.2	U	22.2	210	ug/Kg
78-59-1	Isophorone	39.7	U	39.7	210	ug/Kg
88-75-5	2-Nitrophenol	70.5	U	70.5	210	ug/Kg
105-67-9	2,4-Dimethylphenol	78.5	U	78.5	210	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	37.3	U	37.3	210	ug/Kg
120-83-2	2,4-Dichlorophenol	34.3	U	34.3	210	ug/Kg
91-20-3	Naphthalene	27.5	U	27.5	210	ug/Kg
106-47-8	4-Chloroaniline	42.9	U	42.9	210	ug/Kg
87-68-3	Hexachlorobutadiene	30.6	U	30.6	210	ug/Kg
105-60-2	Caprolactam	63.1	UQ	63.1	400	ug/Kg
59-50-7	4-Chloro-3-methylphenol	34.8	U	34.8	210	ug/Kg
91-57-6	2-Methylnaphthalene	31.0	U	31.0	210	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	400	ug/Kg
88-06-2	2,4,6-Trichlorophenol	24.0	U	24.0	210	ug/Kg
95-95-4	2,4,5-Trichlorophenol	35.2	U	35.2	210	ug/Kg
92-52-4	1,1-Biphenyl	26.4	U	26.4	210	ug/Kg
91-58-7	2-Chloronaphthalene	27.2	U	27.2	210	ug/Kg
88-74-4	2-Nitroaniline	58.2	U	58.2	210	ug/Kg
131-11-3	Dimethylphthalate	32.8	U	32.8	210	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-37	SDG No.:	Q2032
Lab Sample ID:	Q2032-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	82.5
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
BF142450.D	1	05/16/25 10:00	05/19/25 14:35	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	35.0	U	35.0	210	ug/Kg
606-20-2	2,6-Dinitrotoluene	40.7	U	40.7	210	ug/Kg
99-09-2	3-Nitroaniline	55.7	U	55.7	210	ug/Kg
83-32-9	Acenaphthene	25.8	U	25.8	210	ug/Kg
51-28-5	2,4-Dinitrophenol	280	U	280	400	ug/Kg
100-02-7	4-Nitrophenol	130	U	130	400	ug/Kg
132-64-9	Dibenzofuran	27.5	U	27.5	210	ug/Kg
121-14-2	2,4-Dinitrotoluene	60.7	U	60.7	210	ug/Kg
84-66-2	Diethylphthalate	34.3	U	34.3	210	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	32.3	U	32.3	210	ug/Kg
86-73-7	Fluorene	30.6	U	30.6	210	ug/Kg
100-01-6	4-Nitroaniline	77.7	U	77.7	210	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	400	ug/Kg
86-30-6	n-Nitrosodiphenylamine	39.8	U	39.8	210	ug/Kg
101-55-3	4-Bromophenyl-phenylether	33.7	U	33.7	210	ug/Kg
118-74-1	Hexachlorobenzene	30.6	U	30.6	210	ug/Kg
1912-24-9	Atrazine	41.2	U	41.2	210	ug/Kg
87-86-5	Pentachlorophenol	62.1	U	62.1	400	ug/Kg
85-01-8	Phenanthrene	25.3	U	25.3	210	ug/Kg
120-12-7	Anthracene	40.3	U	40.3	210	ug/Kg
86-74-8	Carbazole	37.8	U	37.8	210	ug/Kg
84-74-2	Di-n-butylphthalate	58.0	U	58.0	210	ug/Kg
206-44-0	Fluoranthene	36.3	U	36.3	210	ug/Kg
129-00-0	Pyrene	43.6	U	43.6	210	ug/Kg
85-68-7	Butylbenzylphthalate	86.5	U	86.5	210	ug/Kg
91-94-1	3,3-Dichlorobenzidine	44.4	U	44.4	400	ug/Kg
56-55-3	Benzo(a)anthracene	27.9	U	27.9	210	ug/Kg
218-01-9	Chrysene	24.1	U	24.1	210	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	71.7	U	71.7	210	ug/Kg
117-84-0	Di-n-octyl phthalate	110	U	110	400	ug/Kg
205-99-2	Benzo(b)fluoranthene	23.0	U	23.0	210	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-37	SDG No.:	Q2032
Lab Sample ID:	Q2032-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	82.5
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
BF142450.D	1	05/16/25 10:00	05/19/25 14:35	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	27.1	U	27.1	210	ug/Kg
50-32-8	Benzo(a)pyrene	35.7	U	35.7	210	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	35.2	U	35.2	210	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	33.2	U	33.2	210	ug/Kg
191-24-2	Benzo(g,h,i)perylene	31.1	U	31.1	210	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	31.0	U	31.0	210	ug/Kg
123-91-1	1,4-Dioxane	54.7	U	54.7	210	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	33.2	U	33.2	210	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	80.3		18 - 112	54%	SPK: 150
13127-88-3	Phenol-d6	78.1		15 - 107	52%	SPK: 150
4165-60-0	Nitrobenzene-d5	61.7		18 - 107	62%	SPK: 100
321-60-8	2-Fluorobiphenyl	51.5		20 - 109	51%	SPK: 100
118-79-6	2,4,6-Tribromophenol	96.3		10 - 116	64%	SPK: 150
1718-51-0	Terphenyl-d14	43.5		10 - 105	44%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	128000	6.898
1146-65-2	Naphthalene-d8	448000	8.181
15067-26-2	Acenaphthene-d10	243000	9.939
1517-22-2	Phenanthrene-d10	434000	11.427
1719-03-5	Chrysene-d12	325000	14.063
1520-96-3	Perylene-d12	310000	15.557

TENTATIVE IDENTIFIED COMPOUNDS

	unknown3.422	170	J		3.42	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	250	AB		5.12	ug/Kg
000770-35-4	1-Phenoxypropan-2-ol	130	J		8.49	ug/Kg
	unknown10.028	140	J		10.0	ug/Kg
000057-10-3	n-Hexadecanoic acid	240	J		11.9	ug/Kg
074339-54-1	Trichloroacetic acid, hexadecyl es	230	J		13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-37	SDG No.:	Q2032
Lab Sample ID:	Q2032-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	82.5
Sample Wt/Vol:	30.03	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
BF142450.D	1	05/16/25 10:00	05/19/25 14:35	PB168041

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:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-32	SDG No.:	Q2032
Lab Sample ID:	Q2032-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142451.D	1	05/16/25 10:00	05/19/25 15:04	PB168041

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	28.1	U	28.1	200	ug/Kg
95-48-7	2-Methylphenol	34.4	U	34.4	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	47.3	U	47.3	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.5	U	54.5	92.0	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	74.5	U	74.5	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	59.9	UQ	59.9	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	22.8	U	22.8	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.5	U	33.5	200	ug/Kg
92-52-4	1,1-Biphenyl	25.1	U	25.1	200	ug/Kg
91-58-7	2-Chloronaphthalene	25.9	U	25.9	200	ug/Kg
88-74-4	2-Nitroaniline	55.3	U	55.3	200	ug/Kg
131-11-3	Dimethylphthalate	31.2	U	31.2	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-32	SDG No.:	Q2032
Lab Sample ID:	Q2032-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142451.D	1	05/16/25 10:00	05/19/25 15:04	PB168041

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	52.9	U	52.9	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	57.6	U	57.6	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	73.8	U	73.8	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	32.0	U	32.0	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	59.0	U	59.0	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	35.9	U	35.9	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.1	U	55.1	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	82.1	U	82.1	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.2	U	42.2	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.5	U	26.5	200	ug/Kg
218-01-9	Chrysene	22.9	U	22.9	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.1	U	68.1	200	ug/Kg
117-84-0	Di-n-octyl phthalate	99.8	U	99.8	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	21.9	U	21.9	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-32	SDG No.:	Q2032
Lab Sample ID:	Q2032-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.8
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF142451.D	1	05/16/25 10:00	05/19/25 15:04	PB168041

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.8	U	25.8	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	33.5	U	33.5	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	29.6	U	29.6	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	52.0	U	52.0	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	81.0		18 - 112	54%	SPK: 150
13127-88-3	Phenol-d6	74.4		15 - 107	50%	SPK: 150
4165-60-0	Nitrobenzene-d5	53.2		18 - 107	53%	SPK: 100
321-60-8	2-Fluorobiphenyl	47.8		20 - 109	48%	SPK: 100
118-79-6	2,4,6-Tribromophenol	89.8		10 - 116	60%	SPK: 150
1718-51-0	Terphenyl-d14	47.0		10 - 105	47%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	129000	6.898
1146-65-2	Naphthalene-d8	454000	8.181
15067-26-2	Acenaphthene-d10	244000	9.939
1517-22-2	Phenanthrene-d10	432000	11.428
1719-03-5	Chrysene-d12	248000	14.063
1520-96-3	Perylene-d12	251000	15.557

TENTATIVE IDENTIFIED COMPOUNDS

	unknown3.422	100	J		3.42	ug/Kg
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	250	AB		5.12	ug/Kg
006180-61-6	1-Propanol, 3-phenoxy-	95.1	J		8.49	ug/Kg
	unknown10.034	1700	J		10.0	ug/Kg
000057-10-3	n-Hexadecanoic acid	380	J		12.0	ug/Kg
000057-11-4	Octadecanoic acid	110	J		12.7	ug/Kg
006385-15-5	Heptafluorobutyric acid, hexadecyl	160	J		13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-32	SDG No.:	Q2032
Lab Sample ID:	Q2032-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.8
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
BF142451.D	1	05/16/25 10:00	05/19/25 15:04	PB168041

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:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	FB-05132025	SDG No.:	Q2032
Lab Sample ID:	Q2032-11	Matrix:	Water
Analytical Method:	8270E	% Solid:	0
Sample Wt/Vol:	980 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024716.D	1	05/19/25 08:42	05/20/25 20:42	PB168048

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
100-52-7	Benzaldehyde	4.00	U	4.00	10.2	ug/L
108-95-2	Phenol	0.93	U	0.93	5.10	ug/L
111-44-4	bis(2-Chloroethyl)ether	0.83	U	0.83	5.10	ug/L
95-57-8	2-Chlorophenol	0.59	U	0.59	5.10	ug/L
95-48-7	2-Methylphenol	1.10	U	1.10	5.10	ug/L
108-60-1	2,2-oxybis(1-Chloropropane)	1.30	U	1.30	5.10	ug/L
98-86-2	Acetophenone	0.76	U	0.76	5.10	ug/L
65794-96-9	3+4-Methylphenols	1.10	U	1.10	10.2	ug/L
621-64-7	n-Nitroso-di-n-propylamine	1.40	U	1.40	2.60	ug/L
67-72-1	Hexachloroethane	0.66	U	0.66	5.10	ug/L
98-95-3	Nitrobenzene	0.78	U	0.78	5.10	ug/L
78-59-1	Isophorone	0.77	U	0.77	5.10	ug/L
88-75-5	2-Nitrophenol	1.80	U	1.80	5.10	ug/L
105-67-9	2,4-Dimethylphenol	1.90	U	1.90	5.10	ug/L
111-91-1	bis(2-Chloroethoxy)methane	0.69	U	0.69	5.10	ug/L
120-83-2	2,4-Dichlorophenol	0.53	U	0.53	5.10	ug/L
91-20-3	Naphthalene	0.51	U	0.51	5.10	ug/L
106-47-8	4-Chloroaniline	0.86	U	0.86	5.10	ug/L
87-68-3	Hexachlorobutadiene	0.55	U	0.55	5.10	ug/L
105-60-2	Caprolactam	1.20	U	1.20	10.2	ug/L
59-50-7	4-Chloro-3-methylphenol	0.60	U	0.60	5.10	ug/L
91-57-6	2-Methylnaphthalene	0.57	U	0.57	5.10	ug/L
77-47-4	Hexachlorocyclopentadiene	3.70	U	3.70	10.2	ug/L
88-06-2	2,4,6-Trichlorophenol	0.52	U	0.52	5.10	ug/L
95-95-4	2,4,5-Trichlorophenol	0.63	U	0.63	5.10	ug/L
92-52-4	1,1-Biphenyl	0.54	U	0.54	5.10	ug/L
91-58-7	2-Chloronaphthalene	0.62	U	0.62	5.10	ug/L
88-74-4	2-Nitroaniline	1.30	U	1.30	5.10	ug/L
131-11-3	Dimethylphthalate	0.62	U	0.62	5.10	ug/L

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	FB-05132025	SDG No.:	Q2032
Lab Sample ID:	Q2032-11	Matrix:	Water
Analytical Method:	8270E	% Solid:	0
Sample Wt/Vol:	980 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024716.D	1	05/19/25 08:42	05/20/25 20:42	PB168048

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
208-96-8	Acenaphthylene	0.77	U	0.77	5.10	ug/L
606-20-2	2,6-Dinitrotoluene	0.94	U	0.94	5.10	ug/L
99-09-2	3-Nitroaniline	1.10	U	1.10	5.10	ug/L
83-32-9	Acenaphthene	0.56	U	0.56	5.10	ug/L
51-28-5	2,4-Dinitrophenol	6.10	U	6.10	10.2	ug/L
100-02-7	4-Nitrophenol	2.40	U	2.40	10.2	ug/L
132-64-9	Dibenzofuran	0.62	U	0.62	5.10	ug/L
121-14-2	2,4-Dinitrotoluene	1.20	U	1.20	5.10	ug/L
84-66-2	Diethylphthalate	0.70	U	0.70	5.10	ug/L
7005-72-3	4-Chlorophenyl-phenylether	0.69	U	0.69	5.10	ug/L
86-73-7	Fluorene	0.64	U	0.64	5.10	ug/L
100-01-6	4-Nitroaniline	1.50	U	1.50	5.10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	2.90	U	2.90	10.2	ug/L
86-30-6	n-Nitrosodiphenylamine	0.59	U	0.59	5.10	ug/L
101-55-3	4-Bromophenyl-phenylether	0.41	U	0.41	5.10	ug/L
118-74-1	Hexachlorobenzene	0.53	U	0.53	5.10	ug/L
1912-24-9	Atrazine	1.00	U	1.00	5.10	ug/L
87-86-5	Pentachlorophenol	1.60	U	1.60	10.2	ug/L
85-01-8	Phenanthrene	0.51	U	0.51	5.10	ug/L
120-12-7	Anthracene	0.62	U	0.62	5.10	ug/L
86-74-8	Carbazole	0.73	U	0.73	5.10	ug/L
84-74-2	Di-n-butylphthalate	1.20	U	1.20	5.10	ug/L
206-44-0	Fluoranthene	0.84	U	0.84	5.10	ug/L
129-00-0	Pyrene	0.51	U	0.51	5.10	ug/L
85-68-7	Butylbenzylphthalate	2.00	U	2.00	5.10	ug/L
91-94-1	3,3-Dichlorobenzidine	0.95	U	0.95	10.2	ug/L
56-55-3	Benzo(a)anthracene	0.46	U	0.46	5.10	ug/L
218-01-9	Chrysene	0.45	U	0.45	5.10	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.60	U	1.60	5.10	ug/L
117-84-0	Di-n-octyl phthalate	2.40	U	2.40	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	0.50	U	0.50	5.10	ug/L

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	FB-05132025	SDG No.:	Q2032
Lab Sample ID:	Q2032-11	Matrix:	Water
Analytical Method:	8270E	% Solid:	0
Sample Wt/Vol:	980 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024716.D	1	05/19/25 08:42	05/20/25 20:42	PB168048

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
207-08-9	Benzo(k)fluoranthene	0.49	U	0.49	5.10	ug/L
50-32-8	Benzo(a)pyrene	0.56	U	0.56	5.10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.60	U	0.60	5.10	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.68	U	0.68	5.10	ug/L
191-24-2	Benzo(g,h,i)perylene	0.70	U	0.70	5.10	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	0.53	U	0.53	5.10	ug/L
123-91-1	1,4-Dioxane	1.00	U	1.00	5.10	ug/L
58-90-2	2,3,4,6-Tetrachlorophenol	0.73	U	0.73	5.10	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	56.8		10 - 139	38%	SPK: 150
13127-88-3	Phenol-d6	31.4		10 - 134	21%	SPK: 150
4165-60-0	Nitrobenzene-d5	77.8		49 - 133	78%	SPK: 100
321-60-8	2-Fluorobiphenyl	78.6		52 - 132	79%	SPK: 100
118-79-6	2,4,6-Tribromophenol	152		44 - 137	101%	SPK: 150
1718-51-0	Terphenyl-d14	86.0		48 - 125	86%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	106000	7.657			
1146-65-2	Naphthalene-d8	406000	10.428			
15067-26-2	Acenaphthene-d10	283000	14.292			
1517-22-2	Phenanthrene-d10	572000	17.08			
1719-03-5	Chrysene-d12	650000	21.509			
1520-96-3	Perylene-d12	736000	24.792			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	3.70	AB		4.82	ug/L
000112-79-8	9-Octadecenoic acid, (E)-	2.80	J		19.2	ug/L

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	FB-05132025	SDG No.:	Q2032
Lab Sample ID:	Q2032-11	Matrix:	Water
Analytical Method:	8270E	% Solid:	0
Sample Wt/Vol:	980 Units: mL	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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP024716.D	1	05/19/25 08:42	05/20/25 20:42	PB168048

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range
 Q = indicates LCS control criteria did not meet requirements
 M = MS/MSD acceptance criteria did not meet requirements

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

LAB CHRONICLE

OrderID: Q2032	OrderDate: 5/13/2025 4:01:00 PM
Client: CDM Smith	Project: South River WM Replacement
Contact: Marcie Ann Encinas	Location: L41,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2032-01	TP-11	SOIL	SVOC-TCL BNA -20	8270E	05/13/25	05/16/25	05/19/25	05/13/25
Q2032-02	TP-29	SOIL	SVOC-TCL BNA -20	8270E	05/13/25	05/16/25	05/19/25	05/13/25
Q2032-03	TP-29-99	SOIL	SVOC-TCL BNA -20	8270E	05/13/25	05/16/25	05/19/25	05/13/25
Q2032-04	TP-24	SOIL	SVOC-TCL BNA -20	8270E	05/13/25	05/16/25	05/19/25	05/13/25
Q2032-07	TP-37	SOIL	SVOC-TCL BNA -20	8270E	05/13/25	05/16/25	05/19/25	05/13/25
Q2032-08	TP-32	SOIL	SVOC-TCL BNA -20	8270E	05/13/25	05/16/25	05/19/25	05/13/25
Q2032-11	FB-05132025	Water	SVOC-TCL BNA -20	8270E	05/13/25	05/19/25	05/20/25	05/13/25