

LAB CHRONICLE

OrderID:	Q2514	OrderDate:	7/3/2025 1:29:00 PM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	O21,O22,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2514-01	TP-92	SOIL	SVOC-TCL BNA -20	8270E	07/02/25	07/07/25	07/08/25	07/03/25
Q2514-02	TP-93	SOIL	SVOC-TCL BNA -20	8270E	07/02/25	07/07/25	07/07/25	07/03/25
Q2514-03	TP-94	SOIL	SVOC-TCL BNA -20	8270E	07/02/25	07/07/25	07/08/25	07/03/25
Q2514-04	TP-96	SOIL	SVOC-TCL BNA -20	8270E	07/02/25	07/07/25	07/08/25	07/03/25
Q2514-05	TP-97	SOIL	SVOC-TCL BNA -20	8270E	07/02/25	07/07/25	07/08/25	07/03/25
Q2514-06	TP-103	SOIL	SVOC-TCL BNA -20	8270E	07/02/25	07/07/25	07/08/25	07/03/25
Q2514-07	TP-36	SOIL	SVOC-TCL BNA -20	8270E	07/03/25	07/07/25	07/08/25	07/03/25
Q2514-08	TP-78	SOIL	SVOC-TCL BNA -20	8270E	07/03/25	07/07/25	07/08/25	07/03/25
Q2514-09	TP-81	SOIL	SVOC-TCL BNA -20	8270E	07/03/25	07/07/25	07/08/25	07/03/25
Q2514-10	TP-90	SOIL	SVOC-TCL BNA -20	8270E	07/03/25	07/07/25	07/08/25	07/03/25

Hit Summary Sheet SW-846

SDG No.: Q2514
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-92								
Q2514-01	TP-92	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	220.000	AB	0	0	ug/Kg
Q2514-01	TP-92	SOIL	Benzophenone *	260.000	J	0	0	ug/Kg
Q2514-01	TP-92	SOIL	Phenyl(2-phenyl-1,3-dioxolan-2-y *	190.000	J	0	0	ug/Kg
Q2514-01	TP-92	SOIL	unknown13.716 *	97.500	J	0	0	ug/Kg
Q2514-01	TP-92	SOIL	unknown13.886 *	99.000	J	0	0	ug/Kg
Total Tics :				866.50				
Total Concentration:				866.50				
Client ID : TP-93								
Q2514-02	TP-93	SOIL	1-Octadecanesulphonyl chloride *	100.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	170.000	AB	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Benzophenone *	180.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Eicosane *	300.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Heptacosane *	140.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Heptadecane *	130.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Heptadecyl trifluoroacetate *	160.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Hexacosane *	87.400	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	n-Hexadecanoic acid *	150.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Nonadecane *	160.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Octacosane *	81.300	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Pentadecane, 2,6,10,14-tetramethy *	79.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Tetracosane *	100.000	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Tetradecane *	80.900	J	0	0	ug/Kg
Q2514-02	TP-93	SOIL	Tridecane *	130.000	J	0	0	ug/Kg
Total Tics :				2,048.60				
Total Concentration:				2,048.60				
Client ID : TP-94								
Q2514-03	TP-94	SOIL	1-Heneicosanol *	180.000	J	0	0	ug/Kg
Q2514-03	TP-94	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	230.000	AB	0	0	ug/Kg
Q2514-03	TP-94	SOIL	3,6,9,12-Tetraoxatetradecane-1,14 *	210.000	J	0	0	ug/Kg
Q2514-03	TP-94	SOIL	Benzophenone *	230.000	J	0	0	ug/Kg
Q2514-03	TP-94	SOIL	n-Tetracosanol-1 *	210.000	J	0	0	ug/Kg
Total Tics :				1,060.00				
Total Concentration:				1,060.00				
Client ID : TP-96								
Q2514-04	TP-96	SOIL	Phenanthrene	79.200	J	24.3	200	ug/Kg
Q2514-04	TP-96	SOIL	Fluoranthene	420.000		34.9	200	ug/Kg

Hit Summary Sheet SW-846

SDG No.: Q2514
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2514-04	TP-96	SOIL	Pyrene	200.000		41.9	200	ug/Kg
Q2514-04	TP-96	SOIL	Benzo(a)anthracene	180.000	J	26.8	200	ug/Kg
Q2514-04	TP-96	SOIL	Chrysene	200.000		23.2	200	ug/Kg
Q2514-04	TP-96	SOIL	Benzo(b)fluoranthene	310.000		22.1	200	ug/Kg
Q2514-04	TP-96	SOIL	Benzo(k)fluoranthene	140.000	J	26.1	200	ug/Kg
Q2514-04	TP-96	SOIL	Benzo(a)pyrene	210.000		34.3	200	ug/Kg
Q2514-04	TP-96	SOIL	Indeno(1,2,3-cd)pyrene	79.300	J	33.9	200	ug/Kg
Q2514-04	TP-96	SOIL	Benzo(g,h,i)perylene	96.500	J	29.9	200	ug/Kg
Total Svoc :				1,915.00				
Q2514-04	TP-96	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	170.000	AB	0	0	ug/Kg
Q2514-04	TP-96	SOIL	Benzo[e]pyrene *	160.000	J	0	0	ug/Kg
Q2514-04	TP-96	SOIL	Benzophenone *	170.000	J	0	0	ug/Kg
Q2514-04	TP-96	SOIL	unknown13.904 *	140.000	J	0	0	ug/Kg
Total Tics :				640.00				
Total Concentration:				2,555.00				
Client ID : TP-97								
Q2514-05	TP-97	SOIL	Fluoranthene	92.400	J	35.2	200	ug/Kg
Q2514-05	TP-97	SOIL	Pyrene	86.500	J	42.3	200	ug/Kg
Q2514-05	TP-97	SOIL	Chrysene	80.800	J	23.4	200	ug/Kg
Q2514-05	TP-97	SOIL	Benzo(b)fluoranthene	120.000	J	22.3	200	ug/Kg
Q2514-05	TP-97	SOIL	Benzo(a)pyrene	87.500	J	34.6	200	ug/Kg
Total Svoc :				467.20				
Q2514-05	TP-97	SOIL	Benzophenone *	230.000	J	0	0	ug/Kg
Q2514-05	TP-97	SOIL	2,2-(Ethane-1,2-diylbis(oxy))bis(*	150.000	J	0	0	ug/Kg
Q2514-05	TP-97	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	210.000	AB	0	0	ug/Kg
Total Tics :				590.00				
Total Concentration:				1,057.20				
Client ID : TP-103								
Q2514-06	TP-103	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	220.000	AB	0	0	ug/Kg
Q2514-06	TP-103	SOIL	Benzophenone *	170.000	J	0	0	ug/Kg
Q2514-06	TP-103	SOIL	Diethylene glycol dibenzoate *	120.000	J	0	0	ug/Kg
Total Tics :				510.00				
Total Concentration:				510.00				
Client ID : TP-36								
Q2514-07	TP-36	SOIL	1-Hexadecanol *	200.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	200.000	AB	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Benzophenone *	270.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Eicosane *	6,300.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Heneicosane *	540.000	J	0	0	ug/Kg

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SDG No.: Q2514
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Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units	
Q2514-07	TP-36	SOIL	Hentriacontane	*	200.000	JB	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Heptacosane	*	2,100.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Hexacosane	*	3,800.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	n-Hexadecanoic acid	*	1,400.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Octacosane	*	4,400.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Octacosane, 2-methyl-	*	310.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Octadecanoic acid	*	2,000.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Octadecanoic acid, dodecyl ester	*	630.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Pentacosane	*	2,400.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Pentadecafluorooctanoic acid, oct	*	580.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Tetracosane	*	8,000.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Tetracosane, 11-decyl-	*	980.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Tetratetracontane	*	140.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	Tricosane, 2-methyl-	*	130.000	J	0	0	ug/Kg
Q2514-07	TP-36	SOIL	unknown17.256	*	330.000	J	0	0	ug/Kg
Total Tics :				34,910.00					
Total Concentration:				34,910.00					
Client ID : TP-78									
Q2514-08	TP-78	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB	0	0	ug/Kg
Q2514-08	TP-78	SOIL	Benzophenone	*	320.000	J	0	0	ug/Kg
Q2514-08	TP-78	SOIL	Dotriacontane, 1-iodo-	*	110.000	J	0	0	ug/Kg
Q2514-08	TP-78	SOIL	Octacosane	*	94.900	J	0	0	ug/Kg
Q2514-08	TP-78	SOIL	Octadecanoic acid	*	120.000	J	0	0	ug/Kg
Q2514-08	TP-78	SOIL	Octadecyl trifluoroacetate	*	150.000	J	0	0	ug/Kg
Q2514-08	TP-78	SOIL	Phenyl(2-phenyl-1,3-dioxolan-2-y	*	180.000	J	0	0	ug/Kg
Total Tics :				1,224.90					
Total Concentration:				1,224.90					
Client ID : TP-81									
Q2514-09	TP-81	SOIL	2-Bromomethyl-2-phenyl[1,3]dio:	*	190.000	J	0	0	ug/Kg
Q2514-09	TP-81	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	200.000	AB	0	0	ug/Kg
Q2514-09	TP-81	SOIL	Benzophenone	*	230.000	J	0	0	ug/Kg
Q2514-09	TP-81	SOIL	unknown13.886	*	140.000	J	0	0	ug/Kg
Total Tics :				760.00					
Total Concentration:				760.00					
Client ID : TP-90									
Q2514-10	TP-90	SOIL	Fluoranthene		94.700	J	32.7	190	ug/Kg
Q2514-10	TP-90	SOIL	Benzo(a)anthracene		73.500	J	25	190	ug/Kg
Q2514-10	TP-90	SOIL	Chrysene		74.000	J	21.7	190	ug/Kg
Q2514-10	TP-90	SOIL	Benzo(b)fluoranthene		140.000	J	20.7	190	ug/Kg

Hit Summary Sheet SW-846

SDG No.: Q2514
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2514-10	TP-90	SOIL	Benzo(a)pyrene	98.900	J	32.1	190	ug/Kg
Total Svoc :				481.10				
Q2514-10	TP-90	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	110.000	AB	0	0	ug/Kg
Q2514-10	TP-90	SOIL	Benzo[e]pyrene *	77.300	J	0	0	ug/Kg
Q2514-10	TP-90	SOIL	Benzophenone *	130.000	J	0	0	ug/Kg
Q2514-10	TP-90	SOIL	N-[(2-Phenyl-1,3-dioxolan-2-yl)m *	86.000	J	0	0	ug/Kg
Total Tics :				403.30				
Total Concentration:				884.40				



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-92	SDG No.:	Q2514
Lab Sample ID:	Q2514-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87.4
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
BF143037.D	1	07/07/25 09:00	07/08/25 17:07	PB168737

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	25.2	U	25.2	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	27.8	U	27.8	190	ug/Kg
95-57-8	2-Chlorophenol	27.9	U	27.9	190	ug/Kg
95-48-7	2-Methylphenol	34.2	U	34.2	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	42.8	U	42.8	190	ug/Kg
98-86-2	Acetophenone	33.7	U	33.7	190	ug/Kg
65794-96-9	3+4-Methylphenols	46.9	U	46.9	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.1	U	54.1	91.4	ug/Kg
67-72-1	Hexachloroethane	20.1	U	20.1	190	ug/Kg
98-95-3	Nitrobenzene	20.9	U	20.9	190	ug/Kg
78-59-1	Isophorone	37.5	U	37.5	190	ug/Kg
88-75-5	2-Nitrophenol	66.5	U	66.5	190	ug/Kg
105-67-9	2,4-Dimethylphenol	74.0	U	74.0	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.2	U	35.2	190	ug/Kg
120-83-2	2,4-Dichlorophenol	32.3	U	32.3	190	ug/Kg
91-20-3	Naphthalene	25.9	U	25.9	190	ug/Kg
106-47-8	4-Chloroaniline	40.4	U	40.4	190	ug/Kg
87-68-3	Hexachlorobutadiene	28.9	U	28.9	190	ug/Kg
105-60-2	Caprolactam	59.5	U	59.5	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	32.8	U	32.8	190	ug/Kg
91-57-6	2-Methylnaphthalene	29.2	U	29.2	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.6	U	22.6	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.2	U	33.2	190	ug/Kg
92-52-4	1,1-Biphenyl	24.9	U	24.9	190	ug/Kg
91-58-7	2-Chloronaphthalene	25.7	U	25.7	190	ug/Kg
88-74-4	2-Nitroaniline	54.9	U	54.9	190	ug/Kg
131-11-3	Dimethylphthalate	31.0	U	31.0	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-92	SDG No.:	Q2514
Lab Sample ID:	Q2514-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87.4
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
BF143037.D	1	07/07/25 09:00	07/08/25 17:07	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.0	U	33.0	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.4	U	38.4	190	ug/Kg
99-09-2	3-Nitroaniline	52.5	U	52.5	190	ug/Kg
83-32-9	Acenaphthene	24.3	U	24.3	190	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	25.9	U	25.9	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	57.2	U	57.2	190	ug/Kg
84-66-2	Diethylphthalate	32.3	U	32.3	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.5	U	30.5	190	ug/Kg
86-73-7	Fluorene	28.9	U	28.9	190	ug/Kg
100-01-6	4-Nitroaniline	73.3	U	73.3	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	37.6	U	37.6	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	31.8	U	31.8	190	ug/Kg
118-74-1	Hexachlorobenzene	28.9	U	28.9	190	ug/Kg
1912-24-9	Atrazine	38.8	U	38.8	190	ug/Kg
87-86-5	Pentachlorophenol	58.6	U	58.6	380	ug/Kg
85-01-8	Phenanthrene	23.9	U	23.9	190	ug/Kg
120-12-7	Anthracene	38.0	U	38.0	190	ug/Kg
86-74-8	Carbazole	35.6	U	35.6	190	ug/Kg
84-74-2	Di-n-butylphthalate	54.7	U	54.7	190	ug/Kg
206-44-0	Fluoranthene	34.3	U	34.3	190	ug/Kg
129-00-0	Pyrene	41.1	U	41.1	190	ug/Kg
85-68-7	Butylbenzylphthalate	81.6	U	81.6	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	41.9	U	41.9	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.3	U	26.3	190	ug/Kg
218-01-9	Chrysene	22.7	U	22.7	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	67.6	U	67.6	190	ug/Kg
117-84-0	Di-n-octyl phthalate	99.1	U	99.1	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	21.7	U	21.7	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-92	SDG No.:	Q2514
Lab Sample ID:	Q2514-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87.4
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
BF143037.D	1	07/07/25 09:00	07/08/25 17:07	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.6	U	25.6	190	ug/Kg
50-32-8	Benzo(a)pyrene	33.7	U	33.7	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.2	U	33.2	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.3	U	31.3	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.4	U	29.4	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.2	U	29.2	190	ug/Kg
123-91-1	1,4-Dioxane	51.6	U	51.6	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.3	U	31.3	190	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	81.5		18 - 112	54%	SPK: 150
13127-88-3	Phenol-d6	81.9		15 - 107	55%	SPK: 150
4165-60-0	Nitrobenzene-d5	50.8		18 - 107	51%	SPK: 100
321-60-8	2-Fluorobiphenyl	48.3		20 - 109	48%	SPK: 100
118-79-6	2,4,6-Tribromophenol	59.1		10 - 116	39%	SPK: 150
1718-51-0	Terphenyl-d14	37.4		10 - 105	37%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	52200	6.869
1146-65-2	Naphthalene-d8	201000	8.157
15067-26-2	Acenaphthene-d10	104000	9.916
1517-22-2	Phenanthrene-d10	167000	11.404
1719-03-5	Chrysene-d12	99300	14.051
1520-96-3	Perylene-d12	124000	15.551

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	220	AB	5.08	ug/Kg
000119-61-9	Benzophenone	260	J	10.6	ug/Kg
	unknown13.716	97.5	J	13.7	ug/Kg
	unknown13.886	99.0	J	13.9	ug/Kg
005694-69-9	Phenyl(2-phenyl-1,3-dioxolan-2-yl)	190	J	13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-92	SDG No.:	Q2514
Lab Sample ID:	Q2514-01	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87.4
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
BF143037.D	1	07/07/25 09:00	07/08/25 17:07	PB168737

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:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-93	SDG No.:	Q2514
Lab Sample ID:	Q2514-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87.7
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
BF143015.D	1	07/07/25 09:00	07/07/25 18:21	PB168737

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	25.2	U	25.2	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	27.7	U	27.7	190	ug/Kg
95-57-8	2-Chlorophenol	27.8	U	27.8	190	ug/Kg
95-48-7	2-Methylphenol	34.1	U	34.1	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	42.7	U	42.7	190	ug/Kg
98-86-2	Acetophenone	33.6	U	33.6	190	ug/Kg
65794-96-9	3+4-Methylphenols	46.8	U	46.8	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.0	U	54.0	91.2	ug/Kg
67-72-1	Hexachloroethane	20.1	U	20.1	190	ug/Kg
98-95-3	Nitrobenzene	20.9	U	20.9	190	ug/Kg
78-59-1	Isophorone	37.4	U	37.4	190	ug/Kg
88-75-5	2-Nitrophenol	66.3	U	66.3	190	ug/Kg
105-67-9	2,4-Dimethylphenol	73.9	U	73.9	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.1	U	35.1	190	ug/Kg
120-83-2	2,4-Dichlorophenol	32.3	U	32.3	190	ug/Kg
91-20-3	Naphthalene	25.9	U	25.9	190	ug/Kg
106-47-8	4-Chloroaniline	40.4	U	40.4	190	ug/Kg
87-68-3	Hexachlorobutadiene	28.8	U	28.8	190	ug/Kg
105-60-2	Caprolactam	59.4	U	59.4	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	32.7	U	32.7	190	ug/Kg
91-57-6	2-Methylnaphthalene	29.2	U	29.2	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.6	U	22.6	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.2	U	33.2	190	ug/Kg
92-52-4	1,1-Biphenyl	24.8	U	24.8	190	ug/Kg
91-58-7	2-Chloronaphthalene	25.6	U	25.6	190	ug/Kg
88-74-4	2-Nitroaniline	54.8	U	54.8	190	ug/Kg
131-11-3	Dimethylphthalate	30.9	U	30.9	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-93	SDG No.:	Q2514
Lab Sample ID:	Q2514-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87.7
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
BF143015.D	1	07/07/25 09:00	07/07/25 18:21	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	32.9	U	32.9	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.3	U	38.3	190	ug/Kg
99-09-2	3-Nitroaniline	52.4	U	52.4	190	ug/Kg
83-32-9	Acenaphthene	24.3	U	24.3	190	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	25.9	U	25.9	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	57.1	U	57.1	190	ug/Kg
84-66-2	Diethylphthalate	32.3	U	32.3	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.4	U	30.4	190	ug/Kg
86-73-7	Fluorene	28.8	U	28.8	190	ug/Kg
100-01-6	4-Nitroaniline	73.2	U	73.2	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	37.5	U	37.5	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	31.7	U	31.7	190	ug/Kg
118-74-1	Hexachlorobenzene	28.8	U	28.8	190	ug/Kg
1912-24-9	Atrazine	38.8	U	38.8	190	ug/Kg
87-86-5	Pentachlorophenol	58.5	U	58.5	380	ug/Kg
85-01-8	Phenanthrene	23.8	U	23.8	190	ug/Kg
120-12-7	Anthracene	38.0	U	38.0	190	ug/Kg
86-74-8	Carbazole	35.6	U	35.6	190	ug/Kg
84-74-2	Di-n-butylphthalate	54.6	U	54.6	190	ug/Kg
206-44-0	Fluoranthene	34.2	U	34.2	190	ug/Kg
129-00-0	Pyrene	41.0	U	41.0	190	ug/Kg
85-68-7	Butylbenzylphthalate	81.4	U	81.4	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	41.8	U	41.8	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.2	U	26.2	190	ug/Kg
218-01-9	Chrysene	22.7	U	22.7	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	67.5	U	67.5	190	ug/Kg
117-84-0	Di-n-octyl phthalate	98.9	U	98.9	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	21.7	U	21.7	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-93	SDG No.:	Q2514
Lab Sample ID:	Q2514-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87.7
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
BF143015.D	1	07/07/25 09:00	07/07/25 18:21	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.5	U	25.5	190	ug/Kg
50-32-8	Benzo(a)pyrene	33.6	U	33.6	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.2	U	33.2	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.2	U	31.2	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.3	U	29.3	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.2	U	29.2	190	ug/Kg
123-91-1	1,4-Dioxane	51.5	U	51.5	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.2	U	31.2	190	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	62.0		18 - 112	41%	SPK: 150
13127-88-3	Phenol-d6	57.7		15 - 107	38%	SPK: 150
4165-60-0	Nitrobenzene-d5	41.0		18 - 107	41%	SPK: 100
321-60-8	2-Fluorobiphenyl	41.4		20 - 109	41%	SPK: 100
118-79-6	2,4,6-Tribromophenol	60.4		10 - 116	40%	SPK: 150
1718-51-0	Terphenyl-d14	28.0		10 - 105	28%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	51000	6.875			
1146-65-2	Naphthalene-d8	169000	8.157			
15067-26-2	Acenaphthene-d10	78800	9.916			
1517-22-2	Phenanthrene-d10	138000	11.404			
1719-03-5	Chrysene-d12	140000	14.051			
1520-96-3	Perylene-d12	107000	15.545			

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	170	AB		5.08	ug/Kg
000629-59-4	Tetradecane	80.9	J		9.31	ug/Kg
1000342-70-4	1-Octadecanesulphonyl chloride	100	J		9.63	ug/Kg
000629-50-5	Tridecane	130	J		9.84	ug/Kg
000629-92-5	Nonadecane	160	J		10.3	ug/Kg
000630-01-3	Hexacosane	87.4	J		10.6	ug/Kg
000119-61-9	Benzophenone	180	J		10.6	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-93	SDG No.:	Q2514
Lab Sample ID:	Q2514-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	87.7
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
BF143015.D	1	07/07/25 09:00	07/07/25 18:21	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000112-95-8	Eicosane	300	J		10.8	ug/Kg
000593-49-7	Heptacosane	140	J		11.3	ug/Kg
001921-70-6	Pentadecane, 2,6,10,14-tetramethyl	79.0	J		11.3	ug/Kg
000629-78-7	Heptadecane	130	J		11.7	ug/Kg
000057-10-3	n-Hexadecanoic acid	150	J		11.9	ug/Kg
000646-31-1	Tetracosane	100	J		12.1	ug/Kg
000630-02-4	Octacosane	81.3	J		12.5	ug/Kg
1010351-87-0	Heptadecyl trifluoroacetate	160	J		13.9	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:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-94	SDG No.:	Q2514
Lab Sample ID:	Q2514-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	88.1
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
BF143036.D	1	07/07/25 09:00	07/08/25 16:36	PB168737

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	25.1	U	25.1	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	27.6	U	27.6	190	ug/Kg
95-57-8	2-Chlorophenol	27.7	U	27.7	190	ug/Kg
95-48-7	2-Methylphenol	33.9	U	33.9	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	42.5	U	42.5	190	ug/Kg
98-86-2	Acetophenone	33.5	U	33.5	190	ug/Kg
65794-96-9	3+4-Methylphenols	46.6	U	46.6	370	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	53.8	U	53.8	90.7	ug/Kg
67-72-1	Hexachloroethane	20.0	U	20.0	190	ug/Kg
98-95-3	Nitrobenzene	20.8	U	20.8	190	ug/Kg
78-59-1	Isophorone	37.2	U	37.2	190	ug/Kg
88-75-5	2-Nitrophenol	66.0	U	66.0	190	ug/Kg
105-67-9	2,4-Dimethylphenol	73.5	U	73.5	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	34.9	U	34.9	190	ug/Kg
120-83-2	2,4-Dichlorophenol	32.1	U	32.1	190	ug/Kg
91-20-3	Naphthalene	25.7	U	25.7	190	ug/Kg
106-47-8	4-Chloroaniline	40.2	U	40.2	190	ug/Kg
87-68-3	Hexachlorobutadiene	28.7	U	28.7	190	ug/Kg
105-60-2	Caprolactam	59.1	U	59.1	370	ug/Kg
59-50-7	4-Chloro-3-methylphenol	32.6	U	32.6	190	ug/Kg
91-57-6	2-Methylnaphthalene	29.0	U	29.0	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	370	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.5	U	22.5	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.0	U	33.0	190	ug/Kg
92-52-4	1,1-Biphenyl	24.7	U	24.7	190	ug/Kg
91-58-7	2-Chloronaphthalene	25.5	U	25.5	190	ug/Kg
88-74-4	2-Nitroaniline	54.6	U	54.6	190	ug/Kg
131-11-3	Dimethylphthalate	30.7	U	30.7	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-94	SDG No.:	Q2514
Lab Sample ID:	Q2514-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	88.1
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
BF143036.D	1	07/07/25 09:00	07/08/25 16:36	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	32.8	U	32.8	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.1	U	38.1	190	ug/Kg
99-09-2	3-Nitroaniline	52.2	U	52.2	190	ug/Kg
83-32-9	Acenaphthene	24.2	U	24.2	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	25.7	U	25.7	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	56.8	U	56.8	190	ug/Kg
84-66-2	Diethylphthalate	32.1	U	32.1	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.3	U	30.3	190	ug/Kg
86-73-7	Fluorene	28.7	U	28.7	190	ug/Kg
100-01-6	4-Nitroaniline	72.8	U	72.8	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	370	ug/Kg
86-30-6	n-Nitrosodiphenylamine	37.3	U	37.3	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	31.5	U	31.5	190	ug/Kg
118-74-1	Hexachlorobenzene	28.7	U	28.7	190	ug/Kg
1912-24-9	Atrazine	38.6	U	38.6	190	ug/Kg
87-86-5	Pentachlorophenol	58.2	U	58.2	370	ug/Kg
85-01-8	Phenanthrene	23.7	U	23.7	190	ug/Kg
120-12-7	Anthracene	37.8	U	37.8	190	ug/Kg
86-74-8	Carbazole	35.4	U	35.4	190	ug/Kg
84-74-2	Di-n-butylphthalate	54.3	U	54.3	190	ug/Kg
206-44-0	Fluoranthene	34.0	U	34.0	190	ug/Kg
129-00-0	Pyrene	40.8	U	40.8	190	ug/Kg
85-68-7	Butylbenzylphthalate	81.0	U	81.0	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	41.6	U	41.6	370	ug/Kg
56-55-3	Benzo(a)anthracene	26.1	U	26.1	190	ug/Kg
218-01-9	Chrysene	22.6	U	22.6	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	67.2	U	67.2	190	ug/Kg
117-84-0	Di-n-octyl phthalate	98.5	U	98.5	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	21.6	U	21.6	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-94	SDG No.:	Q2514
Lab Sample ID:	Q2514-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	88.1
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
BF143036.D	1	07/07/25 09:00	07/08/25 16:36	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.4	U	25.4	190	ug/Kg
50-32-8	Benzo(a)pyrene	33.5	U	33.5	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.0	U	33.0	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.1	U	31.1	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.2	U	29.2	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.0	U	29.0	190	ug/Kg
123-91-1	1,4-Dioxane	51.3	U	51.3	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.1	U	31.1	190	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	80.1		18 - 112	53%	SPK: 150
13127-88-3	Phenol-d6	80.7		15 - 107	54%	SPK: 150
4165-60-0	Nitrobenzene-d5	51.9		18 - 107	52%	SPK: 100
321-60-8	2-Fluorobiphenyl	55.1		20 - 109	55%	SPK: 100
118-79-6	2,4,6-Tribromophenol	56.5		10 - 116	38%	SPK: 150
1718-51-0	Terphenyl-d14	37.5		10 - 105	37%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	53300	6.869			
1146-65-2	Naphthalene-d8	200000	8.157			
15067-26-2	Acenaphthene-d10	97900	9.916			
1517-22-2	Phenanthrene-d10	139000	11.404			
1719-03-5	Chrysene-d12	104000	14.051			
1520-96-3	Perylene-d12	131000	15.551			

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	230	AB		5.08	ug/Kg
000119-61-9	Benzophenone	230	J		10.6	ug/Kg
015594-90-8	1-Heneicosanol	180	J		13.9	ug/Kg
1000366-97-0	3,6,9,12-Tetraoxatetradecane-1,14-	210	J		13.9	ug/Kg
000506-51-4	n-Tetracosanol-1	210	J		14.5	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-94	SDG No.:	Q2514
Lab Sample ID:	Q2514-03	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	88.1
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
BF143036.D	1	07/07/25 09:00	07/08/25 16:36	PB168737

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:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-96	SDG No.:	Q2514
Lab Sample ID:	Q2514-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.8
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF143046.D	1	07/07/25 09:00	07/08/25 21:42	PB168737

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	25.7	U	25.7	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.3	U	28.3	200	ug/Kg
95-57-8	2-Chlorophenol	28.4	U	28.4	200	ug/Kg
95-48-7	2-Methylphenol	34.8	U	34.8	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.6	U	43.6	200	ug/Kg
98-86-2	Acetophenone	34.3	U	34.3	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.8	U	47.8	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	55.2	U	55.2	93.1	ug/Kg
67-72-1	Hexachloroethane	20.5	U	20.5	200	ug/Kg
98-95-3	Nitrobenzene	21.3	U	21.3	200	ug/Kg
78-59-1	Isophorone	38.2	U	38.2	200	ug/Kg
88-75-5	2-Nitrophenol	67.7	U	67.7	200	ug/Kg
105-67-9	2,4-Dimethylphenol	75.4	U	75.4	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.8	U	35.8	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.9	U	32.9	200	ug/Kg
91-20-3	Naphthalene	26.4	U	26.4	200	ug/Kg
106-47-8	4-Chloroaniline	41.2	U	41.2	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.4	U	29.4	200	ug/Kg
105-60-2	Caprolactam	60.6	U	60.6	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.4	U	33.4	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.8	U	29.8	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	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	33.9	U	33.9	200	ug/Kg
92-52-4	1,1-Biphenyl	25.4	U	25.4	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.2	U	26.2	200	ug/Kg
88-74-4	2-Nitroaniline	56.0	U	56.0	200	ug/Kg
131-11-3	Dimethylphthalate	31.5	U	31.5	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-96	SDG No.:	Q2514
Lab Sample ID:	Q2514-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.8
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF143046.D	1	07/07/25 09:00	07/08/25 21:42	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.6	U	33.6	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	39.1	U	39.1	200	ug/Kg
99-09-2	3-Nitroaniline	53.5	U	53.5	200	ug/Kg
83-32-9	Acenaphthene	24.8	U	24.8	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	26.4	U	26.4	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	58.3	U	58.3	200	ug/Kg
84-66-2	Diethylphthalate	32.9	U	32.9	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.1	U	31.1	200	ug/Kg
86-73-7	Fluorene	29.4	U	29.4	200	ug/Kg
100-01-6	4-Nitroaniline	74.7	U	74.7	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.3	U	38.3	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.4	U	32.4	200	ug/Kg
118-74-1	Hexachlorobenzene	29.4	U	29.4	200	ug/Kg
1912-24-9	Atrazine	39.6	U	39.6	200	ug/Kg
87-86-5	Pentachlorophenol	59.7	U	59.7	380	ug/Kg
85-01-8	Phenanthrene	79.2	J	24.3	200	ug/Kg
120-12-7	Anthracene	38.8	U	38.8	200	ug/Kg
86-74-8	Carbazole	36.3	U	36.3	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.8	U	55.8	200	ug/Kg
206-44-0	Fluoranthene	420		34.9	200	ug/Kg
129-00-0	Pyrene	200		41.9	200	ug/Kg
85-68-7	Butylbenzylphthalate	83.1	U	83.1	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.7	U	42.7	380	ug/Kg
56-55-3	Benzo(a)anthracene	180	J	26.8	200	ug/Kg
218-01-9	Chrysene	200		23.2	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.9	U	68.9	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	310		22.1	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-96	SDG No.:	Q2514
Lab Sample ID:	Q2514-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.8
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF143046.D	1	07/07/25 09:00	07/08/25 21:42	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	140	J	26.1	200	ug/Kg
50-32-8	Benzo(a)pyrene	210		34.3	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	79.3	J	33.9	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.9	U	31.9	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	96.5	J	29.9	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.8	U	29.8	200	ug/Kg
123-91-1	1,4-Dioxane	52.6	U	52.6	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.9	U	31.9	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	62.3		18 - 112	42%	SPK: 150
13127-88-3	Phenol-d6	61.0		15 - 107	41%	SPK: 150
4165-60-0	Nitrobenzene-d5	40.3		18 - 107	40%	SPK: 100
321-60-8	2-Fluorobiphenyl	42.7		20 - 109	43%	SPK: 100
118-79-6	2,4,6-Tribromophenol	55.0		10 - 116	37%	SPK: 150
1718-51-0	Terphenyl-d14	26.4		10 - 105	26%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	51500	6.869			
1146-65-2	Naphthalene-d8	179000	8.157			
15067-26-2	Acenaphthene-d10	77200	9.916			
1517-22-2	Phenanthrene-d10	120000	11.404			
1719-03-5	Chrysene-d12	136000	14.051			
1520-96-3	Perylene-d12	113000	15.545			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	170	AB		5.08	ug/Kg
000119-61-9	Benzophenone	170	J		10.6	ug/Kg
	unknown13.904	140	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:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-96	SDG No.:	Q2514
Lab Sample ID:	Q2514-04	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85.8
Sample Wt/Vol:	30.04	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
BF143046.D	1	07/07/25 09:00	07/08/25 21:42	PB168737

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:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-97	SDG No.:	Q2514
Lab Sample ID:	Q2514-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85
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
BF143038.D	1	07/07/25 09:00	07/08/25 17:37	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	180	U	180	390	ug/Kg
108-95-2	Phenol	26.0	U	26.0	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	28.5	U	28.5	200	ug/Kg
95-57-8	2-Chlorophenol	28.7	U	28.7	200	ug/Kg
95-48-7	2-Methylphenol	35.1	U	35.1	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	44.0	U	44.0	200	ug/Kg
98-86-2	Acetophenone	34.6	U	34.6	200	ug/Kg
65794-96-9	3+4-Methylphenols	48.3	U	48.3	390	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	55.7	U	55.7	94.0	ug/Kg
67-72-1	Hexachloroethane	20.7	U	20.7	200	ug/Kg
98-95-3	Nitrobenzene	21.5	U	21.5	200	ug/Kg
78-59-1	Isophorone	38.5	U	38.5	200	ug/Kg
88-75-5	2-Nitrophenol	68.4	U	68.4	200	ug/Kg
105-67-9	2,4-Dimethylphenol	76.1	U	76.1	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	36.2	U	36.2	200	ug/Kg
120-83-2	2,4-Dichlorophenol	33.2	U	33.2	200	ug/Kg
91-20-3	Naphthalene	26.7	U	26.7	200	ug/Kg
106-47-8	4-Chloroaniline	41.6	U	41.6	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.7	U	29.7	200	ug/Kg
105-60-2	Caprolactam	61.2	U	61.2	390	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.7	U	33.7	200	ug/Kg
91-57-6	2-Methylnaphthalene	30.1	U	30.1	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	140	U	140	390	ug/Kg
88-06-2	2,4,6-Trichlorophenol	23.3	U	23.3	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	34.2	U	34.2	200	ug/Kg
92-52-4	1,1-Biphenyl	25.6	U	25.6	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.4	U	26.4	200	ug/Kg
88-74-4	2-Nitroaniline	56.5	U	56.5	200	ug/Kg
131-11-3	Dimethylphthalate	31.8	U	31.8	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-97	SDG No.:	Q2514
Lab Sample ID:	Q2514-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85
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
BF143038.D	1	07/07/25 09:00	07/08/25 17:37	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.9	U	33.9	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	39.5	U	39.5	200	ug/Kg
99-09-2	3-Nitroaniline	54.0	U	54.0	200	ug/Kg
83-32-9	Acenaphthene	25.0	U	25.0	200	ug/Kg
51-28-5	2,4-Dinitrophenol	270	U	270	390	ug/Kg
100-02-7	4-Nitrophenol	130	U	130	390	ug/Kg
132-64-9	Dibenzofuran	26.7	U	26.7	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	58.8	U	58.8	200	ug/Kg
84-66-2	Diethylphthalate	33.2	U	33.2	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	31.4	U	31.4	200	ug/Kg
86-73-7	Fluorene	29.7	U	29.7	200	ug/Kg
100-01-6	4-Nitroaniline	75.4	U	75.4	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	390	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.6	U	38.6	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.7	U	32.7	200	ug/Kg
118-74-1	Hexachlorobenzene	29.7	U	29.7	200	ug/Kg
1912-24-9	Atrazine	39.9	U	39.9	200	ug/Kg
87-86-5	Pentachlorophenol	60.3	U	60.3	390	ug/Kg
85-01-8	Phenanthrene	24.5	U	24.5	200	ug/Kg
120-12-7	Anthracene	39.1	U	39.1	200	ug/Kg
86-74-8	Carbazole	36.6	U	36.6	200	ug/Kg
84-74-2	Di-n-butylphthalate	56.3	U	56.3	200	ug/Kg
206-44-0	Fluoranthene	92.4	J	35.2	200	ug/Kg
129-00-0	Pyrene	86.5	J	42.3	200	ug/Kg
85-68-7	Butylbenzylphthalate	83.9	U	83.9	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	43.1	U	43.1	390	ug/Kg
56-55-3	Benzo(a)anthracene	27.0	U	27.0	200	ug/Kg
218-01-9	Chrysene	80.8	J	23.4	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	69.5	U	69.5	200	ug/Kg
117-84-0	Di-n-octyl phthalate	100	U	100	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	120	J	22.3	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-97	SDG No.:	Q2514
Lab Sample ID:	Q2514-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85
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
BF143038.D	1	07/07/25 09:00	07/08/25 17:37	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	26.3	U	26.3	200	ug/Kg
50-32-8	Benzo(a)pyrene	87.5	J	34.6	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	34.2	U	34.2	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	32.2	U	32.2	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	30.2	U	30.2	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	30.1	U	30.1	200	ug/Kg
123-91-1	1,4-Dioxane	53.1	U	53.1	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	32.2	U	32.2	200	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	74.0		18 - 112	49%	SPK: 150
13127-88-3	Phenol-d6	75.6		15 - 107	50%	SPK: 150
4165-60-0	Nitrobenzene-d5	46.2		18 - 107	46%	SPK: 100
321-60-8	2-Fluorobiphenyl	44.0		20 - 109	44%	SPK: 100
118-79-6	2,4,6-Tribromophenol	55.6		10 - 116	37%	SPK: 150
1718-51-0	Terphenyl-d14	38.4		10 - 105	38%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	53500	6.869
1146-65-2	Naphthalene-d8	204000	8.157
15067-26-2	Acenaphthene-d10	108000	9.916
1517-22-2	Phenanthrene-d10	177000	11.404
1719-03-5	Chrysene-d12	102000	14.051
1520-96-3	Perylene-d12	129000	15.545

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	210	AB	5.08	ug/Kg
000119-61-9	Benzophenone	230	J	10.6	ug/Kg
1000366-99-4	2,2-(Ethane-1,2-diylbis(oxy))bis(	150	J	13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-97	SDG No.:	Q2514
Lab Sample ID:	Q2514-05	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	85
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
BF143038.D	1	07/07/25 09:00	07/08/25 17:37	PB168737

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:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-103	SDG No.:	Q2514
Lab Sample ID:	Q2514-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.5
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
BF143044.D	1	07/07/25 09:00	07/08/25 20:42	PB168737

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	28.1	U	28.1	200	ug/Kg
95-57-8	2-Chlorophenol	28.2	U	28.2	200	ug/Kg
95-48-7	2-Methylphenol	34.5	U	34.5	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.3	U	43.3	200	ug/Kg
98-86-2	Acetophenone	34.1	U	34.1	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.5	U	47.5	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.7	U	54.7	92.4	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	37.9	U	37.9	200	ug/Kg
88-75-5	2-Nitrophenol	67.2	U	67.2	200	ug/Kg
105-67-9	2,4-Dimethylphenol	74.8	U	74.8	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.6	U	35.6	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.7	U	32.7	200	ug/Kg
91-20-3	Naphthalene	26.2	U	26.2	200	ug/Kg
106-47-8	4-Chloroaniline	40.9	U	40.9	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.2	U	29.2	200	ug/Kg
105-60-2	Caprolactam	60.2	U	60.2	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.1	U	33.1	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.6	U	29.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.9	U	22.9	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.6	U	33.6	200	ug/Kg
92-52-4	1,1-Biphenyl	25.2	U	25.2	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.0	U	26.0	200	ug/Kg
88-74-4	2-Nitroaniline	55.6	U	55.6	200	ug/Kg
131-11-3	Dimethylphthalate	31.3	U	31.3	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-103	SDG No.:	Q2514
Lab Sample ID:	Q2514-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.5
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
BF143044.D	1	07/07/25 09:00	07/08/25 20:42	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.4	U	33.4	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.8	U	38.8	200	ug/Kg
99-09-2	3-Nitroaniline	53.1	U	53.1	200	ug/Kg
83-32-9	Acenaphthene	24.6	U	24.6	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	26.2	U	26.2	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	57.9	U	57.9	200	ug/Kg
84-66-2	Diethylphthalate	32.7	U	32.7	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.8	U	30.8	200	ug/Kg
86-73-7	Fluorene	29.2	U	29.2	200	ug/Kg
100-01-6	4-Nitroaniline	74.1	U	74.1	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.0	U	38.0	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.1	U	32.1	200	ug/Kg
118-74-1	Hexachlorobenzene	29.2	U	29.2	200	ug/Kg
1912-24-9	Atrazine	39.3	U	39.3	200	ug/Kg
87-86-5	Pentachlorophenol	59.2	U	59.2	380	ug/Kg
85-01-8	Phenanthrene	24.1	U	24.1	200	ug/Kg
120-12-7	Anthracene	38.5	U	38.5	200	ug/Kg
86-74-8	Carbazole	36.0	U	36.0	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.3	U	55.3	200	ug/Kg
206-44-0	Fluoranthene	34.6	U	34.6	200	ug/Kg
129-00-0	Pyrene	41.6	U	41.6	200	ug/Kg
85-68-7	Butylbenzylphthalate	82.5	U	82.5	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.4	U	42.4	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.6	U	26.6	200	ug/Kg
218-01-9	Chrysene	23.0	U	23.0	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.4	U	68.4	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:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-103	SDG No.:	Q2514
Lab Sample ID:	Q2514-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.5
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
BF143044.D	1	07/07/25 09:00	07/08/25 20:42	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.9	U	25.9	200	ug/Kg
50-32-8	Benzo(a)pyrene	34.1	U	34.1	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.6	U	33.6	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	29.7	U	29.7	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.6	U	29.6	200	ug/Kg
123-91-1	1,4-Dioxane	52.2	U	52.2	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	66.8		18 - 112	45%	SPK: 150
13127-88-3	Phenol-d6	67.4		15 - 107	45%	SPK: 150
4165-60-0	Nitrobenzene-d5	44.0		18 - 107	44%	SPK: 100
321-60-8	2-Fluorobiphenyl	46.5		20 - 109	46%	SPK: 100
118-79-6	2,4,6-Tribromophenol	47.8		10 - 116	32%	SPK: 150
1718-51-0	Terphenyl-d14	28.7		10 - 105	29%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	56400	6.869			
1146-65-2	Naphthalene-d8	203000	8.157			
15067-26-2	Acenaphthene-d10	92000	9.91			
1517-22-2	Phenanthrene-d10	127000	11.404			
1719-03-5	Chrysene-d12	130000	14.051			
1520-96-3	Perylene-d12	143000	15.545			

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	220	AB		5.08	ug/Kg
000119-61-9	Benzophenone	170	J		10.6	ug/Kg
000120-55-8	Diethylene glycol dibenzoate	120	J		13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/02/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-103	SDG No.:	Q2514
Lab Sample ID:	Q2514-06	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.5
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
BF143044.D	1	07/07/25 09:00	07/08/25 20:42	PB168737

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:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-36	SDG No.:	Q2514
Lab Sample ID:	Q2514-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	90.3
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
		Test:	SVOC-TCL BNA -20
		Final Vol:	1000
		PH :	
		GPC Cleanup :	N

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF143030.D	1	07/07/25 09:00	07/08/25 13:31	PB168737

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	24.4	U	24.4	190	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	26.9	U	26.9	190	ug/Kg
95-57-8	2-Chlorophenol	27.0	U	27.0	190	ug/Kg
95-48-7	2-Methylphenol	33.0	U	33.0	190	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	41.4	U	41.4	190	ug/Kg
98-86-2	Acetophenone	32.6	U	32.6	190	ug/Kg
65794-96-9	3+4-Methylphenols	45.4	U	45.4	360	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	52.4	U	52.4	88.4	ug/Kg
67-72-1	Hexachloroethane	19.5	U	19.5	190	ug/Kg
98-95-3	Nitrobenzene	20.2	U	20.2	190	ug/Kg
78-59-1	Isophorone	36.3	U	36.3	190	ug/Kg
88-75-5	2-Nitrophenol	64.3	U	64.3	190	ug/Kg
105-67-9	2,4-Dimethylphenol	71.6	U	71.6	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	34.0	U	34.0	190	ug/Kg
120-83-2	2,4-Dichlorophenol	31.3	U	31.3	190	ug/Kg
91-20-3	Naphthalene	25.1	U	25.1	190	ug/Kg
106-47-8	4-Chloroaniline	39.1	U	39.1	190	ug/Kg
87-68-3	Hexachlorobutadiene	28.0	U	28.0	190	ug/Kg
105-60-2	Caprolactam	57.6	U	57.6	360	ug/Kg
59-50-7	4-Chloro-3-methylphenol	31.7	U	31.7	190	ug/Kg
91-57-6	2-Methylnaphthalene	28.3	U	28.3	190	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	360	ug/Kg
88-06-2	2,4,6-Trichlorophenol	21.9	U	21.9	190	ug/Kg
95-95-4	2,4,5-Trichlorophenol	32.2	U	32.2	190	ug/Kg
92-52-4	1,1-Biphenyl	24.1	U	24.1	190	ug/Kg
91-58-7	2-Chloronaphthalene	24.9	U	24.9	190	ug/Kg
88-74-4	2-Nitroaniline	53.2	U	53.2	190	ug/Kg
131-11-3	Dimethylphthalate	30.0	U	30.0	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-36	SDG No.:	Q2514
Lab Sample ID:	Q2514-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	90.3
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
BF143030.D	1	07/07/25 09:00	07/08/25 13:31	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	31.9	U	31.9	190	ug/Kg
606-20-2	2,6-Dinitrotoluene	37.1	U	37.1	190	ug/Kg
99-09-2	3-Nitroaniline	50.8	U	50.8	190	ug/Kg
83-32-9	Acenaphthene	23.5	U	23.5	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	25.1	U	25.1	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	55.4	U	55.4	190	ug/Kg
84-66-2	Diethylphthalate	31.3	U	31.3	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	29.5	U	29.5	190	ug/Kg
86-73-7	Fluorene	28.0	U	28.0	190	ug/Kg
100-01-6	4-Nitroaniline	71.0	U	71.0	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	110	U	110	360	ug/Kg
86-30-6	n-Nitrosodiphenylamine	36.4	U	36.4	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	30.7	U	30.7	190	ug/Kg
118-74-1	Hexachlorobenzene	28.0	U	28.0	190	ug/Kg
1912-24-9	Atrazine	37.6	U	37.6	190	ug/Kg
87-86-5	Pentachlorophenol	56.7	U	56.7	360	ug/Kg
85-01-8	Phenanthrene	23.1	U	23.1	190	ug/Kg
120-12-7	Anthracene	36.8	U	36.8	190	ug/Kg
86-74-8	Carbazole	34.5	U	34.5	190	ug/Kg
84-74-2	Di-n-butylphthalate	52.9	U	52.9	190	ug/Kg
206-44-0	Fluoranthene	33.2	U	33.2	190	ug/Kg
129-00-0	Pyrene	39.8	U	39.8	190	ug/Kg
85-68-7	Butylbenzylphthalate	78.9	U	78.9	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	40.6	U	40.6	360	ug/Kg
56-55-3	Benzo(a)anthracene	25.4	U	25.4	190	ug/Kg
218-01-9	Chrysene	22.0	U	22.0	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	65.4	U	65.4	190	ug/Kg
117-84-0	Di-n-octyl phthalate	95.9	U	95.9	360	ug/Kg
205-99-2	Benzo(b)fluoranthene	21.0	U	21.0	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-36	SDG No.:	Q2514
Lab Sample ID:	Q2514-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	90.3
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
BF143030.D	1	07/07/25 09:00	07/08/25 13:31	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	24.8	U	24.8	190	ug/Kg
50-32-8	Benzo(a)pyrene	32.6	U	32.6	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	32.2	U	32.2	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	30.3	U	30.3	190	ug/Kg
191-24-2	Benzo(g,h,i)perylene	28.4	U	28.4	190	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	28.3	U	28.3	190	ug/Kg
123-91-1	1,4-Dioxane	50.0	U	50.0	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	30.3	U	30.3	190	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	78.2		18 - 112	52%	SPK: 150
13127-88-3	Phenol-d6	79.8		15 - 107	53%	SPK: 150
4165-60-0	Nitrobenzene-d5	50.7		18 - 107	51%	SPK: 100
321-60-8	2-Fluorobiphenyl	52.4		20 - 109	52%	SPK: 100
118-79-6	2,4,6-Tribromophenol	56.2		10 - 116	37%	SPK: 150
1718-51-0	Terphenyl-d14	40.6		10 - 105	41%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	51600	6.875
1146-65-2	Naphthalene-d8	192000	8.157
15067-26-2	Acenaphthene-d10	97400	9.916
1517-22-2	Phenanthrene-d10	146000	11.404
1719-03-5	Chrysene-d12	94000	14.057
1520-96-3	Perylene-d12	120000	15.551

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	200	AB	5.09	ug/Kg
000119-61-9	Benzophenone	270	J	10.6	ug/Kg
000057-10-3	n-Hexadecanoic acid	1400	J	11.9	ug/Kg
000629-94-7	Heneicosane	540	J	12.5	ug/Kg
000057-11-4	Octadecanoic acid	2000	J	12.7	ug/Kg
000593-49-7	Heptacosane	2100	J	13.2	ug/Kg
000630-02-4	Octacosane	4400	J	13.8	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-36	SDG No.:	Q2514
Lab Sample ID:	Q2514-07	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	90.3
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
BF143030.D	1	07/07/25 09:00	07/08/25 13:31	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
036653-82-4	1-Hexadecanol	200	J		13.9	ug/Kg
000112-95-8	Eicosane	6300	J		14.3	ug/Kg
000630-04-6	Hentriacontane	200	JB		14.5	ug/Kg
1000406-04-8	Pentadecafluorooctanoic acid, octa	580	J		14.7	ug/Kg
000646-31-1	Tetracosane	8000	J		14.8	ug/Kg
001928-30-9	Tricosane, 2-methyl-	130	J		15.1	ug/Kg
001560-98-1	Octacosane, 2-methyl-	310	J		15.2	ug/Kg
000630-01-3	Hexacosane	3800	J		15.3	ug/Kg
005303-25-3	Octadecanoic acid, dodecyl ester	630	J		15.7	ug/Kg
000629-99-2	Pentacosane	2400	J		15.9	ug/Kg
007098-22-8	Tetratetracontane	140	J		16.0	ug/Kg
055429-84-0	Tetracosane, 11-decyl-	980	J		16.5	ug/Kg
	unknown17.256	330	J		17.3	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78	SDG No.:	Q2514
Lab Sample ID:	Q2514-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
Sample Wt/Vol:	30.04	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
BF143031.D	1	07/07/25 09:00	07/08/25 14:02	PB168737

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	28.1	U	28.1	200	ug/Kg
95-57-8	2-Chlorophenol	28.2	U	28.2	200	ug/Kg
95-48-7	2-Methylphenol	34.6	U	34.6	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.4	U	43.4	200	ug/Kg
98-86-2	Acetophenone	34.1	U	34.1	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	92.6	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	67.3	U	67.3	200	ug/Kg
105-67-9	2,4-Dimethylphenol	75.0	U	75.0	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.6	U	35.6	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.7	U	32.7	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	60.3	U	60.3	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.2	U	33.2	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.6	U	29.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.9	U	22.9	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.7	U	33.7	200	ug/Kg
92-52-4	1,1-Biphenyl	25.2	U	25.2	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.0	U	26.0	200	ug/Kg
88-74-4	2-Nitroaniline	55.7	U	55.7	200	ug/Kg
131-11-3	Dimethylphthalate	31.4	U	31.4	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78	SDG No.:	Q2514
Lab Sample ID:	Q2514-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF143031.D	1	07/07/25 09:00	07/08/25 14:02	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.4	U	33.4	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.9	U	38.9	200	ug/Kg
99-09-2	3-Nitroaniline	53.2	U	53.2	200	ug/Kg
83-32-9	Acenaphthene	24.6	U	24.6	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	58.0	U	58.0	200	ug/Kg
84-66-2	Diethylphthalate	32.7	U	32.7	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	74.3	U	74.3	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	39.3	U	39.3	200	ug/Kg
87-86-5	Pentachlorophenol	59.4	U	59.4	380	ug/Kg
85-01-8	Phenanthrene	24.2	U	24.2	200	ug/Kg
120-12-7	Anthracene	38.5	U	38.5	200	ug/Kg
86-74-8	Carbazole	36.1	U	36.1	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.4	U	55.4	200	ug/Kg
206-44-0	Fluoranthene	34.7	U	34.7	200	ug/Kg
129-00-0	Pyrene	41.7	U	41.7	200	ug/Kg
85-68-7	Butylbenzylphthalate	82.6	U	82.6	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.5	U	42.5	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.6	U	26.6	200	ug/Kg
218-01-9	Chrysene	23.0	U	23.0	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.5	U	68.5	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:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78	SDG No.:	Q2514
Lab Sample ID:	Q2514-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF143031.D	1	07/07/25 09:00	07/08/25 14:02	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.9	U	25.9	200	ug/Kg
50-32-8	Benzo(a)pyrene	34.1	U	34.1	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	31.7	U	31.7	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.7	U	29.7	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.6	U	29.6	200	ug/Kg
123-91-1	1,4-Dioxane	52.3	U	52.3	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.7	U	31.7	200	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	93.0		18 - 112	62%	SPK: 150
13127-88-3	Phenol-d6	95.8		15 - 107	64%	SPK: 150
4165-60-0	Nitrobenzene-d5	61.0		18 - 107	61%	SPK: 100
321-60-8	2-Fluorobiphenyl	60.2		20 - 109	60%	SPK: 100
118-79-6	2,4,6-Tribromophenol	67.5		10 - 116	45%	SPK: 150
1718-51-0	Terphenyl-d14	46.7		10 - 105	47%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	50600	6.875	
1146-65-2	Naphthalene-d8	193000	8.157	
15067-26-2	Acenaphthene-d10	95900	9.916	
1517-22-2	Phenanthrene-d10	148000	11.404	
1719-03-5	Chrysene-d12	94400	14.057	
1520-96-3	Perylene-d12	118000	15.551	

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	250	AB	5.09	ug/Kg
000119-61-9	Benzophenone	320	J	10.6	ug/Kg
000057-11-4	Octadecanoic acid	120	J	12.7	ug/Kg
079392-43-1	Octadecyl trifluoroacetate	150	J	13.9	ug/Kg
1000507-07-6	Phenyl(2-phenyl-1,3-dioxolan-2-yl)	180	J	13.9	ug/Kg
000630-02-4	Octacosane	94.9	J	15.2	ug/Kg
1000406-32-4	Dotriacontane, 1-iodo-	110	J	16.0	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78	SDG No.:	Q2514
Lab Sample ID:	Q2514-08	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
Sample Wt/Vol:	30.04	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
BF143031.D	1	07/07/25 09:00	07/08/25 14:02	PB168737

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:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-81	SDG No.:	Q2514
Lab Sample ID:	Q2514-09	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143035.D	1	07/07/25 09:00	07/08/25 16:05	PB168737

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	28.1	U	28.1	200	ug/Kg
95-57-8	2-Chlorophenol	28.2	U	28.2	200	ug/Kg
95-48-7	2-Methylphenol	34.6	U	34.6	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	43.4	U	43.4	200	ug/Kg
98-86-2	Acetophenone	34.1	U	34.1	200	ug/Kg
65794-96-9	3+4-Methylphenols	47.5	U	47.5	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	54.8	U	54.8	92.5	ug/Kg
67-72-1	Hexachloroethane	20.3	U	20.3	200	ug/Kg
98-95-3	Nitrobenzene	21.2	U	21.2	200	ug/Kg
78-59-1	Isophorone	37.9	U	37.9	200	ug/Kg
88-75-5	2-Nitrophenol	67.3	U	67.3	200	ug/Kg
105-67-9	2,4-Dimethylphenol	74.9	U	74.9	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	35.6	U	35.6	200	ug/Kg
120-83-2	2,4-Dichlorophenol	32.7	U	32.7	200	ug/Kg
91-20-3	Naphthalene	26.2	U	26.2	200	ug/Kg
106-47-8	4-Chloroaniline	40.9	U	40.9	200	ug/Kg
87-68-3	Hexachlorobutadiene	29.2	U	29.2	200	ug/Kg
105-60-2	Caprolactam	60.2	U	60.2	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	33.2	U	33.2	200	ug/Kg
91-57-6	2-Methylnaphthalene	29.6	U	29.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	130	U	130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	22.9	U	22.9	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	33.6	U	33.6	200	ug/Kg
92-52-4	1,1-Biphenyl	25.2	U	25.2	200	ug/Kg
91-58-7	2-Chloronaphthalene	26.0	U	26.0	200	ug/Kg
88-74-4	2-Nitroaniline	55.6	U	55.6	200	ug/Kg
131-11-3	Dimethylphthalate	31.3	U	31.3	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-81	SDG No.:	Q2514
Lab Sample ID:	Q2514-09	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143035.D	1	07/07/25 09:00	07/08/25 16:05	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	33.4	U	33.4	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	38.8	U	38.8	200	ug/Kg
99-09-2	3-Nitroaniline	53.2	U	53.2	200	ug/Kg
83-32-9	Acenaphthene	24.6	U	24.6	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	26.2	U	26.2	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	57.9	U	57.9	200	ug/Kg
84-66-2	Diethylphthalate	32.7	U	32.7	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	30.9	U	30.9	200	ug/Kg
86-73-7	Fluorene	29.2	U	29.2	200	ug/Kg
100-01-6	4-Nitroaniline	74.2	U	74.2	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	120	U	120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	38.0	U	38.0	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	32.1	U	32.1	200	ug/Kg
118-74-1	Hexachlorobenzene	29.2	U	29.2	200	ug/Kg
1912-24-9	Atrazine	39.3	U	39.3	200	ug/Kg
87-86-5	Pentachlorophenol	59.3	U	59.3	380	ug/Kg
85-01-8	Phenanthrene	24.2	U	24.2	200	ug/Kg
120-12-7	Anthracene	38.5	U	38.5	200	ug/Kg
86-74-8	Carbazole	36.1	U	36.1	200	ug/Kg
84-74-2	Di-n-butylphthalate	55.4	U	55.4	200	ug/Kg
206-44-0	Fluoranthene	34.7	U	34.7	200	ug/Kg
129-00-0	Pyrene	41.6	U	41.6	200	ug/Kg
85-68-7	Butylbenzylphthalate	82.5	U	82.5	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	42.4	U	42.4	380	ug/Kg
56-55-3	Benzo(a)anthracene	26.6	U	26.6	200	ug/Kg
218-01-9	Chrysene	23.0	U	23.0	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	68.4	U	68.4	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:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-81	SDG No.:	Q2514
Lab Sample ID:	Q2514-09	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143035.D	1	07/07/25 09:00	07/08/25 16:05	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	25.9	U	25.9	200	ug/Kg
50-32-8	Benzo(a)pyrene	34.1	U	34.1	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	33.6	U	33.6	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	31.7	U	31.7	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	29.7	U	29.7	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	29.6	U	29.6	200	ug/Kg
123-91-1	1,4-Dioxane	52.3	U	52.3	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	31.7	U	31.7	200	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	78.9		18 - 112	53%	SPK: 150
13127-88-3	Phenol-d6	79.4		15 - 107	53%	SPK: 150
4165-60-0	Nitrobenzene-d5	51.3		18 - 107	51%	SPK: 100
321-60-8	2-Fluorobiphenyl	51.6		20 - 109	52%	SPK: 100
118-79-6	2,4,6-Tribromophenol	52.1		10 - 116	35%	SPK: 150
1718-51-0	Terphenyl-d14	35.4		10 - 105	35%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	49300	6.869
1146-65-2	Naphthalene-d8	187000	8.157
15067-26-2	Acenaphthene-d10	91200	9.916
1517-22-2	Phenanthrene-d10	135000	11.404
1719-03-5	Chrysene-d12	94800	14.051
1520-96-3	Perylene-d12	120000	15.551

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	200	AB	5.08	ug/Kg
000119-61-9	Benzophenone	230	J	10.6	ug/Kg
	unknown13.886	140	J	13.9	ug/Kg
003418-21-1	2-Bromomethyl-2-phenyl[1,3]dioxola	190	J	13.9	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-81	SDG No.:	Q2514
Lab Sample ID:	Q2514-09	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143035.D	1	07/07/25 09:00	07/08/25 16:05	PB168737

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:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-90	SDG No.:	Q2514
Lab Sample ID:	Q2514-10	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	91.6
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
BF143045.D	1	07/07/25 09:00	07/08/25 21:12	PB168737

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)	40.8	U	40.8	190	ug/Kg
98-86-2	Acetophenone	32.1	U	32.1	190	ug/Kg
65794-96-9	3+4-Methylphenols	44.7	U	44.7	360	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	51.6	U	51.6	87.1	ug/Kg
67-72-1	Hexachloroethane	19.2	U	19.2	190	ug/Kg
98-95-3	Nitrobenzene	19.9	U	19.9	190	ug/Kg
78-59-1	Isophorone	35.7	U	35.7	190	ug/Kg
88-75-5	2-Nitrophenol	63.4	U	63.4	190	ug/Kg
105-67-9	2,4-Dimethylphenol	70.6	U	70.6	190	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	33.5	U	33.5	190	ug/Kg
120-83-2	2,4-Dichlorophenol	30.8	U	30.8	190	ug/Kg
91-20-3	Naphthalene	24.7	U	24.7	190	ug/Kg
106-47-8	4-Chloroaniline	38.5	U	38.5	190	ug/Kg
87-68-3	Hexachlorobutadiene	27.5	U	27.5	190	ug/Kg
105-60-2	Caprolactam	56.7	U	56.7	360	ug/Kg
59-50-7	4-Chloro-3-methylphenol	31.2	U	31.2	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	31.7	U	31.7	190	ug/Kg
92-52-4	1,1-Biphenyl	23.7	U	23.7	190	ug/Kg
91-58-7	2-Chloronaphthalene	24.5	U	24.5	190	ug/Kg
88-74-4	2-Nitroaniline	52.4	U	52.4	190	ug/Kg
131-11-3	Dimethylphthalate	29.5	U	29.5	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-90	SDG No.:	Q2514
Lab Sample ID:	Q2514-10	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	91.6
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
BF143045.D	1	07/07/25 09:00	07/08/25 21:12	PB168737

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	36.6	U	36.6	190	ug/Kg
99-09-2	3-Nitroaniline	50.1	U	50.1	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	24.7	U	24.7	190	ug/Kg
121-14-2	2,4-Dinitrotoluene	54.5	U	54.5	190	ug/Kg
84-66-2	Diethylphthalate	30.8	U	30.8	190	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	29.1	U	29.1	190	ug/Kg
86-73-7	Fluorene	27.5	U	27.5	190	ug/Kg
100-01-6	4-Nitroaniline	69.9	U	69.9	190	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	110	U	110	360	ug/Kg
86-30-6	n-Nitrosodiphenylamine	35.8	U	35.8	190	ug/Kg
101-55-3	4-Bromophenyl-phenylether	30.3	U	30.3	190	ug/Kg
118-74-1	Hexachlorobenzene	27.5	U	27.5	190	ug/Kg
1912-24-9	Atrazine	37.0	U	37.0	190	ug/Kg
87-86-5	Pentachlorophenol	55.9	U	55.9	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	52.2	U	52.2	190	ug/Kg
206-44-0	Fluoranthene	94.7	J	32.7	190	ug/Kg
129-00-0	Pyrene	39.2	U	39.2	190	ug/Kg
85-68-7	Butylbenzylphthalate	77.7	U	77.7	190	ug/Kg
91-94-1	3,3-Dichlorobenzidine	40.0	U	40.0	360	ug/Kg
56-55-3	Benzo(a)anthracene	73.5	J	25.0	190	ug/Kg
218-01-9	Chrysene	74.0	J	21.7	190	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	64.5	U	64.5	190	ug/Kg
117-84-0	Di-n-octyl phthalate	94.5	U	94.5	360	ug/Kg
205-99-2	Benzo(b)fluoranthene	140	J	20.7	190	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-90	SDG No.:	Q2514
Lab Sample ID:	Q2514-10	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	91.6
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
BF143045.D	1	07/07/25 09:00	07/08/25 21:12	PB168737

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	98.9	J	32.1	190	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	31.7	U	31.7	190	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	29.8	U	29.8	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	49.2	U	49.2	190	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	29.8	U	29.8	190	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	48.7		18 - 112	32%	SPK: 150
13127-88-3	Phenol-d6	47.1		15 - 107	31%	SPK: 150
4165-60-0	Nitrobenzene-d5	34.4		18 - 107	34%	SPK: 100
321-60-8	2-Fluorobiphenyl	38.3		20 - 109	38%	SPK: 100
118-79-6	2,4,6-Tribromophenol	41.7		10 - 116	28%	SPK: 150
1718-51-0	Terphenyl-d14	23.7		10 - 105	24%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	51700	6.869			
1146-65-2	Naphthalene-d8	174000	8.157			
15067-26-2	Acenaphthene-d10	74700	9.91			
1517-22-2	Phenanthrene-d10	119000	11.404			
1719-03-5	Chrysene-d12	134000	14.051			
1520-96-3	Perylene-d12	110000	15.545			
TENTATIVE IDENTIFIED COMPOUNDS						
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	110	AB		5.08	ug/Kg
000119-61-9	Benzophenone	130	J		10.6	ug/Kg
1000411-48-9	N-[(2-Phenyl-1,3-dioxolan-2-yl)met	86.0	J		13.9	ug/Kg
000192-97-2	Benzo[e]pyrene	77.3	J		15.4	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-90	SDG No.:	Q2514
Lab Sample ID:	Q2514-10	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	91.6
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
BF143045.D	1	07/07/25 09:00	07/08/25 21:12	PB168737

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



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2514

Client: CDM Smith

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168737BL	PB168737BL	2-Fluorophenol	150	127	85		18	112
		Phenol-d6	150	128	85		15	107
		Nitrobenzene-d5	100	80.2	80		18	107
		2-Fluorobiphenyl	100	79.5	80		20	109
		2,4,6-Tribromophenol	150	132	88		10	116
		Terphenyl-d14	100	86.6	87		10	105
PB168737BS	PB168737BS	2-Fluorophenol	150	128	86		18	112
		Phenol-d6	150	129	86		15	107
		Nitrobenzene-d5	100	80.5	80		18	107
		2-Fluorobiphenyl	100	80.5	81		20	109
		2,4,6-Tribromophenol	150	139	92		10	116
		Terphenyl-d14	100	84.1	84		10	105
Q2514-01	TP-92	2-Fluorophenol	150	81.5	54		18	112
		Phenol-d6	150	81.9	55		15	107
		Nitrobenzene-d5	100	50.8	51		18	107
		2-Fluorobiphenyl	100	48.3	48		20	109
		2,4,6-Tribromophenol	150	59.1	39		10	116
		Terphenyl-d14	100	37.4	37		10	105
Q2514-02	TP-93	2-Fluorophenol	150	62.0	41		18	112
		Phenol-d6	150	57.7	38		15	107
		Nitrobenzene-d5	100	41.0	41		18	107
		2-Fluorobiphenyl	100	41.4	41		20	109
		2,4,6-Tribromophenol	150	60.4	40		10	116
		Terphenyl-d14	100	28.0	28		10	105
Q2514-03	TP-94	2-Fluorophenol	150	80.1	53		18	112
		Phenol-d6	150	80.7	54		15	107
		Nitrobenzene-d5	100	51.9	52		18	107
		2-Fluorobiphenyl	100	55.1	55		20	109
		2,4,6-Tribromophenol	150	56.5	38		10	116
		Terphenyl-d14	100	37.5	37		10	105
Q2514-04	TP-96	2-Fluorophenol	150	62.3	42		18	112
		Phenol-d6	150	61.0	41		15	107
		Nitrobenzene-d5	100	40.3	40		18	107
		2-Fluorobiphenyl	100	42.7	43		20	109
		2,4,6-Tribromophenol	150	55.0	37		10	116
		Terphenyl-d14	100	26.4	26		10	105
Q2514-05	TP-97	2-Fluorophenol	150	74.0	49		18	112
		Phenol-d6	150	75.6	50		15	107
		Nitrobenzene-d5	100	46.2	46		18	107
		2-Fluorobiphenyl	100	44.0	44		20	109
		2,4,6-Tribromophenol	150	55.6	37		10	116
		Terphenyl-d14	100	38.4	38		10	105
Q2514-06	TP-103	2-Fluorophenol	150	66.8	45		18	112
		Phenol-d6	150	67.4	45		15	107
		Nitrobenzene-d5	100	44.0	44		18	107
		2-Fluorobiphenyl	100	46.5	46		20	109
		2,4,6-Tribromophenol	150	47.8	32		10	116
		Terphenyl-d14	100	28.7	29		10	105
Q2514-07	TP-36	2-Fluorophenol	150	78.2	52		18	112
		Phenol-d6	150	79.8	53		15	107
		Nitrobenzene-d5	100	50.7	51		18	107

Surrogate Summary

SW-846

SDG No.: Q2514

Client: CDM Smith

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
Q2514-07	TP-36	2-Fluorobiphenyl	100	52.4	52		20	109
		2,4,6-Tribromophenol	150	56.2	37		10	116
		Terphenyl-d14	100	40.6	41		10	105
Q2514-08	TP-78	2-Fluorophenol	150	93.0	62		18	112
		Phenol-d6	150	95.8	64		15	107
		Nitrobenzene-d5	100	61.0	61		18	107
		2-Fluorobiphenyl	100	60.2	60		20	109
		2,4,6-Tribromophenol	150	67.5	45		10	116
		Terphenyl-d14	100	46.7	47		10	105
Q2514-08MS	TP-78MS	2-Fluorophenol	150	76.1	51		18	112
		Phenol-d6	150	76.2	51		15	107
		Nitrobenzene-d5	100	48.0	48		18	107
		2-Fluorobiphenyl	100	48.6	49		20	109
		2,4,6-Tribromophenol	150	68.0	45		10	116
		Terphenyl-d14	100	35.9	36		10	105
Q2514-08MSD	TP-78MSD	2-Fluorophenol	150	71.8	48		18	112
		Phenol-d6	150	70.7	47		15	107
		Nitrobenzene-d5	100	45.9	46		18	107
		2-Fluorobiphenyl	100	45.7	46		20	109
		2,4,6-Tribromophenol	150	64.2	43		10	116
		Terphenyl-d14	100	34.1	34		10	105
Q2514-09	TP-81	2-Fluorophenol	150	78.9	53		18	112
		Phenol-d6	150	79.4	53		15	107
		Nitrobenzene-d5	100	51.3	51		18	107
		2-Fluorobiphenyl	100	51.6	52		20	109
		2,4,6-Tribromophenol	150	52.1	35		10	116
		Terphenyl-d14	100	35.4	35		10	105
Q2514-10	TP-90	2-Fluorophenol	150	48.7	32		18	112
		Phenol-d6	150	47.1	31		15	107
		Nitrobenzene-d5	100	34.4	34		18	107
		2-Fluorobiphenyl	100	38.3	38		20	109
		2,4,6-Tribromophenol	150	41.7	28		10	116
		Terphenyl-d14	100	23.7	24		10	105

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2514

Analytical Method: SW8270E

Client: CDM Smith

DataFile: BF143032.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID:	Q2514-08MS	Client Sample ID:	TP-78MS								
Benzaldehyde	1900	0	1800	ug/Kg	95				10	171	
Phenol	1900	0	1700	ug/Kg	89				51	122	
bis(2-Chloroethyl)ether	1900	0	1800	ug/Kg	95				54	125	
2-Chlorophenol	1900	0	1800	ug/Kg	95				51	121	
2-Methylphenol	1900	0	1800	ug/Kg	95				47	125	
2,2-oxybis(1-Chloropropane)	1900	0	1600	ug/Kg	84				46	119	
Acetophenone	1900	0	1800	ug/Kg	95				55	128	
3+4-Methylphenols	1900	0	1800	ug/Kg	95				49	125	
N-Nitroso-di-n-propylamine	1900	0	1800	ug/Kg	95				59	119	
Hexachloroethane	1900	0	1800	ug/Kg	95				51	116	
Nitrobenzene	1900	0	1700	ug/Kg	89				47	124	
Isophorone	1900	0	1700	ug/Kg	89				49	127	
2-Nitrophenol	1900	0	1800	ug/Kg	95				43	131	
2,4-Dimethylphenol	1900	0	1700	ug/Kg	89				63	151	
bis(2-Chloroethoxy)methane	1900	0	1800	ug/Kg	95				51	119	
2,4-Dichlorophenol	1900	0	1800	ug/Kg	95				50	122	
Naphthalene	1900	0	1800	ug/Kg	95				51	121	
4-Chloroaniline	1900	0	1300	ug/Kg	68				10	100	
Hexachlorobutadiene	1900	0	1800	ug/Kg	95				44	126	
Caprolactam	1900	0	1400	ug/Kg	74				51	134	
4-Chloro-3-methylphenol	1900	0	1700	ug/Kg	89				57	132	
2-Methylnaphthalene	1900	0	1800	ug/Kg	95				59	123	
Hexachlorocyclopentadiene	3900	0	3000	ug/Kg	77				10	175	
2,4,6-Trichlorophenol	1900	0	1700	ug/Kg	89				33	141	
2,4,5-Trichlorophenol	1900	0	1700	ug/Kg	89				38	135	
1,1-Biphenyl	1900	0	1900	ug/Kg	100				55	131	
2-Chloronaphthalene	1900	0	1900	ug/Kg	100				48	124	
2-Nitroaniline	1900	0	1800	ug/Kg	95				47	134	
Dimethylphthalate	1900	0	1800	ug/Kg	95				54	120	
Acenaphthylene	1900	0	1800	ug/Kg	95				57	125	
2,6-Dinitrotoluene	1900	0	1800	ug/Kg	95				48	127	
3-Nitroaniline	1900	0	1400	ug/Kg	74				10	112	
Acenaphthene	1900	0	1800	ug/Kg	95				70	121	
2,4-Dinitrophenol	3900	0	1600	ug/Kg	41				10	155	
4-Nitrophenol	3900	0	2400	ug/Kg	62				10	175	
Dibenzofuran	1900	0	1800	ug/Kg	95				52	114	
2,4-Dinitrotoluene	1900	0	1800	ug/Kg	95				41	140	
Diethylphthalate	1900	0	1800	ug/Kg	95				51	119	
4-Chlorophenyl-phenylether	1900	0	1800	ug/Kg	95				48	122	
Fluorene	1900	0	1800	ug/Kg	95				53	118	
4-Nitroaniline	1900	0	1700	ug/Kg	89				29	140	
4,6-Dinitro-2-methylphenol	1900	0	1400	ug/Kg	74				10	160	
N-Nitrosodiphenylamine	1900	0	1900	ug/Kg	100				73	118	
4-Bromophenyl-phenylether	1900	0	2000	ug/Kg	105				65	121	
Hexachlorobenzene	1900	0	1900	ug/Kg	100				67	118	
Atrazine	1900	0	1900	ug/Kg	100				45	175	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2514

Analytical Method: SW8270E

Client: CDM Smith

DataFile: BF143032.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Pentachlorophenol	3900	0	2100	ug/Kg	54				13	153	
Phenanthrene	1900	0	1900	ug/Kg	100				52	128	
Anthracene	1900	0	1800	ug/Kg	95				62	124	
Carbazole	1900	0	1800	ug/Kg	95				59	119	
Di-n-butylphthalate	1900	0	2000	ug/Kg	105				55	125	
Fluoranthene	1900	0	1700	ug/Kg	89				44	125	
Pyrene	1900	0	1300	ug/Kg	68				37	122	
Butylbenzylphthalate	1900	0	1900	ug/Kg	100				44	135	
3,3-Dichlorobenzidine	1900	0	1400	ug/Kg	74				15	112	
Benzo(a)anthracene	1900	0	1800	ug/Kg	95				53	119	
Chrysene	1900	0	1900	ug/Kg	100				57	121	
bis(2-Ethylhexyl)phthalate	1900	0	1900	ug/Kg	100				42	169	
Di-n-octyl phthalate	1900	0	1900	ug/Kg	100				51	156	
Benzo(b)fluoranthene	1900	0	1900	ug/Kg	100				52	117	
Benzo(k)fluoranthene	1900	0	1900	ug/Kg	100				57	134	
Benzo(a)pyrene	1900	0	1900	ug/Kg	100				70	142	
Indeno(1,2,3-cd)pyrene	1900	0	1500	ug/Kg	79				40	129	
Dibenz(a,h)anthracene	1900	0	1500	ug/Kg	79				43	123	
Benzo(g,h,i)perylene	1900	0	1400	ug/Kg	74				24	125	
1,2,4,5-Tetrachlorobenzene	1900	0	1900	ug/Kg	100				52	134	
1,4-Dioxane	1900	0	1400	ug/Kg	74				46	112	
2,3,4,6-Tetrachlorophenol	1900	0	1400	ug/Kg	74				24	146	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2514

Analytical Method: SW8270E

Client: CDM Smith

DataFile: BF143033.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID:	Q2514-08MSD	Client Sample ID:	TP-78MSD								
Benzaldehyde	1900	0	1700	ug/Kg	89	7			10	171	20
Phenol	1900	0	1600	ug/Kg	84	6			51	122	20
bis(2-Chloroethyl)ether	1900	0	1700	ug/Kg	89	7			54	125	20
2-Chlorophenol	1900	0	1700	ug/Kg	89	7			51	121	20
2-Methylphenol	1900	0	1600	ug/Kg	84	12			47	125	20
2,2-oxybis(1-Chloropropane)	1900	0	1500	ug/Kg	79	6			46	119	20
Acetophenone	1900	0	1700	ug/Kg	89	7			55	128	20
3+4-Methylphenols	1900	0	1700	ug/Kg	89	7			49	125	20
N-Nitroso-di-n-propylamine	1900	0	1600	ug/Kg	84	12			59	119	20
Hexachloroethane	1900	0	1700	ug/Kg	89	7			51	116	20
Nitrobenzene	1900	0	1600	ug/Kg	84	6			47	124	20
Isophorone	1900	0	1600	ug/Kg	84	6			49	127	20
2-Nitrophenol	1900	0	1700	ug/Kg	89	7			43	131	20
2,4-Dimethylphenol	1900	0	1600	ug/Kg	84	6			63	151	20
bis(2-Chloroethoxy)methane	1900	0	1700	ug/Kg	89	7			51	119	20
2,4-Dichlorophenol	1900	0	1600	ug/Kg	84	12			50	122	20
Naphthalene	1900	0	1700	ug/Kg	89	7			51	121	20
4-Chloroaniline	1900	0	1200	ug/Kg	63	8			10	100	20
Hexachlorobutadiene	1900	0	1700	ug/Kg	89	7			44	126	20
Caprolactam	1900	0	1300	ug/Kg	68	8			51	134	20
4-Chloro-3-methylphenol	1900	0	1600	ug/Kg	84	6			57	132	20
2-Methylnaphthalene	1900	0	1700	ug/Kg	89	7			59	123	20
Hexachlorocyclopentadiene	3900	0	2800	ug/Kg	72	7			10	175	20
2,4,6-Trichlorophenol	1900	0	1600	ug/Kg	84	6			33	141	20
2,4,5-Trichlorophenol	1900	0	1600	ug/Kg	84	6			38	135	20
1,1-Biphenyl	1900	0	1700	ug/Kg	89	12			55	131	20
2-Chloronaphthalene	1900	0	1700	ug/Kg	89	12			48	124	20
2-Nitroaniline	1900	0	1700	ug/Kg	89	7			47	134	20
Dimethylphthalate	1900	0	1700	ug/Kg	89	7			54	120	20
Acenaphthylene	1900	0	1700	ug/Kg	89	7			57	125	20
2,6-Dinitrotoluene	1900	0	1700	ug/Kg	89	7			48	127	20
3-Nitroaniline	1900	0	1300	ug/Kg	68	8			10	112	20
Acenaphthene	1900	0	1700	ug/Kg	89	7			70	121	20
2,4-Dinitrophenol	3900	0	1500	ug/Kg	38	8			10	155	20
4-Nitrophenol	3900	0	2300	ug/Kg	59	5			10	175	20
Dibenzofuran	1900	0	1700	ug/Kg	89	7			52	114	20
2,4-Dinitrotoluene	1900	0	1600	ug/Kg	84	12			41	140	20
Diethylphthalate	1900	0	1700	ug/Kg	89	7			51	119	20
4-Chlorophenyl-phenylether	1900	0	1700	ug/Kg	89	7			48	122	20
Fluorene	1900	0	1700	ug/Kg	89	7			53	118	20
4-Nitroaniline	1900	0	1600	ug/Kg	84	6			29	140	20
4,6-Dinitro-2-methylphenol	1900	0	1300	ug/Kg	68	8			10	160	20
N-Nitrosodiphenylamine	1900	0	1800	ug/Kg	95	5			73	118	20
4-Bromophenyl-phenylether	1900	0	1800	ug/Kg	95	10			65	121	20
Hexachlorobenzene	1900	0	1800	ug/Kg	95	5			67	118	20
Atrazine	1900	0	1800	ug/Kg	95	5			45	175	20

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2514

Analytical Method: SW8270E

Client: CDM Smith

DataFile: BF143033.D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Pentachlorophenol	3900	0	1900	ug/Kg	49		10		13	153	20
Phenanthrene	1900	0	1700	ug/Kg	89		12		52	128	20
Anthracene	1900	0	1700	ug/Kg	89		7		62	124	20
Carbazole	1900	0	1700	ug/Kg	89		7		59	119	20
Di-n-butylphthalate	1900	0	1900	ug/Kg	100		5		55	125	20
Fluoranthene	1900	0	1600	ug/Kg	84		6		44	125	20
Pyrene	1900	0	1300	ug/Kg	68		0		37	122	20
Butylbenzylphthalate	1900	0	1800	ug/Kg	95		5		44	135	20
3,3-Dichlorobenzidine	1900	0	1400	ug/Kg	74		0		15	112	20
Benzo(a)anthracene	1900	0	1700	ug/Kg	89		7		53	119	20
Chrysene	1900	0	1800	ug/Kg	95		5		57	121	20
bis(2-Ethylhexyl)phthalate	1900	0	1800	ug/Kg	95		5		42	169	20
Di-n-octyl phthalate	1900	0	1800	ug/Kg	95		5		51	156	20
Benzo(b)fluoranthene	1900	0	1900	ug/Kg	100		0		52	117	20
Benzo(k)fluoranthene	1900	0	1800	ug/Kg	95		5		57	134	20
Benzo(a)pyrene	1900	0	1800	ug/Kg	95		5		70	142	20
Indeno(1,2,3-cd)pyrene	1900	0	1400	ug/Kg	74		7		40	129	20
Dibenz(a,h)anthracene	1900	0	1400	ug/Kg	74		7		43	123	20
Benzo(g,h,i)perylene	1900	0	1300	ug/Kg	68		8		24	125	20
1,2,4,5-Tetrachlorobenzene	1900	0	1800	ug/Kg	95		5		52	134	20
1,4-Dioxane	1900	0	1300	ug/Kg	68		8		46	112	20
2,3,4,6-Tetrachlorophenol	1900	0	1300	ug/Kg	68		8		24	146	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2514

Analytical Method: 8270E

Client: CDM Smith

DataFile: BF143050.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168737BS	Benzaldehyde	1700	1500	ug/Kg	88				10	133	
	Phenol	1700	1400	ug/Kg	82				62	112	
	bis(2-Chloroethyl)ether	1700	1500	ug/Kg	88				60	101	
	2-Chlorophenol	1700	1500	ug/Kg	88				65	112	
	2-Methylphenol	1700	1500	ug/Kg	88				61	108	
	2,2-oxybis(1-Chloropropane)	1700	1300	ug/Kg	76				51	100	
	Acetophenone	1700	1500	ug/Kg	88				66	98	
	3+4-Methylphenols	1700	1500	ug/Kg	88				58	111	
	N-Nitroso-di-n-propylamine	1700	1500	ug/Kg	88				63	95	
	Hexachloroethane	1700	1500	ug/Kg	88				72	108	
	Nitrobenzene	1700	1400	ug/Kg	82				57	101	
	Isophorone	1700	1500	ug/Kg	88				59	99	
	2-Nitrophenol	1700	1500	ug/Kg	88				61	111	
	2,4-Dimethylphenol	1700	1500	ug/Kg	88				46	141	
	bis(2-Chloroethoxy)methane	1700	1500	ug/Kg	88				66	97	
	2,4-Dichlorophenol	1700	1500	ug/Kg	88				62	107	
	Naphthalene	1700	1500	ug/Kg	88				62	100	
	4-Chloroaniline	1700	870	ug/Kg	51				16	100	
	Hexachlorobutadiene	1700	1500	ug/Kg	88				53	98	
	Caprolactam	1700	1600	ug/Kg	94				67	110	
	4-Chloro-3-methylphenol	1700	1500	ug/Kg	88				58	112	
	2-Methylnaphthalene	1700	1500	ug/Kg	88				60	104	
	Hexachlorocyclopentadiene	3300	2500	ug/Kg	76				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	1500	ug/Kg	88				57	103	
	2-Chloronaphthalene	1700	1500	ug/Kg	88				58	99	
	2-Nitroaniline	1700	1500	ug/Kg	88				66	101	
	Dimethylphthalate	1700	1600	ug/Kg	94				61	99	
	Acenaphthylene	1700	1500	ug/Kg	88				63	101	
	2,6-Dinitrotoluene	1700	1600	ug/Kg	94				61	104	
	3-Nitroaniline	1700	1000	ug/Kg	59				28	100	
	Acenaphthene	1700	1600	ug/Kg	94				57	104	
	2,4-Dinitrophenol	3300	3000	ug/Kg	91				37	128	
	4-Nitrophenol	3300	2400	ug/Kg	73				48	119	
	Dibenzofuran	1700	1500	ug/Kg	88				63	99	
	2,4-Dinitrotoluene	1700	1600	ug/Kg	94				60	106	
	Diethylphthalate	1700	1600	ug/Kg	94				60	101	
	4-Chlorophenyl-phenylether	1700	1500	ug/Kg	88				58	98	
	Fluorene	1700	1500	ug/Kg	88				61	101	
	4-Nitroaniline	1700	1500	ug/Kg	88				64	103	
	4,6-Dinitro-2-methylphenol	1700	1500	ug/Kg	88				76	113	
	N-Nitrosodiphenylamine	1700	1500	ug/Kg	88				71	99	
	4-Bromophenyl-phenylether	1700	1500	ug/Kg	88				66	102	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: <u>Q2514</u>	Analytical Method: <u>8270E</u>
Client: <u>CDM Smith</u>	DataFile: <u>BF143050.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB168737BS	Hexachlorobenzene	1700	1500	ug/Kg	88				64	98	
	Atrazine	1700	1700	ug/Kg	100				47	152	
	Pentachlorophenol	3300	2400	ug/Kg	73				67	105	
	Phenanthrene	1700	1500	ug/Kg	88				59	103	
	Anthracene	1700	1500	ug/Kg	88				61	105	
	Carbazole	1700	1500	ug/Kg	88				61	99	
	Di-n-butylphthalate	1700	1600	ug/Kg	94				58	104	
	Fluoranthene	1700	1500	ug/Kg	88				57	107	
	Pyrene	1700	1500	ug/Kg	88				59	103	
	Butylbenzylphthalate	1700	1600	ug/Kg	94				55	103	
	3,3-Dichlorobenzidine	1700	830	ug/Kg	49				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	1600	ug/Kg	94				54	135	
	Di-n-octyl phthalate	1700	1600	ug/Kg	94				52	137	
	Benzo(b)fluoranthene	1700	1400	ug/Kg	82				62	109	
	Benzo(k)fluoranthene	1700	1600	ug/Kg	94				62	109	
	Benzo(a)pyrene	1700	1500	ug/Kg	88				63	103	
	Indeno(1,2,3-cd)pyrene	1700	1400	ug/Kg	82				63	101	
	Dibenz(a,h)anthracene	1700	1400	ug/Kg	82				61	112	
	Benzo(g,h,i)perylene	1700	1400	ug/Kg	82				70	108	
	1,2,4,5-Tetrachlorobenzene	1700	1500	ug/Kg	88				53	101	
	1,4-Dioxane	1700	1200	ug/Kg	71				50	96	
	2,3,4,6-Tetrachlorophenol	1700	1500	ug/Kg	88				59	108	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB168737BL

Lab Name: Alliance

Contract: CAMP02

Lab Code: ACE

SDG NO.: Q2514

Lab File ID: BF143049.D

Lab Sample ID: PB168737BL

Instrument ID: BNA_F

Date Extracted: 07/07/2025

Matrix: (soil/water) SOIL

Date Analyzed: 07/09/2025

Level: (low/med) LOW

Time Analyzed: 11:23

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168737BS	PB168737BS	BF143050.D	07/09/2025
TP-93	Q2514-02	BF143015.D	07/07/2025
TP-92	Q2514-01	BF143037.D	07/08/2025
TP-94	Q2514-03	BF143036.D	07/08/2025
TP-97	Q2514-05	BF143038.D	07/08/2025
TP-103	Q2514-06	BF143044.D	07/08/2025
TP-96	Q2514-04	BF143046.D	07/08/2025
TP-36	Q2514-07	BF143030.D	07/08/2025
TP-78	Q2514-08	BF143031.D	07/08/2025
TP-78MS	Q2514-08MS	BF143032.D	07/08/2025
TP-78MSD	Q2514-08MSD	BF143033.D	07/08/2025
TP-81	Q2514-09	BF143035.D	07/08/2025
TP-90	Q2514-10	BF143045.D	07/08/2025

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BF142787.D
Instrument ID: BNA_F

Contract: CAMP02
SDG NO.: Q2514
DFTPP Injection Date: 06/19/2025
DFTPP Injection Time: 16:37

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	33.9
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
127	10.0 - 80.0% of mass 198	41.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	5.8
275	10.0 - 60.0% of mass 198	24.9
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:

CLIENT ID	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: Alliance
Lab Code: ACE
Lab File ID: BF143002.D
Instrument ID: BNA_F

Contract: CAMP02
SDG NO.: Q2514
DFTPP Injection Date: 07/07/2025
DFTPP Injection Time: 11:12

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	32.2
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	29.4
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	42.4
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6
275	10.0 - 60.0% of mass 198	25.1
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	15.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19 (19) 2

1-Value is % mass 69

2-Value is % mass 442

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF143003.D	07/07/2025	12:12
TP-93	Q2514-02	BF143015.D	07/07/2025	18:21

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BF143024.D
Instrument ID: BNA_F

Contract: CAMP02
SDG NO.: Q2514
DFTPP Injection Date: 07/08/2025
DFTPP Injection Time: 10:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	34.6
68	Less than 2.0% of mass 69	0.6 (2) 1
69	Mass 69 relative abundance	32.1
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	44.5
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
275	10.0 - 60.0% of mass 198	25.6
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	15.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.8 (18.8) 2

1-Value is % mass 69

2-Value is % mass 442

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

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF143025.D	07/08/2025	10:54
TP-36	Q2514-07	BF143030.D	07/08/2025	13:31
TP-78	Q2514-08	BF143031.D	07/08/2025	14:02
TP-78MS	Q2514-08MS	BF143032.D	07/08/2025	14:32
TP-78MSD	Q2514-08MSD	BF143033.D	07/08/2025	15:03
TP-81	Q2514-09	BF143035.D	07/08/2025	16:05
TP-94	Q2514-03	BF143036.D	07/08/2025	16:36
TP-92	Q2514-01	BF143037.D	07/08/2025	17:07
TP-97	Q2514-05	BF143038.D	07/08/2025	17:37
TP-103	Q2514-06	BF143044.D	07/08/2025	20:42
TP-90	Q2514-10	BF143045.D	07/08/2025	21:12
TP-96	Q2514-04	BF143046.D	07/08/2025	21:42

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance
Lab Code: ACE
Lab File ID: BF143047.D
Instrument ID: BNA_F

Contract: CAMP02
SDG NO.: Q2514
DFTPP Injection Date: 07/09/2025
DFTPP Injection Time: 10:22

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	33.7
68	Less than 2.0% of mass 69	0.6 (1.9) 1
69	Mass 69 relative abundance	30.9
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	43.5
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
275	10.0 - 60.0% of mass 198	26
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:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF143048.D	07/09/2025	10:52
PB168737BL	PB168737BL	BF143049.D	07/09/2025	11:23
PB168737BS	PB168737BS	BF143050.D	07/09/2025	11:54

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2514

Client ID : SSTDCCC040

Date Analyzed: 07/07/2025

Lab File ID: BF143003.D

Time Analyzed: 12:12

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	66299	6.875	250576	8.16	128386	9.92
UPPER LIMIT	132598	7.375	501152	8.663	256772	10.422
LOWER LIMIT	33149.5	6.375	125288	7.663	64193	9.422
EPA SAMPLE NO.						
01 TP-93	51019	6.88	169189	8.16	78799	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: Alliance

Lab Code: ACE

SDG NO.: Q2514

Client ID: SSTDCCC040

Date Analyzed: 07/07/2025

Lab File ID: BF143003.D

Time Analyzed: 12:12

Instrument ID: BNA_F

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

01

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	196682	11.41	115356	14.057	146144	15.551
UPPER LIMIT	393364	11.91	230712	14.557	292288	16.051
LOWER LIMIT	98341	10.91	57678	13.557	73072	15.051
EPA SAMPLE NO.						
TP-93	137500	11.40	140379	14.05	106598	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: Alliance

Lab Code: ACE

SDG NO.: Q2514

Client ID : SSTDCCC040

Date Analyzed: 07/08/2025

Lab File ID: BF143025.D

Time Analyzed: 10:54

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	66813	6.875	257725	8.16	136330	9.92
	UPPER LIMIT	133626	7.375	515450	8.663	272660	10.422
	LOWER LIMIT	33406.5	6.375	128863	7.663	68165	9.422
	EPA SAMPLE NO.						
01	TP-92	52203	6.87	200559	8.16	103832	9.92
02	TP-94	53325	6.87	200031	8.16	97923	9.92
03	TP-96	51513	6.87	178914	8.16	77176	9.92
04	TP-97	53517	6.87	204226	8.16	107967	9.92
05	TP-103	56443	6.87	202963	8.16	92048	9.91
06	TP-36	51623	6.88	191789	8.16	97372	9.92
07	TP-78	50576	6.88	192739	8.16	95941	9.92
08	TP-78MS	50264	6.88	189189	8.16	92887	9.92
09	TP-78MSD	51205	6.88	192135	8.16	95468	9.92
10	TP-81	49332	6.87	187293	8.16	91194	9.92
11	TP-90	51734	6.87	174400	8.16	74685	9.91

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: Alliance

Lab Code: ACE

SDG NO.: Q2514

Client ID: SSTDCCC040

Date Analyzed: 07/08/2025

Lab File ID: BF143025.D

Time Analyzed: 10:54

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	218169	11.41	109391	14.063	135350	15.557
	UPPER LIMIT	436338	11.91	218782	14.563	270700	16.057
	LOWER LIMIT	109085	10.91	54695.5	13.563	67675	15.057
	EPA SAMPLE NO.						
01	TP-92	167385	11.40	99277	14.05	124285	15.55
02	TP-94	139376	11.40	103985	14.05	130813	15.55
03	TP-96	119858	11.40	136149	14.05	112713	15.55
04	TP-97	176632	11.40	101816	14.05	128852	15.55
05	TP-103	127469	11.40	129693	14.05	142779	15.55
06	TP-36	145951	11.40	94013	14.06	119996	15.55
07	TP-78	147510	11.40	94443	14.06	118368	15.55
08	TP-78MS	136328	11.40	97647	14.06	121597	15.55
09	TP-78MSD	140156	11.41	99167	14.06	122553	15.55
10	TP-81	135239	11.40	94806	14.05	119948	15.55
11	TP-90	119276	11.40	133812	14.05	110430	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 LOWER 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: Alliance

Lab Code: ACE

SDG NO.: Q2514

Client ID : SSTDCCC040

Date Analyzed: 07/09/2025

Lab File ID: BF143048.D

Time Analyzed: 10:52

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	66592	6.875	257344	8.16	135062	9.92
UPPER LIMIT	133184	7.375	514688	8.657	270124	10.416
LOWER LIMIT	33296	6.375	128672	7.657	67531	9.416
EPA SAMPLE NO.						
01 PB168737BL	57363	6.87	220874	8.16	118712	9.92
02 PB168737BS	58302	6.88	228077	8.16	121529	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: Alliance

Lab Code: ACE

SDG NO.: Q2514

Client ID: SSTDCCC040

Date Analyzed: 07/09/2025

Lab File ID: BF143048.D

Time Analyzed: 10:52

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	218580	11.41	110392	14.057	146270	15.545
UPPER LIMIT	437160	11.91	220784	14.557	292540	16.045
LOWER LIMIT	109290	10.91	55196	13.557	73135	15.045
EPA SAMPLE NO.						
01 PB168737BL	203771	11.40	110413	14.05	115591	15.55
02 PB168737BS	206226	11.40	108155	14.06	126456	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:	PB168737BL	SDG No.:	Q2514
Lab Sample ID:	PB168737BL	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
BF143049.D	1	07/07/25 09:00	07/09/25 11:23	PB168737

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	79.9	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:	PB168737BL	SDG No.:	Q2514
Lab Sample ID:	PB168737BL	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
BF143049.D	1	07/07/25 09:00	07/09/25 11:23	PB168737

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	86.7	U	86.7	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:	PB168737BL	SDG No.:	Q2514
Lab Sample ID:	PB168737BL	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
BF143049.D	1	07/07/25 09:00	07/09/25 11:23	PB168737

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	85%	SPK: 150
13127-88-3	Phenol-d6	128		15 - 107	85%	SPK: 150
4165-60-0	Nitrobenzene-d5	80.2		18 - 107	80%	SPK: 100
321-60-8	2-Fluorobiphenyl	79.5		20 - 109	80%	SPK: 100
118-79-6	2,4,6-Tribromophenol	132		10 - 116	88%	SPK: 150
1718-51-0	Terphenyl-d14	86.6		10 - 105	87%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	57400	6.869
1146-65-2	Naphthalene-d8	221000	8.157
15067-26-2	Acenaphthene-d10	119000	9.916
1517-22-2	Phenanthrene-d10	204000	11.404
1719-03-5	Chrysene-d12	110000	14.051
1520-96-3	Perylene-d12	116000	15.545

TENTATIVE IDENTIFIED COMPOUNDS

000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	310	A	5.10	ug/Kg
000630-04-6	Hentriacontane	150	J	13.9	ug/Kg
006311-48-4	(1,1-Biphenyl)-4,4-diamine, N,N	600	J	17.2	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168737BL	SDG No.:	Q2514
Lab Sample ID:	PB168737BL	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
BF143049.D	1	07/07/25 09:00	07/09/25 11:23	PB168737

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:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168737BS	SDG No.:	Q2514
Lab Sample ID:	PB168737BS	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
BF143050.D	1	07/07/25 09:00	07/09/25 11:54	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1500		160	330	ug/Kg
108-95-2	Phenol	1400		22.1	170	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1500		24.3	170	ug/Kg
95-57-8	2-Chlorophenol	1500		24.4	170	ug/Kg
95-48-7	2-Methylphenol	1500		29.9	170	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1300		37.5	170	ug/Kg
98-86-2	Acetophenone	1500		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	1500		47.4	80.0	ug/Kg
67-72-1	Hexachloroethane	1500		17.6	170	ug/Kg
98-95-3	Nitrobenzene	1400		18.3	170	ug/Kg
78-59-1	Isophorone	1500		32.8	170	ug/Kg
88-75-5	2-Nitrophenol	1500		58.2	170	ug/Kg
105-67-9	2,4-Dimethylphenol	1500		64.8	170	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1500		30.8	170	ug/Kg
120-83-2	2,4-Dichlorophenol	1500		28.3	170	ug/Kg
91-20-3	Naphthalene	1500		22.7	170	ug/Kg
106-47-8	4-Chloroaniline	870		35.4	170	ug/Kg
87-68-3	Hexachlorobutadiene	1500		25.3	170	ug/Kg
105-60-2	Caprolactam	1600		52.1	330	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1500		28.7	170	ug/Kg
91-57-6	2-Methylnaphthalene	1500		25.6	170	ug/Kg
77-47-4	Hexachlorocyclopentadiene	2500		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	1500		21.8	170	ug/Kg
91-58-7	2-Chloronaphthalene	1500		22.5	170	ug/Kg
88-74-4	2-Nitroaniline	1500		48.1	170	ug/Kg
131-11-3	Dimethylphthalate	1600		27.1	170	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168737BS	SDG No.:	Q2514
Lab Sample ID:	PB168737BS	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
BF143050.D	1	07/07/25 09:00	07/09/25 11:54	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1500		28.9	170	ug/Kg
606-20-2	2,6-Dinitrotoluene	1600		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	3000	E	230	330	ug/Kg
100-02-7	4-Nitrophenol	2400		110	330	ug/Kg
132-64-9	Dibenzofuran	1500		22.7	170	ug/Kg
121-14-2	2,4-Dinitrotoluene	1600		50.1	170	ug/Kg
84-66-2	Diethylphthalate	1600		28.3	170	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1500		26.7	170	ug/Kg
86-73-7	Fluorene	1500		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	1500		32.9	170	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1500		27.8	170	ug/Kg
118-74-1	Hexachlorobenzene	1500		25.3	170	ug/Kg
1912-24-9	Atrazine	1700		34.0	170	ug/Kg
87-86-5	Pentachlorophenol	2400		51.3	330	ug/Kg
85-01-8	Phenanthrene	1500		20.9	170	ug/Kg
120-12-7	Anthracene	1500		33.3	170	ug/Kg
86-74-8	Carbazole	1500		31.2	170	ug/Kg
84-74-2	Di-n-butylphthalate	1600		47.9	170	ug/Kg
206-44-0	Fluoranthene	1500		30.0	170	ug/Kg
129-00-0	Pyrene	1500		36.0	170	ug/Kg
85-68-7	Butylbenzylphthalate	1600		71.4	170	ug/Kg
91-94-1	3,3-Dichlorobenzidine	830		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	1600		59.2	170	ug/Kg
117-84-0	Di-n-octyl phthalate	1600		86.8	330	ug/Kg
205-99-2	Benzo(b)fluoranthene	1400		19.0	170	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168737BS	SDG No.:	Q2514
Lab Sample ID:	PB168737BS	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
BF143050.D	1	07/07/25 09:00	07/09/25 11:54	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1600		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	1400		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	1500		25.6	170	ug/Kg
123-91-1	1,4-Dioxane	1200		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	128		18 - 112	86%	SPK: 150
13127-88-3	Phenol-d6	129		15 - 107	86%	SPK: 150
4165-60-0	Nitrobenzene-d5	80.5		18 - 107	80%	SPK: 100
321-60-8	2-Fluorobiphenyl	80.5		20 - 109	81%	SPK: 100
118-79-6	2,4,6-Tribromophenol	139		10 - 116	92%	SPK: 150
1718-51-0	Terphenyl-d14	84.1		10 - 105	84%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	58300	6.875			
1146-65-2	Naphthalene-d8	228000	8.157			
15067-26-2	Acenaphthene-d10	122000	9.916			
1517-22-2	Phenanthrene-d10	206000	11.404			
1719-03-5	Chrysene-d12	108000	14.057			
1520-96-3	Perylene-d12	126000	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:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78MS	SDG No.:	Q2514
Lab Sample ID:	Q2514-08MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143032.D	1	07/07/25 09:00	07/08/25 14:32	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1800		180	380	ug/Kg
108-95-2	Phenol	1700		25.6	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1800		28.1	200	ug/Kg
95-57-8	2-Chlorophenol	1800		28.3	200	ug/Kg
95-48-7	2-Methylphenol	1800		34.6	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1600		43.4	200	ug/Kg
98-86-2	Acetophenone	1800		34.2	200	ug/Kg
65794-96-9	3+4-Methylphenols	1800		47.6	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1800		54.9	92.7	ug/Kg
67-72-1	Hexachloroethane	1800		20.4	200	ug/Kg
98-95-3	Nitrobenzene	1700		21.2	200	ug/Kg
78-59-1	Isophorone	1700		38.0	200	ug/Kg
88-75-5	2-Nitrophenol	1800		67.4	200	ug/Kg
105-67-9	2,4-Dimethylphenol	1700		75.1	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1800		35.7	200	ug/Kg
120-83-2	2,4-Dichlorophenol	1800		32.8	200	ug/Kg
91-20-3	Naphthalene	1800		26.3	200	ug/Kg
106-47-8	4-Chloroaniline	1300		41.0	200	ug/Kg
87-68-3	Hexachlorobutadiene	1800		29.3	200	ug/Kg
105-60-2	Caprolactam	1400		60.4	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1700		33.2	200	ug/Kg
91-57-6	2-Methylnaphthalene	1800		29.7	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3000		130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1700		22.9	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1700		33.7	200	ug/Kg
92-52-4	1,1-Biphenyl	1900		25.3	200	ug/Kg
91-58-7	2-Chloronaphthalene	1900		26.1	200	ug/Kg
88-74-4	2-Nitroaniline	1800		55.7	200	ug/Kg
131-11-3	Dimethylphthalate	1800		31.4	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78MS	SDG No.:	Q2514
Lab Sample ID:	Q2514-08MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143032.D	1	07/07/25 09:00	07/08/25 14:32	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1800		33.5	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	1800		38.9	200	ug/Kg
99-09-2	3-Nitroaniline	1400		53.3	200	ug/Kg
83-32-9	Acenaphthene	1800		24.7	200	ug/Kg
51-28-5	2,4-Dinitrophenol	1600		270	380	ug/Kg
100-02-7	4-Nitrophenol	2400		120	380	ug/Kg
132-64-9	Dibenzofuran	1800		26.3	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	1800		58.0	200	ug/Kg
84-66-2	Diethylphthalate	1800		32.8	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1800		30.9	200	ug/Kg
86-73-7	Fluorene	1800		29.3	200	ug/Kg
100-01-6	4-Nitroaniline	1700		74.4	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1400		120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1900		38.1	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	2000		32.2	200	ug/Kg
118-74-1	Hexachlorobenzene	1900		29.3	200	ug/Kg
1912-24-9	Atrazine	1900		39.4	200	ug/Kg
87-86-5	Pentachlorophenol	2100		59.4	380	ug/Kg
85-01-8	Phenanthrene	1900		24.2	200	ug/Kg
120-12-7	Anthracene	1800		38.6	200	ug/Kg
86-74-8	Carbazole	1800		36.1	200	ug/Kg
84-74-2	Di-n-butylphthalate	2000		55.5	200	ug/Kg
206-44-0	Fluoranthene	1700		34.8	200	ug/Kg
129-00-0	Pyrene	1300		41.7	200	ug/Kg
85-68-7	Butylbenzylphthalate	1900		82.7	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1400		42.5	380	ug/Kg
56-55-3	Benzo(a)anthracene	1800		26.6	200	ug/Kg
218-01-9	Chrysene	1900		23.1	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1900		68.6	200	ug/Kg
117-84-0	Di-n-octyl phthalate	1900		100	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	1900		22.0	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78MS	SDG No.:	Q2514
Lab Sample ID:	Q2514-08MS	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143032.D	1	07/07/25 09:00	07/08/25 14:32	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1900		25.9	200	ug/Kg
50-32-8	Benzo(a)pyrene	1900		34.2	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1500		33.7	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1500		31.7	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1400		29.8	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1900		29.7	200	ug/Kg
123-91-1	1,4-Dioxane	1400		52.4	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1400		31.7	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	76.1		18 - 112	51%	SPK: 150
13127-88-3	Phenol-d6	76.2		15 - 107	51%	SPK: 150
4165-60-0	Nitrobenzene-d5	48.0		18 - 107	48%	SPK: 100
321-60-8	2-Fluorobiphenyl	48.6		20 - 109	49%	SPK: 100
118-79-6	2,4,6-Tribromophenol	68.0		10 - 116	45%	SPK: 150
1718-51-0	Terphenyl-d14	35.9		10 - 105	36%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	50300	6.875			
1146-65-2	Naphthalene-d8	189000	8.157			
15067-26-2	Acenaphthene-d10	92900	9.916			
1517-22-2	Phenanthrene-d10	136000	11.404			
1719-03-5	Chrysene-d12	97600	14.057			
1520-96-3	Perylene-d12	122000	15.551			

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:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78MSD	SDG No.:	Q2514
Lab Sample ID:	Q2514-08MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143033.D	1	07/07/25 09:00	07/08/25 15:03	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	1700		180	380	ug/Kg
108-95-2	Phenol	1600		25.6	200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1700		28.1	200	ug/Kg
95-57-8	2-Chlorophenol	1700		28.2	200	ug/Kg
95-48-7	2-Methylphenol	1600		34.6	200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1500		43.4	200	ug/Kg
98-86-2	Acetophenone	1700		34.1	200	ug/Kg
65794-96-9	3+4-Methylphenols	1700		47.5	380	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	1600		54.8	92.5	ug/Kg
67-72-1	Hexachloroethane	1700		20.4	200	ug/Kg
98-95-3	Nitrobenzene	1600		21.2	200	ug/Kg
78-59-1	Isophorone	1600		37.9	200	ug/Kg
88-75-5	2-Nitrophenol	1700		67.3	200	ug/Kg
105-67-9	2,4-Dimethylphenol	1600		75.0	200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1700		35.6	200	ug/Kg
120-83-2	2,4-Dichlorophenol	1600		32.7	200	ug/Kg
91-20-3	Naphthalene	1700		26.3	200	ug/Kg
106-47-8	4-Chloroaniline	1200		41.0	200	ug/Kg
87-68-3	Hexachlorobutadiene	1700		29.3	200	ug/Kg
105-60-2	Caprolactam	1300		60.3	380	ug/Kg
59-50-7	4-Chloro-3-methylphenol	1600		33.2	200	ug/Kg
91-57-6	2-Methylnaphthalene	1700		29.6	200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	2800		130	380	ug/Kg
88-06-2	2,4,6-Trichlorophenol	1600		22.9	200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	1600		33.7	200	ug/Kg
92-52-4	1,1-Biphenyl	1700		25.2	200	ug/Kg
91-58-7	2-Chloronaphthalene	1700		26.0	200	ug/Kg
88-74-4	2-Nitroaniline	1700		55.6	200	ug/Kg
131-11-3	Dimethylphthalate	1700		31.3	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78MSD	SDG No.:	Q2514
Lab Sample ID:	Q2514-08MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143033.D	1	07/07/25 09:00	07/08/25 15:03	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
208-96-8	Acenaphthylene	1700		33.4	200	ug/Kg
606-20-2	2,6-Dinitrotoluene	1700		38.9	200	ug/Kg
99-09-2	3-Nitroaniline	1300		53.2	200	ug/Kg
83-32-9	Acenaphthene	1700		24.6	200	ug/Kg
51-28-5	2,4-Dinitrophenol	1500		260	380	ug/Kg
100-02-7	4-Nitrophenol	2300		120	380	ug/Kg
132-64-9	Dibenzofuran	1700		26.3	200	ug/Kg
121-14-2	2,4-Dinitrotoluene	1600		58.0	200	ug/Kg
84-66-2	Diethylphthalate	1700		32.7	200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1700		30.9	200	ug/Kg
86-73-7	Fluorene	1700		29.3	200	ug/Kg
100-01-6	4-Nitroaniline	1600		74.3	200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	1300		120	380	ug/Kg
86-30-6	n-Nitrosodiphenylamine	1800		38.1	200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1800		32.2	200	ug/Kg
118-74-1	Hexachlorobenzene	1800		29.3	200	ug/Kg
1912-24-9	Atrazine	1800		39.3	200	ug/Kg
87-86-5	Pentachlorophenol	1900		59.3	380	ug/Kg
85-01-8	Phenanthrene	1700		24.2	200	ug/Kg
120-12-7	Anthracene	1700		38.5	200	ug/Kg
86-74-8	Carbazole	1700		36.1	200	ug/Kg
84-74-2	Di-n-butylphthalate	1900		55.4	200	ug/Kg
206-44-0	Fluoranthene	1600		34.7	200	ug/Kg
129-00-0	Pyrene	1300		41.6	200	ug/Kg
85-68-7	Butylbenzylphthalate	1800		82.6	200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1400		42.5	380	ug/Kg
56-55-3	Benzo(a)anthracene	1700		26.6	200	ug/Kg
218-01-9	Chrysene	1800		23.0	200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	1800		68.5	200	ug/Kg
117-84-0	Di-n-octyl phthalate	1800		100	380	ug/Kg
205-99-2	Benzo(b)fluoranthene	1900		22.0	200	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	07/03/25
Project:	South River WM Replacement	Date Received:	07/03/25
Client Sample ID:	TP-78MSD	SDG No.:	Q2514
Lab Sample ID:	Q2514-08MSD	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	86.3
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
BF143033.D	1	07/07/25 09:00	07/08/25 15:03	PB168737

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	1800		25.9	200	ug/Kg
50-32-8	Benzo(a)pyrene	1800		34.1	200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1400		33.7	200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	1400		31.7	200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1300		29.7	200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	1800		29.6	200	ug/Kg
123-91-1	1,4-Dioxane	1300		52.3	200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1300		31.7	200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	71.8		18 - 112	48%	SPK: 150
13127-88-3	Phenol-d6	70.7		15 - 107	47%	SPK: 150
4165-60-0	Nitrobenzene-d5	45.9		18 - 107	46%	SPK: 100
321-60-8	2-Fluorobiphenyl	45.7		20 - 109	46%	SPK: 100
118-79-6	2,4,6-Tribromophenol	64.2		10 - 116	43%	SPK: 150
1718-51-0	Terphenyl-d14	34.1		10 - 105	34%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	51200	6.875			
1146-65-2	Naphthalene-d8	192000	8.157			
15067-26-2	Acenaphthene-d10	95500	9.916			
1517-22-2	Phenanthrene-d10	140000	11.41			
1719-03-5	Chrysene-d12	99200	14.057			
1520-96-3	Perylene-d12	123000	15.551			

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:	<u>Alliance</u>	Contract:	<u>CAMP02</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2514</u>
Instrument ID:	<u>BNA_F</u>	Calibration Date/Time:	<u>07/07/2025 12:12</u>
Lab File ID:	<u>BF143003.D</u>	Init. Calib. Date(s):	<u>06/19/2025 06/19/2025</u>
EPA Sample No.:	<u>SSTDCCC040</u>	Init. Calib. Time(s):	<u>17:07 20:40</u>
GC Column:	<u>DB-UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.201	1.159		-3.5	
Benzaldehyde	0.841	0.897		6.7	
Phenol-d6	1.417	1.363		-3.8	
Phenol	1.575	1.512		-4.0	20.0
bis(2-Chloroethyl)ether	1.126	1.086		-3.6	
2-Chlorophenol	1.296	1.244		-4.0	
2-Methylphenol	0.982	0.979		-0.3	
2,2-oxybis(1-Chloropropane)	1.809	1.645		-9.1	
Acetophenone	0.441	0.434		-1.6	
3+4-Methylphenols	1.224	1.224		0.0	
n-Nitroso-di-n-propylamine	0.824	0.811	0.050	-1.6	
Nitrobenzene-d5	0.365	0.385		5.5	
Hexachloroethane	0.511	0.506		-1.0	
Nitrobenzene	0.330	0.319		-3.3	
Isophorone	0.585	0.566		-3.2	
2-Nitrophenol	0.180	0.184		2.2	20.0
2,4-Dimethylphenol	0.311	0.300		-3.5	
bis(2-Chloroethoxy)methane	0.372	0.368		-1.1	
2,4-Dichlorophenol	0.282	0.278		-1.4	20.0
Naphthalene	0.979	0.963		-1.6	
4-Chloroaniline	0.398	0.370		-7.0	
Hexachlorobutadiene	0.190	0.191		0.5	20.0
Caprolactam	0.075	0.072		-4.0	
4-Chloro-3-methylphenol	0.281	0.276		-1.8	20.0
2-Methylnaphthalene	0.607	0.593		-2.3	
Hexachlorocyclopentadiene	0.335	0.343	0.050	2.4	
2,4,6-Trichlorophenol	0.385	0.364		-5.5	20.0
2-Fluorobiphenyl	1.522	1.599		5.1	
2,4,5-Trichlorophenol	0.405	0.378		-6.7	
1,1-Biphenyl	1.580	1.546		-2.2	
2-Chloronaphthalene	1.186	1.160		-2.2	
2-Nitroaniline	0.332	0.322		-3.0	
Dimethylphthalate	1.295	1.251		-3.4	
Acenaphthylene	1.952	1.905		-2.4	
2,6-Dinitrotoluene	0.284	0.276		-2.8	
3-Nitroaniline	0.313	0.297		-5.1	
Acenaphthene	1.191	1.193		0.2	20.0
2,4-Dinitrophenol	0.142	0.169	0.050	19.0	
4-Nitrophenol	0.214	0.207	0.050	-3.3	

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>CAMP02</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2514</u>
Instrument ID:	<u>BNA_F</u>	Calibration Date/Time:	<u>07/07/2025 12:12</u>
Lab File ID:	<u>BF143003.D</u>	Init. Calib. Date(s):	<u>06/19/2025 06/19/2025</u>
EPA Sample No.:	<u>SSTDCCC040</u>	Init. Calib. Time(s):	<u>17:07 20:40</u>
GC Column:	<u>DB-UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.708	1.645		-3.7	
2,4-Dinitrotoluene	0.378	0.360		-4.8	
Diethylphthalate	1.269	1.220		-3.9	
4-Chlorophenyl-phenylether	0.636	0.616		-3.1	
Fluorene	1.334	1.274		-4.5	
4-Nitroaniline	0.286	0.265		-7.3	
4,6-Dinitro-2-methylphenol	0.121	0.121		0.0	
n-Nitrosodiphenylamine	0.693	0.704		1.6	20.0
2,4,6-Tribromophenol	0.206	0.187		-9.2	
4-Bromophenyl-phenylether	0.228	0.232		1.8	
Hexachlorobenzene	0.253	0.255		0.8	
Atrazine	0.179	0.184		2.8	
Pentachlorophenol	0.126	0.143		13.5	20.0
Phenanthrene	1.083	1.050		-3.0	
Anthracene	1.111	1.081		-2.7	
Carbazole	0.959	0.888		-7.4	
Di-n-butylphthalate	0.999	1.010		1.1	
Fluoranthene	1.028	0.933		-9.2	20.0
Pyrene	1.875	1.782		-5.0	
Terphenyl-d14	1.447	1.318		-8.9	
Butylbenzylphthalate	0.544	0.602		10.7	
3,3-Dichlorobenzidine	0.438	0.480		9.6	
Benzo (a) anthracene	1.349	1.319		-2.2	
Chrysene	1.204	1.216		1.0	
Bis(2-ethylhexyl)phthalate	0.782	0.919		17.5	
Di-n-octyl phthalate	1.475	1.705		15.6	20.0
Benzo (b) fluoranthene	1.157	1.189		2.8	
Benzo (k) fluoranthene	1.083	1.000		-7.7	
Benzo (a) pyrene	1.118	1.099		-1.7	20.0
Indeno (1,2,3-cd) pyrene	1.523	1.334		-12.4	
Dibenzo (a,h) anthracene	1.238	1.100		-11.1	
Benzo (g,h,i) perylene	1.234	1.044		-15.4	
1,2,4,5-Tetrachlorobenzene	0.590	0.592		0.3	
1,4-Dioxane	0.480	0.430		-10.4	20.0
2,3,4,6-Tetrachlorophenol	0.326	0.293		-10.1	

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>CAMP02</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2514</u>
Instrument ID:	<u>BNA_F</u>	Calibration Date/Time:	<u>07/08/2025 10:54</u>
Lab File ID:	<u>BF143025.D</u>	Init. Calib. Date(s):	<u>06/19/2025 06/19/2025</u>
EPA Sample No.:	<u>SSTDCCC040</u>	Init. Calib. Time(s):	<u>17:07 20:40</u>
GC Column:	<u>DB-UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.201	1.183		-1.5	
Benzaldehyde	0.841	0.903		7.4	
Phenol-d6	1.417	1.384		-2.3	
Phenol	1.575	1.550		-1.6	20.0
bis(2-Chloroethyl)ether	1.126	1.102		-2.1	
2-Chlorophenol	1.296	1.276		-1.5	
2-Methylphenol	0.982	0.973		-0.9	
2,2-oxybis(1-Chloropropane)	1.809	1.645		-9.1	
Acetophenone	0.441	0.431		-2.3	
3+4-Methylphenols	1.224	1.225		0.1	
n-Nitroso-di-n-propylamine	0.824	0.805	0.050	-2.3	
Nitrobenzene-d5	0.365	0.385		5.5	
Hexachloroethane	0.511	0.498		-2.5	
Nitrobenzene	0.330	0.315		-4.5	
Isophorone	0.585	0.566		-3.2	
2-Nitrophenol	0.180	0.181		0.6	20.0
2,4-Dimethylphenol	0.311	0.301		-3.2	
bis(2-Chloroethoxy)methane	0.372	0.361		-3.0	
2,4-Dichlorophenol	0.282	0.275		-2.5	20.0
Naphthalene	0.979	0.952		-2.8	
4-Chloroaniline	0.398	0.391		-1.8	
Hexachlorobutadiene	0.190	0.185		-2.6	20.0
Caprolactam	0.075	0.078		4.0	
4-Chloro-3-methylphenol	0.281	0.276		-1.8	20.0
2-Methylnaphthalene	0.607	0.594		-2.1	
Hexachlorocyclopentadiene	0.335	0.341	0.050	1.8	
2,4,6-Trichlorophenol	0.385	0.367		-4.7	20.0
2-Fluorobiphenyl	1.522	1.552		2.0	
2,4,5-Trichlorophenol	0.405	0.383		-5.4	
1,1-Biphenyl	1.580	1.507		-4.6	
2-Chloronaphthalene	1.186	1.125		-5.1	
2-Nitroaniline	0.332	0.326		-1.8	
Dimethylphthalate	1.295	1.287		-0.6	
Acenaphthylene	1.952	1.854		-5.0	
2,6-Dinitrotoluene	0.284	0.279		-1.8	
3-Nitroaniline	0.313	0.304		-2.9	
Acenaphthene	1.191	1.180		-0.9	20.0
2,4-Dinitrophenol	0.142	0.188	0.050	32.4	
4-Nitrophenol	0.214	0.259	0.050	21.0	

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SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>CAMP02</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2514</u>
Instrument ID:	<u>BNA_F</u>	Calibration Date/Time:	<u>07/08/2025 10:54</u>
Lab File ID:	<u>BF143025.D</u>	Init. Calib. Date(s):	<u>06/19/2025 06/19/2025</u>
EPA Sample No.:	<u>SSTDCCC040</u>	Init. Calib. Time(s):	<u>17:07 20:40</u>
GC Column:	<u>DB-UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.708	1.634		-4.3	
2,4-Dinitrotoluene	0.378	0.376		-0.5	
Diethylphthalate	1.269	1.241		-2.2	
4-Chlorophenyl-phenylether	0.636	0.623		-2.0	
Fluorene	1.334	1.302		-2.4	
4-Nitroaniline	0.286	0.282		-1.4	
4,6-Dinitro-2-methylphenol	0.121	0.120		-0.8	
n-Nitrosodiphenylamine	0.693	0.683		-1.4	20.0
2,4,6-Tribromophenol	0.206	0.200		-2.9	
4-Bromophenyl-phenylether	0.228	0.230		0.9	
Hexachlorobenzene	0.253	0.251		-0.8	
Atrazine	0.179	0.189		5.6	
Pentachlorophenol	0.126	0.185		46.8	20.0
Phenanthrene	1.083	1.051		-3.0	
Anthracene	1.111	1.089		-2.0	
Carbazole	0.959	0.908		-5.3	
Di-n-butylphthalate	0.999	1.022		2.3	
Fluoranthene	1.028	0.959		-6.7	20.0
Pyrene	1.875	2.136		13.9	
Terphenyl-d14	1.447	1.536		6.2	
Butylbenzylphthalate	0.544	0.573		5.3	
3,3-Dichlorobenzidine	0.438	0.444		1.4	
Benzo (a) anthracene	1.349	1.310		-2.9	
Chrysene	1.204	1.161		-3.6	
Bis(2-ethylhexyl)phthalate	0.782	0.775		-0.9	
Di-n-octyl phthalate	1.475	1.479		0.3	20.0
Benzo (b) fluoranthene	1.157	1.133		-2.1	
Benzo (k) fluoranthene	1.083	0.990		-8.6	
Benzo (a) pyrene	1.118	1.090		-2.5	20.0
Indeno (1,2,3-cd) pyrene	1.523	1.509		-0.9	
Dibenzo (a,h) anthracene	1.238	1.206		-2.6	
Benzo (g,h,i) perylene	1.234	1.198		-2.9	
1,2,4,5-Tetrachlorobenzene	0.590	0.574		-2.7	
1,4-Dioxane	0.480	0.434		-9.6	20.0
2,3,4,6-Tetrachlorophenol	0.326	0.307		-5.8	

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>CAMP02</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2514</u>
Instrument ID:	<u>BNA_F</u>	Calibration Date/Time:	<u>07/09/2025 10:52</u>
Lab File ID:	<u>BF143048.D</u>	Init. Calib. Date(s):	<u>06/19/2025 06/19/2025</u>
EPA Sample No.:	<u>SSTDCCC040</u>	Init. Calib. Time(s):	<u>17:07 20:40</u>
GC Column:	<u>DB-UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.201	1.190		-0.9	
Benzaldehyde	0.841	0.917		9.0	
Phenol-d6	1.417	1.399		-1.3	
Phenol	1.575	1.548		-1.7	20.0
bis(2-Chloroethyl)ether	1.126	1.113		-1.2	
2-Chlorophenol	1.296	1.293		-0.2	
2-Methylphenol	0.982	0.968		-1.4	
2,2-oxybis(1-Chloropropane)	1.809	1.636		-9.6	
Acetophenone	0.441	0.435		-1.4	
3+4-Methylphenols	1.224	1.238		1.1	
n-Nitroso-di-n-propylamine	0.824	0.819	0.050	-0.6	
Nitrobenzene-d5	0.365	0.383		4.9	
Hexachloroethane	0.511	0.503		-1.6	
Nitrobenzene	0.330	0.321		-2.7	
Isophorone	0.585	0.566		-3.2	
2-Nitrophenol	0.180	0.180		0.0	20.0
2,4-Dimethylphenol	0.311	0.298		-4.2	
bis(2-Chloroethoxy)methane	0.372	0.364		-2.2	
2,4-Dichlorophenol	0.282	0.277		-1.8	20.0
Naphthalene	0.979	0.942		-3.8	
4-Chloroaniline	0.398	0.385		-3.3	
Hexachlorobutadiene	0.190	0.187		-1.6	20.0
Caprolactam	0.075	0.073		-2.7	
4-Chloro-3-methylphenol	0.281	0.274		-2.5	20.0
2-Methylnaphthalene	0.607	0.598		-1.5	
Hexachlorocyclopentadiene	0.335	0.341	0.050	1.8	
2,4,6-Trichlorophenol	0.385	0.356		-7.5	20.0
2-Fluorobiphenyl	1.522	1.555		2.2	
2,4,5-Trichlorophenol	0.405	0.379		-6.4	
1,1-Biphenyl	1.580	1.532		-3.0	
2-Chloronaphthalene	1.186	1.134		-4.4	
2-Nitroaniline	0.332	0.317		-4.5	
Dimethylphthalate	1.295	1.268		-2.1	
Acenaphthylene	1.952	1.863		-4.6	
2,6-Dinitrotoluene	0.284	0.281		-1.1	
3-Nitroaniline	0.313	0.292		-6.7	
Acenaphthene	1.191	1.172		-1.6	20.0
2,4-Dinitrophenol	0.142	0.173	0.050	21.8	
4-Nitrophenol	0.214	0.250	0.050	16.8	

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>CAMP02</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q2514</u>
Instrument ID:	<u>BNA_F</u>	Calibration Date/Time:	<u>07/09/2025 10:52</u>
Lab File ID:	<u>BF143048.D</u>	Init. Calib. Date(s):	<u>06/19/2025 06/19/2025</u>
EPA Sample No.:	<u>SSTDCCC040</u>	Init. Calib. Time(s):	<u>17:07 20:40</u>
GC Column:	<u>DB-UI</u>	ID:	<u>0.18</u> (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
Dibenzofuran	1.708	1.630		-4.6	
2,4-Dinitrotoluene	0.378	0.375		-0.8	
Diethylphthalate	1.269	1.231		-3.0	
4-Chlorophenyl-phenylether	0.636	0.620		-2.5	
Fluorene	1.334	1.292		-3.1	
4-Nitroaniline	0.286	0.271		-5.2	
4,6-Dinitro-2-methylphenol	0.121	0.118		-2.5	
n-Nitrosodiphenylamine	0.693	0.678		-2.2	20.0
2,4,6-Tribromophenol	0.206	0.202		-1.9	
4-Bromophenyl-phenylether	0.228	0.229		0.4	
Hexachlorobenzene	0.253	0.249		-1.6	
Atrazine	0.179	0.180		0.6	
Pentachlorophenol	0.126	0.181		43.7	20.0
Phenanthrene	1.083	1.038		-4.2	
Anthracene	1.111	1.064		-4.2	
Carbazole	0.959	0.897		-6.5	
Di-n-butylphthalate	0.999	0.985		-1.4	
Fluoranthene	1.028	0.934		-9.1	20.0
Pyrene	1.875	2.057		9.7	
Terphenyl-d14	1.447	1.481		2.3	
Butylbenzylphthalate	0.544	0.572		5.1	
3,3-Dichlorobenzidine	0.438	0.472		7.8	
Benzo (a) anthracene	1.349	1.327		-1.6	
Chrysene	1.204	1.179		-2.1	
Bis(2-ethylhexyl)phthalate	0.782	0.881		12.7	
Di-n-octyl phthalate	1.475	1.717		16.4	20.0
Benzo (b) fluoranthene	1.157	1.101		-4.8	
Benzo (k) fluoranthene	1.083	1.058		-2.3	
Benzo (a) pyrene	1.118	1.086		-2.9	20.0
Indeno (1,2,3-cd) pyrene	1.523	1.452		-4.7	
Dibenzo (a,h) anthracene	1.238	1.181		-4.6	
Benzo (g,h,i) perylene	1.234	1.161		-5.9	
1,2,4,5-Tetrachlorobenzene	0.590	0.572		-3.1	
1,4-Dioxane	0.480	0.441		-8.1	20.0
2,3,4,6-Tetrachlorophenol	0.326	0.318		-2.5	

All other compounds must meet a minimum RRF of 0.010.