

LAB CHRONICLE

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

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2413-01	TP-35	SOIL	VOC-TCLVOA-10	8260D	06/23/25		06/26/25	06/24/25
Q2413-02	TP-34	SOIL	VOC-TCLVOA-10	8260D	06/23/25		06/25/25	06/24/25
Q2413-03	TP-77	SOIL	VOC-TCLVOA-10	8260D	06/23/25		06/25/25	06/24/25
Q2413-04	TP-74	SOIL	VOC-TCLVOA-10	8260D	06/23/25		06/25/25	06/24/25
Q2413-05	TP-73	SOIL	VOC-TCLVOA-10	8260D	06/23/25		06/25/25	06/24/25
Q2413-06	TP-72	SOIL	VOC-TCLVOA-10	8260D	06/24/25		06/26/25	06/24/25

Hit Summary Sheet
SW-846

SDG No.: Q2413
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID: Q2413-01	TP-35 TP-35	SOIL	Toluene	2.50	J	0.67	4.30	ug/Kg
			Total Voc :	2.50				
			Total Concentration:	2.50				
Client ID: Q2413-02	TP-34 TP-34	SOIL	Methylene Chloride	6.50	J	2.90	8.20	ug/Kg
			Total Voc :	6.50				
Q2413-02	TP-34	SOIL	Naphthalene, 2-ethenyl-	* 6.80	J	0	0	ug/Kg
			Total Tics :	6.80				
			Total Concentration:	13.3				
Client ID: Q2413-03	TP-77 TP-77	SOIL	Methylene Chloride	5.10	J	3.30	9.20	ug/Kg
			Total Voc :	5.10				
			Total Concentration:	5.10				
Client ID: Q2413-04	TP-74 TP-74	SOIL	Methylene Chloride	5.60	J	3.00	8.60	ug/Kg
			Total Voc :	5.60				
			Total Concentration:	5.60				
Client ID: Q2413-05	TP-73 TP-73	SOIL	Acetone	120		4.90	26.1	ug/Kg
Q2413-05	TP-73	SOIL	Methylene Chloride	8.20	J	3.70	10.4	ug/Kg
Q2413-05	TP-73	SOIL	2-Butanone	19.3	J	6.80	26.1	ug/Kg
			Total Voc :	148				
			Total Concentration:	148				
Client ID: Q2413-06	TP-72 TP-72	SOIL	Methylene Chloride	6.20	J	3.10	8.80	ug/Kg
Q2413-06	TP-72	SOIL	Methylcyclohexane	13.8		0.80	4.40	ug/Kg
Q2413-06	TP-72	SOIL	m/p-Xylenes	3.40	J	1.10	8.80	ug/Kg
Q2413-06	TP-72	SOIL	o-Xylene	2.00	J	0.72	4.40	ug/Kg
			Total Voc :	25.4				
Q2413-06	TP-72	SOIL	Octane	* 37.8	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	Heptane, 3-methyl-	* 21.4	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	2-Acetylcyclopentanone	* 66.8	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, ethyl-	* 33.7	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1,3,5-trimethyl-	* 21.6	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1,2-dimethyl-, cis	* 22.6	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1,3-dimethyl-, trans	* 45.0	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	Octane, 3-methyl-	* 22.7	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	Cyclohexane, 1,1,3-trimethyl-	* 21.8	J	0	0	ug/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2413

Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2413-06	TP-72	SOIL	Cyclohexane, 1,2-dimethyl-, tr	* 29.5	J	0	0	ug/Kg
Q2413-06	TP-72	SOIL	1,2,4-Trimethylbenzene	* 1.10	J	0.56	4.40	ug/Kg
Total Tics :					324			
Total Concentration:					349			

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SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.8
Sample Wt/Vol:	6.55 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022844.D	1		06/26/25 12:56	VY062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.98	U	0.98	4.30	ug/Kg
74-87-3	Chloromethane	0.98	U	0.98	4.30	ug/Kg
75-01-4	Vinyl Chloride	0.68	U	0.68	4.30	ug/Kg
74-83-9	Bromomethane	0.92	U	0.92	4.30	ug/Kg
75-00-3	Chloroethane	1.10	U	1.10	4.30	ug/Kg
75-69-4	Trichlorofluoromethane	1.00	U	1.00	4.30	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.91	U	0.91	4.30	ug/Kg
75-35-4	1,1-Dichloroethene	0.86	U	0.86	4.30	ug/Kg
67-64-1	Acetone	4.10	U	4.10	21.5	ug/Kg
75-15-0	Carbon Disulfide	0.91	U	0.91	4.30	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.63	U	0.63	4.30	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	4.30	ug/Kg
75-09-2	Methylene Chloride	3.00	U	3.00	8.60	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.74	U	0.74	4.30	ug/Kg
75-34-3	1,1-Dichloroethane	0.69	U	0.69	4.30	ug/Kg
110-82-7	Cyclohexane	0.68	U	0.68	4.30	ug/Kg
78-93-3	2-Butanone	5.60	U	5.60	21.5	ug/Kg
56-23-5	Carbon Tetrachloride	0.83	U	0.83	4.30	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.64	U	0.64	4.30	ug/Kg
74-97-5	Bromochloromethane	0.99	U	0.99	4.30	ug/Kg
67-66-3	Chloroform	0.72	U	0.72	4.30	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.80	U	0.80	4.30	ug/Kg
108-87-2	Methylcyclohexane	0.78	U	0.78	4.30	ug/Kg
71-43-2	Benzene	0.68	U	0.68	4.30	ug/Kg
107-06-2	1,2-Dichloroethane	0.68	U	0.68	4.30	ug/Kg
79-01-6	Trichloroethene	0.70	U	0.70	4.30	ug/Kg
78-87-5	1,2-Dichloropropane	0.78	U	0.78	4.30	ug/Kg
75-27-4	Bromodichloromethane	0.67	U	0.67	4.30	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.10	U	3.10	21.5	ug/Kg
108-88-3	Toluene	2.50	J	0.67	4.30	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.8
Sample Wt/Vol:	6.55 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022844.D	1		06/26/25 12:56	VY062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.56	U	0.56	4.30	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.53	U	0.53	4.30	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.79	U	0.79	4.30	ug/Kg
591-78-6	2-Hexanone	3.20	U	3.20	21.5	ug/Kg
124-48-1	Dibromochloromethane	0.75	U	0.75	4.30	ug/Kg
106-93-4	1,2-Dibromoethane	0.76	U	0.76	4.30	ug/Kg
127-18-4	Tetrachloroethene	0.90	U	0.90	4.30	ug/Kg
108-90-7	Chlorobenzene	0.78	U	0.78	4.30	ug/Kg
100-41-4	Ethyl Benzene	0.58	U	0.58	4.30	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	8.60	ug/Kg
95-47-6	o-Xylene	0.70	U	0.70	4.30	ug/Kg
100-42-5	Styrene	0.61	U	0.61	4.30	ug/Kg
75-25-2	Bromoform	0.74	U	0.74	4.30	ug/Kg
98-82-8	Isopropylbenzene	0.67	U	0.67	4.30	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	1.00	4.30	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.50	U	1.50	4.30	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.30	U	1.30	4.30	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.20	U	1.20	4.30	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.60	U	1.60	4.30	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.60	U	2.60	4.30	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.70	U	2.70	4.30	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.4		63 - 155	95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.5		70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	50.3		74 - 123	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.9		17 - 146	110%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	307000	7.713			
540-36-3	1,4-Difluorobenzene	584000	8.616			
3114-55-4	Chlorobenzene-d5	574000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	247000	13.346			

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.8
Sample Wt/Vol:	6.55	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022844.D	1		06/26/25 12:56	VY062625

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

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

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	92
Sample Wt/Vol:	6.66 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022820.D	1		06/25/25 13:22	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.93	U	0.93	4.10	ug/Kg
74-87-3	Chloromethane	0.93	U	0.93	4.10	ug/Kg
75-01-4	Vinyl Chloride	0.64	U	0.64	4.10	ug/Kg
74-83-9	Bromomethane	0.87	U	0.87	4.10	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	4.10	ug/Kg
75-69-4	Trichlorofluoromethane	0.99	U	0.99	4.10	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.86	U	0.86	4.10	ug/Kg
75-35-4	1,1-Dichloroethene	0.82	U	0.82	4.10	ug/Kg
67-64-1	Acetone	3.90	U	3.90	20.4	ug/Kg
75-15-0	Carbon Disulfide	0.86	U	0.86	4.10	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.60	U	0.60	4.10	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	4.10	ug/Kg
75-09-2	Methylene Chloride	6.50	J	2.90	8.20	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.70	U	0.70	4.10	ug/Kg
75-34-3	1,1-Dichloroethane	0.65	U	0.65	4.10	ug/Kg
110-82-7	Cyclohexane	0.64	U	0.64	4.10	ug/Kg
78-93-3	2-Butanone	5.30	U	5.30	20.4	ug/Kg
56-23-5	Carbon Tetrachloride	0.79	U	0.79	4.10	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.61	U	0.61	4.10	ug/Kg
74-97-5	Bromochloromethane	0.94	U	0.94	4.10	ug/Kg
67-66-3	Chloroform	0.69	U	0.69	4.10	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.76	U	0.76	4.10	ug/Kg
108-87-2	Methylcyclohexane	0.74	U	0.74	4.10	ug/Kg
71-43-2	Benzene	0.64	U	0.64	4.10	ug/Kg
107-06-2	1,2-Dichloroethane	0.64	U	0.64	4.10	ug/Kg
79-01-6	Trichloroethene	0.66	U	0.66	4.10	ug/Kg
78-87-5	1,2-Dichloropropane	0.74	U	0.74	4.10	ug/Kg
75-27-4	Bromodichloromethane	0.64	U	0.64	4.10	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.90	U	2.90	20.4	ug/Kg
108-88-3	Toluene	0.64	U	0.64	4.10	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	92
Sample Wt/Vol:	6.66	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10
GC Column:	RXI-624	Level :	LOW
Prep Method :	ID : 0.25		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022820.D	1		06/25/25 13:22	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.53	U	0.53	4.10	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.51	U	0.51	4.10	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.75	U	0.75	4.10	ug/Kg
591-78-6	2-Hexanone	3.00	U	3.00	20.4	ug/Kg
124-48-1	Dibromochloromethane	0.71	U	0.71	4.10	ug/Kg
106-93-4	1,2-Dibromoethane	0.72	U	0.72	4.10	ug/Kg
127-18-4	Tetrachloroethene	0.86	U	0.86	4.10	ug/Kg
108-90-7	Chlorobenzene	0.74	U	0.74	4.10	ug/Kg
100-41-4	Ethyl Benzene	0.55	U	0.55	4.10	ug/Kg
179601-23-1	m/p-Xylenes	1.00	U	1.00	8.20	ug/Kg
95-47-6	o-Xylene	0.67	U	0.67	4.10	ug/Kg
100-42-5	Styrene	0.58	U	0.58	4.10	ug/Kg
75-25-2	Bromoform	0.70	U	0.70	4.10	ug/Kg
98-82-8	Isopropylbenzene	0.64	U	0.64	4.10	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.99	U	0.99	4.10	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.40	U	1.40	4.10	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.30	U	1.30	4.10	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.20	U	1.20	4.10	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.50	U	1.50	4.10	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.40	U	2.40	4.10	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.60	U	2.60	4.10	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	38.7	63 - 155	77%	SPK: 50
1868-53-7	Dibromofluoromethane	46.1	70 - 134	92%	SPK: 50
2037-26-5	Toluene-d8	49.1	74 - 123	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.6	17 - 146	101%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	392000	7.707
540-36-3	1,4-Difluorobenzene	691000	8.61
3114-55-4	Chlorobenzene-d5	623000	11.414
3855-82-1	1,4-Dichlorobenzene-d4	266000	13.34

TENTATIVE IDENTIFIED COMPOUNDS

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Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	92
Sample Wt/Vol:	6.66 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022820.D	1		06/25/25 13:22	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000827-54-3	Naphthalene, 2-ethenyl-	6.80	J		14.5	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	91.4
Sample Wt/Vol:	5.92 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022821.D	1		06/25/25 13:45	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.10	U	1.10	4.60	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	4.60	ug/Kg
75-01-4	Vinyl Chloride	0.73	U	0.73	4.60	ug/Kg
74-83-9	Bromomethane	0.99	U	0.99	4.60	ug/Kg
75-00-3	Chloroethane	1.20	U	1.20	4.60	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	4.60	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.98	U	0.98	4.60	ug/Kg
75-35-4	1,1-Dichloroethene	0.92	U	0.92	4.60	ug/Kg
67-64-1	Acetone	4.40	U	4.40	23.1	ug/Kg
75-15-0	Carbon Disulfide	0.98	U	0.98	4.60	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.67	U	0.67	4.60	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	4.60	ug/Kg
75-09-2	Methylene Chloride	5.10	J	3.30	9.20	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.79	U	0.79	4.60	ug/Kg
75-34-3	1,1-Dichloroethane	0.74	U	0.74	4.60	ug/Kg
110-82-7	Cyclohexane	0.73	U	0.73	4.60	ug/Kg
78-93-3	2-Butanone	6.00	U	6.00	23.1	ug/Kg
56-23-5	Carbon Tetrachloride	0.90	U	0.90	4.60	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.69	U	0.69	4.60	ug/Kg
74-97-5	Bromochloromethane	1.10	U	1.10	4.60	ug/Kg
67-66-3	Chloroform	0.78	U	0.78	4.60	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.86	U	0.86	4.60	ug/Kg
108-87-2	Methylcyclohexane	0.84	U	0.84	4.60	ug/Kg
71-43-2	Benzene	0.73	U	0.73	4.60	ug/Kg
107-06-2	1,2-Dichloroethane	0.73	U	0.73	4.60	ug/Kg
79-01-6	Trichloroethene	0.75	U	0.75	4.60	ug/Kg
78-87-5	1,2-Dichloropropane	0.84	U	0.84	4.60	ug/Kg
75-27-4	Bromodichloromethane	0.72	U	0.72	4.60	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.30	U	3.30	23.1	ug/Kg
108-88-3	Toluene	0.72	U	0.72	4.60	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	91.4
Sample Wt/Vol:	5.92 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022821.D	1		06/25/25 13:45	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.60	U	0.60	4.60	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.57	U	0.57	4.60	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.85	U	0.85	4.60	ug/Kg
591-78-6	2-Hexanone	3.40	U	3.40	23.1	ug/Kg
124-48-1	Dibromochloromethane	0.80	U	0.80	4.60	ug/Kg
106-93-4	1,2-Dibromoethane	0.81	U	0.81	4.60	ug/Kg
127-18-4	Tetrachloroethene	0.97	U	0.97	4.60	ug/Kg
108-90-7	Chlorobenzene	0.84	U	0.84	4.60	ug/Kg
100-41-4	Ethyl Benzene	0.62	U	0.62	4.60	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	9.20	ug/Kg
95-47-6	o-Xylene	0.76	U	0.76	4.60	ug/Kg
100-42-5	Styrene	0.66	U	0.66	4.60	ug/Kg
75-25-2	Bromoform	0.79	U	0.79	4.60	ug/Kg
98-82-8	Isopropylbenzene	0.72	U	0.72	4.60	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	4.60	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.60	U	1.60	4.60	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.40	U	1.40	4.60	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.30	U	1.30	4.60	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.70	U	1.70	4.60	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.70	U	2.70	4.60	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.90	U	2.90	4.60	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	38.8		63 - 155	78%	SPK: 50
1868-53-7	Dibromofluoromethane	45.9		70 - 134	92%	SPK: 50
2037-26-5	Toluene-d8	49.1		74 - 123	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.0		17 - 146	96%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	382000	7.707			
540-36-3	1,4-Difluorobenzene	682000	8.61			
3114-55-4	Chlorobenzene-d5	597000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	245000	13.34			

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	91.4
Sample Wt/Vol:	5.92	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022821.D	1		06/25/25 13:45	VY062525

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

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

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	89.5
Sample Wt/Vol:	6.51 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022822.D	1		06/25/25 14:08	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.98	U	0.98	4.30	ug/Kg
74-87-3	Chloromethane	0.98	U	0.98	4.30	ug/Kg
75-01-4	Vinyl Chloride	0.68	U	0.68	4.30	ug/Kg
74-83-9	Bromomethane	0.92	U	0.92	4.30	ug/Kg
75-00-3	Chloroethane	1.10	U	1.10	4.30	ug/Kg
75-69-4	Trichlorofluoromethane	1.00	U	1.00	4.30	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.91	U	0.91	4.30	ug/Kg
75-35-4	1,1-Dichloroethene	0.86	U	0.86	4.30	ug/Kg
67-64-1	Acetone	4.10	U	4.10	21.5	ug/Kg
75-15-0	Carbon Disulfide	0.91	U	0.91	4.30	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.63	U	0.63	4.30	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	4.30	ug/Kg
75-09-2	Methylene Chloride	5.60	J	3.00	8.60	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.74	U	0.74	4.30	ug/Kg
75-34-3	1,1-Dichloroethane	0.69	U	0.69	4.30	ug/Kg
110-82-7	Cyclohexane	0.68	U	0.68	4.30	ug/Kg
78-93-3	2-Butanone	5.60	U	5.60	21.5	ug/Kg
56-23-5	Carbon Tetrachloride	0.83	U	0.83	4.30	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.64	U	0.64	4.30	ug/Kg
74-97-5	Bromochloromethane	0.99	U	0.99	4.30	ug/Kg
67-66-3	Chloroform	0.72	U	0.72	4.30	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.80	U	0.80	4.30	ug/Kg
108-87-2	Methylcyclohexane	0.78	U	0.78	4.30	ug/Kg
71-43-2	Benzene	0.68	U	0.68	4.30	ug/Kg
107-06-2	1,2-Dichloroethane	0.68	U	0.68	4.30	ug/Kg
79-01-6	Trichloroethene	0.70	U	0.70	4.30	ug/Kg
78-87-5	1,2-Dichloropropane	0.78	U	0.78	4.30	ug/Kg
75-27-4	Bromodichloromethane	0.67	U	0.67	4.30	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.10	U	3.10	21.5	ug/Kg
108-88-3	Toluene	0.67	U	0.67	4.30	ug/Kg

Report of Analysis

Client:	CDM Smith		Date Collected:	06/23/25	
Project:	South River WM Replacement		Date Received:	06/24/25	
Client Sample ID:	TP-74		SDG No.:	Q2413	
Lab Sample ID:	Q2413-04		Matrix:	SOIL	
Analytical Method:	8260D		% Solid:	89.5	
Sample Wt/Vol:	6.51	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022822.D	1		06/25/25 14:08	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.56	U	0.56	4.30	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.53	U	0.53	4.30	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.79	U	0.79	4.30	ug/Kg
591-78-6	2-Hexanone	3.20	U	3.20	21.5	ug/Kg
124-48-1	Dibromochloromethane	0.75	U	0.75	4.30	ug/Kg
106-93-4	1,2-Dibromoethane	0.76	U	0.76	4.30	ug/Kg
127-18-4	Tetrachloroethene	0.90	U	0.90	4.30	ug/Kg
108-90-7	Chlorobenzene	0.78	U	0.78	4.30	ug/Kg
100-41-4	Ethyl Benzene	0.57	U	0.57	4.30	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	8.60	ug/Kg
95-47-6	o-Xylene	0.70	U	0.70	4.30	ug/Kg
100-42-5	Styrene	0.61	U	0.61	4.30	ug/Kg
75-25-2	Bromoform	0.74	U	0.74	4.30	ug/Kg
98-82-8	Isopropylbenzene	0.67	U	0.67	4.30	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	1.00	4.30	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.50	U	1.50	4.30	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.30	U	1.30	4.30	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.20	U	1.20	4.30	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.60	U	1.60	4.30	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.50	U	2.50	4.30	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.70	U	2.70	4.30	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	43.3		63 - 155	87%	SPK: 50
1868-53-7	Dibromofluoromethane	49.2		70 - 134	98%	SPK: 50
2037-26-5	Toluene-d8	49.7		74 - 123	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.3		17 - 146	99%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	386000	7.707			
540-36-3	1,4-Difluorobenzene	689000	8.609			
3114-55-4	Chlorobenzene-d5	620000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	262000	13.34			

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	89.5
Sample Wt/Vol:	6.51	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022822.D	1		06/25/25 14:08	VY062525

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

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	77.1
Sample Wt/Vol:	6.22 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022823.D	1		06/25/25 14:32	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.20	U	1.20	5.20	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.20	ug/Kg
75-01-4	Vinyl Chloride	0.82	U	0.82	5.20	ug/Kg
74-83-9	Bromomethane	1.10	U	1.10	5.20	ug/Kg
75-00-3	Chloroethane	1.30	U	1.30	5.20	ug/Kg
75-69-4	Trichlorofluoromethane	1.30	U	1.30	5.20	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.20	ug/Kg
75-35-4	1,1-Dichloroethene	1.00	U	1.00	5.20	ug/Kg
67-64-1	Acetone	120		4.90	26.1	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	5.20	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.76	U	0.76	5.20	ug/Kg
79-20-9	Methyl Acetate	1.60	U	1.60	5.20	ug/Kg
75-09-2	Methylene Chloride	8.20	J	3.70	10.4	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.90	U	0.90	5.20	ug/Kg
75-34-3	1,1-Dichloroethane	0.83	U	0.83	5.20	ug/Kg
110-82-7	Cyclohexane	0.82	U	0.82	5.20	ug/Kg
78-93-3	2-Butanone	19.3	J	6.80	26.1	ug/Kg
56-23-5	Carbon Tetrachloride	1.00	U	1.00	5.20	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.78	U	0.78	5.20	ug/Kg
74-97-5	Bromochloromethane	1.20	U	1.20	5.20	ug/Kg
67-66-3	Chloroform	0.88	U	0.88	5.20	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.97	U	0.97	5.20	ug/Kg
108-87-2	Methylcyclohexane	0.95	U	0.95	5.20	ug/Kg
71-43-2	Benzene	0.82	U	0.82	5.20	ug/Kg
107-06-2	1,2-Dichloroethane	0.82	U	0.82	5.20	ug/Kg
79-01-6	Trichloroethene	0.84	U	0.84	5.20	ug/Kg
78-87-5	1,2-Dichloropropane	0.95	U	0.95	5.20	ug/Kg
75-27-4	Bromodichloromethane	0.81	U	0.81	5.20	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.70	U	3.70	26.1	ug/Kg
108-88-3	Toluene	0.81	U	0.81	5.20	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	77.1
Sample Wt/Vol:	6.22 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022823.D	1		06/25/25 14:32	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.68	U	0.68	5.20	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.65	U	0.65	5.20	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.96	U	0.96	5.20	ug/Kg
591-78-6	2-Hexanone	3.80	U	3.80	26.1	ug/Kg
124-48-1	Dibromochloromethane	0.91	U	0.91	5.20	ug/Kg
106-93-4	1,2-Dibromoethane	0.92	U	0.92	5.20	ug/Kg
127-18-4	Tetrachloroethene	1.10	U	1.10	5.20	ug/Kg
108-90-7	Chlorobenzene	0.95	U	0.95	5.20	ug/Kg
100-41-4	Ethyl Benzene	0.70	U	0.70	5.20	ug/Kg
179601-23-1	m/p-Xylenes	1.30	U	1.30	10.4	ug/Kg
95-47-6	o-Xylene	0.85	U	0.85	5.20	ug/Kg
100-42-5	Styrene	0.74	U	0.74	5.20	ug/Kg
75-25-2	Bromoform	0.90	U	0.90	5.20	ug/Kg
98-82-8	Isopropylbenzene	0.81	U	0.81	5.20	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.30	U	1.30	5.20	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.80	U	1.80	5.20	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.60	U	1.60	5.20	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.50	U	1.50	5.20	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.90	U	1.90	5.20	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.10	U	3.10	5.20	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.30	U	3.30	5.20	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.3		63 - 155	93%	SPK: 50
1868-53-7	Dibromofluoromethane	49.4		70 - 134	99%	SPK: 50
2037-26-5	Toluene-d8	49.0		74 - 123	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		17 - 146	101%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	353000	7.701			
540-36-3	1,4-Difluorobenzene	632000	8.609			
3114-55-4	Chlorobenzene-d5	568000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	244000	13.34			

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	77.1
Sample Wt/Vol:	6.22 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022823.D	1		06/25/25 14:32	VY062525

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

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.53 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022845.D	1		06/26/25 13:20	VY062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.00	U	1.00	4.40	ug/Kg
74-87-3	Chloromethane	1.00	U	1.00	4.40	ug/Kg
75-01-4	Vinyl Chloride	0.70	U	0.70	4.40	ug/Kg
74-83-9	Bromomethane	0.94	U	0.94	4.40	ug/Kg
75-00-3	Chloroethane	1.10	U	1.10	4.40	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	4.40	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.93	U	0.93	4.40	ug/Kg
75-35-4	1,1-Dichloroethene	0.88	U	0.88	4.40	ug/Kg
67-64-1	Acetone	4.20	U	4.20	22.0	ug/Kg
75-15-0	Carbon Disulfide	0.93	U	0.93	4.40	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.64	U	0.64	4.40	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	4.40	ug/Kg
75-09-2	Methylene Chloride	6.20	J	3.10	8.80	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.76	U	0.76	4.40	ug/Kg
75-34-3	1,1-Dichloroethane	0.70	U	0.70	4.40	ug/Kg
110-82-7	Cyclohexane	0.70	U	0.70	4.40	ug/Kg
78-93-3	2-Butanone	5.80	U	5.80	22.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.85	U	0.85	4.40	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.66	U	0.66	4.40	ug/Kg
74-97-5	Bromochloromethane	1.00	U	1.00	4.40	ug/Kg
67-66-3	Chloroform	0.74	U	0.74	4.40	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.82	U	0.82	4.40	ug/Kg
108-87-2	Methylcyclohexane	13.8		0.80	4.40	ug/Kg
71-43-2	Benzene	0.70	U	0.70	4.40	ug/Kg
107-06-2	1,2-Dichloroethane	0.70	U	0.70	4.40	ug/Kg
79-01-6	Trichloroethene	0.71	U	0.71	4.40	ug/Kg
78-87-5	1,2-Dichloropropane	0.80	U	0.80	4.40	ug/Kg
75-27-4	Bromodichloromethane	0.69	U	0.69	4.40	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.20	U	3.20	22.0	ug/Kg
108-88-3	Toluene	0.69	U	0.69	4.40	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.53	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Final Vol:	5000
Prep Method :	ID : 0.25	Test:	VOC-TCLVOA-10
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022845.D	1		06/26/25 13:20	VY062625

[illegible]

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.53 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022845.D	1		06/26/25 13:20	VY062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000589-81-1	Heptane, 3-methyl-	21.4	J		9.89	ug/Kg
000111-65-9	Octane	37.8	J		10.3	ug/Kg
006876-23-9	Cyclohexane, 1,2-dimethyl-, trans-	29.5	J		10.5	ug/Kg
002207-03-6	Cyclohexane, 1,3-dimethyl-, trans-	45.0	J		10.5	ug/Kg
001839-63-0	Cyclohexane, 1,3,5-trimethyl-	21.6	J		10.9	ug/Kg
002207-01-4	Cyclohexane, 1,2-dimethyl-, cis-	22.6	J		10.9	ug/Kg
001678-91-7	Cyclohexane, ethyl-	33.7	J		11.0	ug/Kg
003073-66-3	Cyclohexane, 1,1,3-trimethyl-	21.8	J		11.0	ug/Kg
001670-46-8	2-Acetylcyclopentanone	66.8	J		11.2	ug/Kg
002216-33-3	Octane, 3-methyl-	22.7	J		11.3	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	1.10	J		13.0	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SDG No.: **Q2413**

Client: **CDM Smith**

Analytical Method: **SW8260D**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q2413-01	TP-35	1,2-Dichloroethane-d4	50	47.4	95	63	155
		Dibromofluoromethane	50	50.5	101	70	134
		Toluene-d8	50	50.3	101	74	123
		4-Bromofluorobenzene	50	54.9	110	17	146
Q2413-02	TP-34	1,2-Dichloroethane-d4	50	38.7	77	63	155
		Dibromofluoromethane	50	46.1	92	70	134
		Toluene-d8	50	49.1	98	74	123
		4-Bromofluorobenzene	50	50.6	101	17	146
Q2413-03	TP-77	1,2-Dichloroethane-d4	50	38.9	78	63	155
		Dibromofluoromethane	50	45.9	92	70	134
		Toluene-d8	50	49.1	98	74	123
		4-Bromofluorobenzene	50	48.0	96	17	146
Q2413-04	TP-74	1,2-Dichloroethane-d4	50	43.3	87	63	155
		Dibromofluoromethane	50	49.2	98	70	134
		Toluene-d8	50	49.7	99	74	123
		4-Bromofluorobenzene	50	49.3	99	17	146
Q2413-05	TP-73	1,2-Dichloroethane-d4	50	46.3	93	63	155
		Dibromofluoromethane	50	49.4	99	70	134
		Toluene-d8	50	49.0	98	74	123
		4-Bromofluorobenzene	50	50.3	101	17	146
Q2413-06	TP-72	1,2-Dichloroethane-d4	50	47.8	96	63	155
		Dibromofluoromethane	50	50.5	101	70	134
		Toluene-d8	50	57.0	114	74	123
		4-Bromofluorobenzene	50	53.8	108	17	146
VY0625SBL01	VY0625SBL01	1,2-Dichloroethane-d4	50	48.2	96	63	155
		Dibromofluoromethane	50	49.8	100	70	134
		Toluene-d8	50	49.3	99	74	123
		4-Bromofluorobenzene	50	53.3	107	17	146
VY0625SBS01	VY0625SBS01	1,2-Dichloroethane-d4	50	50.1	100	63	155
		Dibromofluoromethane	50	50.1	100	70	134
		Toluene-d8	50	51.1	102	74	123
		4-Bromofluorobenzene	50	49.7	99	17	146
VY0625SBSD01	VY0625SBSD01	1,2-Dichloroethane-d4	50	51.0	102	63	155
		Dibromofluoromethane	50	51.1	102	70	134
		Toluene-d8	50	51.5	103	74	123
		4-Bromofluorobenzene	50	49.5	99	17	146
VY0626SBL01	VY0626SBL01	1,2-Dichloroethane-d4	50	49.9	100	63	155
		Dibromofluoromethane	50	50.3	101	70	134
		Toluene-d8	50	49.8	100	74	123
		4-Bromofluorobenzene	50	53.7	107	17	146
VY0626SBS01	VY0626SBS01	1,2-Dichloroethane-d4	50	51.8	104	63	155
		Dibromofluoromethane	50	50.4	101	70	134
		Toluene-d8	50	51.0	102	74	123
		4-Bromofluorobenzene	50	50.0	100	17	146

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022813.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0625SBS01	Dichlorodifluoromethane	20	21.9	ug/Kg	110			64	136	
	Chloromethane	20	19.1	ug/Kg	96			52	151	
	Vinyl chloride	20	20.3	ug/Kg	102			56	148	
	Bromomethane	20	22.7	ug/Kg	114			58	141	
	Chloroethane	20	20.3	ug/Kg	102			69	130	
	Trichlorofluoromethane	20	20.9	ug/Kg	104			69	134	
	1,1,2-Trichlorotrifluoroethane	20	20.7	ug/Kg	104			81	123	
	1,1-Dichloroethene	20	20.3	ug/Kg	102			79	121	
	Acetone	100	130	ug/Kg	130			40	171	
	Carbon disulfide	20	20.1	ug/Kg	101			59	130	
	Methyl tert-butyl Ether	20	20.4	ug/Kg	102			77	129	
	Methyl Acetate	20	18.3	ug/Kg	92			69	149	
	Methylene Chloride	20	22.2	ug/Kg	111			72	131	
	trans-1,2-Dichloroethene	20	19.9	ug/Kg	100			80	123	
	1,1-Dichloroethane	20	20.0	ug/Kg	100			82	123	
	Cyclohexane	20	20.4	ug/Kg	102			76	122	
	2-Butanone	100	110	ug/Kg	110			69	131	
	Carbon Tetrachloride	20	20.4	ug/Kg	102			76	129	
	cis-1,2-Dichloroethene	20	20.1	ug/Kg	101			82	123	
	Bromochloromethane	20	19.5	ug/Kg	98			80	127	
	Chloroform	20	20.0	ug/Kg	100			82	125	
	1,1,1-Trichloroethane	20	20.2	ug/Kg	101			80	126	
	Methylcyclohexane	20	20.6	ug/Kg	103			77	123	
	Benzene	20	20.1	ug/Kg	101			84	121	
	1,2-Dichloroethane	20	20.5	ug/Kg	103			81	126	
	Trichloroethene	20	20.9	ug/Kg	104			83	122	
	1,2-Dichloropropane	20	19.9	ug/Kg	100			83	122	
	Bromodichloromethane	20	20.4	ug/Kg	102			82	123	
	4-Methyl-2-Pentanone	100	100	ug/Kg	100			70	135	
	Toluene	20	20.2	ug/Kg	101			83	122	
	t-1,3-Dichloropropene	20	20.0	ug/Kg	100			78	124	
	cis-1,3-Dichloropropene	20	20.4	ug/Kg	102			81	122	
	1,1,2-Trichloroethane	20	20.5	ug/Kg	103			82	125	
	2-Hexanone	100	110	ug/Kg	110			66	138	
	Dibromochloromethane	20	20.2	ug/Kg	101			79	125	
	1,2-Dibromoethane	20	19.9	ug/Kg	100			80	125	
	Tetrachloroethene	20	21.8	ug/Kg	109			83	125	
	Chlorobenzene	20	19.9	ug/Kg	100			84	122	
	Ethyl Benzene	20	20.1	ug/Kg	101			82	124	
	m/p-Xylenes	40	39.8	ug/Kg	100			83	124	
	o-Xylene	20	19.7	ug/Kg	99			83	123	
	Styrene	20	19.6	ug/Kg	98			82	124	
	Bromoform	20	19.5	ug/Kg	98			75	127	
	Isopropylbenzene	20	20.3	ug/Kg	102			82	124	
	1,1,2,2-Tetrachloroethane	20	19.0	ug/Kg	95			77	127	
	1,3-Dichlorobenzene	20	19.7	ug/Kg	99			83	122	
	1,4-Dichlorobenzene	20	19.9	ug/Kg	100			84	121	
	1,2-Dichlorobenzene	20	19.8	ug/Kg	99			83	124	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022813.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0625SBS01	1,2-Dibromo-3-Chloropropane	20	19.3	ug/Kg	97			66	134	
	1,2,4-Trichlorobenzene	20	20.3	ug/Kg	102			78	127	
	1,2,3-Trichlorobenzene	20	19.5	ug/Kg	98			70	137	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022814.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0625SBSD01	Dichlorodifluoromethane	20	21.7	ug/Kg	109	1		64	136	20
	Chloromethane	20	20.0	ug/Kg	100	4		52	151	20
	Vinyl chloride	20	21.0	ug/Kg	105	3		56	148	20
	Bromomethane	20	23.1	ug/Kg	116	2		58	141	20
	Chloroethane	20	20.8	ug/Kg	104	2		69	130	20
	Trichlorofluoromethane	20	20.9	ug/Kg	104	0		69	134	20
	1,1,2-Trichlorotrifluoroethane	20	20.7	ug/Kg	104	0		81	123	20
	1,1-Dichloroethene	20	20.7	ug/Kg	104	2		79	121	20
	Acetone	100	130	ug/Kg	130	0		40	171	20
	Carbon disulfide	20	20.4	ug/Kg	102	1		59	130	20
	Methyl tert-butyl Ether	20	20.9	ug/Kg	104	2		77	129	20
	Methyl Acetate	20	18.6	ug/Kg	93	1		69	149	20
	Methylene Chloride	20	21.1	ug/Kg	106	5		72	131	20
	trans-1,2-Dichloroethene	20	20.4	ug/Kg	102	2		80	123	20
	1,1-Dichloroethane	20	20.5	ug/Kg	103	3		82	123	20
	Cyclohexane	20	20.4	ug/Kg	102	0		76	122	20
	2-Butanone	100	110	ug/Kg	110	0		69	131	20
	Carbon Tetrachloride	20	20.6	ug/Kg	103	1		76	129	20
	cis-1,2-Dichloroethene	20	20.4	ug/Kg	102	1		82	123	20
	Bromochloromethane	20	19.7	ug/Kg	99	1		80	127	20
	Chloroform	20	20.2	ug/Kg	101	1		82	125	20
	1,1,1-Trichloroethane	20	20.5	ug/Kg	103	2		80	126	20
	Methylcyclohexane	20	20.6	ug/Kg	103	0		77	123	20
	Benzene	20	20.4	ug/Kg	102	1		84	121	20
	1,2-Dichloroethane	20	20.5	ug/Kg	103	0		81	126	20
	Trichloroethene	20	20.4	ug/Kg	102	2		83	122	20
	1,2-Dichloropropane	20	20.3	ug/Kg	102	2		83	122	20
	Bromodichloromethane	20	20.3	ug/Kg	102	0		82	123	20
	4-Methyl-2-Pentanone	100	100	ug/Kg	100	0		70	135	20
	Toluene	20	20.0	ug/Kg	100	1		83	122	20
	t-1,3-Dichloropropene	20	20.1	ug/Kg	101	1		78	124	20
	cis-1,3-Dichloropropene	20	20.5	ug/Kg	103	1		81	122	20
	1,1,2-Trichloroethane	20	20.3	ug/Kg	102	1		82	125	20
	2-Hexanone	100	110	ug/Kg	110	0		66	138	20
	Dibromochloromethane	20	20.3	ug/Kg	102	1		79	125	20
	1,2-Dibromoethane	20	20.3	ug/Kg	102	2		80	125	20
	Tetrachloroethene	20	18.8	ug/Kg	94	15		83	125	20
	Chlorobenzene	20	20.6	ug/Kg	103	3		84	122	20
	Ethyl Benzene	20	20.6	ug/Kg	103	2		82	124	20
	m/p-Xylenes	40	41.0	ug/Kg	103	3		83	124	20
	o-Xylene	20	20.2	ug/Kg	101	2		83	123	20
	Styrene	20	20.4	ug/Kg	102	4		82	124	20
	Bromoform	20	20.1	ug/Kg	101	3		75	127	20
	Isopropylbenzene	20	21.3	ug/Kg	106	4		82	124	20
	1,1,2,2-Tetrachloroethane	20	22.6	ug/Kg	113	17		77	127	20
	1,3-Dichlorobenzene	20	20.9	ug/Kg	104	5		83	122	20
	1,4-Dichlorobenzene	20	20.5	ug/Kg	103	3		84	121	20
	1,2-Dichlorobenzene	20	20.5	ug/Kg	103	4		83	124	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022814.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VY0625SBSD01	1,2-Dibromo-3-Chloropropane	20	20.0	ug/Kg	100	3		66	134	20
	1,2,4-Trichlorobenzene	20	20.2	ug/Kg	101	1		78	127	20
	1,2,3-Trichlorobenzene	20	19.9	ug/Kg	100	2		70	137	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022840.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0626SBS01	Dichlorodifluoromethane	20	20.4	ug/Kg	102			64	136	
	Chloromethane	20	22.2	ug/Kg	111			52	151	
	Vinyl chloride	20	20.0	ug/Kg	100			56	148	
	Bromomethane	20	23.1	ug/Kg	116			58	141	
	Chloroethane	20	19.3	ug/Kg	97			69	130	
	Trichlorofluoromethane	20	19.0	ug/Kg	95			69	134	
	1,1,2-Trichlorotrifluoroethane	20	20.8	ug/Kg	104			81	123	
	1,1-Dichloroethene	20	20.5	ug/Kg	103			79	121	
	Acetone	100	150	ug/Kg	150			40	171	
	Carbon disulfide	20	20.4	ug/Kg	102			59	130	
	Methyl tert-butyl Ether	20	21.0	ug/Kg	105			77	129	
	Methyl Acetate	20	18.1	ug/Kg	91			69	149	
	Methylene Chloride	20	23.0	ug/Kg	115			72	131	
	trans-1,2-Dichloroethene	20	20.2	ug/Kg	101			80	123	
	1,1-Dichloroethane	20	20.6	ug/Kg	103			82	123	
	Cyclohexane	20	20.3	ug/Kg	102			76	122	
	2-Butanone	100	130	ug/Kg	130			69	131	
	Carbon Tetrachloride	20	19.8	ug/Kg	99			76	129	
	cis-1,2-Dichloroethene	20	20.3	ug/Kg	102			82	123	
	Bromochloromethane	20	20.7	ug/Kg	104			80	127	
	Chloroform	20	20.3	ug/Kg	102			82	125	
	1,1,1-Trichloroethane	20	20.3	ug/Kg	102			80	126	
	Methylcyclohexane	20	20.1	ug/Kg	101			77	123	
	Benzene	20	20.1	ug/Kg	101			84	121	
	1,2-Dichloroethane	20	20.1	ug/Kg	101			81	126	
	Trichloroethene	20	20.8	ug/Kg	104			83	122	
	1,2-Dichloropropane	20	20.1	ug/Kg	101			83	122	
	Bromodichloromethane	20	20.2	ug/Kg	101			82	123	
	4-Methyl-2-Pentanone	100	110	ug/Kg	110			70	135	
	Toluene	20	20.0	ug/Kg	100			83	122	
	t-1,3-Dichloropropene	20	20.0	ug/Kg	100			78	124	
	cis-1,3-Dichloropropene	20	20.3	ug/Kg	102			81	122	
	1,1,2-Trichloroethane	20	20.2	ug/Kg	101			82	125	
	2-Hexanone	100	120	ug/Kg	120			66	138	
	Dibromochloromethane	20	20.0	ug/Kg	100			79	125	
	1,2-Dibromoethane	20	20.0	ug/Kg	100			80	125	
	Tetrachloroethene	20	20.8	ug/Kg	104			83	125	
	Chlorobenzene	20	19.9	ug/Kg	100			84	122	
	Ethyl Benzene	20	19.8	ug/Kg	99			82	124	
	m/p-Xylenes	40	39.9	ug/Kg	100			83	124	
	o-Xylene	20	19.8	ug/Kg	99			83	123	
	Styrene	20	19.7	ug/Kg	99			82	124	
	Bromoform	20	19.4	ug/Kg	97			75	127	
	Isopropylbenzene	20	20.5	ug/Kg	103			82	124	
	1,1,2,2-Tetrachloroethane	20	20.7	ug/Kg	104			77	127	
	1,3-Dichlorobenzene	20	20.3	ug/Kg	102			83	122	
	1,4-Dichlorobenzene	20	20.0	ug/Kg	100			84	121	
	1,2-Dichlorobenzene	20	20.1	ug/Kg	101			83	124	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022840.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VY0626SBS01	1,2-Dibromo-3-Chloropropane	20	20.2	ug/Kg	101			66	134	
	1,2,4-Trichlorobenzene	20	19.8	ug/Kg	99			78	127	
	1,2,3-Trichlorobenzene	20	19.5	ug/Kg	98			70	137	

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0625SBL01

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: VY022812.D

Lab Sample ID: VY0625SBL01

Date Analyzed: 06/25/2025

Time Analyzed: 09:46

GC Column: RXI-624 ID: 0.25 (mm)

Heated Purge: (Y/N) Y

Instrument ID: MSVOA_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY0625SBS01	VY0625SBS01	VY022813.D	06/25/2025
VY0625SBSD01	VY0625SBSD01	VY022814.D	06/25/2025
TP-34	Q2413-02	VY022820.D	06/25/2025
TP-77	Q2413-03	VY022821.D	06/25/2025
TP-74	Q2413-04	VY022822.D	06/25/2025
TP-73	Q2413-05	VY022823.D	06/25/2025

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0626SBL01

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: VY022839.D

Lab Sample ID: VY0626SBL01

Date Analyzed: 06/26/2025

Time Analyzed: 10:39

GC Column: RXI-624 ID: 0.25 (mm)

Heated Purge: (Y/N) Y

Instrument ID: MSVOA_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY0626SBS01	VY0626SBS01	VY022840.D	06/26/2025
TP-35	Q2413-01	VY022844.D	06/26/2025
TP-72	Q2413-06	VY022845.D	06/26/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG NO.: Q2413
Lab File ID: VY022775.D BFB Injection Date: 06/23/2025
Instrument ID: MSVOA_Y BFB Injection Time: 10:17
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.8
75	30.0 - 60.0% of mass 95	56.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.9 (1.1) 1
174	50.0 - 100.0% of mass 95	81.9
175	5.0 - 9.0% of mass 174	6 (7.4) 1
176	95.0 - 101.0% of mass 174	78.2 (95.5) 1
177	5.0 - 9.0% of mass 176	5.1 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC005	VSTDIC005	VY022776.D	06/23/2025	13:38
VSTDIC010	VSTDIC010	VY022777.D	06/23/2025	14:00
VSTDIC020	VSTDIC020	VY022778.D	06/23/2025	14:23
VSTDIC050	VSTDIC050	VY022779.D	06/23/2025	14:46
VSTDIC100	VSTDIC100	VY022780.D	06/23/2025	15:08
VSTDIC150	VSTDIC150	VY022781.D	06/23/2025	15:31

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG NO.: Q2413
Lab File ID: VY022810.D BFB Injection Date: 06/25/2025
Instrument ID: MSVOA_Y BFB Injection Time: 08:41
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23
75	30.0 - 60.0% of mass 95	56.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.9 (1.2) 1
174	50.0 - 100.0% of mass 95	80.5
175	5.0 - 9.0% of mass 174	6 (7.5) 1
176	95.0 - 101.0% of mass 174	79.5 (98.8) 1
177	5.0 - 9.0% of mass 176	5.2 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY022811.D	06/25/2025	09:13
VY0625SBL01	VY0625SBL01	VY022812.D	06/25/2025	09:46
VY0625SBS01	VY0625SBS01	VY022813.D	06/25/2025	10:18
VY0625SBSD01	VY0625SBSD01	VY022814.D	06/25/2025	10:40
TP-34	Q2413-02	VY022820.D	06/25/2025	13:22
TP-77	Q2413-03	VY022821.D	06/25/2025	13:45
TP-74	Q2413-04	VY022822.D	06/25/2025	14:08
TP-73	Q2413-05	VY022823.D	06/25/2025	14:32

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG NO.: Q2413
Lab File ID: VY022837.D BFB Injection Date: 06/26/2025
Instrument ID: MSVOA_Y BFB Injection Time: 08:22
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.5
75	30.0 - 60.0% of mass 95	56
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.9 (1.1) 1
174	50.0 - 100.0% of mass 95	86.1
175	5.0 - 9.0% of mass 174	6.1 (7.1) 1
176	95.0 - 101.0% of mass 174	82.8 (96.2) 1
177	5.0 - 9.0% of mass 176	5.5 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY022838.D	06/26/2025	10:07
VY0626SBL01	VY0626SBL01	VY022839.D	06/26/2025	10:39
VY0626SBS01	VY0626SBS01	VY022840.D	06/26/2025	11:09
TP-35	Q2413-01	VY022844.D	06/26/2025	12:56
TP-72	Q2413-06	VY022845.D	06/26/2025	13:20

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG NO.: Q2413
Lab File ID: VY022811.D Date Analyzed: 06/25/2025
Instrument ID: MSVOA_Y Time Analyzed: 09:13
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	448549	7.71	727879	8.61	634524	11.41
UPPER LIMIT	897098	8.207	1455760	9.11	1269050	11.914
LOWER LIMIT	224275	7.207	363940	8.11	317262	10.914
EPA SAMPLE NO.						
TP-34	392242	7.71	690772	8.61	622911	11.41
TP-77	381808	7.71	681622	8.61	597468	11.41
TP-74	385627	7.71	688505	8.61	619901	11.41
TP-73	352660	7.70	632034	8.61	567782	11.41
VY0625SBL01	322245	7.71	582244	8.62	555259	11.41
VY0625SBS01	433589	7.71	722109	8.61	625216	11.41
VY0625SBSD01	424898	7.71	717544	8.61	607296	11.41

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CAMP02
 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG NO.: Q2413
 Lab File ID: VY022811.D Date Analyzed: 06/25/2025
 Instrument ID: MSVOA_Y Time Analyzed: 09:13
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	316858	13.34				
UPPER LIMIT	633716	13.84				
LOWER LIMIT	158429	12.84				
EPA SAMPLE NO.						
TP-34	266014	13.34				
TP-77	245461	13.34				
TP-74	261665	13.34				
TP-73	243559	13.34				
VY0625SBL01	248657	13.35				
VY0625SBS01	303331	13.35				
VY0625SBSD01	290027	13.34				

IS4 = 1,4-Dichlorobenzene-d4

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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG NO.: Q2413
Lab File ID: VY022838.D Date Analyzed: 06/26/2025
Instrument ID: MSVOA_Y Time Analyzed: 10:07
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	469939	7.71	769006	8.62	661912	11.41
UPPER LIMIT	939878	8.207	1538010	9.116	1323820	11.914
LOWER LIMIT	234970	7.207	384503	8.116	330956	10.914
EPA SAMPLE NO.						
TP-35	306589	7.71	584214	8.62	574106	11.41
TP-72	313811	7.71	566645	8.62	546225	11.41
VY0626SBL01	328943	7.71	604959	8.62	571725	11.41
VY0626SBS01	434636	7.71	740035	8.62	637859	11.42

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CAMP02
 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG NO.: Q2413
 Lab File ID: VY022838.D Date Analyzed: 06/26/2025
 Instrument ID: MSVOA_Y Time Analyzed: 10:07
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	328091	13.347				
UPPER LIMIT	656182	13.847				
LOWER LIMIT	164046	12.847				
EPA SAMPLE NO.						
TP-35	247141	13.35				
TP-72	218308	13.35				
VY0626SBL01	249132	13.35				
VY0626SBS01	302470	13.35				

IS4 = 1,4-Dichlorobenzene-d4

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.



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0625SBL01	SDG No.:	Q2413
Lab Sample ID:	VY0625SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022812.D	1		06/25/25 09:46	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.10	U	1.10	5.00	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.79	U	0.79	5.00	ug/Kg
74-83-9	Bromomethane	1.10	U	1.10	5.00	ug/Kg
75-00-3	Chloroethane	1.30	U	1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	1.20	U	1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	1.00	U	1.00	5.00	ug/Kg
67-64-1	Acetone	4.70	U	4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.73	U	0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	1.50	U	1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	3.50	U	3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.86	U	0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.80	U	0.80	5.00	ug/Kg
110-82-7	Cyclohexane	0.79	U	0.79	5.00	ug/Kg
78-93-3	2-Butanone	6.50	U	6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.97	U	0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	1.20	U	1.20	5.00	ug/Kg
67-66-3	Chloroform	0.84	U	0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.93	U	0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	0.91	U	0.91	5.00	ug/Kg
71-43-2	Benzene	0.79	U	0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.79	U	0.79	5.00	ug/Kg
79-01-6	Trichloroethene	0.81	U	0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.91	U	0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.78	U	0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	25.0	ug/Kg
108-88-3	Toluene	0.78	U	0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith		Date Collected:	
Project:	South River WM Replacement		Date Received:	
Client Sample ID:	VY0625SBL01		SDG No.:	Q2413
Lab Sample ID:	VY0625SBL01		Matrix:	SOIL
Analytical Method:	8260D		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022812.D	1		06/25/25 09:46	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.65	U	0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.62	U	0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.92	U	0.92	5.00	ug/Kg
591-78-6	2-Hexanone	3.70	U	3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.87	U	0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.88	U	0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	1.10	U	1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	0.91	U	0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.67	U	0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	10.0	ug/Kg
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/Kg
100-42-5	Styrene	0.71	U	0.71	5.00	ug/Kg
75-25-2	Bromoform	0.86	U	0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.70	U	1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.60	U	1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.50	U	1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.80	U	1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.00	U	3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.20	U	3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.2		63 - 155	96%	SPK: 50
1868-53-7	Dibromofluoromethane	49.8		70 - 134	100%	SPK: 50
2037-26-5	Toluene-d8	49.3		74 - 123	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.3		17 - 146	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	322000	7.707			
540-36-3	1,4-Difluorobenzene	582000	8.616			
3114-55-4	Chlorobenzene-d5	555000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	249000	13.346			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0625SBL01	SDG No.:	Q2413
Lab Sample ID:	VY0625SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022812.D	1		06/25/25 09:46	VY062525

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

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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0626SBL01	SDG No.:	Q2413
Lab Sample ID:	VY0626SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022839.D	1		06/26/25 10:39	VY062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.10	U	1.10	5.00	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.79	U	0.79	5.00	ug/Kg
74-83-9	Bromomethane	1.10	U	1.10	5.00	ug/Kg
75-00-3	Chloroethane	1.30	U	1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	1.20	U	1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	1.00	U	1.00	5.00	ug/Kg
67-64-1	Acetone	4.70	U	4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.73	U	0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	1.50	U	1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	3.50	U	3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.86	U	0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.80	U	0.80	5.00	ug/Kg
110-82-7	Cyclohexane	0.79	U	0.79	5.00	ug/Kg
78-93-3	2-Butanone	6.50	U	6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.97	U	0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	1.20	U	1.20	5.00	ug/Kg
67-66-3	Chloroform	0.84	U	0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.93	U	0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	0.91	U	0.91	5.00	ug/Kg
71-43-2	Benzene	0.79	U	0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.79	U	0.79	5.00	ug/Kg
79-01-6	Trichloroethene	0.81	U	0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.91	U	0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.78	U	0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	25.0	ug/Kg
108-88-3	Toluene	0.78	U	0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith		Date Collected:	
Project:	South River WM Replacement		Date Received:	
Client Sample ID:	VY0626SBL01		SDG No.:	Q2413
Lab Sample ID:	VY0626SBL01		Matrix:	SOIL
Analytical Method:	8260D		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022839.D	1		06/26/25 10:39	VY062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.65	U	0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.62	U	0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.92	U	0.92	5.00	ug/Kg
591-78-6	2-Hexanone	3.70	U	3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.87	U	0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.88	U	0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	1.10	U	1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	0.91	U	0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.67	U	0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	10.0	ug/Kg
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/Kg
100-42-5	Styrene	0.71	U	0.71	5.00	ug/Kg
75-25-2	Bromoform	0.86	U	0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.70	U	1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.60	U	1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.50	U	1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.80	U	1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.00	U	3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.20	U	3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.9		63 - 155	100%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	49.8		74 - 123	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.7		17 - 146	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	329000	7.713			
540-36-3	1,4-Difluorobenzene	605000	8.616			
3114-55-4	Chlorobenzene-d5	572000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	249000	13.347			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0626SBL01	SDG No.:	Q2413
Lab Sample ID:	VY0626SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022839.D	1		06/26/25 10:39	VY062625

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

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0625SBS01	SDG No.:	Q2413
Lab Sample ID:	VY0625SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022813.D	1		06/25/25 10:18	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	21.9		1.10	5.00	ug/Kg
74-87-3	Chloromethane	19.1		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	20.3		0.79	5.00	ug/Kg
74-83-9	Bromomethane	22.7		1.10	5.00	ug/Kg
75-00-3	Chloroethane	20.3		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	20.9		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.7		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.3		1.00	5.00	ug/Kg
67-64-1	Acetone	130		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	20.1		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	20.4		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	18.3		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	22.2		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.9		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.0		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	20.4		0.79	5.00	ug/Kg
78-93-3	2-Butanone	110		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	20.4		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.1		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	19.5		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.0		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.2		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	20.6		0.91	5.00	ug/Kg
71-43-2	Benzene	20.1		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.5		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.9		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	19.9		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	20.4		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	100		3.60	25.0	ug/Kg
108-88-3	Toluene	20.2		0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0625SBS01	SDG No.:	Q2413
Lab Sample ID:	VY0625SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022813.D	1		06/25/25 10:18	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	20.0		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	20.4		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	20.5		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	110		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	20.2		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	19.9		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	21.8		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	19.9		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	20.1		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	39.8		1.20	10.0	ug/Kg
95-47-6	o-Xylene	19.7		0.82	5.00	ug/Kg
100-42-5	Styrene	19.6		0.71	5.00	ug/Kg
75-25-2	Bromoform	19.5		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	20.3		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	19.0		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	19.7		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.9		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	19.8		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	19.3		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	20.3		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	19.5		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.1		63 - 155	100%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		70 - 134	100%	SPK: 50
2037-26-5	Toluene-d8	51.1		74 - 123	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.7		17 - 146	99%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	434000	7.707			
540-36-3	1,4-Difluorobenzene	722000	8.61			
3114-55-4	Chlorobenzene-d5	625000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	303000	13.346			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0625SBS01	SDG No.:	Q2413
Lab Sample ID:	VY0625SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022813.D	1		06/25/25 10:18	VY062525

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

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0626SBS01	SDG No.:	Q2413
Lab Sample ID:	VY0626SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022840.D	1		06/26/25 11:09	VY062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	20.4		1.10	5.00	ug/Kg
74-87-3	Chloromethane	22.2		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	20.0		0.79	5.00	ug/Kg
74-83-9	Bromomethane	23.1		1.10	5.00	ug/Kg
75-00-3	Chloroethane	19.3		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	19.0		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.8		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.5		1.00	5.00	ug/Kg
67-64-1	Acetone	150		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	20.4		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	21.0		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	18.1		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	23.0		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.2		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.6		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	20.3		0.79	5.00	ug/Kg
78-93-3	2-Butanone	130		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.8		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.3		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	20.7		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.3		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.3		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	20.1		0.91	5.00	ug/Kg
71-43-2	Benzene	20.1		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.1		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.8		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	20.1		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	20.2		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	110		3.60	25.0	ug/Kg
108-88-3	Toluene	20.0		0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0626SBS01	SDG No.:	Q2413
Lab Sample ID:	VY0626SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022840.D	1		06/26/25 11:09	VY062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	20.0		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	20.3		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	20.2		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	120		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	20.0		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	20.0		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	20.8		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	19.9		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.8		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	39.9		1.20	10.0	ug/Kg
95-47-6	o-Xylene	19.8		0.82	5.00	ug/Kg
100-42-5	Styrene	19.7		0.71	5.00	ug/Kg
75-25-2	Bromoform	19.4		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	20.5		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	20.7		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	20.3		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	20.0		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.1		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	20.2		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	19.8		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	19.5		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.8		63 - 155	104%	SPK: 50
1868-53-7	Dibromofluoromethane	50.4		70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	51.0		74 - 123	102%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.0		17 - 146	100%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	435000	7.713			
540-36-3	1,4-Difluorobenzene	740000	8.616			
3114-55-4	Chlorobenzene-d5	638000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	302000	13.346			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0626SBS01	SDG No.:	Q2413
Lab Sample ID:	VY0626SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022840.D	1		06/26/25 11:09	VY062625

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

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0625SBSD01	SDG No.:	Q2413
Lab Sample ID:	VY0625SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022814.D	1		06/25/25 10:40	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	21.7		1.10	5.00	ug/Kg
74-87-3	Chloromethane	20.0		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	21.0		0.79	5.00	ug/Kg
74-83-9	Bromomethane	23.1		1.10	5.00	ug/Kg
75-00-3	Chloroethane	20.8		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	20.9		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.7		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.7		1.00	5.00	ug/Kg
67-64-1	Acetone	130		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	20.4		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	20.9		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	18.6		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	21.1		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.4		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.5		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	20.4		0.79	5.00	ug/Kg
78-93-3	2-Butanone	110		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	20.6		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.4		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	19.7		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.2		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.5		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	20.6		0.91	5.00	ug/Kg
71-43-2	Benzene	20.4		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.5		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.4		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	20.3		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	20.3		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	100		3.60	25.0	ug/Kg
108-88-3	Toluene	20.0		0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0625SBS01	SDG No.:	Q2413
Lab Sample ID:	VY0625SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022814.D	1		06/25/25 10:40	VY062525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	20.1		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	20.5		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	20.3		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	110		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	20.3		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	20.3		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	18.8		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	20.6		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	20.6		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	41.0		1.20	10.0	ug/Kg
95-47-6	o-Xylene	20.2		0.82	5.00	ug/Kg
100-42-5	Styrene	20.4		0.71	5.00	ug/Kg
75-25-2	Bromoform	20.1		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	21.3		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	22.6		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	20.9		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	20.5		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.5		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	20.0		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	20.2		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	19.9		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.0		63 - 155	102%	SPK: 50
1868-53-7	Dibromofluoromethane	51.1		70 - 134	102%	SPK: 50
2037-26-5	Toluene-d8	51.5		74 - 123	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.5		17 - 146	99%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	425000	7.707			
540-36-3	1,4-Difluorobenzene	718000	8.61			
3114-55-4	Chlorobenzene-d5	607000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	290000	13.34			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0625SBSD01	SDG No.:	Q2413
Lab Sample ID:	VY0625SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022814.D	1		06/25/25 10:40	VY062525

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

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



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:	<u>CHEMTECH</u>	Contract:	<u>CAMP02</u>
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q2413</u>
Instrument ID:	<u>MSVOA_Y</u>	SAS No.:	<u>Q2413</u>
Heated Purge: (Y/N)	<u>Y</u>	SDG No.:	<u>Q2413</u>
GC Column:	<u>RXI-624</u>	Calibration Date(s):	<u>06/23/2025</u>
ID:	<u>0.25 (mm)</u>	Calibration Time(s):	<u>13:38</u>
			<u>15:31</u>

LAB FILE ID:	RRF005 = VY022776.D		RRF010 = VY022777.D		RRF020 = VY022778.D			
	RRF050 = VY022779.D		RRF100 = VY022780.D		RRF150 = VY022781.D			
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Dichlorodifluoromethane	0.424	0.456	0.474	0.424	0.404	0.384	0.428	7.7
Chloromethane	0.837	0.921	0.865	0.793	0.758	0.724	0.816	8.9
Vinyl Chloride	0.934	1.099	1.091	1.045	0.993	0.958	1.020	6.8
Bromomethane	0.784	0.885	0.854	0.771	0.760	0.756	0.802	6.8
Chloroethane	0.649	0.736	0.722	0.694	0.673	0.640	0.686	5.6
Trichlorofluoromethane	0.999	1.180	1.219	1.166	1.127	1.085	1.129	7
1,1,2-Trichlorotrifluoroethane	0.508	0.560	0.547	0.515	0.492	0.474	0.516	6.3
1,1-Dichloroethene	0.478	0.539	0.524	0.514	0.500	0.483	0.506	4.7
Acetone	0.117	0.124	0.114	0.095	0.096	0.087	0.105	13.9
Carbon Disulfide	1.516	1.705	1.731	1.667	1.625	1.566	1.635	5.1
Methyl tert-butyl Ether	1.173	1.398	1.396	1.435	1.460	1.405	1.378	7.5
Methyl Acetate	0.272	0.358	0.440	0.351	0.353	0.322	0.349	15.7
Methylene Chloride	0.840	0.777	0.664	0.590	0.578	0.548	0.666	17.7
trans-1,2-Dichloroethene	0.521	0.604	0.597	0.592	0.581	0.575	0.578	5.2
1,1-Dichloroethane	0.949	1.075	1.079	1.077	1.055	1.030	1.044	4.8
Cyclohexane	0.998	1.021	0.988	0.946	0.905	0.894	0.959	5.4
2-Butanone	0.145	0.160	0.160	0.153	0.156	0.147	0.154	4.4
Carbon Tetrachloride	0.439	0.498	0.507	0.491	0.492	0.491	0.486	5
cis-1,2-Dichloroethene	0.606	0.689	0.687	0.685	0.687	0.678	0.672	4.8
Bromochloromethane	0.437	0.431	0.437	0.459	0.443	0.427	0.439	2.6
Chloroform	0.986	1.130	1.099	1.096	1.084	1.059	1.076	4.6
1,1,1-Trichloroethane	0.847	0.945	0.973	0.950	0.939	0.923	0.929	4.7
Methylcyclohexane	0.543	0.589	0.610	0.618	0.608	0.611	0.596	4.7
Benzene	1.248	1.433	1.451	1.464	1.467	1.440	1.417	5.9
1,2-Dichloroethane	0.335	0.397	0.402	0.400	0.404	0.392	0.388	6.8
Trichloroethene	0.305	0.364	0.382	0.372	0.360	0.350	0.356	7.6
1,2-Dichloropropane	0.289	0.339	0.345	0.339	0.341	0.337	0.332	6.4
Bromodichloromethane	0.422	0.495	0.496	0.498	0.504	0.498	0.485	6.4
4-Methyl-2-Pentanone	0.168	0.201	0.215	0.226	0.230	0.221	0.210	10.9
Toluene	0.747	0.873	0.908	0.926	0.955	0.954	0.894	8.8

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CAMP02

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

Instrument ID: MSVOA_Y Calibration Date(s): 06/23/2025 06/23/2025

Heated Purge: (Y/N) Y Calibration Time(s): 13:38 15:31

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF005 = VY022776.D		RRF010 = VY022777.D		RRF020 = VY022778.D		
		RRF050 = VY022779.D		RRF100 = VY022780.D		RRF150 = VY022781.D		
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
t-1,3-Dichloropropene	0.355	0.430	0.438	0.451	0.473	0.473	0.437	10
cis-1,3-Dichloropropene	0.412	0.503	0.523	0.524	0.540	0.538	0.506	9.6
1,1,2-Trichloroethane	0.207	0.249	0.249	0.253	0.255	0.250	0.244	7.4
2-Hexanone	0.115	0.140	0.145	0.151	0.157	0.149	0.143	10.5
Dibromochloromethane	0.260	0.315	0.321	0.329	0.336	0.329	0.315	8.8
1,2-Dibromoethane	0.193	0.231	0.229	0.237	0.244	0.236	0.228	7.8
Tetrachloroethene	0.399	0.465	0.535	0.515	0.473	0.446	0.472	10.3
Chlorobenzene	0.981	1.110	1.131	1.126	1.130	1.114	1.099	5.3
Ethyl Benzene	1.644	1.881	1.971	2.029	2.040	2.018	1.930	7.9
m/p-Xylenes	0.624	0.722	0.759	0.782	0.800	0.791	0.746	8.8
o-Xylene	0.578	0.674	0.708	0.734	0.759	0.765	0.703	10
Styrene	0.926	1.108	1.165	1.249	1.309	1.309	1.178	12.5
Bromoform	0.178	0.204	0.203	0.212	0.225	0.220	0.207	8
Isopropylbenzene	3.354	3.764	3.823	3.778	3.709	3.759	3.698	4.7
1,1,2,2-Tetrachloroethane	0.597	0.659	0.566	0.567	0.594	0.593	0.596	5.6
1,3-Dichlorobenzene	1.546	1.660	1.692	1.708	1.750	1.744	1.683	4.5
1,4-Dichlorobenzene	1.564	1.740	1.688	1.685	1.690	1.666	1.672	3.5
1,2-Dichlorobenzene	1.395	1.488	1.502	1.499	1.515	1.502	1.483	3
1,2-Dibromo-3-Chloropropane	0.102	0.101	0.103	0.103	0.102	0.096	0.101	2.7
1,2,4-Trichlorobenzene	0.778	0.841	0.848	0.843	0.871	0.845	0.838	3.7
1,2,3-Trichlorobenzene	0.679	0.723	0.735	0.728	0.751	0.727	0.724	3.3
1,2-Dichloroethane-d4	0.568	0.550	0.557	0.559	0.571	0.545	0.558	1.8
Dibromofluoromethane	0.306	0.297	0.295	0.304	0.314	0.308	0.304	2.3
Toluene-d8	1.182	1.148	1.186	1.215	1.262	1.247	1.207	3.6
4-Bromofluorobenzene	0.368	0.362	0.370	0.385	0.423	0.421	0.388	7

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

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

Instrument ID: MSVOA_Y Calibration Date/Time: 06/25/2025 09:13

Lab File ID: VY022811.D Init. Calib. Date(s): 06/23/2025 06/23/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 13:38 15:31

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.428	0.402		-6.07	20
Chloromethane	0.816	0.678	0.1	-16.91	20
Vinyl Chloride	1.020	0.942		-7.65	20
Bromomethane	0.802	0.717		-10.6	20
Chloroethane	0.686	0.643		-6.27	20
Trichlorofluoromethane	1.129	1.068		-5.4	20
1,1,2-Trichlorotrifluoroethane	0.516	0.503		-2.52	20
1,1-Dichloroethene	0.506	0.494		-2.37	20
Acetone	0.105	0.114		8.57	20
Carbon Disulfide	1.635	1.577		-3.55	20
Methyl tert-butyl Ether	1.378	1.304		-5.37	20
Methyl Acetate	0.349	0.282		-19.2	20
Methylene Chloride	0.666	0.569		-14.56	20
trans-1,2-Dichloroethene	0.578	0.554		-4.15	20
1,1-Dichloroethane	1.044	1.002	0.1	-4.02	20
Cyclohexane	0.959	0.895		-6.67	20
2-Butanone	0.154	0.145		-5.84	20
Carbon Tetrachloride	0.486	0.494		1.65	20
cis-1,2-Dichloroethene	0.672	0.648		-3.57	20
Bromochloromethane	0.439	0.409		-6.83	20
Chloroform	1.076	1.022		-4.93	20
1,1,1-Trichloroethane	0.929	0.916		-1.4	20
Methylcyclohexane	0.596	0.609		2.18	20
Benzene	1.417	1.415		-0.14	20
1,2-Dichloroethane	0.388	0.380		-2.06	20
Trichloroethene	0.356	0.364		2.25	20
1,2-Dichloropropane	0.332	0.331		-0.3	20
Bromodichloromethane	0.485	0.481		-0.82	20
4-Methyl-2-Pentanone	0.210	0.201		-4.29	20
Toluene	0.894	0.909		1.68	20
t-1,3-Dichloropropene	0.437	0.438		0.23	20
cis-1,3-Dichloropropene	0.506	0.513		1.38	20
1,1,2-Trichloroethane	0.244	0.236		-3.28	20
2-Hexanone	0.143	0.141		-1.4	20
Dibromochloromethane	0.315	0.312		-0.95	20
1,2-Dibromoethane	0.228	0.223		-2.19	20
Tetrachloroethene	0.472	0.499		5.72	20
Chlorobenzene	1.099	1.104	0.3	0.46	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

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

Instrument ID: MSVOA_Y Calibration Date/Time: 06/25/2025 09:13

Lab File ID: VY022811.D Init. Calib. Date(s): 06/23/2025 06/23/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 13:38 15:31

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.930	1.981		2.64	20
m/p-Xylenes	0.746	0.775		3.89	20
o-Xylene	0.703	0.725		3.13	20
Styrene	1.178	1.218		3.4	20
Bromoform	0.207	0.199	0.1	-3.87	20
Isopropylbenzene	3.698	3.805		2.89	20
1,1,2,2-Tetrachloroethane	0.596	0.530	0.3	-11.07	20
1,3-Dichlorobenzene	1.683	1.693		0.59	20
1,4-Dichlorobenzene	1.672	1.661		-0.66	20
1,2-Dichlorobenzene	1.483	1.460		-1.55	20
1,2-Dibromo-3-Chloropropane	0.101	0.095		-5.94	20
1,2,4-Trichlorobenzene	0.838	0.820		-2.15	20
1,2,3-Trichlorobenzene	0.724	0.698		-3.59	20
1,2-Dichloroethane-d4	0.558	0.536		-3.94	20
Dibromofluoromethane	0.304	0.309		1.64	20
Toluene-d8	1.207	1.256		4.06	20
4-Bromofluorobenzene	0.388	0.398		2.58	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

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

Instrument ID: MSVOA_Y Calibration Date/Time: 06/26/2025 10:07

Lab File ID: VY022838.D Init. Calib. Date(s): 06/23/2025 06/23/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 13:38 15:31

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.428	0.440		2.8	20
Chloromethane	0.816	0.752	0.1	-7.84	20
Vinyl Chloride	1.020	0.980		-3.92	20
Bromomethane	0.802	0.762		-4.99	20
Chloroethane	0.686	0.667		-2.77	20
Trichlorofluoromethane	1.129	1.082		-4.16	20
1,1,2-Trichlorotrifluoroethane	0.516	0.546		5.81	20
1,1-Dichloroethene	0.506	0.545		7.71	20
Acetone	0.105	0.131		24.76	20
Carbon Disulfide	1.635	1.715		4.89	20
Methyl tert-butyl Ether	1.378	1.465		6.31	20
Methyl Acetate	0.349	0.323		-7.45	20
Methylene Chloride	0.666	0.634		-4.8	20
trans-1,2-Dichloroethene	0.578	0.608		5.19	20
1,1-Dichloroethane	1.044	1.094	0.1	4.79	20
Cyclohexane	0.959	1.000		4.28	20
2-Butanone	0.154	0.172		11.69	20
Carbon Tetrachloride	0.486	0.541		11.32	20
cis-1,2-Dichloroethene	0.672	0.699		4.02	20
Bromochloromethane	0.439	0.426		-2.96	20
Chloroform	1.076	1.110		3.26	20
1,1,1-Trichloroethane	0.929	0.993		6.89	20
Methylcyclohexane	0.596	0.679		13.93	20
Benzene	1.417	1.540		8.68	20
1,2-Dichloroethane	0.388	0.410		5.67	20
Trichloroethene	0.356	0.385		8.15	20
1,2-Dichloropropane	0.332	0.357		7.53	20
Bromodichloromethane	0.485	0.522		7.63	20
4-Methyl-2-Pentanone	0.210	0.232		10.48	20
Toluene	0.894	0.997		11.52	20
t-1,3-Dichloropropene	0.437	0.479		9.61	20
cis-1,3-Dichloropropene	0.506	0.554		9.49	20
1,1,2-Trichloroethane	0.244	0.262		7.38	20
2-Hexanone	0.143	0.165		15.39	20
Dibromochloromethane	0.315	0.338		7.3	20
1,2-Dibromoethane	0.228	0.245		7.46	20
Tetrachloroethene	0.472	0.516		9.32	20
Chlorobenzene	1.099	1.206	0.3	9.74	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

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

Instrument ID: MSVOA_Y Calibration Date/Time: 06/26/2025 10:07

Lab File ID: VY022838.D Init. Calib. Date(s): 06/23/2025 06/23/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 13:38 15:31

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	1.930	2.192		13.57	20
m/p-Xylenes	0.746	0.854		14.48	20
o-Xylene	0.703	0.798		13.51	20
Styrene	1.178	1.349		14.52	20
Bromoform	0.207	0.220	0.1	6.28	20
Isopropylbenzene	3.698	4.255		15.06	20
1,1,2,2-Tetrachloroethane	0.596	0.638	0.3	7.05	20
1,3-Dichlorobenzene	1.683	1.856		10.28	20
1,4-Dichlorobenzene	1.672	1.815		8.55	20
1,2-Dichlorobenzene	1.483	1.605		8.23	20
1,2-Dibromo-3-Chloropropane	0.101	0.101		0	20
1,2,4-Trichlorobenzene	0.838	0.856		2.15	20
1,2,3-Trichlorobenzene	0.724	0.712		-1.66	20
1,2-Dichloroethane-d4	0.558	0.541		-3.05	20
Dibromofluoromethane	0.304	0.302		-0.66	20
Toluene-d8	1.207	1.223		1.33	20
4-Bromofluorobenzene	0.388	0.390		0.51	20

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

LAB CHRONICLE

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

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2413-01	TP-35	SOIL	Gasoline Range Organics	8015D	06/24/25		06/26/25	06/24/25
Q2413-02	TP-34	SOIL	Gasoline Range Organics	8015D	06/24/25		06/26/25	06/24/25
Q2413-03	TP-77	SOIL	Gasoline Range Organics	8015D	06/24/25		06/26/25	06/24/25
Q2413-04	TP-74	SOIL	Gasoline Range Organics	8015D	06/24/25		06/26/25	06/24/25
Q2413-05	TP-73	SOIL	Gasoline Range Organics	8015D	06/24/25		06/26/25	06/24/25
Q2413-06	TP-72	SOIL	Gasoline Range Organics	8015D	06/24/25		06/26/25	06/24/25



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	88.8
Sample Wt/Vol:	4	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		PH :	
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031935.D	1	06/26/25 12:51	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	13.0	J	12.0	63.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	16.0		50 - 150	80%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	92
Sample Wt/Vol:	4.6	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		PH :	
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031936.D	1	06/26/25 13:36	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	10.0	U	10.0	53.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	11.1		50 - 150	55%	SPK: 20

Comments:

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N = Presumptive Evidence of a Compound

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Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	91.4
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Gasoline Range Organics
GPC Factor :		Injection Volume :	
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031937.D	1	06/26/25 14:04	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	9.00	U	9.00	49.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	11.1		50 - 150	55%	SPK: 20

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Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	89.5
Sample Wt/Vol:	4.2	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		PH :	
Prep Method :		Decanted:	
		Test:	Gasoline Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031938.D	1	06/26/25 14:31	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	11.0	U	11.0	60.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	12.8		50 - 150	64%	SPK: 20

Comments:

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M = MS/MSD acceptance criteria did not meet requirements

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D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	77.1
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		PH :	
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031941.D	50	06/26/25 16:09	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	536	U	536	2920	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.6		50 - 150	78%	SPK: 20

Comments:

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	87
Sample Wt/Vol:	5.1	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		Decanted:	
Prep Method :		Test:	Gasoline Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031942.D	50	06/26/25 16:36	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	2210	J	465	2540	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.5		50 - 150	78%	SPK: 20

Comments:

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M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

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() = Laboratory InHouse Limit



QC SUMMARY

SOIL GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: CDM Smith

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

EPA SAMPLE NO.	S1 AAA-TFT	S2	S3	S4	TOT OUT
VPF0626S1	77				0
VPF0626S2	80				0
BSF0626S1	81				0
TP-35	80				0
TP-34	55				0
TP-77	55				0
TP-74	64				0
BSF0626S2	83				0
TP-73	78				0
TP-72	78				0

QC LIMITS

AAA-TFT

For Water : 50-150

For Soil : 50-150

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate Diluted Out

SOIL GASOLINE RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATION

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2413 **SAS No :** Q2413 **SDG No:** Q2413
Matrix Spike - EPA Sample No : BSF0626S1 **Datafile:** FB031934.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
GRO	180	0	160	89	50-150

SOIL GASOLINE RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATION

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2413 **SAS No :** Q2413 **SDG No:** Q2413
Matrix Spike - EPA Sample No : BSF0626S2 **Datafile:** FB031939.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
GRO	180	0	155	86	50-150

LCS/LCSD % Recovery RPD : 3.2

METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF0626S1

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: FB031932.D

Lab Sample ID: VBF0626S1

Date Analyzed: 06/26/25

Time Analyzed: 11:15

GC Column: RTX-502.2 ID: 0.53 (mm)

Heated Purge: (Y/N) Y

Instrument ID: FB

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSF0626S1	BSF0626S1	FB031934.D	06/26/25
TP-35	Q2413-01	FB031935.D	06/26/25
TP-34	Q2413-02	FB031936.D	06/26/25
TP-77	Q2413-03	FB031937.D	06/26/25
TP-74	Q2413-04	FB031938.D	06/26/25
BSF0626S2	BSF0626S2	FB031939.D	06/26/25

COMMENTS: _____

METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF0626S2

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: FB031933.D

Lab Sample ID: VBF0626S2

Date Analyzed: 06/26/25

Time Analyzed: 11:43

GC Column: RTX-502.2 ID: 0.53 (mm)

Heated Purge: (Y/N) Y

Instrument ID: FB

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
TP-73	Q2413-05	FB031941.D	06/26/25
TP-72	Q2413-06	FB031942.D	06/26/25

COMMENTS: _____



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VBF0626S1	SDG No.:	Q2413
Lab Sample ID:	VBF0626S1	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Gasoline Range Organics
GPC Factor :		Injection Volume :	
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031932.D	1	06/26/25 11:15	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	8.00	U	8.00	45.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.4		50 - 150	77%	SPK: 20

Comments:

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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VBF0626S2	SDG No.:	Q2413
Lab Sample ID:	VBF0626S2	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Decanted:	
GPC Factor :		Final Vol:	5
Prep Method :		Test:	Gasoline Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031933.D	50	06/26/25 11:43	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	413	U	413	2250	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.9		50 - 150	80%	SPK: 20

Comments:

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D = Dilution

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Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	BSF0626S1	SDG No.:	Q2413
Lab Sample ID:	BSF0626S1	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Decanted:	
GPC Factor :		Final Vol:	5
Prep Method :		Test:	Gasoline Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031934.D	1	06/26/25 12:10	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	160		8.00	45.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	16.3		50 - 150	81%	SPK: 20

Comments:

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J = Estimated Value

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N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	BSF0626S2	SDG No.:	Q2413
Lab Sample ID:	BSF0626S2	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Decanted:	
GPC Factor :		Final Vol:	5
Prep Method :		Test:	Gasoline Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031939.D	1	06/26/25 14:59	FB062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	155		8.00	45.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	16.6		50 - 150	83%	SPK: 20

Comments:

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CALIBRATION SUMMARY

GASOLINE RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: CAMP02
 ProjectID: South River WM Replacement
 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413

Calibration Sequence : FB062325		Test : Gasoline Range Organics	
Concentration (PPB)	Area Count	Reference Factor	File ID
45	1490557	33123	FB031909.D
90	2566530	28517	FB031910.D
180	5166210	28701	FB031911.D
450	12609856	28022	FB031912.D
900	27368301	30409	FB031913.D
AVG RF : 29754		% RSD : 7.013	AVG RT : 8.798

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

20 PPB GRO STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413
DataFile: FB031931.D Analyst Name: YP/AJ Analyst Date: 06-26-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	4762065	26456	29754	11.084

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

20 PPB GRO STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413
DataFile: FB031940.D Analyst Name: YP/AJ Analyst Date: 06-26-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	4613127	25628	29754	13.867

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

20 PPB GRO STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413
DataFile: FB031944.D Analyst Name: YP/AJ Analyst Date: 06-26-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	4646618	25815	29754	13.239

Analytical Sequence

Client: CDM Smith

SDG No.: Q2413

Project: South River WM Replacement

Instrument ID: FID_B

GC Column: RTX-502.2 **ID:** 0.53 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

MEAN SUROGATE RT FROM INITIAL CALIBRATION 8.798					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
20 PPB GRO STD	20 PPB GRO STD	26 Jun 2025 10:31	FB031931.D	8.792	
VBF0626S1	VBF0626S1	26 Jun 2025 11:15	FB031932.D	8.796	
VBF0626S2	VBF0626S2	26 Jun 2025 11:43	FB031933.D	8.797	
BSF0626S1	BSF0626S1	26 Jun 2025 12:10	FB031934.D	8.797	
TP-35	Q2413-01	26 Jun 2025 12:51	FB031935.D	8.796	
TP-34	Q2413-02	26 Jun 2025 13:36	FB031936.D	8.796	
TP-77	Q2413-03	26 Jun 2025 14:04	FB031937.D	8.796	
TP-74	Q2413-04	26 Jun 2025 14:31	FB031938.D	8.798	
BSF0626S2	BSF0626S2	26 Jun 2025 14:59	FB031939.D	8.799	
20 PPB GRO STD	20 PPB GRO STD	26 Jun 2025 15:26	FB031940.D	8.799	
TP-73	Q2413-05	26 Jun 2025 16:09	FB031941.D	8.797	
TP-72	Q2413-06	26 Jun 2025 16:36	FB031942.D	8.797	
20 PPB GRO STD	20 PPB GRO STD	26 Jun 2025 17:32	FB031944.D	8.798	

LAB CHRONICLE

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

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

Hit Summary Sheet SW-846

SDG No.: Q2413
Client: CDM Smith

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

Hit Summary Sheet

SW-846

SDG No.: Q2413

Client: CDM Smith

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

Total Tics :	910.00
Total Concentration:	985.70

Client ID : TP-74

Q2413-04	TP-74	SOIL	Fluoranthene	79,000 J	33.5	190	ug/Kg
Q2413-04	TP-74	SOIL	Benzo(b)fluoranthene	76,400 J	21.2	190	ug/Kg

Total Syoc : 155.40

Q2413-04	TP-74	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	210.000	A	0	0	ug/Kg
Q2413-04	TP-74	SOIL	n-Hexadecanoic acid *	110.000	J	0	0	ug/Kg
Q2413-04	TP-74	SOIL	Trifluoroacetic acid, pentadecyl e *	90.700	J	0	0	ug/Kg
Q2413-04	TP-74	SOIL	Benzophenone *	250.000	J	0	0	ug/Kg

Total Tics :	660.70
Total Concentration:	816.10

Client ID : TP-73

Q2413-05	TP-73	SOIL	Diethylphthalate	130.000	J	36.7	220	ug/Kg
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Total Svoc : 130.00

Q2413-05	TP-73	SOIL	1,2,4,8-Tetramethylbicyclo[6.3.0]l *	260.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	270.000	A	0	0	ug/Kg
Q2413-05	TP-73	SOIL	7,9-Di-tert-butyl-1-oxaspiro(4,5)d *	90.700	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Aromandendrene *	220.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Benzophenone *	350.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Cyclopentadecane *	120.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	n-Hexadecanoic acid *	480.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Octacosane *	160.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Octacosanol *	170.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Octadecanal *	98.500	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Octadecanoic acid *	120.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Octadecyl trifluoroacetate *	440.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Oxirane, heptadecyl- *	91.600	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Pentadecafluorooctanoic acid, oct *	540.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	Tetratetracontane *	180.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	unknown17.645 *	110.000	J	0	0	ug/Kg
Q2413-05	TP-73	SOIL	unknown17.727 *	170.000	J	0	0	ug/Kg

Total Tics :	3,870.80
Total Concentration:	4,000.80

Client ID : TP-72

Hit Summary Sheet SW-846

SDG No.: Q2413
Client: CDM Smith

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

Total Tics : 3,245.40

Total Concentration: 3,245.40



SAMPLE DATA

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

SURROGATES

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

INTERNAL STANDARDS

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

TENTATIVE IDENTIFIED COMPOUNDS

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

Report of Analysis

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

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

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

SURROGATES

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

INTERNAL STANDARDS

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

TENTATIVE IDENTIFIED COMPOUNDS

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

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8270E	% Solid:	92
Sample Wt/Vol:	30.03	Units:	g
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
BF142892.D	1	06/26/25 09:20	06/27/25 14:47	PB168625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

SURROGATES

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

INTERNAL STANDARDS

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

TENTATIVE IDENTIFIED COMPOUNDS

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

Report of Analysis

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

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

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

SURROGATES

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

INTERNAL STANDARDS

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

TENTATIVE IDENTIFIED COMPOUNDS

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

Report of Analysis

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

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

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

SURROGATES

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

INTERNAL STANDARDS

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

TENTATIVE IDENTIFIED COMPOUNDS

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

Report of Analysis

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

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

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8270E

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

Surrogate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8270E

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8270E

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8270E

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8270E

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: SW8270E

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8270E

DataFile: BF142885.D

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8270E

DataFile: BF142885.D

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

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168625BL

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: BF142884.D

Lab Sample ID: PB168625BL

Instrument ID: BNA_F

Date Extracted: 06/26/2025

Matrix: (soil/water) SOIL

Date Analyzed: 06/27/2025

Level: (low/med) LOW

Time Analyzed: 10:49

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

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

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM

SAS No.: Q2413

SDG NO.: Q2413

Lab File ID: BF142787.D

DFTPP Injection Date: 06/19/2025

Instrument ID: BNA_F

DFTPP Injection Time: 16:37

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.6 (1.8) 1
69	Mass 69 relative abundance	30.9
70	Less than 2.0% of mass 69	0.1 (0.5) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	5.8
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	15
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.1 (19.1) 2

1-Value is % mass 69

2-Value is % mass 442

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

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: BF142856.D

DFTPP Injection Date: 06/26/2025

Instrument ID: BNA_F

DFTPP Injection Time: 09:10

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.6 (1.8) 1
69	Mass 69 relative abundance	33.7
70	Less than 2.0% of mass 69	0.2 (0.6) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	15.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.4 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF142857.D	06/26/2025	09:39
MH-G/HMS	Q2416-01MS	BF142872.D	06/26/2025	17:06
MH-G/HMSD	Q2416-01MSD	BF142873.D	06/26/2025	17:36

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: BF142881.D

DFTPP Injection Date: 06/27/2025

Instrument ID: BNA_F

DFTPP Injection Time: 09:21

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.6 (1.8) 1
69	Mass 69 relative abundance	32.3
70	Less than 2.0% of mass 69	0.1 (0.4) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.4
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	15.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19.2 (19.2) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF142882.D	06/27/2025	09:51
PB168625BL	PB168625BL	BF142884.D	06/27/2025	10:49
PB168625BS	PB168625BS	BF142885.D	06/27/2025	11:19
TP-73	Q2413-05	BF142886.D	06/27/2025	11:52
TP-35	Q2413-01	BF142889.D	06/27/2025	13:19
TP-77	Q2413-03	BF142890.D	06/27/2025	13:48
TP-74	Q2413-04	BF142891.D	06/27/2025	14:17
TP-34	Q2413-02	BF142892.D	06/27/2025	14:47
TP-72	Q2413-06	BF142893.D	06/27/2025	15:15

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

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

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

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	77664	6.875	293795	8.16	161192	9.92
UPPER LIMIT	155328	7.375	587590	8.663	322384	10.422
LOWER LIMIT	38832	6.375	146898	7.663	80596	9.422
EPA SAMPLE NO.						
01 MH-G/HMS	84939	6.88	322606	8.16	168684	9.92
02 MH-G/HMSD	79872	6.88	303973	8.16	162686	9.92

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

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

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

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	275904	11.41	159836	14.057	144296	15.545
UPPER LIMIT	551808	11.91	319672	14.557	288592	16.045
LOWER LIMIT	137952	10.91	79918	13.557	72148	15.045
EPA SAMPLE NO.						
01 MH-G/HMS	277774	11.41	149832	14.06	169288	15.55
02 MH-G/HMSD	266635	11.41	149914	14.06	166770	15.55

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

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

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

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

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	70500	6.875	264550	8.16	140000	9.92
UPPER LIMIT	141000	7.375	529100	8.663	280000	10.422
LOWER LIMIT	35250	6.375	132275	7.663	70000	9.422
EPA SAMPLE NO.						
01 PB168625BL	77055	6.88	295430	8.16	162519	9.92
02 PB168625BS	79288	6.88	306414	8.16	167156	9.92
03 TP-73	71511	6.88	269771	8.16	131916	9.92
04 TP-35	69777	6.88	263920	8.16	134370	9.92
05 TP-34	74176	6.88	267947	8.16	125086	9.92
06 TP-77	71725	6.88	266677	8.16	131150	9.92
07 TP-74	73989	6.88	272969	8.16	135853	9.92
08 TP-72	68428	6.88	240509	8.16	109896	9.92

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

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

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

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

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

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	234291	11.41	139168	14.057	151209	15.545
UPPER LIMIT	468582	11.91	278336	14.557	302418	16.045
LOWER LIMIT	117146	10.91	69584	13.557	75604.5	15.045
EPA SAMPLE NO.						
01 PB168625BL	284575	11.40	168482	14.05	158706	15.55
02 PB168625BS	286462	11.41	164874	14.06	166752	15.55
03 TP-73	195199	11.40	151359	14.05	151859	15.55
04 TP-35	199779	11.40	149012	14.05	152863	15.55
05 TP-34	186159	11.40	169043	14.05	135290	15.55
06 TP-77	189644	11.40	153845	14.05	153297	15.55
07 TP-74	197144	11.40	161564	14.05	156020	15.55
08 TP-72	174745	11.41	163929	14.06	110583	15.55

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
207-08-9	Benzo(k)fluoranthene	22.4	U	22.4	170	ug/Kg
50-32-8	Benzo(a)pyrene	29.5	U	29.5	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	29.1	U	29.1	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	27.4	U	27.4	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	25.7	U	25.7	170	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	25.6	U	25.6	170	ug/Kg
123-91-1	1,4-Dioxane	45.2	U	45.2	170	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	27.4	U	27.4	170	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	127		18 - 112	84%	SPK: 150
13127-88-3	Phenol-d6	127		15 - 107	85%	SPK: 150
4165-60-0	Nitrobenzene-d5	81.6		18 - 107	82%	SPK: 100
321-60-8	2-Fluorobiphenyl	77.4		20 - 109	77%	SPK: 100
118-79-6	2,4,6-Tribromophenol	134		10 - 116	89%	SPK: 150
1718-51-0	Terphenyl-d14	78.5		10 - 105	78%	SPK: 100
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	77100	6.875			
1146-65-2	Naphthalene-d8	295000	8.157			
15067-26-2	Acenaphthene-d10	163000	9.916			
1517-22-2	Phenanthrene-d10	285000	11.404			
1719-03-5	Chrysene-d12	168000	14.051			
1520-96-3	Perylene-d12	159000	15.545			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

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

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

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

Report of Analysis

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

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

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

Report of Analysis

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

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

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF061925.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Jun 20 05:06:14 2025
 Response Via : Initial Calibration

Calibration Files

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

Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD

1) I 1,4-Dichlorobenzen...	-----ISTD-----									
2) 1,4-Dioxane		0.479	0.499	0.471	0.461	0.509	0.479	0.467	0.480	3.60
3) Pyridine		1.190	1.195	1.190	1.164	1.303	1.209	1.181	1.205	3.78
4) n-Nitrosodimet...			0.610	0.617	0.596	0.668	0.632	0.614	0.623	3.98
5) S 2-Fluorophenol		2.475	2.460	2.460	2.299	2.525	2.342	2.256	2.403	4.26
6) Aniline		1.951	1.944	1.891	1.818	1.982	1.869	1.746	1.886	4.41
7) S Phenol-d6		3.024	2.962	2.846	2.681	2.959	2.760	2.610	2.834	5.53
8) 2-Chlorophenol		1.362	1.303	1.292	1.245	1.366	1.272	1.231	1.296	4.08
9) Benzaldehyde			0.988	0.943	0.757	0.832	0.684		0.841	15.02
10) C Phenol		1.648	1.653	1.591	1.516	1.651	1.530	1.437	1.575	5.31
11) bis(2-Chloroet...		1.167	1.133	1.134	1.072	1.183	1.116	1.077	1.126	3.71
12) 1,3-Dichlorobe...		1.536	1.499	1.470	1.377	1.500	1.414	1.348	1.449	4.85
13) C 1,4-Dichlorobe...		1.563	1.496	1.472	1.409	1.523	1.425	1.347	1.462	5.04
14) 1,2-Dichlorobe...		1.458	1.422	1.409	1.331	1.451	1.353	1.284	1.387	4.72
15) Benzyl Alcohol			1.023	1.025	0.976	1.106	1.032	0.985	1.025	4.51
16) 2,2'-oxybis(1-...		1.975	1.869	1.815	1.723	1.879	1.758	1.644	1.809	6.12
17) 2-Methylphenol		1.015	0.997	0.980	0.938	1.043	0.972	0.929	0.982	4.13
18) Hexachloroethane		0.533	0.521	0.507	0.499	0.539	0.498	0.484	0.511	3.89
19) P n-Nitroso-di-n...	0.831	0.879	0.840	0.833	0.787	0.847	0.812	0.766	0.824	4.30
20) 3+4-Methylphenols			1.292	1.262	1.176	1.312	1.197	1.108	1.224	6.36

21) I Naphthalene-d8	-----ISTD-----									
22) Acetophenone		0.464	0.451	0.459	0.418	0.461	0.428	0.406	0.441	5.28
23) S Nitrobenzene-d5		0.738	0.724	0.747	0.708	0.771	0.724	0.694	0.729	3.48
24) Nitrobenzene		0.345	0.325	0.332	0.319	0.349	0.326	0.314	0.330	3.88
25) Isophorone		0.611	0.582	0.592	0.555	0.616	0.584	0.554	0.585	4.17
26) C 2-Nitrophenol		0.169	0.172	0.182	0.178	0.194	0.186	0.176	0.180	4.85
27) 2,4-Dimethylph...		0.322	0.310	0.318	0.300	0.329	0.307	0.294	0.311	3.99
28) bis(2-Chloroet...		0.386	0.373	0.383	0.355	0.390	0.366	0.351	0.372	4.09
29) C 2,4-Dichloroph...		0.291	0.280	0.290	0.273	0.298	0.277	0.268	0.282	3.77
30) 1,2,4-Trichlor...		0.324	0.316	0.318	0.299	0.324	0.301	0.292	0.310	4.26
31) Naphthalene		1.051	1.002	1.004	0.934	1.017	0.943	0.902	0.979	5.46
32) Benzoic acid			0.118	0.147	0.157	0.181	0.180	0.169	0.159	15.08
33) 4-Chloroaniline		0.414	0.408	0.409	0.379	0.421	0.393	0.363	0.398	5.26
34) C Hexachlorobuta...		0.195	0.188	0.198	0.184	0.200	0.184	0.179	0.190	4.30
35) Caprolactam			0.073	0.075	0.072	0.081	0.078	0.069	0.075	5.84
36) C 4-Chloro-3-met...		0.300	0.275	0.286	0.269	0.298	0.278	0.260	0.281	5.24
37) 2-Methylnaphth...		0.655	0.621	0.629	0.579	0.631	0.583	0.550	0.607	6.12
38) 1-Methylnaphth...		0.684	0.645	0.650	0.598	0.654	0.604	0.563	0.628	6.56

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

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

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

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

(#) = Out of Range

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

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

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

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

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

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

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

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

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

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

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

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

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

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

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

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

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

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

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

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

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

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

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

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

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

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

All other compounds must meet a minimum RRF of 0.010.

LAB CHRONICLE

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

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2413-01	TP-35	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-02	TP-34	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-03	TP-77	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-04	TP-74	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-05	TP-73	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-06	TP-72	SOIL			06/24/25			06/24/25
			Gasoline Range Organics	8015D			06/26/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	

Hit Summary Sheet
SW-846

SDG No.: Q2413

Order ID: Q2413

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-34								
Q2413-02	TP-34	SOIL	beta-BHC	0.39	JP	0.20	1.80	ug/kg
Q2413-02	TP-34	SOIL	alpha-Chlordane	1.20	JP	0.13	1.80	ug/kg
Q2413-02	TP-34	SOIL	gamma-Chlordane	0.78	JP	0.16	1.80	ug/kg
Total Concentration:				2.370				
Client ID : TP-77								
Q2413-03	TP-77	SOIL	Endrin	0.26	JP	0.15	1.90	ug/kg
Total Concentration:				0.260				
Client ID : TP-74								
Q2413-04	TP-74	SOIL	4,4-DDE	0.37	JP	0.16	1.90	ug/kg
Q2413-04	TP-74	SOIL	4,4-DDT	0.43	JP	0.16	1.90	ug/kg
Total Concentration:				0.800				
Client ID : TP-73								
Q2413-05	TP-73	SOIL	4,4-DDD	0.29	J	0.19	2.20	ug/kg
Total Concentration:				0.290				



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	88.8
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089177.D	1	06/26/25 08:20	06/27/25 04:33	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.15	U	0.15	1.90	ug/kg
319-85-7	beta-BHC	0.20	U	0.20	1.90	ug/kg
319-86-8	delta-BHC	0.44	U	0.44	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	0.16	U	0.16	1.90	ug/kg
76-44-8	Heptachlor	0.14	U	0.14	1.90	ug/kg
309-00-2	Aldrin	0.14	U	0.14	1.90	ug/kg
1024-57-3	Heptachlor epoxide	0.21	U	0.21	1.90	ug/kg
959-98-8	Endosulfan I	0.16	U	0.16	1.90	ug/kg
60-57-1	Dieldrin	0.16	U	0.16	1.90	ug/kg
72-55-9	4,4-DDE	0.16	U	0.16	1.90	ug/kg
72-20-8	Endrin	0.16	U	0.16	1.90	ug/kg
33213-65-9	Endosulfan II	0.33	U	0.33	1.90	ug/kg
72-54-8	4,4-DDD	0.17	U	0.17	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	0.15	U	0.15	1.90	ug/kg
50-29-3	4,4-DDT	0.16	U	0.16	1.90	ug/kg
72-43-5	Methoxychlor	0.42	U	0.42	1.90	ug/kg
53494-70-5	Endrin ketone	0.21	U	0.21	1.90	ug/kg
7421-93-4	Endrin aldehyde	0.42	U	0.42	1.90	ug/kg
5103-71-9	alpha-Chlordane	0.14	U	0.14	1.90	ug/kg
5103-74-2	gamma-Chlordane	0.17	U	0.17	1.90	ug/kg
8001-35-2	Toxaphene	6.10	U	6.10	37.1	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	19.2		20 - 144	96%	SPK: 20
877-09-8	Tetrachloro-m-xylene	21.2		19 - 148	106%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/23/25	
Project:	South River WM Replacement		Date Received:	06/24/25	
Client Sample ID:	TP-35		SDG No.:	Q2413	
Lab Sample ID:	Q2413-01		Matrix:	SOIL	
Analytical Method:	8081B		% Solid:	88.8	Decanted:
Sample Wt/Vol:	30.01	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089177.D	1	06/26/25 08:20	06/27/25 04:33	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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N = Presumptive Evidence of a Compound

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D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	92
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089178.D	1	06/26/25 08:20	06/27/25 04:47	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.14	U	0.14	1.80	ug/kg
319-85-7	beta-BHC	0.39	JP	0.20	1.80	ug/kg
319-86-8	delta-BHC	0.42	U	0.42	1.80	ug/kg
58-89-9	gamma-BHC (Lindane)	0.15	U	0.15	1.80	ug/kg
76-44-8	Heptachlor	0.13	U	0.13	1.80	ug/kg
309-00-2	Aldrin	0.13	U	0.13	1.80	ug/kg
1024-57-3	Heptachlor epoxide	0.21	U	0.21	1.80	ug/kg
959-98-8	Endosulfan I	0.15	U	0.15	1.80	ug/kg
60-57-1	Dieldrin	0.15	U	0.15	1.80	ug/kg
72-55-9	4,4-DDE	0.15	U	0.15	1.80	ug/kg
72-20-8	Endrin	0.15	U	0.15	1.80	ug/kg
33213-65-9	Endosulfan II	0.31	U	0.31	1.80	ug/kg
72-54-8	4,4-DDD	0.16	U	0.16	1.80	ug/kg
1031-07-8	Endosulfan Sulfate	0.14	U	0.14	1.80	ug/kg
50-29-3	4,4-DDT	0.15	U	0.15	1.80	ug/kg
72-43-5	Methoxychlor	0.40	U	0.40	1.80	ug/kg
53494-70-5	Endrin ketone	0.21	U	0.21	1.80	ug/kg
7421-93-4	Endrin aldehyde	0.40	U	0.40	1.80	ug/kg
5103-71-9	alpha-Chlordane	1.20	JP	0.13	1.80	ug/kg
5103-74-2	gamma-Chlordane	0.78	JP	0.16	1.80	ug/kg
8001-35-2	Toxaphene	5.90	U	5.90	35.8	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	20.7		20 - 144	103%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.1		19 - 148	101%	SPK: 20

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	92
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089178.D	1	06/26/25 08:20	06/27/25 04:47	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	91.4
Sample Wt/Vol:	30.04	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089179.D	1	06/26/25 08:20	06/27/25 05:01	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.14	U	0.14	1.90	ug/kg
319-85-7	beta-BHC	0.20	U	0.20	1.90	ug/kg
319-86-8	delta-BHC	0.43	U	0.43	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	0.15	U	0.15	1.90	ug/kg
76-44-8	Heptachlor	0.13	U	0.13	1.90	ug/kg
309-00-2	Aldrin	0.13	U	0.13	1.90	ug/kg
1024-57-3	Heptachlor epoxide	0.21	U	0.21	1.90	ug/kg
959-98-8	Endosulfan I	0.15	U	0.15	1.90	ug/kg
60-57-1	Dieldrin	0.15	U	0.15	1.90	ug/kg
72-55-9	4,4-DDE	0.15	U	0.15	1.90	ug/kg
72-20-8	Endrin	0.26	JP	0.15	1.90	ug/kg
33213-65-9	Endosulfan II	0.32	U	0.32	1.90	ug/kg
72-54-8	4,4-DDD	0.16	U	0.16	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	0.14	U	0.14	1.90	ug/kg
50-29-3	4,4-DDT	0.15	U	0.15	1.90	ug/kg
72-43-5	Methoxychlor	0.40	U	0.40	1.90	ug/kg
53494-70-5	Endrin ketone	0.21	U	0.21	1.90	ug/kg
7421-93-4	Endrin aldehyde	0.40	U	0.40	1.90	ug/kg
5103-71-9	alpha-Chlordane	0.13	U	0.13	1.90	ug/kg
5103-74-2	gamma-Chlordane	0.16	U	0.16	1.90	ug/kg
8001-35-2	Toxaphene	5.90	U	5.90	36.1	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	16.7		20 - 144	84%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.9		19 - 148	100%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/23/25	
Project:	South River WM Replacement		Date Received:	06/24/25	
Client Sample ID:	TP-77		SDG No.:	Q2413	
Lab Sample ID:	Q2413-03		Matrix:	SOIL	
Analytical Method:	8081B		% Solid:	91.4	Decanted:
Sample Wt/Vol:	30.04	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089179.D	1	06/26/25 08:20	06/27/25 05:01	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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N = Presumptive Evidence of a Compound

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S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	89.5
Sample Wt/Vol:	30.07	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089180.D	1	06/26/25 08:20	06/27/25 05:14	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.14	U	0.14	1.90	ug/kg
319-85-7	beta-BHC	0.20	U	0.20	1.90	ug/kg
319-86-8	delta-BHC	0.43	U	0.43	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	0.16	U	0.16	1.90	ug/kg
76-44-8	Heptachlor	0.13	U	0.13	1.90	ug/kg
309-00-2	Aldrin	0.13	U	0.13	1.90	ug/kg
1024-57-3	Heptachlor epoxide	0.21	U	0.21	1.90	ug/kg
959-98-8	Endosulfan I	0.16	U	0.16	1.90	ug/kg
60-57-1	Dieldrin	0.16	U	0.16	1.90	ug/kg
72-55-9	4,4-DDE	0.37	JP	0.16	1.90	ug/kg
72-20-8	Endrin	0.16	U	0.16	1.90	ug/kg
33213-65-9	Endosulfan II	0.32	U	0.32	1.90	ug/kg
72-54-8	4,4-DDD	0.17	U	0.17	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	0.14	U	0.14	1.90	ug/kg
50-29-3	4,4-DDT	0.43	JP	0.16	1.90	ug/kg
72-43-5	Methoxychlor	0.41	U	0.41	1.90	ug/kg
53494-70-5	Endrin ketone	0.21	U	0.21	1.90	ug/kg
7421-93-4	Endrin aldehyde	0.41	U	0.41	1.90	ug/kg
5103-71-9	alpha-Chlordane	0.13	U	0.13	1.90	ug/kg
5103-74-2	gamma-Chlordane	0.17	U	0.17	1.90	ug/kg
8001-35-2	Toxaphene	6.00	U	6.00	36.8	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	14.7		20 - 144	74%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.8		19 - 148	94%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/23/25	
Project:	South River WM Replacement		Date Received:	06/24/25	
Client Sample ID:	TP-74		SDG No.:	Q2413	
Lab Sample ID:	Q2413-04		Matrix:	SOIL	
Analytical Method:	8081B		% Solid:	89.5	Decanted:
Sample Wt/Vol:	30.07	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089180.D	1	06/26/25 08:20	06/27/25 05:14	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

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Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	77.1
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089183.D	1	06/26/25 08:20	06/27/25 11:14	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.17	U	0.17	2.20	ug/kg
319-85-7	beta-BHC	0.23	U	0.23	2.20	ug/kg
319-86-8	delta-BHC	0.51	U	0.51	2.20	ug/kg
58-89-9	gamma-BHC (Lindane)	0.18	U	0.18	2.20	ug/kg
76-44-8	Heptachlor	0.16	U	0.16	2.20	ug/kg
309-00-2	Aldrin	0.16	U	0.16	2.20	ug/kg
1024-57-3	Heptachlor epoxide	0.25	U	0.25	2.20	ug/kg
959-98-8	Endosulfan I	0.18	U	0.18	2.20	ug/kg
60-57-1	Dieldrin	0.18	U	0.18	2.20	ug/kg
72-55-9	4,4-DDE	0.18	U	0.18	2.20	ug/kg
72-20-8	Endrin	0.18	U	0.18	2.20	ug/kg
33213-65-9	Endosulfan II	0.38	U	0.38	2.20	ug/kg
72-54-8	4,4-DDD	0.29	J	0.19	2.20	ug/kg
1031-07-8	Endosulfan Sulfate	0.17	U	0.17	2.20	ug/kg
50-29-3	4,4-DDT	0.18	U	0.18	2.20	ug/kg
72-43-5	Methoxychlor	0.48	U	0.48	2.20	ug/kg
53494-70-5	Endrin ketone	0.25	U	0.25	2.20	ug/kg
7421-93-4	Endrin aldehyde	0.48	U	0.48	2.20	ug/kg
5103-71-9	alpha-Chlordane	0.16	U	0.16	2.20	ug/kg
5103-74-2	gamma-Chlordane	0.19	U	0.19	2.20	ug/kg
8001-35-2	Toxaphene	7.00	U	7.00	42.8	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	11.9		20 - 144	60%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.8		19 - 148	99%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/23/25	
Project:	South River WM Replacement		Date Received:	06/24/25	
Client Sample ID:	TP-73		SDG No.:	Q2413	
Lab Sample ID:	Q2413-05		Matrix:	SOIL	
Analytical Method:	8081B		% Solid:	77.1	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089183.D	1	06/26/25 08:20	06/27/25 11:14	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	87
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089184.D	1	06/26/25 08:20	06/27/25 11:28	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.15	U	0.15	2.00	ug/kg
319-85-7	beta-BHC	0.21	U	0.21	2.00	ug/kg
319-86-8	delta-BHC	0.45	U	0.45	2.00	ug/kg
58-89-9	gamma-BHC (Lindane)	0.16	U	0.16	2.00	ug/kg
76-44-8	Heptachlor	0.14	U	0.14	2.00	ug/kg
309-00-2	Aldrin	0.14	U	0.14	2.00	ug/kg
1024-57-3	Heptachlor epoxide	0.22	U	0.22	2.00	ug/kg
959-98-8	Endosulfan I	0.16	U	0.16	2.00	ug/kg
60-57-1	Dieldrin	0.16	U	0.16	2.00	ug/kg
72-55-9	4,4-DDE	0.16	U	0.16	2.00	ug/kg
72-20-8	Endrin	0.16	U	0.16	2.00	ug/kg
33213-65-9	Endosulfan II	0.33	U	0.33	2.00	ug/kg
72-54-8	4,4-DDD	0.17	U	0.17	2.00	ug/kg
1031-07-8	Endosulfan Sulfate	0.15	U	0.15	2.00	ug/kg
50-29-3	4,4-DDT	0.16	U	0.16	2.00	ug/kg
72-43-5	Methoxychlor	0.42	U	0.42	2.00	ug/kg
53494-70-5	Endrin ketone	0.22	U	0.22	2.00	ug/kg
7421-93-4	Endrin aldehyde	0.42	U	0.42	2.00	ug/kg
5103-71-9	alpha-Chlordane	0.14	U	0.14	2.00	ug/kg
5103-74-2	gamma-Chlordane	0.17	U	0.17	2.00	ug/kg
8001-35-2	Toxaphene	6.20	U	6.20	37.9	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	11.6		20 - 144	58%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.9		19 - 148	99%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/24/25	
Project:	South River WM Replacement		Date Received:	06/24/25	
Client Sample ID:	TP-72		SDG No.:	Q2413	
Lab Sample ID:	Q2413-06		Matrix:	SOIL	
Analytical Method:	8081B		% Solid:	87	Decanted:
Sample Wt/Vol:	30.06	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089184.D	1	06/26/25 08:20	06/27/25 11:28	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



QC SUMMARY

Surrogate Summary

SDG No.: **Q2413**

Client: **CDM Smith**

Analytical Method: **8081B**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PD088990.D	PIBLK-PD088990.D	Decachlorobiphenyl	1	20	18.2	91		57	171
		Tetrachloro-m-xylene	1	20	16.1	80		61	148
		Decachlorobiphenyl	2	20	18.6	93		57	171
		Tetrachloro-m-xylene	2	20	17.7	88		61	148
I.BLK-PD089157.D	PIBLK-PD089157.D	Decachlorobiphenyl	1	20	21.3	106		57	171
		Tetrachloro-m-xylene	1	20	20.9	104		61	148
		Decachlorobiphenyl	2	20	20.8	104		57	171
		Tetrachloro-m-xylene	2	20	22.2	111		61	148
PB168623BL	PB168623BL	Decachlorobiphenyl	1	20	17.6	88		20	144
		Tetrachloro-m-xylene	1	20	17.9	89		19	148
		Decachlorobiphenyl	2	20	16.3	81		20	144
		Tetrachloro-m-xylene	2	20	19.3	97		19	148
PB168623BS	PB168623BS	Decachlorobiphenyl	1	20	22.1	111		20	144
		Tetrachloro-m-xylene	1	20	21.3	106		19	148
		Decachlorobiphenyl	2	20	20.9	105		20	144
		Tetrachloro-m-xylene	2	20	22.9	114		19	148
I.BLK-PD089171.D	PIBLK-PD089171.D	Decachlorobiphenyl	1	20	19.8	99		57	171
		Tetrachloro-m-xylene	1	20	20.5	103		61	148
		Decachlorobiphenyl	2	20	17.4	87		57	171
		Tetrachloro-m-xylene	2	20	21.6	108		61	148
I.BLK-PD089174.D	PIBLK-PD089174.D	Decachlorobiphenyl	1	20	21.4	107		57	171
		Tetrachloro-m-xylene	1	20	22.1	110		61	148
		Decachlorobiphenyl	2	20	19.3	97		57	171
		Tetrachloro-m-xylene	2	20	23.4	117		61	148
Q2413-01	TP-35	Decachlorobiphenyl	1	20	19.2	96		20	144
		Tetrachloro-m-xylene	1	20	20.3	102		19	148
		Decachlorobiphenyl	2	20	16.6	83		20	144
		Tetrachloro-m-xylene	2	20	21.2	106		19	148
Q2413-02	TP-34	Decachlorobiphenyl	1	20	20.7	103		20	144
		Tetrachloro-m-xylene	1	20	19.5	97		19	148
		Decachlorobiphenyl	2	20	16.1	80		20	144
		Tetrachloro-m-xylene	2	20	20.1	101		19	148
Q2413-03	TP-77	Decachlorobiphenyl	1	20	16.7	84		20	144
		Tetrachloro-m-xylene	1	20	19.6	98		19	148
		Decachlorobiphenyl	2	20	14.4	72		20	144
		Tetrachloro-m-xylene	2	20	19.9	100		19	148
Q2413-04	TP-74	Decachlorobiphenyl	1	20	14.7	74		20	144
		Tetrachloro-m-xylene	1	20	18.8	94		19	148
		Decachlorobiphenyl	2	20	13.1	65		20	144
		Tetrachloro-m-xylene	2	20	18.8	94		19	148
Q2413-05	TP-73	Decachlorobiphenyl	1	20	11.9	60		20	144

Surrogate Summary

SDG No.: **Q2413**

Client: **CDM Smith**

Analytical Method: **8081B**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
Q2413-05	TP-73	Tetrachloro-m-xylene	1	20	14.7	74		19	148
		Decachlorobiphenyl	2	20	9.33	47		20	144
Q2413-06	TP-72	Tetrachloro-m-xylene	2	20	19.8	99		19	148
		Decachlorobiphenyl	1	20	11.6	58		20	144
		Tetrachloro-m-xylene	1	20	18.0	90		19	148
		Decachlorobiphenyl	2	20	9.94	50		20	144
		Tetrachloro-m-xylene	2	20	19.9	99		19	148
I.BLK-PD089187.D	PIBLK-PD089187.D	Decachlorobiphenyl	1	20	20.0	100		57	171
		Tetrachloro-m-xylene	1	20	22.3	112		61	148
		Decachlorobiphenyl	2	20	17.8	89		57	171
		Tetrachloro-m-xylene	2	20	23.6	118		61	148
I.BLK-PD089190.D	PIBLK-PD089190.D	Decachlorobiphenyl	1	20	22.1	110		57	171
		Tetrachloro-m-xylene	1	20	22.8	114		61	148
		Decachlorobiphenyl	2	20	21.5	107		57	171
		Tetrachloro-m-xylene	2	20	24.4	122		61	148
Q2425-03MS	COMP-3MS	Decachlorobiphenyl	1	20	16.0	80		20	144
		Tetrachloro-m-xylene	1	20	17.0	85		19	148
		Decachlorobiphenyl	2	20	16.5	82		20	144
		Tetrachloro-m-xylene	2	20	18.5	92		19	148
Q2425-03MSD	COMP-3MSD	Decachlorobiphenyl	1	20	16.8	84		20	144
		Tetrachloro-m-xylene	1	20	17.4	87		19	148
		Decachlorobiphenyl	2	20	16.7	83		20	144
		Tetrachloro-m-xylene	2	20	18.4	92		19	148
I.BLK-PD089201.D	PIBLK-PD089201.D	Decachlorobiphenyl	1	20	22.4	112		57	171
		Tetrachloro-m-xylene	1	20	22.9	114		61	148
		Decachlorobiphenyl	2	20	21.9	109		57	171
		Tetrachloro-m-xylene	2	20	24.5	122		61	148

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	Q2413	Analytical Method:	8081B
Client:	CDM Smith	DataFile :	PD089198.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: Q2425-03MS (Column 1)	COMP-3MS											
	alpha-BHC	20.12	0	16.7	ug/kg	83				60	144	
	beta-BHC	20.12	0	17.1	ug/kg	85				54	143	
	delta-BHC	20.12	0	17.1	ug/kg	85				29	151	
	gamma-BHC (Lindane)	20.12	0	16.1	ug/kg	80				61	140	
	Heptachlor	20.12	0	14.7	ug/kg	73				63	135	
	Aldrin	20.12	0	17.6	ug/kg	87				49	139	
	Heptachlor epoxide	20.12	0	17.3	ug/kg	86				41	156	
	Endosulfan I	20.12	0	17.4	ug/kg	86				56	142	
	Dieldrin	20.12	0	17.4	ug/kg	86				47	161	
	4,4'-DDE	20.12	0	17.2	ug/kg	85				55	136	
	Endrin	20.12	0	16.1	ug/kg	80				57	139	
	Endosulfan II	20.12	0	17.1	ug/kg	85				40	163	
	4,4'-DDD	20.12	0	18.6	ug/kg	92				47	163	
	Endosulfan sulfate	20.12	0	13.7	ug/kg	68				62	139	
	4,4'-DDT	20.12	0	11.5	ug/kg	57				51	146	
	Methoxychlor	20.12	0	11.0	ug/kg	55				54	136	
	Endrin ketone	20.12	0	16.4	ug/kg	82				60	129	
	Endrin aldehyde	20.12	0	11.4	ug/kg	57	*			59	132	
	alpha-Chlordane	20.12	0	17.3	ug/kg	86				39	166	
	gamma-Chlordane	20.12	0	18.1	ug/kg	90				44	175	
Client Sample ID: Q2425-03MS (Column 2)	COMP-3MS											
	alpha-BHC	20.12	0	17.3	ug/kg	86				60	144	
	beta-BHC	20.12	0	18.1	ug/kg	90				54	143	
	delta-BHC	20.12	0	16.6	ug/kg	83				29	151	
	gamma-BHC (Lindane)	20.12	0	16.4	ug/kg	82				61	140	
	Heptachlor	20.12	0	15.2	ug/kg	76				63	135	
	Aldrin	20.12	0	17.9	ug/kg	89				49	139	
	Heptachlor epoxide	20.12	0	17.9	ug/kg	89				41	156	
	Endosulfan I	20.12	0	17.3	ug/kg	86				56	142	
	Dieldrin	20.12	0	17.6	ug/kg	87				47	161	
	4,4'-DDE	20.12	0	17.7	ug/kg	88				55	136	
	Endrin	20.12	0	16.5	ug/kg	82				57	139	
	Endosulfan II	20.12	0	17.2	ug/kg	85				40	163	
	4,4'-DDD	20.12	0	17.8	ug/kg	88				47	163	
	Endosulfan sulfate	20.12	0	13.9	ug/kg	69				62	139	
	4,4'-DDT	20.12	0	13.3	ug/kg	66				51	146	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8081B</u>
Client:	<u>CDM Smith</u>	DataFile :	<u>PD089198.D</u>

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits	
			Result	Result							High	RPD
Q2425-03MS (Column 2)	Methoxychlor	20.12	0	11.9	ug/kg	59				54	136	
	Endrin ketone	20.12	0	16.5	ug/kg	82				60	129	
	Endrin aldehyde	20.12	0	11.7	ug/kg	58	*			59	132	
	alpha-Chlordane	20.12	0	17.6	ug/kg	87				39	166	
	gamma-Chlordane	20.12	0	17.8	ug/kg	88				44	175	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8081B</u>
Client:	<u>CDM Smith</u>	DataFile :	<u>PD089199.D</u>

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: Q2425-03MSD (Column 1)	COMP-3MSD											
	alpha-BHC	20.16	0	17.4	ug/kg	86		4		60	144	20
	beta-BHC	20.16	0	17.2	ug/kg	85		0		54	143	20
	delta-BHC	20.16	0	16.7	ug/kg	83		2		29	151	20
	gamma-BHC (Lindane)	20.16	0	17.0	ug/kg	84		5		61	140	20
	Heptachlor	20.16	0	13.6	ug/kg	67		9		63	135	20
	Aldrin	20.16	0	18.2	ug/kg	90		3		49	139	20
	Heptachlor epoxide	20.16	0	17.6	ug/kg	87		1		41	156	20
	Endosulfan I	20.16	0	17.7	ug/kg	88		2		56	142	20
	Dieldrin	20.16	0	17.8	ug/kg	88		2		47	161	20
	4,4'-DDE	20.16	0	18.2	ug/kg	90		6		55	136	20
	Endrin	20.16	0	16.7	ug/kg	83		4		57	139	20
	Endosulfan II	20.16	0	17.5	ug/kg	87		2		40	163	20
	4,4'-DDD	20.16	0	17.7	ug/kg	88		4		47	163	20
	Endosulfan sulfate	20.16	0	15.0	ug/kg	74		8		62	139	20
	4,4'-DDT	20.16	0	10.2	ug/kg	51		11		51	146	20
	Methoxychlor	20.16	0	9.40	ug/kg	47	*	16		54	136	20
	Endrin ketone	20.16	0	15.4	ug/kg	76		8		60	129	20
	Endrin aldehyde	20.16	0	13.7	ug/kg	68		18		59	132	20
	alpha-Chlordane	20.16	0	17.7	ug/kg	88		2		39	166	20
	gamma-Chlordane	20.16	0	18.7	ug/kg	93		3		44	175	20
Client Sample ID: Q2425-03MSD (Column 2)	COMP-3MSD											
	alpha-BHC	20.16	0	17.8	ug/kg	88		2		60	144	20
	beta-BHC	20.16	0	18.1	ug/kg	90		0		54	143	20
	delta-BHC	20.16	0	16.2	ug/kg	80		4		29	151	20
	gamma-BHC (Lindane)	20.16	0	17.2	ug/kg	85		4		61	140	20
	Heptachlor	20.16	0	13.9	ug/kg	69		10		63	135	20
	Aldrin	20.16	0	18.3	ug/kg	91		2		49	139	20
	Heptachlor epoxide	20.16	0	18.0	ug/kg	89		0		41	156	20
	Endosulfan I	20.16	0	17.3	ug/kg	86		0		56	142	20
	Dieldrin	20.16	0	17.9	ug/kg	89		2		47	161	20
	4,4'-DDE	20.16	0	18.4	ug/kg	91		3		55	136	20
	Endrin	20.16	0	16.5	ug/kg	82		0		57	139	20
	Endosulfan II	20.16	0	17.3	ug/kg	86		1		40	163	20
	4,4'-DDD	20.16	0	17.1	ug/kg	85		3		47	163	20
	Endosulfan sulfate	20.16	0	14.3	ug/kg	71		3		62	139	20
	4,4'-DDT	20.16	0	12.9	ug/kg	64		3		51	146	20

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8081B</u>
Client:	<u>CDM Smith</u>	DataFile :	<u>PD089199.D</u>

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits	
			Result	Result							High	RPD
Q2425-03MSD (Column 2)	Methoxychlor	20.16	0	10.4	ug/kg	52	*	13		54	136	20
	Endrin ketone	20.16	0	15.5	ug/kg	77		6		60	129	20
	Endrin aldehyde	20.16	0	13.5	ug/kg	67		14		59	132	20
	alpha-Chlordane	20.16	0	17.9	ug/kg	89		2		39	166	20
	gamma-Chlordane	20.16	0	18.4	ug/kg	91		3		44	175	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8081B</u>
Client:	<u>CDM Smith</u>	Datafile :	<u>PD089167.D</u>

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB168623BS (Column 1)	alpha-BHC	16.65	16.2	ug/kg	97				84	123		
	beta-BHC	16.65	15.7	ug/kg	94				82	123		
	delta-BHC	16.65	16.9	ug/kg	102				83	126		
	gamma-BHC (Lindane)	16.65	16.2	ug/kg	97				83	125		
	Heptachlor	16.65	15.7	ug/kg	94				83	122		
	Aldrin	16.65	16.2	ug/kg	97				82	124		
	Heptachlor epoxide	16.65	15.7	ug/kg	94				83	120		
	Endosulfan I	16.65	15.9	ug/kg	95				81	124		
	Dieldrin	16.65	15.9	ug/kg	95				85	121		
	4,4'-DDE	16.65	15.9	ug/kg	95				81	123		
	Endrin	16.65	14.3	ug/kg	86				76	130		
	Endosulfan II	16.65	15.7	ug/kg	94				80	125		
	4,4'-DDD	16.65	16.1	ug/kg	97				80	131		
	Endosulfan sulfate	16.65	15.1	ug/kg	91				81	122		
	4,4'-DDT	16.65	13.9	ug/kg	83				70	129		
	Methoxychlor	16.65	12.9	ug/kg	77				60	119		
	Endrin ketone	16.65	15.5	ug/kg	93				77	132		
	Endrin aldehyde	16.65	15.3	ug/kg	92				79	124		
	alpha-Chlordane	16.65	15.9	ug/kg	95				84	120		
	gamma-Chlordane	16.65	16.0	ug/kg	96				83	122		
	alpha-BHC	16.65	15.9	ug/kg	95				84	123		
PB168623BS (Column 2)	beta-BHC	16.65	15.7	ug/kg	94				82	123		
	delta-BHC	16.65	15.9	ug/kg	95				83	126		
	gamma-BHC (Lindane)	16.65	15.9	ug/kg	95				83	125		
	Heptachlor	16.65	15.1	ug/kg	91				83	122		
	Aldrin	16.65	15.9	ug/kg	95				82	124		
	Heptachlor epoxide	16.65	15.8	ug/kg	95				83	120		
	Endosulfan I	16.65	15.8	ug/kg	95				81	124		
	Dieldrin	16.65	15.5	ug/kg	93				85	121		
	4,4'-DDE	16.65	15.5	ug/kg	93				81	123		
	Endrin	16.65	14.1	ug/kg	85				76	130		
	Endosulfan II	16.65	15.4	ug/kg	92				80	125		
	4,4'-DDD	16.65	16.0	ug/kg	96				80	131		
	Endosulfan sulfate	16.65	14.9	ug/kg	89				81	122		
	4,4'-DDT	16.65	13.9	ug/kg	83				70	129		
	Methoxychlor	16.65	13.0	ug/kg	78				60	119		
	Endrin ketone	16.65	15.1	ug/kg	91				77	132		
	Endrin aldehyde	16.65	15.1	ug/kg	91				79	124		
	alpha-Chlordane	16.65	15.6	ug/kg	94				84	120		
	gamma-Chlordane	16.65	15.7	ug/kg	94				83	122		

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168623BL

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: PB168623BL

Lab File ID: PD089166.D

Matrix: (soil/water) Solid

Extraction: (Type) SOXH

Sulfur Cleanup: (Y/N) N

Date Extracted: 06/26/2025

Date Analyzed (1): 06/26/2025

Date Analyzed (2): 06/26/2025

Time Analyzed (1): 13:44

Time Analyzed (2): 13:44

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column (1): ZB-MR1 ID: 0.32 (mm)

GC Column (2): ZB-MR2 ID: 0.32 (mm)

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
PB168623BS	PB168623BS	PD089167.D	06/26/2025	06/26/2025
TP-35	Q2413-01	PD089177.D	06/27/2025	06/27/2025
TP-34	Q2413-02	PD089178.D	06/27/2025	06/27/2025
TP-77	Q2413-03	PD089179.D	06/27/2025	06/27/2025
TP-74	Q2413-04	PD089180.D	06/27/2025	06/27/2025
TP-73	Q2413-05	PD089183.D	06/27/2025	06/27/2025
TP-72	Q2413-06	PD089184.D	06/27/2025	06/27/2025
COMP-3MS	Q2425-03MS	PD089198.D	06/27/2025	06/27/2025
COMP-3MSD	Q2425-03MSD	PD089199.D	06/27/2025	06/27/2025

COMMENTS: _____



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168623BL	SDG No.:	Q2413
Lab Sample ID:	PB168623BL	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	100
Sample Wt/Vol:	30.02	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	Injection Volume :	
Prep Method :	SW3541B		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089166.D	1	06/26/25 08:20	06/26/25 13:44	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.13	U	0.13	1.70	ug/kg
319-85-7	beta-BHC	0.18	U	0.18	1.70	ug/kg
319-86-8	delta-BHC	0.39	U	0.39	1.70	ug/kg
58-89-9	gamma-BHC (Lindane)	0.14	U	0.14	1.70	ug/kg
76-44-8	Heptachlor	0.12	U	0.12	1.70	ug/kg
309-00-2	Aldrin	0.12	U	0.12	1.70	ug/kg
1024-57-3	Heptachlor epoxide	0.19	U	0.19	1.70	ug/kg
959-98-8	Endosulfan I	0.14	U	0.14	1.70	ug/kg
60-57-1	Dieldrin	0.14	U	0.14	1.70	ug/kg
72-55-9	4,4-DDE	0.14	U	0.14	1.70	ug/kg
72-20-8	Endrin	0.14	U	0.14	1.70	ug/kg
33213-65-9	Endosulfan II	0.29	U	0.29	1.70	ug/kg
72-54-8	4,4-DDD	0.15	U	0.15	1.70	ug/kg
1031-07-8	Endosulfan Sulfate	0.13	U	0.13	1.70	ug/kg
50-29-3	4,4-DDT	0.14	U	0.14	1.70	ug/kg
72-43-5	Methoxychlor	0.37	U	0.37	1.70	ug/kg
53494-70-5	Endrin ketone	0.19	U	0.19	1.70	ug/kg
7421-93-4	Endrin aldehyde	0.37	U	0.37	1.70	ug/kg
5103-71-9	alpha-Chlordane	0.12	U	0.12	1.70	ug/kg
5103-74-2	gamma-Chlordane	0.15	U	0.15	1.70	ug/kg
8001-35-2	Toxaphene	5.40	U	5.40	33.0	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	17.6		20 - 144	88%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.3		19 - 148	97%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:		
Project:	South River WM Replacement		Date Received:		
Client Sample ID:	PB168623BL		SDG No.:	Q2413	
Lab Sample ID:	PB168623BL		Matrix:	SOIL	
Analytical Method:	8081B		% Solid:	100	Decanted:
Sample Wt/Vol:	30.02	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089166.D	1	06/26/25 08:20	06/26/25 13:44	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/17/25
Project:	South River WM Replacement	Date Received:	06/17/25
Client Sample ID:	PIBLK-PD088990.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PD088990.D	Matrix:	WATER
Analytical Method:	8081B	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD088990.D	1		06/17/25	PD061825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0039	U	0.0039	0.050	ug/L
319-85-7	beta-BHC	0.0049	U	0.0049	0.050	ug/L
319-86-8	delta-BHC	0.011	U	0.011	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0037	U	0.0037	0.050	ug/L
76-44-8	Heptachlor	0.0027	U	0.0027	0.050	ug/L
309-00-2	Aldrin	0.0036	U	0.0036	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0096	U	0.0096	0.050	ug/L
959-98-8	Endosulfan I	0.0031	U	0.0031	0.050	ug/L
60-57-1	Dieldrin	0.0036	U	0.0036	0.050	ug/L
72-55-9	4,4-DDE	0.0037	U	0.0037	0.050	ug/L
72-20-8	Endrin	0.0032	U	0.0032	0.050	ug/L
33213-65-9	Endosulfan II	0.0079	U	0.0079	0.050	ug/L
72-54-8	4,4-DDD	0.0071	U	0.0071	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0037	U	0.0037	0.050	ug/L
50-29-3	4,4-DDT	0.0035	U	0.0035	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0093	U	0.0093	0.050	ug/L
7421-93-4	Endrin aldehyde	0.011	U	0.011	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0035	U	0.0035	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0039	U	0.0039	0.050	ug/L
8001-35-2	Toxaphene	0.17	U	0.17	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	18.6		57 - 171	93%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.7		61 - 148	88%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/17/25	
Project:	South River WM Replacement		Date Received:	06/17/25	
Client Sample ID:	PIBLK-PD088990.D		SDG No.:	Q2413	
Lab Sample ID:	I.BLK-PD088990.D		Matrix:	WATER	
Analytical Method:	8081B		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD088990.D	1		06/17/25	PD061825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

E = Value Exceeds Calibration Range

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	PIBLK-PD089157.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PD089157.D	Matrix:	WATER
Analytical Method:	8081B	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089157.D	1		06/26/25	pd062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0039	U	0.0039	0.050	ug/L
319-85-7	beta-BHC	0.0049	U	0.0049	0.050	ug/L
319-86-8	delta-BHC	0.011	U	0.011	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0037	U	0.0037	0.050	ug/L
76-44-8	Heptachlor	0.0027	U	0.0027	0.050	ug/L
309-00-2	Aldrin	0.0036	U	0.0036	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0096	U	0.0096	0.050	ug/L
959-98-8	Endosulfan I	0.0031	U	0.0031	0.050	ug/L
60-57-1	Dieldrin	0.0036	U	0.0036	0.050	ug/L
72-55-9	4,4-DDE	0.0037	U	0.0037	0.050	ug/L
72-20-8	Endrin	0.0032	U	0.0032	0.050	ug/L
33213-65-9	Endosulfan II	0.0079	U	0.0079	0.050	ug/L
72-54-8	4,4-DDD	0.0071	U	0.0071	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0037	U	0.0037	0.050	ug/L
50-29-3	4,4-DDT	0.0035	U	0.0035	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0093	U	0.0093	0.050	ug/L
7421-93-4	Endrin aldehyde	0.011	U	0.011	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0035	U	0.0035	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0039	U	0.0039	0.050	ug/L
8001-35-2	Toxaphene	0.17	U	0.17	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.3		57 - 171	106%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.2		61 - 148	111%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/26/25	
Project:	South River WM Replacement		Date Received:	06/26/25	
Client Sample ID:	PIBLK-PD089157.D		SDG No.:	Q2413	
Lab Sample ID:	I.BLK-PD089157.D		Matrix:	WATER	
Analytical Method:	8081B		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089157.D	1		06/26/25	pd062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

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D = Dilution

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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	PIBLK-PD089171.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PD089171.D	Matrix:	WATER
Analytical Method:	8081B	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089171.D	1		06/26/25	pd062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0039	U	0.0039	0.050	ug/L
319-85-7	beta-BHC	0.0049	U	0.0049	0.050	ug/L
319-86-8	delta-BHC	0.011	U	0.011	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0037	U	0.0037	0.050	ug/L
76-44-8	Heptachlor	0.0027	U	0.0027	0.050	ug/L
309-00-2	Aldrin	0.0036	U	0.0036	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0096	U	0.0096	0.050	ug/L
959-98-8	Endosulfan I	0.0031	U	0.0031	0.050	ug/L
60-57-1	Dieldrin	0.0036	U	0.0036	0.050	ug/L
72-55-9	4,4-DDE	0.0037	U	0.0037	0.050	ug/L
72-20-8	Endrin	0.0032	U	0.0032	0.050	ug/L
33213-65-9	Endosulfan II	0.0079	U	0.0079	0.050	ug/L
72-54-8	4,4-DDD	0.0071	U	0.0071	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0037	U	0.0037	0.050	ug/L
50-29-3	4,4-DDT	0.0035	U	0.0035	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0093	U	0.0093	0.050	ug/L
7421-93-4	Endrin aldehyde	0.011	U	0.011	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0035	U	0.0035	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0039	U	0.0039	0.050	ug/L
8001-35-2	Toxaphene	0.17	U	0.17	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	19.8		57 - 171	99%	SPK: 20
877-09-8	Tetrachloro-m-xylene	21.6		61 - 148	108%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/26/25	
Project:	South River WM Replacement		Date Received:	06/26/25	
Client Sample ID:	PIBLK-PD089171.D		SDG No.:	Q2413	
Lab Sample ID:	I.BLK-PD089171.D		Matrix:	WATER	
Analytical Method:	8081B		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089171.D	1		06/26/25	pd062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/27/25
Project:	South River WM Replacement	Date Received:	06/27/25
Client Sample ID:	PIBLK-PD089174.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PD089174.D	Matrix:	WATER
Analytical Method:	8081B	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089174.D	1		06/27/25	pd062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0039	U	0.0039	0.050	ug/L
319-85-7	beta-BHC	0.0049	U	0.0049	0.050	ug/L
319-86-8	delta-BHC	0.011	U	0.011	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0037	U	0.0037	0.050	ug/L
76-44-8	Heptachlor	0.0027	U	0.0027	0.050	ug/L
309-00-2	Aldrin	0.0036	U	0.0036	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0096	U	0.0096	0.050	ug/L
959-98-8	Endosulfan I	0.0031	U	0.0031	0.050	ug/L
60-57-1	Dieldrin	0.0036	U	0.0036	0.050	ug/L
72-55-9	4,4-DDE	0.0037	U	0.0037	0.050	ug/L
72-20-8	Endrin	0.0032	U	0.0032	0.050	ug/L
33213-65-9	Endosulfan II	0.0079	U	0.0079	0.050	ug/L
72-54-8	4,4-DDD	0.0071	U	0.0071	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0037	U	0.0037	0.050	ug/L
50-29-3	4,4-DDT	0.0035	U	0.0035	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0093	U	0.0093	0.050	ug/L
7421-93-4	Endrin aldehyde	0.011	U	0.011	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0035	U	0.0035	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0039	U	0.0039	0.050	ug/L
8001-35-2	Toxaphene	0.17	U	0.17	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.4		57 - 171	107%	SPK: 20
877-09-8	Tetrachloro-m-xylene	23.4		61 - 148	117%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/27/25	
Project:	South River WM Replacement		Date Received:	06/27/25	
Client Sample ID:	PIBLK-PD089174.D		SDG No.:	Q2413	
Lab Sample ID:	I.BLK-PD089174.D		Matrix:	WATER	
Analytical Method:	8081B		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089174.D	1		06/27/25	pd062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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J = Estimated Value

B = Analyte Found in Associated Method Blank

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D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/27/25
Project:	South River WM Replacement	Date Received:	06/27/25
Client Sample ID:	PIBLK-PD089187.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PD089187.D	Matrix:	WATER
Analytical Method:	8081B	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089187.D	1		06/27/25	pd062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0039	U	0.0039	0.050	ug/L
319-85-7	beta-BHC	0.0049	U	0.0049	0.050	ug/L
319-86-8	delta-BHC	0.011	U	0.011	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0037	U	0.0037	0.050	ug/L
76-44-8	Heptachlor	0.0027	U	0.0027	0.050	ug/L
309-00-2	Aldrin	0.0036	U	0.0036	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0096	U	0.0096	0.050	ug/L
959-98-8	Endosulfan I	0.0031	U	0.0031	0.050	ug/L
60-57-1	Dieldrin	0.0036	U	0.0036	0.050	ug/L
72-55-9	4,4-DDE	0.0037	U	0.0037	0.050	ug/L
72-20-8	Endrin	0.0032	U	0.0032	0.050	ug/L
33213-65-9	Endosulfan II	0.0079	U	0.0079	0.050	ug/L
72-54-8	4,4-DDD	0.0071	U	0.0071	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0037	U	0.0037	0.050	ug/L
50-29-3	4,4-DDT	0.0035	U	0.0035	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0093	U	0.0093	0.050	ug/L
7421-93-4	Endrin aldehyde	0.011	U	0.011	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0035	U	0.0035	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0039	U	0.0039	0.050	ug/L
8001-35-2	Toxaphene	0.17	U	0.17	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	20.0		57 - 171	100%	SPK: 20
877-09-8	Tetrachloro-m-xylene	23.6		61 - 148	118%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/27/25	
Project:	South River WM Replacement		Date Received:	06/27/25	
Client Sample ID:	PIBLK-PD089187.D		SDG No.:	Q2413	
Lab Sample ID:	I.BLK-PD089187.D		Matrix:	WATER	
Analytical Method:	8081B		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089187.D	1		06/27/25	pd062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/27/25
Project:	South River WM Replacement	Date Received:	06/27/25
Client Sample ID:	PIBLK-PD089190.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PD089190.D	Matrix:	WATER
Analytical Method:	8081B	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089190.D	1		06/27/25	pd062825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0039	U	0.0039	0.050	ug/L
319-85-7	beta-BHC	0.0049	U	0.0049	0.050	ug/L
319-86-8	delta-BHC	0.011	U	0.011	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0037	U	0.0037	0.050	ug/L
76-44-8	Heptachlor	0.0027	U	0.0027	0.050	ug/L
309-00-2	Aldrin	0.0036	U	0.0036	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0096	U	0.0096	0.050	ug/L
959-98-8	Endosulfan I	0.0031	U	0.0031	0.050	ug/L
60-57-1	Dieldrin	0.0036	U	0.0036	0.050	ug/L
72-55-9	4,4-DDE	0.0037	U	0.0037	0.050	ug/L
72-20-8	Endrin	0.0032	U	0.0032	0.050	ug/L
33213-65-9	Endosulfan II	0.0079	U	0.0079	0.050	ug/L
72-54-8	4,4-DDD	0.0071	U	0.0071	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0037	U	0.0037	0.050	ug/L
50-29-3	4,4-DDT	0.0035	U	0.0035	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0093	U	0.0093	0.050	ug/L
7421-93-4	Endrin aldehyde	0.011	U	0.011	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0035	U	0.0035	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0039	U	0.0039	0.050	ug/L
8001-35-2	Toxaphene	0.17	U	0.17	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	22.1		57 - 171	110%	SPK: 20
877-09-8	Tetrachloro-m-xylene	24.4		61 - 148	122%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/27/25	
Project:	South River WM Replacement		Date Received:	06/27/25	
Client Sample ID:	PIBLK-PD089190.D		SDG No.:	Q2413	
Lab Sample ID:	I.BLK-PD089190.D		Matrix:	WATER	
Analytical Method:	8081B		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089190.D	1		06/27/25	pd062825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

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LOD = Limit of Detection

E = Value Exceeds Calibration Range

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/27/25
Project:	South River WM Replacement	Date Received:	06/27/25
Client Sample ID:	PIBLK-PD089201.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PD089201.D	Matrix:	WATER
Analytical Method:	8081B	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089201.D	1		06/27/25	pd062825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0039	U	0.0039	0.050	ug/L
319-85-7	beta-BHC	0.0049	U	0.0049	0.050	ug/L
319-86-8	delta-BHC	0.011	U	0.011	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0037	U	0.0037	0.050	ug/L
76-44-8	Heptachlor	0.0027	U	0.0027	0.050	ug/L
309-00-2	Aldrin	0.0036	U	0.0036	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0096	U	0.0096	0.050	ug/L
959-98-8	Endosulfan I	0.0031	U	0.0031	0.050	ug/L
60-57-1	Dieldrin	0.0036	U	0.0036	0.050	ug/L
72-55-9	4,4-DDE	0.0037	U	0.0037	0.050	ug/L
72-20-8	Endrin	0.0032	U	0.0032	0.050	ug/L
33213-65-9	Endosulfan II	0.0079	U	0.0079	0.050	ug/L
72-54-8	4,4-DDD	0.0071	U	0.0071	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0037	U	0.0037	0.050	ug/L
50-29-3	4,4-DDT	0.0035	U	0.0035	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0093	U	0.0093	0.050	ug/L
7421-93-4	Endrin aldehyde	0.011	U	0.011	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0035	U	0.0035	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0039	U	0.0039	0.050	ug/L
8001-35-2	Toxaphene	0.17	U	0.17	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	22.4		57 - 171	112%	SPK: 20
877-09-8	Tetrachloro-m-xylene	24.5		61 - 148	122%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/27/25	
Project:	South River WM Replacement		Date Received:	06/27/25	
Client Sample ID:	PIBLK-PD089201.D		SDG No.:	Q2413	
Lab Sample ID:	I.BLK-PD089201.D		Matrix:	WATER	
Analytical Method:	8081B		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089201.D	1		06/27/25	pd062825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168623BS	SDG No.:	Q2413
Lab Sample ID:	PB168623BS	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	100
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089167.D	1	06/26/25 08:20	06/26/25 14:59	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	16.2		0.13	1.70	ug/kg
319-85-7	beta-BHC	15.7		0.18	1.70	ug/kg
319-86-8	delta-BHC	16.9		0.39	1.70	ug/kg
58-89-9	gamma-BHC (Lindane)	16.2		0.14	1.70	ug/kg
76-44-8	Heptachlor	15.7		0.12	1.70	ug/kg
309-00-2	Aldrin	16.2		0.12	1.70	ug/kg
1024-57-3	Heptachlor epoxide	15.8		0.19	1.70	ug/kg
959-98-8	Endosulfan I	15.9		0.14	1.70	ug/kg
60-57-1	Dieldrin	15.9		0.14	1.70	ug/kg
72-55-9	4,4-DDE	15.9		0.14	1.70	ug/kg
72-20-8	Endrin	14.3		0.14	1.70	ug/kg
33213-65-9	Endosulfan II	15.7		0.29	1.70	ug/kg
72-54-8	4,4-DDD	16.1		0.15	1.70	ug/kg
1031-07-8	Endosulfan Sulfate	15.1		0.13	1.70	ug/kg
50-29-3	4,4-DDT	13.9		0.14	1.70	ug/kg
72-43-5	Methoxychlor	13.0		0.37	1.70	ug/kg
53494-70-5	Endrin ketone	15.5		0.19	1.70	ug/kg
7421-93-4	Endrin aldehyde	15.3		0.37	1.70	ug/kg
5103-71-9	alpha-Chlordane	15.9		0.12	1.70	ug/kg
5103-74-2	gamma-Chlordane	16.0		0.15	1.70	ug/kg
8001-35-2	Toxaphene	5.40	U	5.40	33.0	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	22.1		20 - 144	111%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.9		19 - 148	114%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:		
Project:	South River WM Replacement		Date Received:		
Client Sample ID:	PB168623BS		SDG No.:	Q2413	
Lab Sample ID:	PB168623BS		Matrix:	SOIL	
Analytical Method:	8081B		% Solid:	100	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089167.D	1	06/26/25 08:20	06/26/25 14:59	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

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M = MS/MSD acceptance criteria did not meet requirements

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	COMP-3MS	SDG No.:	Q2413
Lab Sample ID:	Q2425-03MS	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	82.6
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Decanted:	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089198.D	1	06/26/25 08:20	06/27/25 20:22	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	17.3		0.16	2.10	ug/kg
319-85-7	beta-BHC	18.1		0.22	2.10	ug/kg
319-86-8	delta-BHC	17.1		0.47	2.10	ug/kg
58-89-9	gamma-BHC (Lindane)	16.4		0.17	2.10	ug/kg
76-44-8	Heptachlor	15.2		0.14	2.10	ug/kg
309-00-2	Aldrin	17.9		0.14	2.10	ug/kg
1024-57-3	Heptachlor epoxide	17.9		0.23	2.10	ug/kg
959-98-8	Endosulfan I	17.4		0.17	2.10	ug/kg
60-57-1	Dieldrin	17.6		0.17	2.10	ug/kg
72-55-9	4,4-DDE	17.7		0.17	2.10	ug/kg
72-20-8	Endrin	16.5		0.17	2.10	ug/kg
33213-65-9	Endosulfan II	17.2		0.35	2.10	ug/kg
72-54-8	4,4-DDD	18.6		0.18	2.10	ug/kg
1031-07-8	Endosulfan Sulfate	13.9		0.16	2.10	ug/kg
50-29-3	4,4-DDT	13.3		0.17	2.10	ug/kg
72-43-5	Methoxychlor	11.9		0.45	2.10	ug/kg
53494-70-5	Endrin ketone	16.5		0.23	2.10	ug/kg
7421-93-4	Endrin aldehyde	11.7		0.45	2.10	ug/kg
5103-71-9	alpha-Chlordane	17.6		0.14	2.10	ug/kg
5103-74-2	gamma-Chlordane	18.1		0.18	2.10	ug/kg
8001-35-2	Toxaphene	6.50	U	6.50	39.8	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	16.5		20 - 144	82%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.5		19 - 148	92%	SPK: 20

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	COMP-3MS	SDG No.:	Q2413
Lab Sample ID:	Q2425-03MS	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	82.6
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089198.D	1	06/26/25 08:20	06/27/25 20:22	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/25/25
Client Sample ID:	COMP-3MSD	SDG No.:	Q2413
Lab Sample ID:	Q2425-03MSD	Matrix:	SOIL
Analytical Method:	8081B	% Solid:	82.6
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Decanted:	
		Final Vol:	10000
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089199.D	1	06/26/25 08:20	06/27/25 20:35	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	17.8		0.16	2.10	ug/kg
319-85-7	beta-BHC	18.1		0.22	2.10	ug/kg
319-86-8	delta-BHC	16.7		0.47	2.10	ug/kg
58-89-9	gamma-BHC (Lindane)	17.2		0.17	2.10	ug/kg
76-44-8	Heptachlor	13.9		0.15	2.10	ug/kg
309-00-2	Aldrin	18.3		0.15	2.10	ug/kg
1024-57-3	Heptachlor epoxide	18.0		0.23	2.10	ug/kg
959-98-8	Endosulfan I	17.7		0.17	2.10	ug/kg
60-57-1	Dieldrin	17.9		0.17	2.10	ug/kg
72-55-9	4,4-DDE	18.4		0.17	2.10	ug/kg
72-20-8	Endrin	16.7		0.17	2.10	ug/kg
33213-65-9	Endosulfan II	17.5		0.35	2.10	ug/kg
72-54-8	4,4-DDD	17.7		0.18	2.10	ug/kg
1031-07-8	Endosulfan Sulfate	15.0		0.16	2.10	ug/kg
50-29-3	4,4-DDT	12.9		0.17	2.10	ug/kg
72-43-5	Methoxychlor	10.4		0.45	2.10	ug/kg
53494-70-5	Endrin ketone	15.5		0.23	2.10	ug/kg
7421-93-4	Endrin aldehyde	13.7		0.45	2.10	ug/kg
5103-71-9	alpha-Chlordane	17.9		0.15	2.10	ug/kg
5103-74-2	gamma-Chlordane	18.7		0.18	2.10	ug/kg
8001-35-2	Toxaphene	6.50	U	6.50	39.9	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	16.8		20 - 144	84%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.4		19 - 148	92%	SPK: 20

Report of Analysis

Client:	CDM Smith		Date Collected:	06/24/25	
Project:	South River WM Replacement		Date Received:	06/25/25	
Client Sample ID:	COMP-3MSD		SDG No.:	Q2413	
Lab Sample ID:	Q2425-03MSD		Matrix:	SOIL	
Analytical Method:	8081B		% Solid:	82.6	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PD089199.D	1	06/26/25 08:20	06/27/25 20:35	PB168623

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
------------	-----------	-------	-----------	-----	------------	-------

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



CALIBRATION SUMMARY

A
B
C
D
E
F
G
H

Calibration Times: 15:52 16:47

LAB FILE ID:	RT 100 =	<u>PD088993.D</u>	RT 075 =	<u>PD088994.D</u>
	RT 050 =	PD088995.D	RT 025 =	PD088996.D
			RT 005 =	PD088997.D

[illegible]

A
B
C
D
E
F
G
H

Calibration Times: 15:52 16:47

LAB FILE ID: RT 100 = PD088993.D RT 075 = PD088994.D
RT 050 = PD088995.D RT 025 = PD088996.D RT 005 = PD088997.D

[illegible]

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: CAMP02

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

Instrument ID: ECD_D

Calibration Date(s): 06/17/2025 06/17/2025

Calibration Times: 15:52 16:47

GC Column: ZB-MR1 **ID:** 0.32 (mm)

LAB FILE ID:		CF 100 =	PD088993.D	CF 075 =	PD088994.D		
CF 050 =		PD088995.D	CF 025 =	PD088996.D	CF 005 =	PD088997.D	
COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
4,4'-DDD	3557450000	3439230000	3414120000	3228670000	3520780000	3432050000	4
4,4'-DDE	4564130000	4401240000	4312380000	4092310000	4435110000	4361030000	4
4,4'-DDT	3928430000	3802000000	3763430000	3580670000	3866490000	3788210000	3
Aldrin	5504150000	5312640000	5254800000	4989300000	5504000000	5312980000	4
alpha-BHC	6295370000	6031790000	5874750000	5417910000	5525530000	5829070000	6
alpha-Chlordane	4885060000	4758900000	4734630000	4584390000	5229700000	4838540000	5
beta-BHC	2136750000	2100860000	2137680000	2144670000	2515730000	2207140000	8
Decachlorobiphenyl	3598890000	3628150000	3773200000	3897960000	4739940000	3927630000	12
delta-BHC	5546280000	5292010000	5182350000	4751190000	4892690000	5132900000	6
Dieldrin	4933650000	4797080000	4750270000	4527510000	4978810000	4797470000	4
Endosulfan I	4511200000	4405770000	4412600000	4289200000	4918470000	4507450000	5
Endosulfan II	3829260000	3982180000	4002080000	3816490000	4553000000	4036600000	7
Endosulfan sulfate	3786900000	3718160000	3741600000	3667440000	4271990000	3837220000	6
Endrin	4238140000	4109540000	4096430000	3878120000	4305700000	4125590000	4
Endrin aldehyde	2964260000	2935670000	2964230000	2966830000	3488720000	3063940000	8
Endrin ketone	4050100000	3970810000	4004900000	3895960000	4443590000	4073070000	5
gamma-BHC (Lindane)	5900830000	5686510000	5566590000	5221690000	5532800000	5581680000	4
gamma-Chlordane	4869330000	4801300000	4716110000	4508810000	5045020000	4788110000	4
Heptachlor	5621840000	5429540000	5358570000	5116310000	5733550000	5451960000	4
Heptachlor epoxide	4794850000	4673610000	4749650000	4554690000	5346870000	4823940000	6
Methoxychlor	1926110000	1918890000	1971480000	1982080000	2304580000	2020630000	8
Tetrachloro-m-xylene	2812300000	2762040000	2767280000	2751820000	3172230000	2853130000	6

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: CAMP02

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

Instrument ID: ECD_D **Calibration Date(s):** 06/17/2025 06/17/2025
Calibration Times: 15:52 16:47

GC Column: ZB-MR2 **ID:** 0.32 (mm)

LAB FILE ID:		CF 100 = <u>PD088993.D</u>		CF 075 = <u>PD088994.D</u>			
CF 050 = <u>PD088995.D</u>		CF 025 = <u>PD088996.D</u>		CF 005 = <u>PD088997.D</u>			
COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
4,4'-DDD	17754100000	17899700000	18191100000	18805800000	22996200000	19129400000	11
4,4'-DDE	21343500000	21440200000	21823600000	22564100000	27409000000	22916100000	11
4,4'-DDT	19391000000	19327800000	19594100000	20005200000	23078500000	20279300000	8
Aldrin	22719200000	22747700000	23159400000	23852800000	28607200000	24217300000	10
alpha-BHC	25649000000	25438700000	25849200000	26153100000	30895500000	26797100000	9
alpha-Chlordane	21191300000	21145300000	21570900000	22517200000	28059300000	22896800000	13
beta-BHC	9903630000	9918550000	10198200000	10624100000	13086800000	10746200000	12
Decachlorobiphenyl	17946500000	17939700000	18428600000	19427500000	25107500000	19770000000	15
delta-BHC	23614400000	23533700000	23918700000	24298300000	29003000000	24873600000	9
Dieldrin	21438700000	21622000000	22120600000	22941800000	27919200000	23208500000	12
Endosulfan I	19170300000	19201000000	19315500000	20752900000	25772600000	20842500000	14
Endosulfan II	18473200000	18573800000	19087100000	20002300000	24846800000	20196600000	13
Endosulfan sulfate	17925600000	18043500000	18492500000	19409200000	24234500000	19621100000	13
Endrin	20535400000	19906600000	20644700000	21276500000	26206500000	21713900000	12
Endrin aldehyde	13773600000	13920200000	14379400000	15195500000	19287900000	15311300000	15
Endrin ketone	19587400000	19824900000	20446500000	21535300000	26614600000	21601700000	13
gamma-BHC (Lindane)	23622800000	23442000000	23749900000	24221500000	28748400000	24756900000	9
gamma-Chlordane	22229100000	22022500000	22519500000	23493700000	29348800000	23922700000	13
Heptachlor	23291600000	23365200000	23922200000	24716000000	29896800000	25038400000	11
Heptachlor epoxide	20080600000	20251900000	20827300000	21695300000	26635200000	21898100000	12
Methoxychlor	9712450000	9897880000	10259100000	10830900000	13140100000	10768100000	13
Tetrachloro-m-xylene	15879800000	15866400000	15978000000	16730900000	20310700000	16953200000	11

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: CAMP02

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

Instrument ID: ECD_D Date(s) Analyzed: 06/17/2025 06/17/2025

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Toxaphene	500	1	6.24	6.14	6.34	33601800
		2	6.44	6.34	6.54	47528600
		3	7.15	7.05	7.25	87292700
		4	7.56	7.46	7.66	111357000
		5	7.93	7.83	8.03	63112600

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: CAMP02

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

Instrument ID: ECD_D Date(s) Analyzed: 06/17/2025 06/17/2025

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Toxaphene	500	1	5.47	5.37	5.57	158160000
		2	5.65	5.55	5.75	108820000
		3	6.76	6.66	6.86	511856000
		4	7.20	7.10	7.30	350145000
		5	7.33	7.23	7.43	253920000

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 11:47 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.07	9.07	8.97	9.17	0.00
Tetrachloro-m-xylene	3.55	3.55	3.45	3.65	0.00
alpha-BHC	4.00	4.00	3.90	4.10	0.00
beta-BHC	4.52	4.52	4.42	4.62	0.00
delta-BHC	4.76	4.76	4.66	4.86	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.93	4.93	4.83	5.03	0.00
Aldrin	5.27	5.27	5.17	5.37	0.00
Heptachlor epoxide	5.69	5.69	5.59	5.79	0.00
Endosulfan I	6.07	6.08	5.98	6.18	0.01
Dieldrin	6.35	6.35	6.25	6.45	0.00
4,4'-DDE	6.20	6.20	6.10	6.30	0.00
Endrin	6.57	6.58	6.48	6.68	0.01
Endosulfan II	6.79	6.79	6.69	6.89	0.00
4,4'-DDD	6.71	6.71	6.61	6.81	0.01
Endosulfan sulfate	7.15	7.15	7.05	7.25	0.00
4,4'-DDT	7.02	7.02	6.92	7.12	0.00
Methoxychlor	7.49	7.49	7.39	7.59	0.00
Endrin ketone	7.63	7.63	7.53	7.73	0.00
Endrin aldehyde	6.92	6.92	6.82	7.02	0.01
alpha-Chlordane	6.03	6.03	5.93	6.13	0.00
gamma-Chlordane	5.95	5.95	5.85	6.05	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 11:47 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	8.07	8.07	7.97	8.17	0.00
Tetrachloro-m-xylene	2.88	2.88	2.78	2.98	0.00
alpha-BHC	3.39	3.39	3.29	3.49	0.00
beta-BHC	4.03	4.03	3.93	4.13	0.00
delta-BHC	4.26	4.26	4.16	4.36	0.00
gamma-BHC (Lindane)	3.73	3.73	3.63	3.83	0.00
Heptachlor	4.08	4.08	3.98	4.18	0.00
Aldrin	4.37	4.37	4.27	4.47	0.00
Heptachlor epoxide	4.87	4.87	4.77	4.97	0.00
Endosulfan I	5.25	5.25	5.15	5.35	0.00
Dieldrin	5.51	5.51	5.41	5.61	0.00
4,4'-DDE	5.38	5.38	5.28	5.48	0.00
Endrin	5.79	5.79	5.69	5.89	0.00
Endosulfan II	6.08	6.08	5.98	6.18	0.00
4,4'-DDD	5.93	5.93	5.83	6.03	0.00
Endosulfan sulfate	6.48	6.48	6.38	6.58	0.00
4,4'-DDT	6.18	6.18	6.08	6.28	0.00
Methoxychlor	6.75	6.76	6.66	6.86	0.01
Endrin ketone	6.99	6.99	6.89	7.09	0.00
Endrin aldehyde	6.26	6.26	6.16	6.36	0.00
alpha-Chlordane	5.19	5.19	5.09	5.29	0.00
gamma-Chlordane	5.13	5.13	5.03	5.23	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL01 Date Analyzed: 06/26/2025

Lab Sample No.: PSTDCCC050 Data File : PD089159.D Time Analyzed: 11:47

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.705	6.605	6.805	53.110	50.000	6.2
4,4'-DDE	6.196	6.096	6.296	52.180	50.000	4.4
4,4'-DDT	7.021	6.921	7.121	48.890	50.000	-2.2
Aldrin	5.271	5.171	5.371	54.570	50.000	9.1
alpha-BHC	4.000	3.899	4.099	56.190	50.000	12.4
alpha-Chlordane	6.027	5.927	6.127	53.680	50.000	7.4
beta-BHC	4.516	4.415	4.615	53.430	50.000	6.9
Decachlorobiphenyl	9.072	8.972	9.172	49.280	50.000	-1.4
delta-BHC	4.764	4.664	4.864	58.080	50.000	16.2
Dieldrin	6.347	6.247	6.447	53.280	50.000	6.6
Endosulfan I	6.074	5.975	6.175	53.510	50.000	7.0
Endosulfan II	6.786	6.686	6.886	52.520	50.000	5.0
Endosulfan sulfate	7.149	7.049	7.249	50.240	50.000	0.5
Endrin	6.574	6.475	6.675	51.670	50.000	3.3
Endrin aldehyde	6.915	6.815	7.015	50.270	50.000	0.5
Endrin ketone	7.630	7.530	7.730	50.680	50.000	1.4
gamma-BHC (Lindane)	4.331	4.230	4.430	55.550	50.000	11.1
gamma-Chlordane	5.946	5.846	6.046	54.360	50.000	8.7
Heptachlor	4.929	4.829	5.029	54.610	50.000	9.2
Heptachlor epoxide	5.691	5.591	5.791	53.310	50.000	6.6
Methoxychlor	7.493	7.393	7.593	46.320	50.000	-7.4
Tetrachloro-m-xylene	3.551	3.450	3.650	53.870	50.000	7.7

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL01 Date Analyzed: 06/26/2025

Lab Sample No.: PSTDCCC050 Data File : PD089159.D Time Analyzed: 11:47

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.929	5.830	6.030	51.260	50.000	2.5
4,4'-DDE	5.375	5.275	5.475	51.130	50.000	2.3
4,4'-DDT	6.183	6.084	6.284	48.440	50.000	-3.1
Aldrin	4.369	4.269	4.469	52.050	50.000	4.1
alpha-BHC	3.393	3.293	3.493	52.750	50.000	5.5
alpha-Chlordane	5.189	5.091	5.291	50.880	50.000	1.8
beta-BHC	4.025	3.926	4.126	49.610	50.000	-0.8
Decachlorobiphenyl	8.071	7.972	8.172	47.520	50.000	-5.0
delta-BHC	4.262	4.162	4.362	52.030	50.000	4.1
Dieldrin	5.512	5.413	5.613	51.120	50.000	2.2
Endosulfan I	5.246	5.147	5.347	46.580	50.000	-6.8
Endosulfan II	6.079	5.981	6.181	50.470	50.000	0.9
Endosulfan sulfate	6.481	6.383	6.583	48.980	50.000	-2.0
Endrin	5.789	5.689	5.889	51.790	50.000	3.6
Endrin aldehyde	6.258	6.159	6.359	48.930	50.000	-2.1
Endrin ketone	6.990	6.892	7.092	48.810	50.000	-2.4
gamma-BHC (Lindane)	3.730	3.630	3.830	52.520	50.000	5.0
gamma-Chlordane	5.125	5.026	5.226	51.120	50.000	2.2
Heptachlor	4.083	3.983	4.183	50.700	50.000	1.4
Heptachlor epoxide	4.872	4.773	4.973	51.480	50.000	3.0
Methoxychlor	6.753	6.655	6.855	45.550	50.000	-8.9
Tetrachloro-m-xylene	2.881	2.780	2.980	52.560	50.000	5.1

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 17:20 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.08	9.07	8.97	9.17	-0.01
Tetrachloro-m-xylene	3.56	3.55	3.45	3.65	-0.01
alpha-BHC	4.00	4.00	3.90	4.10	0.00
beta-BHC	4.52	4.52	4.42	4.62	0.00
delta-BHC	4.77	4.76	4.66	4.86	-0.01
gamma-BHC (Lindane)	4.34	4.33	4.23	4.43	-0.01
Heptachlor	4.93	4.93	4.83	5.03	0.00
Aldrin	5.28	5.27	5.17	5.37	-0.01
Heptachlor epoxide	5.70	5.69	5.59	5.79	-0.01
Endosulfan I	6.08	6.08	5.98	6.18	0.00
Dieldrin	6.35	6.35	6.25	6.45	0.00
4,4'-DDE	6.20	6.20	6.10	6.30	0.00
Endrin	6.58	6.58	6.48	6.68	0.00
Endosulfan II	6.79	6.79	6.69	6.89	0.00
4,4'-DDD	6.71	6.71	6.61	6.81	0.00
Endosulfan sulfate	7.15	7.15	7.05	7.25	0.00
4,4'-DDT	7.03	7.02	6.92	7.12	-0.01
Methoxychlor	7.50	7.49	7.39	7.59	-0.01
Endrin ketone	7.63	7.63	7.53	7.73	0.00
Endrin aldehyde	6.92	6.92	6.82	7.02	0.00
alpha-Chlordane	6.03	6.03	5.93	6.13	0.00
gamma-Chlordane	5.95	5.95	5.85	6.05	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 17:20 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	8.07	8.07	7.97	8.17	0.00
Tetrachloro-m-xylene	2.88	2.88	2.78	2.98	0.00
alpha-BHC	3.39	3.39	3.29	3.49	0.00
beta-BHC	4.03	4.03	3.93	4.13	0.00
delta-BHC	4.26	4.26	4.16	4.36	0.00
gamma-BHC (Lindane)	3.73	3.73	3.63	3.83	0.00
Heptachlor	4.08	4.08	3.98	4.18	0.00
Aldrin	4.37	4.37	4.27	4.47	0.00
Heptachlor epoxide	4.87	4.87	4.77	4.97	0.00
Endosulfan I	5.25	5.25	5.15	5.35	0.00
Dieldrin	5.51	5.51	5.41	5.61	0.00
4,4'-DDE	5.38	5.38	5.28	5.48	0.00
Endrin	5.79	5.79	5.69	5.89	0.00
Endosulfan II	6.08	6.08	5.98	6.18	0.00
4,4'-DDD	5.93	5.93	5.83	6.03	0.00
Endosulfan sulfate	6.48	6.48	6.38	6.58	0.00
4,4'-DDT	6.18	6.18	6.08	6.28	0.00
Methoxychlor	6.76	6.76	6.66	6.86	0.00
Endrin ketone	6.99	6.99	6.89	7.09	0.00
Endrin aldehyde	6.26	6.26	6.16	6.36	0.00
alpha-Chlordane	5.19	5.19	5.09	5.29	0.00
gamma-Chlordane	5.13	5.13	5.03	5.23	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL02 Date Analyzed: 06/26/2025

Lab Sample No.: PSTDCCC050 Data File : PD089172.D Time Analyzed: 17:20

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.709	6.605	6.805	52.210	50.000	4.4
4,4'-DDE	6.200	6.096	6.296	53.450	50.000	6.9
4,4'-DDT	7.025	6.921	7.121	46.980	50.000	-6.0
Aldrin	5.275	5.171	5.371	55.770	50.000	11.5
alpha-BHC	4.004	3.899	4.099	57.640	50.000	15.3
alpha-Chlordane	6.031	5.927	6.127	53.780	50.000	7.6
beta-BHC	4.520	4.415	4.615	54.870	50.000	9.7
Decachlorobiphenyl	9.077	8.972	9.172	49.220	50.000	-1.6
delta-BHC	4.769	4.664	4.864	59.310	50.000	18.6
Dieldrin	6.351	6.247	6.447	53.140	50.000	6.3
Endosulfan I	6.078	5.975	6.175	53.750	50.000	7.5
Endosulfan II	6.790	6.686	6.886	50.330	50.000	0.7
Endosulfan sulfate	7.153	7.049	7.249	49.420	50.000	-1.2
Endrin	6.578	6.475	6.675	48.980	50.000	-2.0
Endrin aldehyde	6.919	6.815	7.015	49.300	50.000	-1.4
Endrin ketone	7.634	7.530	7.730	49.390	50.000	-1.2
gamma-BHC (Lindane)	4.335	4.230	4.430	56.910	50.000	13.8
gamma-Chlordane	5.950	5.846	6.046	54.970	50.000	9.9
Heptachlor	4.934	4.829	5.029	54.900	50.000	9.8
Heptachlor epoxide	5.695	5.591	5.791	53.490	50.000	7.0
Methoxychlor	7.497	7.393	7.593	42.870	50.000	-14.3
Tetrachloro-m-xylene	3.555	3.450	3.650	57.010	50.000	14.0

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL02 Date Analyzed: 06/26/2025

Lab Sample No.: PSTDCCC050 Data File : PD089172.D Time Analyzed: 17:20

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.930	5.830	6.030	49.850	50.000	-0.3
4,4'-DDE	5.376	5.275	5.475	51.580	50.000	3.2
4,4'-DDT	6.184	6.084	6.284	46.860	50.000	-6.3
Aldrin	4.369	4.269	4.469	53.840	50.000	7.7
alpha-BHC	3.393	3.293	3.493	54.360	50.000	8.7
alpha-Chlordane	5.191	5.091	5.291	51.880	50.000	3.8
beta-BHC	4.026	3.926	4.126	52.990	50.000	6.0
Decachlorobiphenyl	8.073	7.972	8.172	44.560	50.000	-10.9
delta-BHC	4.262	4.162	4.362	53.600	50.000	7.2
Dieldrin	5.513	5.413	5.613	51.790	50.000	3.6
Endosulfan I	5.247	5.147	5.347	52.450	50.000	4.9
Endosulfan II	6.081	5.981	6.181	50.470	50.000	0.9
Endosulfan sulfate	6.483	6.383	6.583	48.080	50.000	-3.8
Endrin	5.789	5.689	5.889	48.870	50.000	-2.3
Endrin aldehyde	6.260	6.159	6.359	48.550	50.000	-2.9
Endrin ketone	6.992	6.892	7.092	46.790	50.000	-6.4
gamma-BHC (Lindane)	3.730	3.630	3.830	54.110	50.000	8.2
gamma-Chlordane	5.126	5.026	5.226	52.120	50.000	4.2
Heptachlor	4.083	3.983	4.183	51.710	50.000	3.4
Heptachlor epoxide	4.873	4.773	4.973	54.670	50.000	9.3
Methoxychlor	6.755	6.655	6.855	43.150	50.000	-13.7
Tetrachloro-m-xylene	2.881	2.780	2.980	56.090	50.000	12.2

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 03:25 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.07	9.07	8.97	9.17	0.00
Tetrachloro-m-xylene	3.55	3.55	3.45	3.65	0.00
alpha-BHC	4.00	4.00	3.90	4.10	0.00
beta-BHC	4.52	4.52	4.42	4.62	0.00
delta-BHC	4.76	4.76	4.66	4.86	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.93	4.93	4.83	5.03	0.00
Aldrin	5.27	5.27	5.17	5.37	0.00
Heptachlor epoxide	5.69	5.69	5.59	5.79	0.00
Endosulfan I	6.07	6.08	5.98	6.18	0.01
Dieldrin	6.35	6.35	6.25	6.45	0.00
4,4'-DDE	6.20	6.20	6.10	6.30	0.00
Endrin	6.57	6.58	6.48	6.68	0.01
Endosulfan II	6.79	6.79	6.69	6.89	0.00
4,4'-DDD	6.70	6.71	6.61	6.81	0.01
Endosulfan sulfate	7.15	7.15	7.05	7.25	0.00
4,4'-DDT	7.02	7.02	6.92	7.12	0.00
Methoxychlor	7.49	7.49	7.39	7.59	0.00
Endrin ketone	7.63	7.63	7.53	7.73	0.00
Endrin aldehyde	6.91	6.92	6.82	7.02	0.01
alpha-Chlordane	6.03	6.03	5.93	6.13	0.00
gamma-Chlordane	5.95	5.95	5.85	6.05	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 03:25 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	8.07	8.07	7.97	8.17	0.00
Tetrachloro-m-xylene	2.88	2.88	2.78	2.98	0.00
alpha-BHC	3.39	3.39	3.29	3.49	0.00
beta-BHC	4.03	4.03	3.93	4.13	0.00
delta-BHC	4.26	4.26	4.16	4.36	0.00
gamma-BHC (Lindane)	3.73	3.73	3.63	3.83	0.00
Heptachlor	4.08	4.08	3.98	4.18	0.00
Aldrin	4.37	4.37	4.27	4.47	0.00
Heptachlor epoxide	4.87	4.87	4.77	4.97	0.00
Endosulfan I	5.25	5.25	5.15	5.35	0.00
Dieldrin	5.51	5.51	5.41	5.61	0.00
4,4'-DDE	5.37	5.38	5.28	5.48	0.01
Endrin	5.79	5.79	5.69	5.89	0.00
Endosulfan II	6.08	6.08	5.98	6.18	0.00
4,4'-DDD	5.93	5.93	5.83	6.03	0.00
Endosulfan sulfate	6.48	6.48	6.38	6.58	0.00
4,4'-DDT	6.18	6.18	6.08	6.28	0.00
Methoxychlor	6.75	6.76	6.66	6.86	0.01
Endrin ketone	6.99	6.99	6.89	7.09	0.00
Endrin aldehyde	6.26	6.26	6.16	6.36	0.00
alpha-Chlordane	5.19	5.19	5.09	5.29	0.00
gamma-Chlordane	5.13	5.13	5.03	5.23	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL03 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC050 Data File : PD089176.D Time Analyzed: 03:25

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.704	6.605	6.805	55.140	50.000	10.3
4,4'-DDE	6.195	6.096	6.296	55.960	50.000	11.9
4,4'-DDT	7.021	6.921	7.121	49.570	50.000	-0.9
Aldrin	5.271	5.171	5.371	58.050	50.000	16.1
alpha-BHC	4.000	3.899	4.099	59.200	50.000	18.4
alpha-Chlordane	6.027	5.927	6.127	55.950	50.000	11.9
beta-BHC	4.516	4.415	4.615	56.150	50.000	12.3
Decachlorobiphenyl	9.072	8.972	9.172	51.290	50.000	2.6
delta-BHC	4.764	4.664	4.864	61.300	50.000	22.6
Dieldrin	6.347	6.247	6.447	55.610	50.000	11.2
Endosulfan I	6.074	5.975	6.175	55.920	50.000	11.8
Endosulfan II	6.786	6.686	6.886	53.380	50.000	6.8
Endosulfan sulfate	7.149	7.049	7.249	52.100	50.000	4.2
Endrin	6.574	6.475	6.675	51.810	50.000	3.6
Endrin aldehyde	6.914	6.815	7.015	52.050	50.000	4.1
Endrin ketone	7.629	7.530	7.730	51.950	50.000	3.9
gamma-BHC (Lindane)	4.331	4.230	4.430	58.540	50.000	17.1
gamma-Chlordane	5.946	5.846	6.046	57.530	50.000	15.1
Heptachlor	4.929	4.829	5.029	56.570	50.000	13.1
Heptachlor epoxide	5.690	5.591	5.791	56.070	50.000	12.1
Methoxychlor	7.493	7.393	7.593	44.260	50.000	-11.5
Tetrachloro-m-xylene	3.551	3.450	3.650	58.530	50.000	17.1

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL03 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC050 Data File : PD089176.D Time Analyzed: 03:25

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.928	5.830	6.030	51.620	50.000	3.2
4,4'-DDE	5.374	5.275	5.475	53.890	50.000	7.8
4,4'-DDT	6.182	6.084	6.284	48.080	50.000	-3.8
Aldrin	4.368	4.269	4.469	55.330	50.000	10.7
alpha-BHC	3.393	3.293	3.493	55.980	50.000	12.0
alpha-Chlordane	5.189	5.091	5.291	53.700	50.000	7.4
beta-BHC	4.025	3.926	4.126	54.810	50.000	9.6
Decachlorobiphenyl	8.071	7.972	8.172	46.750	50.000	-6.5
delta-BHC	4.262	4.162	4.362	55.070	50.000	10.1
Dieldrin	5.512	5.413	5.613	53.990	50.000	8.0
Endosulfan I	5.246	5.147	5.347	54.380	50.000	8.8
Endosulfan II	6.079	5.981	6.181	52.150	50.000	4.3
Endosulfan sulfate	6.481	6.383	6.583	50.440	50.000	0.9
Endrin	5.788	5.689	5.889	50.380	50.000	0.8
Endrin aldehyde	6.258	6.159	6.359	50.110	50.000	0.2
Endrin ketone	6.990	6.892	7.092	50.220	50.000	0.4
gamma-BHC (Lindane)	3.729	3.630	3.830	55.710	50.000	11.4
gamma-Chlordane	5.125	5.026	5.226	53.800	50.000	7.6
Heptachlor	4.082	3.983	4.183	53.010	50.000	6.0
Heptachlor epoxide	4.872	4.773	4.973	55.860	50.000	11.7
Methoxychlor	6.752	6.655	6.855	44.470	50.000	-11.1
Tetrachloro-m-xylene	2.881	2.780	2.980	58.020	50.000	16.0

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 12:53 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.07	9.07	8.97	9.17	0.00
Tetrachloro-m-xylene	3.55	3.55	3.45	3.65	0.00
alpha-BHC	4.00	4.00	3.90	4.10	0.00
beta-BHC	4.52	4.52	4.42	4.62	0.00
delta-BHC	4.77	4.76	4.66	4.86	-0.01
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.93	4.93	4.83	5.03	0.00
Aldrin	5.27	5.27	5.17	5.37	0.00
Heptachlor epoxide	5.69	5.69	5.59	5.79	0.00
Endosulfan I	6.08	6.08	5.98	6.18	0.00
Dieldrin	6.35	6.35	6.25	6.45	0.00
4,4'-DDE	6.20	6.20	6.10	6.30	0.00
Endrin	6.58	6.58	6.48	6.68	0.01
Endosulfan II	6.79	6.79	6.69	6.89	0.00
4,4'-DDD	6.71	6.71	6.61	6.81	0.00
Endosulfan sulfate	7.15	7.15	7.05	7.25	0.00
4,4'-DDT	7.02	7.02	6.92	7.12	0.00
Methoxychlor	7.50	7.49	7.39	7.59	0.00
Endrin ketone	7.63	7.63	7.53	7.73	0.00
Endrin aldehyde	6.92	6.92	6.82	7.02	0.00
alpha-Chlordane	6.03	6.03	5.93	6.13	0.00
gamma-Chlordane	5.95	5.95	5.85	6.05	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 12:53 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	8.07	8.07	7.97	8.17	0.00
Tetrachloro-m-xylene	2.88	2.88	2.78	2.98	0.00
alpha-BHC	3.39	3.39	3.29	3.49	0.00
beta-BHC	4.03	4.03	3.93	4.13	0.00
delta-BHC	4.26	4.26	4.16	4.36	0.00
gamma-BHC (Lindane)	3.73	3.73	3.63	3.83	0.00
Heptachlor	4.08	4.08	3.98	4.18	0.00
Aldrin	4.37	4.37	4.27	4.47	0.00
Heptachlor epoxide	4.87	4.87	4.77	4.97	0.00
Endosulfan I	5.25	5.25	5.15	5.35	0.00
Dieldrin	5.51	5.51	5.41	5.61	0.00
4,4'-DDE	5.37	5.38	5.28	5.48	0.01
Endrin	5.79	5.79	5.69	5.89	0.00
Endosulfan II	6.08	6.08	5.98	6.18	0.00
4,4'-DDD	5.93	5.93	5.83	6.03	0.00
Endosulfan sulfate	6.48	6.48	6.38	6.58	0.00
4,4'-DDT	6.18	6.18	6.08	6.28	0.00
Methoxychlor	6.75	6.76	6.66	6.86	0.01
Endrin ketone	6.99	6.99	6.89	7.09	0.00
Endrin aldehyde	6.26	6.26	6.16	6.36	0.00
alpha-Chlordane	5.19	5.19	5.09	5.29	0.00
gamma-Chlordane	5.13	5.13	5.03	5.23	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL04 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC050 Data File : PD089188.D Time Analyzed: 12:53

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.706	6.605	6.805	52.920	50.000	5.8
4,4'-DDE	6.197	6.096	6.296	52.760	50.000	5.5
4,4'-DDT	7.022	6.921	7.121	41.870	50.000	-16.3
Aldrin	5.273	5.171	5.371	56.700	50.000	13.4
alpha-BHC	4.001	3.899	4.099	58.280	50.000	16.6
alpha-Chlordane	6.028	5.927	6.127	54.740	50.000	9.5
beta-BHC	4.518	4.415	4.615	55.030	50.000	10.1
Decachlorobiphenyl	9.074	8.972	9.172	47.460	50.000	-5.1
delta-BHC	4.766	4.664	4.864	59.810	50.000	19.6
Dieldrin	6.348	6.247	6.447	53.510	50.000	7.0
Endosulfan I	6.076	5.975	6.175	53.660	50.000	7.3
Endosulfan II	6.787	6.686	6.886	51.560	50.000	3.1
Endosulfan sulfate	7.151	7.049	7.249	48.780	50.000	-2.4
Endrin	6.575	6.475	6.675	49.740	50.000	-0.5
Endrin aldehyde	6.916	6.815	7.015	47.780	50.000	-4.4
Endrin ketone	7.631	7.530	7.730	48.700	50.000	-2.6
gamma-BHC (Lindane)	4.332	4.230	4.430	57.160	50.000	14.3
gamma-Chlordane	5.947	5.846	6.046	56.600	50.000	13.2
Heptachlor	4.931	4.829	5.029	51.810	50.000	3.6
Heptachlor epoxide	5.692	5.591	5.791	53.630	50.000	7.3
Methoxychlor	7.495	7.393	7.593	41.710	50.000	-16.6
Tetrachloro-m-xylene	3.553	3.450	3.650	57.800	50.000	15.6

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL04 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC050 Data File : PD089188.D Time Analyzed: 12:53

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.928	5.830	6.030	50.730	50.000	1.5
4,4'-DDE	5.374	5.275	5.475	52.450	50.000	4.9
4,4'-DDT	6.182	6.084	6.284	42.840	50.000	-14.3
Aldrin	4.368	4.269	4.469	54.590	50.000	9.2
alpha-BHC	3.393	3.293	3.493	55.380	50.000	10.8
alpha-Chlordane	5.189	5.091	5.291	53.310	50.000	6.6
beta-BHC	4.025	3.926	4.126	53.250	50.000	6.5
Decachlorobiphenyl	8.072	7.972	8.172	44.640	50.000	-10.7
delta-BHC	4.261	4.162	4.362	54.340	50.000	8.7
Dieldrin	5.512	5.413	5.613	52.640	50.000	5.3
Endosulfan I	5.246	5.147	5.347	52.920	50.000	5.8
Endosulfan II	6.079	5.981	6.181	51.330	50.000	2.7
Endosulfan sulfate	6.481	6.383	6.583	48.770	50.000	-2.5
Endrin	5.788	5.689	5.889	49.850	50.000	-0.3
Endrin aldehyde	6.257	6.159	6.359	48.640	50.000	-2.7
Endrin ketone	6.990	6.892	7.092	47.270	50.000	-5.5
gamma-BHC (Lindane)	3.729	3.630	3.830	54.810	50.000	9.6
gamma-Chlordane	5.125	5.026	5.226	54.490	50.000	9.0
Heptachlor	4.082	3.983	4.183	49.790	50.000	-0.4
Heptachlor epoxide	4.871	4.773	4.973	54.520	50.000	9.0
Methoxychlor	6.753	6.655	6.855	43.610	50.000	-12.8
Tetrachloro-m-xylene	2.881	2.780	2.980	57.130	50.000	14.3

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 18:46 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.07	9.07	8.97	9.17	0.00
Tetrachloro-m-xylene	3.55	3.55	3.45	3.65	0.00
alpha-BHC	4.00	4.00	3.90	4.10	0.00
beta-BHC	4.52	4.52	4.42	4.62	0.01
delta-BHC	4.76	4.76	4.66	4.86	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.93	4.93	4.83	5.03	0.00
Aldrin	5.27	5.27	5.17	5.37	0.00
Heptachlor epoxide	5.69	5.69	5.59	5.79	0.00
Endosulfan I	6.07	6.08	5.98	6.18	0.01
Dieldrin	6.35	6.35	6.25	6.45	0.00
4,4'-DDE	6.20	6.20	6.10	6.30	0.00
Endrin	6.57	6.58	6.48	6.68	0.01
Endosulfan II	6.79	6.79	6.69	6.89	0.01
4,4'-DDD	6.70	6.71	6.61	6.81	0.01
Endosulfan sulfate	7.15	7.15	7.05	7.25	0.00
4,4'-DDT	7.02	7.02	6.92	7.12	0.00
Methoxychlor	7.49	7.49	7.39	7.59	0.00
Endrin ketone	7.63	7.63	7.53	7.73	0.00
Endrin aldehyde	6.91	6.92	6.82	7.02	0.01
alpha-Chlordane	6.03	6.03	5.93	6.13	0.00
gamma-Chlordane	5.95	5.95	5.85	6.05	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 18:46 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	8.07	8.07	7.97	8.17	0.00
Tetrachloro-m-xylene	2.88	2.88	2.78	2.98	0.00
alpha-BHC	3.39	3.39	3.29	3.49	0.00
beta-BHC	4.02	4.03	3.93	4.13	0.01
delta-BHC	4.26	4.26	4.16	4.36	0.00
gamma-BHC (Lindane)	3.73	3.73	3.63	3.83	0.00
Heptachlor	4.08	4.08	3.98	4.18	0.00
Aldrin	4.37	4.37	4.27	4.47	0.00
Heptachlor epoxide	4.87	4.87	4.77	4.97	0.00
Endosulfan I	5.25	5.25	5.15	5.35	0.00
Dieldrin	5.51	5.51	5.41	5.61	0.00
4,4'-DDE	5.37	5.38	5.28	5.48	0.01
Endrin	5.79	5.79	5.69	5.89	0.00
Endosulfan II	6.08	6.08	5.98	6.18	0.00
4,4'-DDD	5.93	5.93	5.83	6.03	0.00
Endosulfan sulfate	6.48	6.48	6.38	6.58	0.00
4,4'-DDT	6.18	6.18	6.08	6.28	0.00
Methoxychlor	6.75	6.76	6.66	6.86	0.01
Endrin ketone	6.99	6.99	6.89	7.09	0.00
Endrin aldehyde	6.26	6.26	6.16	6.36	0.00
alpha-Chlordane	5.19	5.19	5.09	5.29	0.00
gamma-Chlordane	5.13	5.13	5.03	5.23	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL05 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC050 Data File : PD089192.D Time Analyzed: 18:46

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.704	6.605	6.805	57.030	50.000	14.1
4,4'-DDE	6.195	6.096	6.296	55.130	50.000	10.3
4,4'-DDT	7.020	6.921	7.121	43.230	50.000	-13.5
Aldrin	5.270	5.171	5.371	57.560	50.000	15.1
alpha-BHC	4.000	3.899	4.099	58.380	50.000	16.8
alpha-Chlordane	6.026	5.927	6.127	56.760	50.000	13.5
beta-BHC	4.515	4.415	4.615	55.200	50.000	10.4
Decachlorobiphenyl	9.071	8.972	9.172	50.650	50.000	1.3
delta-BHC	4.763	4.664	4.864	59.910	50.000	19.8
Dieldrin	6.346	6.247	6.447	56.130	50.000	12.3
Endosulfan I	6.073	5.975	6.175	55.650	50.000	11.3
Endosulfan II	6.785	6.686	6.886	54.300	50.000	8.6
Endosulfan sulfate	7.148	7.049	7.249	52.510	50.000	5.0
Endrin	6.573	6.475	6.675	51.200	50.000	2.4
Endrin aldehyde	6.914	6.815	7.015	50.910	50.000	1.8
Endrin ketone	7.629	7.530	7.730	52.730	50.000	5.5
gamma-BHC (Lindane)	4.330	4.230	4.430	57.270	50.000	14.5
gamma-Chlordane	5.945	5.846	6.046	58.450	50.000	16.9
Heptachlor	4.929	4.829	5.029	52.650	50.000	5.3
Heptachlor epoxide	5.690	5.591	5.791	55.210	50.000	10.4
Methoxychlor	7.492	7.393	7.593	44.350	50.000	-11.3
Tetrachloro-m-xylene	3.550	3.450	3.650	58.070	50.000	16.1

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL05 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC050 Data File : PD089192.D Time Analyzed: 18:46

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.928	5.830	6.030	53.960	50.000	7.9
4,4'-DDE	5.374	5.275	5.475	54.320	50.000	8.6
4,4'-DDT	6.182	6.084	6.284	43.220	50.000	-13.6
Aldrin	4.367	4.269	4.469	55.730	50.000	11.5
alpha-BHC	3.393	3.293	3.493	56.430	50.000	12.9
alpha-Chlordane	5.189	5.091	5.291	54.770	50.000	9.5
beta-BHC	4.024	3.926	4.126	54.310	50.000	8.6
Decachlorobiphenyl	8.070	7.972	8.172	50.160	50.000	0.3
delta-BHC	4.261	4.162	4.362	55.240	50.000	10.5
Dieldrin	5.511	5.413	5.613	54.310	50.000	8.6
Endosulfan I	5.246	5.147	5.347	54.500	50.000	9.0
Endosulfan II	6.079	5.981	6.181	53.660	50.000	7.3
Endosulfan sulfate	6.481	6.383	6.583	51.810	50.000	3.6
Endrin	5.788	5.689	5.889	51.230	50.000	2.5
Endrin aldehyde	6.257	6.159	6.359	50.400	50.000	0.8
Endrin ketone	6.990	6.892	7.092	51.820	50.000	3.6
gamma-BHC (Lindane)	3.729	3.630	3.830	55.860	50.000	11.7
gamma-Chlordane	5.125	5.026	5.226	55.840	50.000	11.7
Heptachlor	4.082	3.983	4.183	50.960	50.000	1.9
Heptachlor epoxide	4.872	4.773	4.973	55.580	50.000	11.2
Methoxychlor	6.753	6.655	6.855	46.290	50.000	-7.4
Tetrachloro-m-xylene	2.881	2.780	2.980	58.440	50.000	16.9

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 21:16 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.07	9.07	8.97	9.17	0.00
Tetrachloro-m-xylene	3.55	3.55	3.45	3.65	0.00
alpha-BHC	4.00	4.00	3.90	4.10	0.00
beta-BHC	4.52	4.52	4.42	4.62	0.01
delta-BHC	4.76	4.76	4.66	4.86	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.93	4.93	4.83	5.03	0.00
Aldrin	5.27	5.27	5.17	5.37	0.00
Heptachlor epoxide	5.69	5.69	5.59	5.79	0.00
Endosulfan I	6.07	6.08	5.98	6.18	0.01
Dieldrin	6.35	6.35	6.25	6.45	0.01
4,4'-DDE	6.19	6.20	6.10	6.30	0.01
Endrin	6.57	6.58	6.48	6.68	0.01
Endosulfan II	6.79	6.79	6.69	6.89	0.01
4,4'-DDD	6.70	6.71	6.61	6.81	0.01
Endosulfan sulfate	7.15	7.15	7.05	7.25	0.00
4,4'-DDT	7.02	7.02	6.92	7.12	0.00
Methoxychlor	7.49	7.49	7.39	7.59	0.00
Endrin ketone	7.63	7.63	7.53	7.73	0.00
Endrin aldehyde	6.91	6.92	6.82	7.02	0.01
alpha-Chlordane	6.03	6.03	5.93	6.13	0.00
gamma-Chlordane	5.95	5.95	5.85	6.05	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 21:16 Initial Calibration Time(s): 15:52 16:47

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	8.07	8.07	7.97	8.17	0.00
Tetrachloro-m-xylene	2.88	2.88	2.78	2.98	0.00
alpha-BHC	3.39	3.39	3.29	3.49	0.00
beta-BHC	4.02	4.03	3.93	4.13	0.01
delta-BHC	4.26	4.26	4.16	4.36	0.00
gamma-BHC (Lindane)	3.73	3.73	3.63	3.83	0.00
Heptachlor	4.08	4.08	3.98	4.18	0.00
Aldrin	4.37	4.37	4.27	4.47	0.00
Heptachlor epoxide	4.87	4.87	4.77	4.97	0.00
Endosulfan I	5.25	5.25	5.15	5.35	0.01
Dieldrin	5.51	5.51	5.41	5.61	0.00
4,4'-DDE	5.37	5.38	5.28	5.48	0.01
Endrin	5.79	5.79	5.69	5.89	0.00
Endosulfan II	6.08	6.08	5.98	6.18	0.00
4,4'-DDD	5.93	5.93	5.83	6.03	0.00
Endosulfan sulfate	6.48	6.48	6.38	6.58	0.00
4,4'-DDT	6.18	6.18	6.08	6.28	0.00
Methoxychlor	6.75	6.76	6.66	6.86	0.01
Endrin ketone	6.99	6.99	6.89	7.09	0.00
Endrin aldehyde	6.26	6.26	6.16	6.36	0.00
alpha-Chlordane	5.19	5.19	5.09	5.29	0.00
gamma-Chlordane	5.12	5.13	5.03	5.23	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL06 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC050 Data File : PD089202.D Time Analyzed: 21:16

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.704	6.605	6.805	57.920	50.000	15.8
4,4'-DDE	6.194	6.096	6.296	54.700	50.000	9.4
4,4'-DDT	7.019	6.921	7.121	42.000	50.000	-16.0
Aldrin	5.270	5.171	5.371	56.890	50.000	13.8
alpha-BHC	3.999	3.899	4.099	58.040	50.000	16.1
alpha-Chlordane	6.026	5.927	6.127	56.470	50.000	12.9
beta-BHC	4.515	4.415	4.615	54.780	50.000	9.6
Decachlorobiphenyl	9.070	8.972	9.172	50.550	50.000	1.1
delta-BHC	4.763	4.664	4.864	59.190	50.000	18.4
Dieldrin	6.345	6.247	6.447	55.790	50.000	11.6
Endosulfan I	6.073	5.975	6.175	55.380	50.000	10.8
Endosulfan II	6.785	6.686	6.886	54.540	50.000	9.1
Endosulfan sulfate	7.148	7.049	7.249	52.730	50.000	5.5
Endrin	6.573	6.475	6.675	50.190	50.000	0.4
Endrin aldehyde	6.913	6.815	7.015	50.620	50.000	1.2
Endrin ketone	7.628	7.530	7.730	52.990	50.000	6.0
gamma-BHC (Lindane)	4.330	4.230	4.430	56.990	50.000	14.0
gamma-Chlordane	5.945	5.846	6.046	57.950	50.000	15.9
Heptachlor	4.929	4.829	5.029	51.400	50.000	2.8
Heptachlor epoxide	5.689	5.591	5.791	54.280	50.000	8.6
Methoxychlor	7.491	7.393	7.593	42.560	50.000	-14.9
Tetrachloro-m-xylene	3.550	3.450	3.650	57.800	50.000	15.6

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL06 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC050 Data File : PD089202.D Time Analyzed: 21:16

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.928	5.830	6.030	54.200	50.000	8.4
4,4'-DDE	5.373	5.275	5.475	53.740	50.000	7.5
4,4'-DDT	6.181	6.084	6.284	41.310	50.000	-17.4
Aldrin	4.367	4.269	4.469	55.520	50.000	11.0
alpha-BHC	3.392	3.293	3.493	56.420	50.000	12.8
alpha-Chlordane	5.189	5.091	5.291	54.340	50.000	8.7
beta-BHC	4.024	3.926	4.126	54.120	50.000	8.2
Decachlorobiphenyl	8.070	7.972	8.172	50.420	50.000	0.8
delta-BHC	4.261	4.162	4.362	54.930	50.000	9.9
Dieldrin	5.511	5.413	5.613	53.700	50.000	7.4
Endosulfan I	5.245	5.147	5.347	54.090	50.000	8.2
Endosulfan II	6.079	5.981	6.181	53.260	50.000	6.5
Endosulfan sulfate	6.480	6.383	6.583	51.330	50.000	2.7
Endrin	5.787	5.689	5.889	50.370	50.000	0.7
Endrin aldehyde	6.256	6.159	6.359	49.550	50.000	-0.9
Endrin ketone	6.989	6.892	7.092	51.450	50.000	2.9
gamma-BHC (Lindane)	3.729	3.630	3.830	55.740	50.000	11.5
gamma-Chlordane	5.124	5.026	5.226	55.510	50.000	11.0
Heptachlor	4.082	3.983	4.183	50.310	50.000	0.6
Heptachlor epoxide	4.871	4.773	4.973	55.210	50.000	10.4
Methoxychlor	6.752	6.655	6.855	44.610	50.000	-10.8
Tetrachloro-m-xylene	2.881	2.780	2.980	58.420	50.000	16.8

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: **CAMP02**

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

GC Column: **ZB-MR1** ID: **0.32** (mm) Initi. Calib. Date(s): **06/17/2025** **06/17/2025**

Client Sample No. (PEM): **PEM - PD088991.D** Date Analyzed: **06/17/2025**

Lab Sample No.(PEM): **PEM** Time Analyzed: **15:25**

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	9.071	8.970	9.170	21.440	20.000	7.2
Tetrachloro-m-xylene	3.550	3.500	3.600	19.860	20.000	-0.7
alpha-BHC	3.999	3.950	4.050	8.970	10.000	-10.3
beta-BHC	4.514	4.460	4.560	9.720	10.000	-2.8
gamma-BHC (Lindane)	4.330	4.280	4.380	9.320	10.000	-6.8
Endrin	6.574	6.500	6.640	50.260	50.000	0.5
4,4'-DDT	7.020	6.950	7.090	100.820	100.000	0.8
Methoxychlor	7.493	7.420	7.560	229.880	250.000	-8.0

GC Column: **ZB-MR2** ID: **0.32** (mm) Initi. Calib. Date(s): **06/17/2025** **06/17/2025**

Client Sample No. (PEM): **PEM - PD088991.D** Date Analyzed: **06/17/2025**

Lab Sample No.(PEM): **PEM** Time Analyzed: **15:25**

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	8.072	7.970	8.170	21.290	20.000	6.5
Tetrachloro-m-xylene	2.880	2.830	2.930	20.440	20.000	2.2
alpha-BHC	3.393	3.340	3.440	10.570	10.000	5.7
beta-BHC	4.025	3.970	4.080	10.750	10.000	7.5
gamma-BHC (Lindane)	3.729	3.680	3.780	10.580	10.000	5.8
Endrin	5.789	5.720	5.860	50.490	50.000	1.0
4,4'-DDT	6.183	6.110	6.250	96.080	100.000	-3.9
Methoxychlor	6.754	6.680	6.820	198.860	250.000	-20.5

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No. (PEM): PEM - PD089158.D Date Analyzed: 06/26/2025

Lab Sample No.(PEM): PEM Time Analyzed: 11:33

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	9.072	8.970	9.170	20.370	20.000	1.9
Tetrachloro-m-xylene	3.550	3.500	3.600	20.980	20.000	4.9
alpha-BHC	3.999	3.950	4.050	9.740	10.000	-2.6
beta-BHC	4.516	4.470	4.570	10.730	10.000	7.3
gamma-BHC (Lindane)	4.331	4.280	4.380	10.120	10.000	1.2
Endrin	6.574	6.500	6.640	48.910	50.000	-2.2
4,4'-DDT	7.021	6.950	7.090	92.590	100.000	-7.4
Methoxychlor	7.493	7.420	7.560	206.780	250.000	-17.3

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No. (PEM): PEM - PD089158.D Date Analyzed: 06/26/2025

Lab Sample No.(PEM): PEM Time Analyzed: 11:33

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	8.071	7.970	8.170	20.100	20.000	0.5
Tetrachloro-m-xylene	2.880	2.830	2.930	21.410	20.000	7.1
alpha-BHC	3.393	3.340	3.440	11.020	10.000	10.2
beta-BHC	4.024	3.970	4.070	10.860	10.000	8.6
gamma-BHC (Lindane)	3.729	3.680	3.780	11.120	10.000	11.2
Endrin	5.788	5.720	5.860	48.080	50.000	-3.8
4,4'-DDT	6.182	6.110	6.250	89.550	100.000	-10.5
Methoxychlor	6.752	6.680	6.820	175.300	250.000	-29.9

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: **CAMP02**

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

GC Column: **ZB-MR1** ID: **0.32** (mm) Initi. Calib. Date(s): **06/17/2025** **06/17/2025**

Client Sample No. (PEM): **PEM - PD089175.D** Date Analyzed: **06/27/2025**

Lab Sample No.(PEM): **PEM** Time Analyzed: **03:11**

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	9.072	8.970	9.170	19.900	20.000	-0.5
Tetrachloro-m-xylene	3.550	3.500	3.600	21.570	20.000	7.9
alpha-BHC	3.999	3.950	4.050	9.940	10.000	-0.6
beta-BHC	4.516	4.470	4.570	10.980	10.000	9.8
gamma-BHC (Lindane)	4.330	4.280	4.380	10.390	10.000	3.9
Endrin	6.572	6.500	6.640	49.500	50.000	-1.0
4,4'-DDT	7.021	6.950	7.090	90.560	100.000	-9.4
Methoxychlor	7.493	7.420	7.560	202.750	250.000	-18.9

GC Column: **ZB-MR2** ID: **0.32** (mm) Initi. Calib. Date(s): **06/17/2025** **06/17/2025**

Client Sample No. (PEM): **PEM - PD089175.D** Date Analyzed: **06/27/2025**

Lab Sample No.(PEM): **PEM** Time Analyzed: **03:11**

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	8.071	7.970	8.170	18.490	20.000	-7.6
Tetrachloro-m-xylene	2.881	2.830	2.930	22.340	20.000	11.7
alpha-BHC	3.392	3.340	3.440	11.470	10.000	14.7
beta-BHC	4.024	3.970	4.070	10.880	10.000	8.8
gamma-BHC (Lindane)	3.729	3.680	3.780	11.550	10.000	15.5
Endrin	5.788	5.720	5.860	50.120	50.000	0.2
4,4'-DDT	6.182	6.110	6.250	88.420	100.000	-11.6
Methoxychlor	6.753	6.680	6.820	172.110	250.000	-31.2

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 06/17/2025 06/17/2025

Client Sample No. (PEM): PEM - PD089191.D **Date Analyzed:** 06/27/2025

Lab Sample No.(PEM): PEM **Time Analyzed:** 18:32

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	9.071	8.970	9.170	20.920	20.000	4.6
Tetrachloro-m-xylene	3.550	3.500	3.600	22.080	20.000	10.4
alpha-BHC	3.998	3.950	4.050	10.090	10.000	0.9
beta-BHC	4.515	4.460	4.570	11.260	10.000	12.6
gamma-BHC (Lindane)	4.328	4.280	4.380	10.260	10.000	2.6
Endrin	6.572	6.500	6.640	51.080	50.000	2.2
4,4'-DDT	7.020	6.950	7.090	80.720	100.000	-19.3
Methoxychlor	7.492	7.420	7.560	182.490	250.000	-27.0

GC Column: ZB-MR2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 06/17/2025 06/17/2025

Client Sample No. (PEM): PEM - PD089191.D **Date Analyzed:** 06/27/2025

Lab Sample No.(PEM): PEM **Time Analyzed:** 18:32

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	8.071	7.970	8.170	20.430	20.000	2.2
Tetrachloro-m-xylene	2.880	2.830	2.930	23.060	20.000	15.3
alpha-BHC	3.392	3.340	3.440	11.830	10.000	18.3
beta-BHC	4.025	3.970	4.080	10.760	10.000	7.6
gamma-BHC (Lindane)	3.729	3.680	3.780	11.860	10.000	18.6
Endrin	5.788	5.720	5.860	53.330	50.000	6.7
4,4'-DDT	6.182	6.110	6.250	80.360	100.000	-19.6
Methoxychlor	6.753	6.680	6.820	160.570	250.000	-35.8

Analytical Sequence

Client: CDM Smith	SDG No.: Q2413	
Project: South River WM Replacement	Instrument ID: ECD_D	
GC Column: ZB-MR1	ID: 0.32 (mm)	Inst. Calib. Date(s): 06/17/2025 06/17/2025

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
IBLK	IBLK	06/17/2025	15:11	PD088990.D	9.07	3.55
PEM	PEM	06/17/2025	15:25	PD088991.D	9.07	3.55
RESCHK	RESCHK	06/17/2025	15:39	PD088992.D	9.07	3.55
PSTDICC100	PSTDICC100	06/17/2025	15:52	PD088993.D	9.07	3.55
PSTDICC075	PSTDICC075	06/17/2025	16:06	PD088994.D	9.07	3.55
PSTDICC050	PSTDICC050	06/17/2025	16:20	PD088995.D	9.07	3.55
PSTDICC025	PSTDICC025	06/17/2025	16:33	PD088996.D	9.07	3.55
PSTDICC005	PSTDICC005	06/17/2025	16:47	PD088997.D	9.07	3.55
PCHLORICC500	PCHLORICC500	06/17/2025	17:28	PD089000.D	9.07	3.55
PTOXICC500	PTOXICC500	06/17/2025	18:36	PD089005.D	9.07	3.55
IBLK	IBLK	06/26/2025	11:20	PD089157.D	9.07	3.55
PEM	PEM	06/26/2025	11:33	PD089158.D	9.07	3.55
PSTDCCC050	PSTDCCC050	06/26/2025	11:47	PD089159.D	9.07	3.55
PB168623BL	PB168623BL	06/26/2025	13:44	PD089166.D	9.07	3.55
PB168623BS	PB168623BS	06/26/2025	14:59	PD089167.D	9.08	3.56
IBLK	IBLK	06/26/2025	16:35	PD089171.D	9.08	3.56
PSTDCCC050	PSTDCCC050	06/26/2025	17:20	PD089172.D	9.08	3.56
IBLK	IBLK	06/27/2025	02:58	PD089174.D	9.07	3.55
PEM	PEM	06/27/2025	03:11	PD089175.D	9.07	3.55
PSTDCCC050	PSTDCCC050	06/27/2025	03:25	PD089176.D	9.07	3.55
TP-35	Q2413-01	06/27/2025	04:33	PD089177.D	9.07	3.55
TP-34	Q2413-02	06/27/2025	04:47	PD089178.D	9.07	3.55
TP-77	Q2413-03	06/27/2025	05:01	PD089179.D	9.07	3.55
TP-74	Q2413-04	06/27/2025	05:14	PD089180.D	9.07	3.55
TP-73	Q2413-05	06/27/2025	11:14	PD089183.D	9.07	3.55
TP-72	Q2413-06	06/27/2025	11:28	PD089184.D	9.07	3.55
IBLK	IBLK	06/27/2025	12:09	PD089187.D	9.07	3.55
PSTDCCC050	PSTDCCC050	06/27/2025	12:53	PD089188.D	9.07	3.55
IBLK	IBLK	06/27/2025	18:19	PD089190.D	9.07	3.55
PEM	PEM	06/27/2025	18:32	PD089191.D	9.07	3.55
PSTDCCC050	PSTDCCC050	06/27/2025	18:46	PD089192.D	9.07	3.55
COMP-3MS	Q2425-03MS	06/27/2025	20:22	PD089198.D	9.07	3.55
COMP-3MSD	Q2425-03MSD	06/27/2025	20:35	PD089199.D	9.07	3.55
IBLK	IBLK	06/27/2025	21:03	PD089201.D	9.07	3.55
PSTDCCC050	PSTDCCC050	06/27/2025	21:16	PD089202.D	9.07	3.55

Analytical Sequence

Client: CDM Smith	SDG No.: Q2413	
Project: South River WM Replacement	Instrument ID: ECD_D	
GC Column: ZB-MR2	ID: 0.32 (mm)	Inst. Calib. Date(s): 06/17/2025 06/17/2025

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
IBLK	IBLK	06/17/2025	15:11	PD088990.D	8.07	2.88
PEM	PEM	06/17/2025	15:25	PD088991.D	8.07	2.88
RESCHK	RESCHK	06/17/2025	15:39	PD088992.D	8.07	2.88
PSTDICC100	PSTDICC100	06/17/2025	15:52	PD088993.D	8.07	2.88
PSTDICC075	PSTDICC075	06/17/2025	16:06	PD088994.D	8.07	2.88
PSTDICC050	PSTDICC050	06/17/2025	16:20	PD088995.D	8.07	2.88
PSTDICC025	PSTDICC025	06/17/2025	16:33	PD088996.D	8.07	2.88
PSTDICC005	PSTDICC005	06/17/2025	16:47	PD088997.D	8.07	2.88
PCHLORICC500	PCHLORICC500	06/17/2025	17:28	PD089000.D	8.07	2.88
PTOXICC500	PTOXICC500	06/17/2025	18:36	PD089005.D	8.07	2.88
IBLK	IBLK	06/26/2025	11:20	PD089157.D	8.07	2.88
PEM	PEM	06/26/2025	11:33	PD089158.D	8.07	2.88
PSTDCCC050	PSTDCCC050	06/26/2025	11:47	PD089159.D	8.07	2.88
PB168623BL	PB168623BL	06/26/2025	13:44	PD089166.D	8.07	2.88
PB168623BS	PB168623BS	06/26/2025	14:59	PD089167.D	8.07	2.88
IBLK	IBLK	06/26/2025	16:35	PD089171.D	8.07	2.88
PSTDCCC050	PSTDCCC050	06/26/2025	17:20	PD089172.D	8.07	2.88
IBLK	IBLK	06/27/2025	02:58	PD089174.D	8.07	2.88
PEM	PEM	06/27/2025	03:11	PD089175.D	8.07	2.88
PSTDCCC050	PSTDCCC050	06/27/2025	03:25	PD089176.D	8.07	2.88
TP-35	Q2413-01	06/27/2025	04:33	PD089177.D	8.07	2.88
TP-34	Q2413-02	06/27/2025	04:47	PD089178.D	8.07	2.88
TP-77	Q2413-03	06/27/2025	05:01	PD089179.D	8.07	2.88
TP-74	Q2413-04	06/27/2025	05:14	PD089180.D	8.07	2.88
TP-73	Q2413-05	06/27/2025	11:14	PD089183.D	8.07	2.88
TP-72	Q2413-06	06/27/2025	11:28	PD089184.D	8.07	2.88
IBLK	IBLK	06/27/2025	12:09	PD089187.D	8.07	2.88
PSTDCCC050	PSTDCCC050	06/27/2025	12:53	PD089188.D	8.07	2.88
IBLK	IBLK	06/27/2025	18:19	PD089190.D	8.07	2.88
PEM	PEM	06/27/2025	18:32	PD089191.D	8.07	2.88
PSTDCCC050	PSTDCCC050	06/27/2025	18:46	PD089192.D	8.07	2.88
COMP-3MS	Q2425-03MS	06/27/2025	20:22	PD089198.D	8.07	2.88
COMP-3MSD	Q2425-03MSD	06/27/2025	20:35	PD089199.D	8.07	2.88
IBLK	IBLK	06/27/2025	21:03	PD089201.D	8.07	2.88
PSTDCCC050	PSTDCCC050	06/27/2025	21:16	PD089202.D	8.07	2.88

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

COMP-3MS

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: Q2425-03MS

Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1 ID: 0.32 (mm)

GC Column: (2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endosulfan II	1	6.78	6.73	6.83	17.1	0.6
	2	6.08	6.03	6.13	17.2	
4,4'-DDD	1	6.70	6.65	6.75	18.6	4.4
	2	5.93	5.88	5.98	17.8	
4,4'-DDT	1	7.02	6.97	7.07	11.5	14.5
	2	6.18	6.13	6.23	13.3	
Endrin aldehyde	1	6.91	6.86	6.96	11.4	2.6
	2	6.26	6.21	6.31	11.7	
Endosulfan sulfate	1	7.15	7.10	7.20	13.7	1.4
	2	6.48	6.43	6.53	13.9	
Methoxychlor	1	7.49	7.44	7.54	11.0	7.9
	2	6.75	6.70	6.80	11.9	
Endrin ketone	1	7.63	7.58	7.68	16.4	0.6
	2	6.99	6.94	7.04	16.5	
alpha-BHC	1	4.00	3.95	4.05	16.7	3.5
	2	3.39	3.34	3.44	17.3	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	16.1	1.8
	2	3.73	3.68	3.78	16.4	
Heptachlor	1	4.93	4.88	4.98	14.7	3.3
	2	4.08	4.03	4.13	15.2	
Aldrin	1	5.27	5.22	5.32	17.6	1.7
	2	4.37	4.32	4.42	17.9	
beta-BHC	1	4.52	4.47	4.57	17.1	5.7
	2	4.03	3.98	4.08	18.1	
delta-BHC	1	4.76	4.71	4.81	17.1	3
	2	4.26	4.21	4.31	16.6	
Heptachlor epoxide	1	5.69	5.64	5.74	17.3	3.4
	2	4.87	4.82	4.92	17.9	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

COMP-3MS

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: Q2425-03MS

Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1 ID: 0.32 (mm)

GC Column: (2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endosulfan I	1	6.07	6.02	6.12	17.4	0.6
	2	5.25	5.20	5.30	17.3	
gamma-Chlordane	1	5.95	5.90	6.00	18.1	1.7
	2	5.12	5.07	5.17	17.8	
alpha-Chlordane	1	6.03	5.98	6.08	17.3	1.7
	2	5.19	5.14	5.24	17.6	
4,4'-DDE	1	6.20	6.15	6.25	17.2	2.9
	2	5.37	5.32	5.42	17.7	
Dieldrin	1	6.35	6.30	6.40	17.4	1.1
	2	5.51	5.46	5.56	17.6	
Endrin	1	6.57	6.52	6.62	16.1	2.5
	2	5.79	5.74	5.84	16.5	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

COMP-3MSD

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: Q2425-03MSD

Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1 ID: 0.32 (mm)

GC Column: (2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endosulfan II	1	6.79	6.74	6.84	17.5	1.1
	2	6.08	6.03	6.13	17.3	
4,4'-DDD	1	6.70	6.65	6.75	17.7	3.4
	2	5.93	5.88	5.98	17.1	
4,4'-DDT	1	7.02	6.97	7.07	10.2	23.4
	2	6.18	6.13	6.23	12.9	
Endrin aldehyde	1	6.91	6.86	6.96	13.7	1.5
	2	6.26	6.21	6.31	13.5	
Endosulfan sulfate	1	7.15	7.10	7.20	15.0	4.8
	2	6.48	6.43	6.53	14.3	
Methoxychlor	1	7.49	7.44	7.54	9.40	10.1
	2	6.75	6.70	6.80	10.4	
Endrin ketone	1	7.63	7.58	7.68	15.4	0.6
	2	6.99	6.94	7.04	15.5	
alpha-BHC	1	4.00	3.95	4.05	17.4	2.3
	2	3.39	3.34	3.44	17.8	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	17.0	1.2
	2	3.73	3.68	3.78	17.2	
Heptachlor	1	4.93	4.88	4.98	13.6	2.2
	2	4.08	4.03	4.13	13.9	
Aldrin	1	5.27	5.22	5.32	18.2	0.5
	2	4.37	4.32	4.42	18.3	
beta-BHC	1	4.52	4.47	4.57	17.2	5.1
	2	4.02	3.97	4.07	18.1	
delta-BHC	1	4.76	4.71	4.81	16.7	3
	2	4.26	4.21	4.31	16.2	
Heptachlor epoxide	1	5.69	5.64	5.74	17.6	2.2
	2	4.87	4.82	4.92	18.0	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

COMP-3MSD

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: Q2425-03MSD

Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1 ID: 0.32 (mm)

GC Column: (2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endosulfan I	1	6.07	6.02	6.12	17.7	2.3
	2	5.25	5.20	5.30	17.3	
gamma-Chlordane	1	5.95	5.90	6.00	18.7	1.6
	2	5.12	5.07	5.17	18.4	
alpha-Chlordane	1	6.03	5.98	6.08	17.7	1.1
	2	5.19	5.14	5.24	17.9	
4,4'-DDE	1	6.20	6.15	6.25	18.2	1.1
	2	5.37	5.32	5.42	18.4	
Dieldrin	1	6.35	6.30	6.40	17.8	0.6
	2	5.51	5.46	5.56	17.9	
Endrin	1	6.57	6.52	6.62	16.7	1.2
	2	5.79	5.74	5.84	16.5	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB168623BS

Contract: CAMP02

Lab Code: CHEM

Case No.: Q2413

SAS No.: Q2413

SDG NO.: Q2413

Lab Sample ID: PB168623BS

Date(s) Analyzed: 06/26/2025

06/26/2025

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1

ID: 0.32 (mm)

GC Column: (2): ZB-MR2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.71	6.66	6.76	16.1	0.6
	2	5.93	5.88	5.98	16.0	
4,4'-DDE	1	6.20	6.15	6.25	15.9	2.5
	2	5.38	5.33	5.43	15.5	
4,4'-DDT	1	7.03	6.98	7.08	13.9	0
	2	6.18	6.13	6.23	13.9	
alpha-BHC	1	4.01	3.96	4.06	16.2	1.9
	2	3.39	3.34	3.44	15.9	
Aldrin	1	5.28	5.23	5.33	16.2	1.9
	2	4.37	4.32	4.42	15.9	
alpha-Chlordane	1	6.03	5.98	6.08	15.9	1.9
	2	5.19	5.14	5.24	15.6	
Endosulfan II	1	6.79	6.74	6.84	15.7	1.9
	2	6.08	6.03	6.13	15.4	
Endosulfan sulfate	1	7.16	7.11	7.21	15.1	1.3
	2	6.48	6.43	6.53	14.9	
beta-BHC	1	4.52	4.47	4.57	15.7	0
	2	4.03	3.98	4.08	15.7	
delta-BHC	1	4.77	4.72	4.82	16.9	6.1
	2	4.26	4.21	4.31	15.9	
Endosulfan I	1	6.08	6.03	6.13	15.9	0.6
	2	5.25	5.20	5.30	15.8	
Dieldrin	1	6.35	6.30	6.40	15.9	2.5
	2	5.51	5.46	5.56	15.5	
Endrin aldehyde	1	6.92	6.87	6.97	15.3	1.3
	2	6.26	6.21	6.31	15.1	
Methoxychlor	1	7.50	7.45	7.55	12.9	0.8
	2	6.75	6.70	6.80	13.0	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB168623BS

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: PB168623BS

Date(s) Analyzed: 06/26/2025 06/26/2025

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1 ID: 0.32 (mm)

GC Column: (2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endrin ketone	1	7.64	7.59	7.69	15.5	2.6
	2	6.99	6.94	7.04	15.1	
gamma-BHC (Lindane)	1	4.34	4.29	4.39	16.2	1.9
	2	3.73	3.68	3.78	15.9	
Heptachlor	1	4.94	4.89	4.99	15.7	3.9
	2	4.08	4.03	4.13	15.1	
Heptachlor epoxide	1	5.70	5.65	5.75	15.7	0.6
	2	4.87	4.82	4.92	15.8	
gamma-Chlordane	1	5.95	5.90	6.00	16.0	1.9
	2	5.13	5.08	5.18	15.7	
Endrin	1	6.58	6.53	6.63	14.3	1.4
	2	5.79	5.74	5.84	14.1	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

TP-34

Contract: CAMP02

Lab Code: CHEM

Case No.: Q2413

SAS No.: Q2413

SDG NO.: Q2413

Lab Sample ID: Q2413-02

Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1 ID: 0.32 (mm)

GC Column:(2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
beta-BHC	1	4.52	4.47	4.57	0.39	55.6
	2	4.04	3.99	4.09	0.22	
gamma-Chlordane	1	5.95	5.90	6.00	0.78	61.4
	2	5.12	5.07	5.17	0.41	
alpha-Chlordane	1	6.03	5.98	6.08	1.20	61.9
	2	5.19	5.14	5.24	0.63	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

TP-73

Contract: CAMP02

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

Lab Sample ID: Q2413-05 Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_D Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1 ID: 0.32 (mm) GC Column:(2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.70	6.65	6.75	0.29	7.6
	2	5.93	5.88	5.98	0.27	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

TP-74

Contract: CAMP02

Lab Code: CHEM

Case No.: Q2413

SAS No.: Q2413

SDG NO.: Q2413

Lab Sample ID: Q2413-04

Date(s) Analyzed: 06/27/2025

06/27/2025

Instrument ID (1): ECD_D

Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1

ID: 0.32 (mm)

GC Column:(2): ZB-MR2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDT	1	7.02	6.97	7.07	0.28	42.9
	2	6.18	6.13	6.23	0.43	
4,4'-DDE	1	6.20	6.15	6.25	0.24	42.4
	2	5.37	5.32	5.42	0.37	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

TP-77

Contract: CAMP02

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

Lab Sample ID: Q2413-03 Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_D Instrument ID (2): ECD_D

GC Column: (1): ZB-MR1 ID: 0.32 (mm) GC Column:(2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endrin	1	6.57	6.52	6.62	0.17	44.1
	2	5.79	5.74	5.84	0.26	

LAB CHRONICLE

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

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2413-01	TP-35	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-02	TP-34	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-03	TP-77	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-04	TP-74	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-05	TP-73	SOIL			06/23/25			06/24/25
			PCB	8082A		06/26/25	06/26/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-06	TP-72	SOIL			06/24/25			06/24/25
			Gasoline Range Organics	8015D			06/26/25	
			PCB	8082A		06/26/25	06/26/25	



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

Hit Summary Sheet
SW-846

SDG No.:	Q2413	Order ID:	Q2413
Client:	CDM Smith	Project ID:	South River WM Replacement

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



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	88.8
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073299.D	1	06/26/25 08:20	06/26/25 15:58	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	4.40	U	4.40	19.1	ug/kg
11104-28-2	Aroclor-1221	4.50	U	4.50	19.1	ug/kg
11141-16-5	Aroclor-1232	4.20	U	4.20	19.1	ug/kg
53469-21-9	Aroclor-1242	4.50	U	4.50	19.1	ug/kg
12672-29-6	Aroclor-1248	6.70	U	6.70	19.1	ug/kg
11097-69-1	Aroclor-1254	3.60	U	3.60	19.1	ug/kg
37324-23-5	Aroclor-1262	5.70	U	5.70	19.1	ug/kg
11100-14-4	Aroclor-1268	4.10	U	4.10	19.1	ug/kg
11096-82-5	Aroclor-1260	3.60	U	3.60	19.1	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	21.9		32 - 144	110%	SPK: 20
2051-24-3	Decachlorobiphenyl	21.7		32 - 175	109%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	92
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073300.D	1	06/26/25 08:20	06/26/25 16:15	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	4.30	U	4.30	18.4	ug/kg
11104-28-2	Aroclor-1221	4.40	U	4.40	18.4	ug/kg
11141-16-5	Aroclor-1232	4.00	U	4.00	18.4	ug/kg
53469-21-9	Aroclor-1242	4.40	U	4.40	18.4	ug/kg
12672-29-6	Aroclor-1248	6.40	U	6.40	18.4	ug/kg
11097-69-1	Aroclor-1254	3.50	U	3.50	18.4	ug/kg
37324-23-5	Aroclor-1262	5.40	U	5.40	18.4	ug/kg
11100-14-4	Aroclor-1268	3.90	U	3.90	18.4	ug/kg
11096-82-5	Aroclor-1260	3.50	U	3.50	18.4	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	21.7		32 - 144	108%	SPK: 20
2051-24-3	Decachlorobiphenyl	20.8		32 - 175	104%	SPK: 20

Comments:

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	91.4
Sample Wt/Vol:	30.04	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073301.D	1	06/26/25 08:20	06/26/25 16:31	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	4.30	U	4.30	18.6	ug/kg
11104-28-2	Aroclor-1221	4.40	U	4.40	18.6	ug/kg
11141-16-5	Aroclor-1232	4.10	U	4.10	18.6	ug/kg
53469-21-9	Aroclor-1242	4.40	U	4.40	18.6	ug/kg
12672-29-6	Aroclor-1248	6.50	U	6.50	18.6	ug/kg
11097-69-1	Aroclor-1254	3.50	U	3.50	18.6	ug/kg
37324-23-5	Aroclor-1262	5.50	U	5.50	18.6	ug/kg
11100-14-4	Aroclor-1268	3.90	U	3.90	18.6	ug/kg
11096-82-5	Aroclor-1260	3.50	U	3.50	18.6	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	20.7		32 - 144	103%	SPK: 20
2051-24-3	Decachlorobiphenyl	19.5		32 - 175	98%	SPK: 20

Comments:

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LOD = Limit of Detection

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P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	89.5
Sample Wt/Vol:	30.07	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073302.D	1	06/26/25 08:20	06/26/25 16:47	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	4.40	U	4.40	19.0	ug/kg
11104-28-2	Aroclor-1221	4.50	U	4.50	19.0	ug/kg
11141-16-5	Aroclor-1232	4.10	U	4.10	19.0	ug/kg
53469-21-9	Aroclor-1242	4.50	U	4.50	19.0	ug/kg
12672-29-6	Aroclor-1248	6.60	U	6.60	19.0	ug/kg
11097-69-1	Aroclor-1254	3.60	U	3.60	19.0	ug/kg
37324-23-5	Aroclor-1262	5.60	U	5.60	19.0	ug/kg
11100-14-4	Aroclor-1268	4.00	U	4.00	19.0	ug/kg
11096-82-5	Aroclor-1260	3.60	U	3.60	19.0	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	20.5		32 - 144	102%	SPK: 20
2051-24-3	Decachlorobiphenyl	17.1		32 - 175	85%	SPK: 20

Comments:

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	77.1
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073303.D	1	06/26/25 08:20	06/26/25 17:04	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	5.10	U	5.10	22.0	ug/kg
11104-28-2	Aroclor-1221	5.20	U	5.20	22.0	ug/kg
11141-16-5	Aroclor-1232	4.80	U	4.80	22.0	ug/kg
53469-21-9	Aroclor-1242	5.20	U	5.20	22.0	ug/kg
12672-29-6	Aroclor-1248	7.70	U	7.70	22.0	ug/kg
11097-69-1	Aroclor-1254	4.20	U	4.20	22.0	ug/kg
37324-23-5	Aroclor-1262	6.50	U	6.50	22.0	ug/kg
11100-14-4	Aroclor-1268	4.70	U	4.70	22.0	ug/kg
11096-82-5	Aroclor-1260	4.20	U	4.20	22.0	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	22.7		32 - 144	114%	SPK: 20
2051-24-3	Decachlorobiphenyl	20.2		32 - 175	101%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	87
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073304.D	1	06/26/25 08:20	06/26/25 17:20	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	4.50	U	4.50	19.5	ug/kg
11104-28-2	Aroclor-1221	4.60	U	4.60	19.5	ug/kg
11141-16-5	Aroclor-1232	4.30	U	4.30	19.5	ug/kg
53469-21-9	Aroclor-1242	4.60	U	4.60	19.5	ug/kg
12672-29-6	Aroclor-1248	6.80	U	6.80	19.5	ug/kg
11097-69-1	Aroclor-1254	3.70	U	3.70	19.5	ug/kg
37324-23-5	Aroclor-1262	5.80	U	5.80	19.5	ug/kg
11100-14-4	Aroclor-1268	4.10	U	4.10	19.5	ug/kg
11096-82-5	Aroclor-1260	3.70	U	3.70	19.5	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	21.7		32 - 144	109%	SPK: 20
2051-24-3	Decachlorobiphenyl	18.8		32 - 175	94%	SPK: 20

Comments:

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P = Indicates >25% difference for detected concentrations between the two GC columns

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

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() = Laboratory InHouse Limit



QC SUMMARY

Surrogate Summary

SDG No.: **Q2413**

Client: **CDM Smith**

Analytical Method: **8082A**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PP072990.D	PIBLK-PP072990.D	Tetrachloro-m-xylene	1	20	17.3	86		60	140
		Decachlorobiphenyl	1	20	18.3	91		60	140
		Tetrachloro-m-xylene	2	20	18.0	90		60	140
		Decachlorobiphenyl	2	20	17.2	86		60	140
I.BLK-PP073283.D	PIBLK-PP073283.D	Tetrachloro-m-xylene	1	20	18.9	94		60	140
		Decachlorobiphenyl	1	20	18.6	93		60	140
		Tetrachloro-m-xylene	2	20	18.8	94		60	140
		Decachlorobiphenyl	2	20	20.9	105		60	140
PB168622BL	PB168622BL	Tetrachloro-m-xylene	1	20	19.3	96		32	144
		Decachlorobiphenyl	1	20	20.0	100		32	175
		Tetrachloro-m-xylene	2	20	18.8	94		32	144
		Decachlorobiphenyl	2	20	21.1	106		32	175
PB168622BS	PB168622BS	Tetrachloro-m-xylene	1	20	20.2	101		32	144
		Decachlorobiphenyl	1	20	20.0	100		32	175
		Tetrachloro-m-xylene	2	20	18.6	93		32	144
		Decachlorobiphenyl	2	20	23.0	115		32	175
Q2409-02MS	COP-SOIL-PILEMS	Tetrachloro-m-xylene	1	20	20.0	100		32	144
		Decachlorobiphenyl	1	20	22.5	112		32	175
		Tetrachloro-m-xylene	2	20	18.9	94		32	144
		Decachlorobiphenyl	2	20	22.7	113		32	175
Q2409-02MSD	COP-SOIL-PILEMSD	Tetrachloro-m-xylene	1	20	19.3	97		32	144
		Decachlorobiphenyl	1	20	23.0	115		32	175
		Tetrachloro-m-xylene	2	20	19.2	96		32	144
		Decachlorobiphenyl	2	20	22.7	114		32	175
I.BLK-PP073298.D	PIBLK-PP073298.D	Tetrachloro-m-xylene	1	20	18.3	91		60	140
		Decachlorobiphenyl	1	20	18.9	95		60	140
		Tetrachloro-m-xylene	2	20	18.7	93		60	140
		Decachlorobiphenyl	2	20	20.5	103		60	140
Q2413-01	TP-35	Tetrachloro-m-xylene	1	20	21.8	109		32	144
		Decachlorobiphenyl	1	20	19.4	97		32	175
		Tetrachloro-m-xylene	2	20	21.9	110		32	144
		Decachlorobiphenyl	2	20	21.7	109		32	175
Q2413-02	TP-34	Tetrachloro-m-xylene	1	20	20.7	104		32	144
		Decachlorobiphenyl	1	20	19.9	100		32	175
		Tetrachloro-m-xylene	2	20	21.7	108		32	144
		Decachlorobiphenyl	2	20	20.8	104		32	175
Q2413-03	TP-77	Tetrachloro-m-xylene	1	20	20.7	103		32	144
		Decachlorobiphenyl	1	20	18.3	92		32	175
		Tetrachloro-m-xylene	2	20	20.3	101		32	144
		Decachlorobiphenyl	2	20	19.5	98		32	175
Q2413-04	TP-74	Tetrachloro-m-xylene	1	20	20.0	100		32	144

Surrogate Summary

SDG No.: Q2413

Client: CDM Smith

Analytical Method: 8082A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
Q2413-04	TP-74	Decachlorobiphenyl	1	20	16.0	80		32	175
		Tetrachloro-m-xylene	2	20	20.5	102		32	144
Q2413-05	TP-73	Decachlorobiphenyl	2	20	17.1	85		32	175
		Tetrachloro-m-xylene	1	20	22.1	110		32	144
		Decachlorobiphenyl	1	20	18.7	94		32	175
		Tetrachloro-m-xylene	2	20	22.7	114		32	144
		Decachlorobiphenyl	2	20	20.2	101		32	175
		Tetrachloro-m-xylene	1	20	21.0	105		32	144
Q2413-06	TP-72	Decachlorobiphenyl	1	20	16.6	83		32	175
		Tetrachloro-m-xylene	2	20	21.7	109		32	144
		Decachlorobiphenyl	2	20	18.8	94		32	175
		Tetrachloro-m-xylene	1	20	17.4	87		60	140
I.BLK-PP073313.D	PIBLK-PP073313.D	Decachlorobiphenyl	1	20	16.9	85		60	140
		Tetrachloro-m-xylene	2	20	18.9	95		60	140
		Decachlorobiphenyl	2	20	20.5	102		60	140
		Tetrachloro-m-xylene	2	20	20.5	102		60	140

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8082A</u>
Client:	<u>CDM Smith</u>	DataFile :	<u>PP073292.D</u>

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: Q2409-02MS (Column 1)	COP-SOIL-PILEMS AR1016	172.7	0	163	ug/kg	94				55	146	
	AR1260	172.7	31	195	ug/kg	95				54	119	
Client Sample ID: Q2409-02MS (Column 2)	COP-SOIL-PILEMS AR1016	172.7	0	154	ug/kg	89				55	146	
	AR1260	172.7	28	169	ug/kg	98				54	119	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8082A</u>
Client:	<u>CDM Smith</u>	DataFile :	<u>PP073293.D</u>

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: Q2409-02MSD (Column 1)	COP-SOIL-PILEMSD AR1016	172.5	0	163	ug/kg	94		0		55	146	15
	AR1260	172.5	31	202	ug/kg	99		4		54	119	15
Client Sample ID: Q2409-02MSD (Column 2)	COP-SOIL-PILEMSD AR1016	172.5	0	158	ug/kg	92		3		55	146	15
	AR1260	172.5	28	174	ug/kg	101		3		54	119	15

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8082A</u>
Client:	<u>CDM Smith</u>	Datafile :	<u>PP073290.D</u>

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB168622BS (Column 1)	AR1016	166.6	160	ug/kg	96				71	120		
	AR1260	166.6	159	ug/kg	95				65	130		
PB168622BS (Column 2)	AR1016	166.6	149	ug/kg	89				71	120		
	AR1260	166.6	157	ug/kg	94				65	130		

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168622BL

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: PB168622BL

Lab File ID: PP073289.D

Matrix: (soil/water) Solid

Extraction: (Type) SOXH

Sulfur Cleanup: (Y/N) N

Date Extracted: 06/26/2025

Date Analyzed (1): 06/26/2025

Date Analyzed (2): 06/26/2025

Time Analyzed (1): 12:25

Time Analyzed (2): 12:25

Instrument ID (1): ECD_P

Instrument ID (2): ECD_P

GC Column (1): ZB-MR1 ID: 0.32 (mm)

GC Column (2): ZB-MR2 ID: 0.32 (mm)

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
PB168622BS	PB168622BS	PP073290.D	06/26/2025	06/26/2025
COP-SOIL-PILEMS	Q2409-02MS	PP073292.D	06/26/2025	06/26/2025
COP-SOIL-PILEMSD	Q2409-02MSD	PP073293.D	06/26/2025	06/26/2025
TP-35	Q2413-01	PP073299.D	06/26/2025	06/26/2025
TP-34	Q2413-02	PP073300.D	06/26/2025	06/26/2025
TP-77	Q2413-03	PP073301.D	06/26/2025	06/26/2025
TP-74	Q2413-04	PP073302.D	06/26/2025	06/26/2025
TP-73	Q2413-05	PP073303.D	06/26/2025	06/26/2025
TP-72	Q2413-06	PP073304.D	06/26/2025	06/26/2025

COMMENTS: _____



CALIBRATION SUMMARY

A
B
C
D
E
F
G

Calibration Times: 10:04 20:10

LAB FILE ID: RT 1000 = PP072991.D RT 750 = PP072992.D
RT 500 = PP072993.D RT 250 = PP072994.D RT 050 = PP072995.D

[illegible]

RETENTION TIMES OF INITIAL CALIBRATION

Decachlorobiphenyl	10.19	10.18	10.18	10.19	10.18	10.19	10.09	10.29
Tetrachloro-m-xylene	4.49	4.49	4.49	4.50	4.49	4.49	4.39	4.59

A
B
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A
B
C
D
E
F
G

Calibration Times: 10:04 20:10

ID: 0.32 (mm)

[illegible]

RETENTION TIMES OF INITIAL CALIBRATION

Decachlorobiphenyl	8.80	8.80	8.80	8.80	8.80	8.80	8.70	8.90
Tetrachloro-m-xylene	3.79	3.79	3.79	3.79	3.79	3.79	3.69	3.89

A
B
C
D
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G

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: CAMP02

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

Instrument ID: ECD_P

Calibration Date(s): 06/17/2025 06/17/2025

Calibration Times: 10:04 20:10

GC Column: ZB-MR1 ID: 0.32 (mm)

LAB FILE ID:		CF 1000 = <u>PP072991.D</u>		CF 750 = <u>PP072992.D</u>			
CF 500 = <u>PP072993.D</u>		CF 250 = <u>PP072994.D</u>		CF 050 = <u>PP072995.D</u>			
COMPOUND		CF 1000	CF 750	CF 500	CF 250	CF 050	% RSD
Aroclor-1016-1	(1)	63671603	67644257	70148492	76963128	84930220	12
Aroclor-1016-2	(2)	97440661	102354848	107008936	114458460	98840440	7
Aroclor-1016-3	(3)	59983524	63267185	65041372	73554480	64895380	8
Aroclor-1016-4	(4)	50589003	52912481	54400336	56287652	47214800	7
Aroclor-1016-5	(5)	46240143	47840919	49349310	51433860	55161280	7
Aroclor-1260-1	(1)	82538787	86792979	90284630	94211564	87238820	5
Aroclor-1260-2	(2)	125600539	132072107	137363486	143645412	140737120	5
Aroclor-1260-3	(3)	106201830	111185451	115341698	120182220	117849880	5
Aroclor-1260-4	(4)	98670506	102821608	101520658	108282220	103932620	3
Aroclor-1260-5	(5)	227637841	236485680	245198018	255372264	238418920	4
Decachlorobiphenyl		1620648950	1677444467	1749703060	1784234960	1712434400	4
Tetrachloro-m-xylene		1977356170	2059482187	2109826840	2243117400	2164249200	5
Aroclor-1242-1	(1)	54005130	54512615	57421654	60290804	65956000	8
Aroclor-1242-2	(2)	81931377	79616400	88109514	98852440	84261940	9
Aroclor-1242-3	(3)	50398728	48446856	53645312	57446220	53601300	7
Aroclor-1242-4	(4)	42240385	41710237	44319270	46660108	44861080	5
Aroclor-1242-5	(5)	45003164	45972225	47192024	56790384	52840600	10
Decachlorobiphenyl		1612495640	1627929573	1725341220	1814607120	1610121000	5
Tetrachloro-m-xylene		1888746510	1833283947	1976454780	2024098800	2031619200	4
Aroclor-1248-1	(1)	41858490	44170731	45862520	49041552	56908940	12
Aroclor-1248-2	(2)	55380415	58022209	55617524	59041032	64693660	6
Aroclor-1248-3	(3)	63266998	66239924	62737624	66758520	67243400	3
Aroclor-1248-4	(4)	77728954	82015129	82895984	86036548	96645880	8
Aroclor-1248-5	(5)	75041779	78134308	81070348	82544344	101675060	12
Decachlorobiphenyl		1620420410	1689508547	1707113880	1772211040	1987340600	8
Tetrachloro-m-xylene		1885218090	1960849747	1904121260	1960400040	2044577000	3
Aroclor-1254-1	(1)	73763285	78885443	81757104	88891384	97572240	11
Aroclor-1254-2	(2)	111451506	118674340	123357828	133620984	139899720	9
Aroclor-1254-3	(3)	119235877	126285657	130365552	141133040	139034740	7
Aroclor-1254-4	(4)	108754762	114515340	117946542	128101128	129602040	7
Aroclor-1254-5	(5)	106940669	112254864	115991910	123909512	112185340	6
Decachlorobiphenyl		1648218000	1739306053	1775656020	1935470960	1659491600	7
Tetrachloro-m-xylene		1872735760	1960277133	2019595300	2159825040	2074265000	5
Aroclor-1268-1	(1)	342609292	345928729	355896714	398597476	345083220	7

CALIBRATION FACTOR OF INITIAL CALIBRATION

Aroclor-1268-2	(2)	290418323	293649853	302966618	340918088	297353440	305061264	7
Aroclor-1268-3	(3)	249992898	253511760	262173960	295232256	266657480	265513671	7
Aroclor-1268-4	(4)	114648839	115165531	118059850	128871696	108376940	117024571	6
Aroclor-1268-5	(5)	713831298	735909031	738672980	819932440	689883900	739645930	7
Decachlorobiphenyl		3002859930	3106573307	3204862440	3588507520	3062996400	3193159919	7
Tetrachloro-m-xylene		1965399560	2013897333	2066727860	2334276840	2005844200	2077229159	7

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: CAMP02

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

Instrument ID: ECD_P

Calibration Date(s): 06/17/2025 06/17/2025

Calibration Times: 10:04 20:10

GC Column: ZB-MR2 ID: 0.32 (mm)

LAB FILE ID:		CF 1000 = <u>PP072991.D</u>		CF 750 = <u>PP072992.D</u>			
CF 500 = <u>PP072993.D</u>		CF 250 = <u>PP072994.D</u>		CF 050 = <u>PP072995.D</u>			
COMPOUND		CF 1000	CF 750	CF 500	CF 250	CF 050	% RSD
Aroclor-1016-1	(1)	58734267	64000205	67674152	72695560	80484240	12
Aroclor-1016-2	(2)	90382349	94344453	98038690	104433472	115993580	10
Aroclor-1016-3	(3)	48136215	50748025	53595712	56975444	64125620	11
Aroclor-1016-4	(4)	38107893	40907291	43245840	46954372	53532680	13
Aroclor-1016-5	(5)	49203503	51615780	54910048	58505108	62177080	9
Aroclor-1260-1	(1)	84892100	88579871	95448406	100236824	104495860	9
Aroclor-1260-2	(2)	105588352	108160505	115763440	121715240	130953840	9
Aroclor-1260-3	(3)	96095206	97763095	104346708	109521728	113078520	7
Aroclor-1260-4	(4)	77788306	79915727	86740682	92092068	102155800	11
Aroclor-1260-5	(5)	196041650	198840268	209548214	218270728	244301260	9
Decachlorobiphenyl		1225771100	1248497173	1342901640	1435827000	1420581600	7
Tetrachloro-m-xylene		1662896120	1767446653	1788437460	1893713440	1896490200	5
Aroclor-1242-1	(1)	50070930	49549424	54443442	59214632	62816600	10
Aroclor-1242-2	(2)	73623300	71492977	79469612	84317900	88528280	9
Aroclor-1242-3	(3)	39446084	38282884	42982138	46709656	49104180	11
Aroclor-1242-4	(4)	37721961	36558999	41186366	44840456	47211420	11
Aroclor-1242-5	(5)	49158591	46923105	52837542	55505240	58508140	9
Decachlorobiphenyl		1205418560	1226140693	1281128260	1336855440	1341504000	5
Tetrachloro-m-xylene		1683517200	1544398853	1783586240	1693726480	1780668000	6
Aroclor-1248-1	(1)	39929038	42320627	40002718	45282436	50417100	10
Aroclor-1248-2	(2)	53044396	57410791	53304096	60483108	68735640	11
Aroclor-1248-3	(3)	55822275	59851821	54787908	62834628	69424220	10
Aroclor-1248-4	(4)	64712793	69142612	62749900	72698224	80808780	10
Aroclor-1248-5	(5)	65436447	68813545	68635516	72459776	79814180	8
Decachlorobiphenyl		1226985710	1250965200	1294060880	1349363760	1435080400	6
Tetrachloro-m-xylene		1707872610	1775213400	1595172200	1742416320	1838339400	5
Aroclor-1254-1	(1)	94131500	102369100	108358230	120483728	122907600	11
Aroclor-1254-2	(2)	80645865	88030495	92596756	103733056	107725280	12
Aroclor-1254-3	(3)	128776319	138178049	147317104	161124892	162339800	10
Aroclor-1254-4	(4)	83562949	90268741	96675708	106896836	108101020	11
Aroclor-1254-5	(5)	116424396	122854644	129598642	142067368	138868340	8
Decachlorobiphenyl		1234350420	1314370427	1354328000	1438665160	1427909200	6
Tetrachloro-m-xylene		1670033590	1775346533	1836392320	1937020080	1788575000	5
Aroclor-1268-1	(1)	263809069	277704169	280800266	313024424	300977600	7

CALIBRATION FACTOR OF INITIAL CALIBRATION

Aroclor-1268-2	(2)	236468443	251452185	251704404	280300416	265662900	257117670	6
Aroclor-1268-3	(3)	197435098	210533244	211556648	231588560	228588480	215940406	7
Aroclor-1268-4	(4)	83966367	90997261	93004838	103484904	99474300	94185534	8
Aroclor-1268-5	(5)	544182935	572449871	587387342	623593632	566405340	578803824	5
Decachlorobiphenyl		2216214780	2314031280	2438938620	2677731000	2452104000	2419803936	7
Tetrachloro-m-xylene		1798342890	1816167067	1835922080	2018457320	1810038400	1855785551	5

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: CAMP02

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

Instrument ID: ECD_P Date(s) Analyzed: 06/17/2025 06/17/2025

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	500	1	4.69	4.59	4.79	24659200
		2	4.78	4.68	4.88	20179000
		3	4.85	4.75	4.95	61551400
		4	0.00			0
		5	0.00			0
Aroclor-1232	500	1	4.86	4.76	4.96	46956200
		2	5.38	5.28	5.48	22369800
		3	5.67	5.57	5.77	51597600
		4	5.83	5.73	5.93	25810400
		5	5.92	5.82	6.02	35670200
Aroclor-1262	500	1	8.07	7.97	8.17	148023000
		2	8.39	8.29	8.49	316466000
		3	8.70	8.60	8.80	213972000
		4	8.79	8.69	8.89	157593000
		5	9.44	9.34	9.54	111864000

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: CAMP02

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

Instrument ID: ECD_P Date(s) Analyzed: 06/17/2025 06/17/2025

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	500	1	4.00	3.90	4.10	26872400
		2	4.09	3.99	4.19	20185400
		3	4.16	4.06	4.26	58732000
		4	0.00			0
		5	0.00			0
Aroclor-1232	500	1	4.16	4.06	4.26	45564800
		2	4.89	4.79	4.99	46259800
		3	5.06	4.96	5.16	24558000
		4	5.15	5.05	5.25	21625200
		5	5.32	5.22	5.42	22858800
Aroclor-1262	500	1	6.90	6.80	7.00	144467000
		2	7.16	7.06	7.26	122231000
		3	7.68	7.58	7.78	112703000
		4	7.75	7.65	7.85	183356000
		5	8.24	8.14	8.34	86585200

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 09:04 Initial Calibration Time(s): 10:04 20:10

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	5.64	5.65	5.55	5.75	0.01
Aroclor-1016-2	(2)	5.66	5.67	5.57	5.77	0.01
Aroclor-1016-3	(3)	5.73	5.73	5.63	5.83	0.01
Aroclor-1016-4	(4)	5.82	5.83	5.73	5.93	0.01
Aroclor-1016-5	(5)	6.11	6.12	6.02	6.22	0.01
Aroclor-1260-1	(1)	7.23	7.24	7.14	7.34	0.01
Aroclor-1260-2	(2)	7.49	7.49	7.39	7.59	0.00
Aroclor-1260-3	(3)	7.84	7.85	7.75	7.95	0.01
Aroclor-1260-4	(4)	8.07	8.07	7.97	8.17	0.00
Aroclor-1260-5	(5)	8.38	8.39	8.29	8.49	0.01
Tetrachloro-m-xylene		4.49	4.49	4.39	4.59	0.00
Decachlorobiphenyl		10.18	10.19	10.09	10.29	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 09:04 Initial Calibration Time(s): 10:04 20:10

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	4.86	4.87	4.77	4.97	0.01
Aroclor-1016-2	(2)	4.88	4.89	4.79	4.99	0.01
Aroclor-1016-3	(3)	5.06	5.06	4.96	5.16	0.00
Aroclor-1016-4	(4)	5.10	5.10	5.00	5.20	0.00
Aroclor-1016-5	(5)	5.31	5.32	5.22	5.42	0.01
Aroclor-1260-1	(1)	6.34	6.35	6.25	6.45	0.01
Aroclor-1260-2	(2)	6.53	6.54	6.44	6.64	0.01
Aroclor-1260-3	(3)	6.68	6.69	6.59	6.79	0.01
Aroclor-1260-4	(4)	7.15	7.16	7.06	7.26	0.01
Aroclor-1260-5	(5)	7.40	7.40	7.30	7.50	0.01
Tetrachloro-m-xylene		3.78	3.79	3.69	3.89	0.01
Decachlorobiphenyl		8.79	8.80	8.70	8.90	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL01 Date Analyzed: 06/26/2025

Lab Sample No.: AR1660CCC500 Data File : PP073279.D Time Analyzed: 09:04

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	5.641	5.546	5.746	485.990	500.000	-2.8
Aroclor-1016-2	5.662	5.567	5.767	533.210	500.000	6.6
Aroclor-1016-3	5.725	5.629	5.829	520.180	500.000	4.0
Aroclor-1016-4	5.822	5.727	5.927	549.860	500.000	10.0
Aroclor-1016-5	6.114	6.019	6.219	524.760	500.000	5.0
Aroclor-1260-1	7.231	7.136	7.336	560.880	500.000	12.2
Aroclor-1260-2	7.485	7.389	7.589	543.950	500.000	8.8
Aroclor-1260-3	7.842	7.747	7.947	544.400	500.000	8.9
Aroclor-1260-4	8.066	7.971	8.171	548.260	500.000	9.7
Aroclor-1260-5	8.384	8.288	8.488	516.290	500.000	3.3
Decachlorobiphenyl	10.181	10.087	10.287	50.830	50.000	1.7
Tetrachloro-m-xylene	4.490	4.394	4.594	51.690	50.000	3.4

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL01 Date Analyzed: 06/26/2025

Lab Sample No.: AR1660CCC500 Data File : PP073279.D Time Analyzed: 09:04

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Aroclor-1016-1	4.862	4.768	4.968	473.800	500.000	-5.2
Aroclor-1016-2	4.880	4.786	4.986	482.540	500.000	-3.5
Aroclor-1016-3	5.056	4.962	5.162	483.380	500.000	-3.3
Aroclor-1016-4	5.098	5.004	5.204	477.720	500.000	-4.5
Aroclor-1016-5	5.312	5.218	5.418	546.190	500.000	9.2
Aroclor-1260-1	6.342	6.249	6.449	495.490	500.000	-0.9
Aroclor-1260-2	6.531	6.438	6.638	513.470	500.000	2.7
Aroclor-1260-3	6.683	6.589	6.789	485.640	500.000	-2.9
Aroclor-1260-4	7.152	7.060	7.260	489.320	500.000	-2.1
Aroclor-1260-5	7.395	7.302	7.502	489.940	500.000	-2.0
Decachlorobiphenyl	8.788	8.697	8.897	50.670	50.000	1.3
Tetrachloro-m-xylene	3.783	3.688	3.888	47.840	50.000	-4.3

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 14:37 Initial Calibration Time(s): 10:04 20:10

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
Aroclor-1016-1	(1)	5.64	5.65	5.55	5.75	0.01
Aroclor-1016-2	(2)	5.67	5.67	5.57	5.77	0.01
Aroclor-1016-3	(3)	5.73	5.73	5.63	5.83	0.00
Aroclor-1016-4	(4)	5.82	5.83	5.73	5.93	0.01
Aroclor-1016-5	(5)	6.12	6.12	6.02	6.22	0.00
Aroclor-1260-1	(1)	7.23	7.24	7.14	7.34	0.01
Aroclor-1260-2	(2)	7.49	7.49	7.39	7.59	0.00
Aroclor-1260-3	(3)	7.84	7.85	7.75	7.95	0.01
Aroclor-1260-4	(4)	8.07	8.07	7.97	8.17	0.00
Aroclor-1260-5	(5)	8.39	8.39	8.29	8.49	0.00
Tetrachloro-m-xylene		4.49	4.49	4.39	4.59	0.00
Decachlorobiphenyl		10.18	10.19	10.09	10.29	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 14:37 Initial Calibration Time(s): 10:04 20:10

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	4.87	4.87	4.77	4.97	0.01
Aroclor-1016-2	(2)	4.88	4.89	4.79	4.99	0.01
Aroclor-1016-3	(3)	5.06	5.06	4.96	5.16	0.00
Aroclor-1016-4	(4)	5.10	5.10	5.00	5.20	0.00
Aroclor-1016-5	(5)	5.31	5.32	5.22	5.42	0.01
Aroclor-1260-1	(1)	6.34	6.35	6.25	6.45	0.01
Aroclor-1260-2	(2)	6.53	6.54	6.44	6.64	0.01
Aroclor-1260-3	(3)	6.69	6.69	6.59	6.79	0.01
Aroclor-1260-4	(4)	7.16	7.16	7.06	7.26	0.00
Aroclor-1260-5	(5)	7.40	7.40	7.30	7.50	0.00
Tetrachloro-m-xylene		3.79	3.79	3.69	3.89	0.00
Decachlorobiphenyl		8.79	8.80	8.70	8.90	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL02 Date Analyzed: 06/26/2025

Lab Sample No.: AR1660CCC500 Data File : PP073294.D Time Analyzed: 14:37

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	5.643	5.546	5.746	477.730	500.000	-4.5
Aroclor-1016-2	5.665	5.567	5.767	514.610	500.000	2.9
Aroclor-1016-3	5.727	5.629	5.829	507.950	500.000	1.6
Aroclor-1016-4	5.824	5.727	5.927	534.040	500.000	6.8
Aroclor-1016-5	6.116	6.019	6.219	509.130	500.000	1.8
Aroclor-1260-1	7.233	7.136	7.336	554.370	500.000	10.9
Aroclor-1260-2	7.486	7.389	7.589	530.980	500.000	6.2
Aroclor-1260-3	7.844	7.747	7.947	525.830	500.000	5.2
Aroclor-1260-4	8.068	7.971	8.171	527.090	500.000	5.4
Aroclor-1260-5	8.386	8.288	8.488	505.830	500.000	1.2
Decachlorobiphenyl	10.182	10.087	10.287	51.630	50.000	3.3
Tetrachloro-m-xylene	4.492	4.394	4.594	49.270	50.000	-1.5

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL02 Date Analyzed: 06/26/2025

Lab Sample No.: AR1660CCC500 Data File : PP073294.D Time Analyzed: 14:37

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.865	4.768	4.968	475.950	500.000	-4.8
Aroclor-1016-2	4.882	4.786	4.986	486.130	500.000	-2.8
Aroclor-1016-3	5.059	4.962	5.162	484.990	500.000	-3.0
Aroclor-1016-4	5.100	5.004	5.204	478.600	500.000	-4.3
Aroclor-1016-5	5.314	5.218	5.418	545.720	500.000	9.1
Aroclor-1260-1	6.344	6.249	6.449	518.030	500.000	3.6
Aroclor-1260-2	6.534	6.438	6.638	531.220	500.000	6.2
Aroclor-1260-3	6.685	6.589	6.789	499.440	500.000	-0.1
Aroclor-1260-4	7.155	7.060	7.260	498.560	500.000	-0.3
Aroclor-1260-5	7.396	7.302	7.502	503.650	500.000	0.7
Decachlorobiphenyl	8.790	8.697	8.897	52.420	50.000	4.8
Tetrachloro-m-xylene	3.786	3.688	3.888	49.210	50.000	-1.6

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 19:30 Initial Calibration Time(s): 10:04 20:10

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	5.64	5.65	5.55	5.75	0.01
Aroclor-1016-2	(2)	5.66	5.67	5.57	5.77	0.01
Aroclor-1016-3	(3)	5.72	5.73	5.63	5.83	0.01
Aroclor-1016-4	(4)	5.82	5.83	5.73	5.93	0.01
Aroclor-1016-5	(5)	6.11	6.12	6.02	6.22	0.01
Aroclor-1260-1	(1)	7.23	7.24	7.14	7.34	0.01
Aroclor-1260-2	(2)	7.48	7.49	7.39	7.59	0.01
Aroclor-1260-3	(3)	7.84	7.85	7.75	7.95	0.01
Aroclor-1260-4	(4)	8.07	8.07	7.97	8.17	0.01
Aroclor-1260-5	(5)	8.38	8.39	8.29	8.49	0.01
Tetrachloro-m-xylene		4.49	4.49	4.39	4.59	0.00
Decachlorobiphenyl		10.18	10.19	10.09	10.29	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/26/2025 Initial Calibration Date(s): 06/17/2025 06/17/2025

Continuing Calib Time: 19:30 Initial Calibration Time(s): 10:04 20:10

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
Aroclor-1016-1	(1)	4.88	4.87	4.77	4.97	-0.01
Aroclor-1016-2	(2)	4.90	4.89	4.79	4.99	-0.01
Aroclor-1016-3	(3)	5.08	5.06	4.96	5.16	-0.02
Aroclor-1016-4	(4)	5.12	5.10	5.00	5.20	-0.02
Aroclor-1016-5	(5)	5.33	5.32	5.22	5.42	-0.01
Aroclor-1260-1	(1)	6.37	6.35	6.25	6.45	-0.01
Aroclor-1260-2	(2)	6.55	6.54	6.44	6.64	-0.01
Aroclor-1260-3	(3)	6.71	6.69	6.59	6.79	-0.02
Aroclor-1260-4	(4)	7.18	7.16	7.06	7.26	-0.02
Aroclor-1260-5	(5)	7.42	7.40	7.30	7.50	-0.02
Tetrachloro-m-xylene		3.81	3.79	3.69	3.89	-0.02
Decachlorobiphenyl		8.81	8.80	8.70	8.90	-0.01

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL03 Date Analyzed: 06/26/2025

Lab Sample No.: AR1660CCC500 Data File : PP073309.D Time Analyzed: 19:30

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Aroclor-1016-1	5.640	5.546	5.746	451.620	500.000	-9.7
Aroclor-1016-2	5.662	5.567	5.767	494.360	500.000	-1.1
Aroclor-1016-3	5.724	5.629	5.829	490.840	500.000	-1.8
Aroclor-1016-4	5.821	5.727	5.927	522.060	500.000	4.4
Aroclor-1016-5	6.113	6.019	6.219	481.760	500.000	-3.6
Aroclor-1260-1	7.230	7.136	7.336	513.110	500.000	2.6
Aroclor-1260-2	7.483	7.389	7.589	481.840	500.000	-3.6
Aroclor-1260-3	7.842	7.747	7.947	473.110	500.000	-5.4
Aroclor-1260-4	8.065	7.971	8.171	460.670	500.000	-7.9
Aroclor-1260-5	8.383	8.288	8.488	459.970	500.000	-8.0
Decachlorobiphenyl	10.178	10.087	10.287	47.810	50.000	-4.4
Tetrachloro-m-xylene	4.490	4.394	4.594	47.870	50.000	-4.3

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/17/2025 06/17/2025

Client Sample No.: CCAL03 Date Analyzed: 06/26/2025

Lab Sample No.: AR1660CCC500 Data File : PP073309.D Time Analyzed: 19:30

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Aroclor-1016-1	4.884	4.768	4.968	487.530	500.000	-2.5
Aroclor-1016-2	4.902	4.786	4.986	475.770	500.000	-4.8
Aroclor-1016-3	5.079	4.962	5.162	480.790	500.000	-3.8
Aroclor-1016-4	5.121	5.004	5.204	474.850	500.000	-5.0
Aroclor-1016-5	5.334	5.218	5.418	533.340	500.000	6.7
Aroclor-1260-1	6.365	6.249	6.449	483.000	500.000	-3.4
Aroclor-1260-2	6.554	6.438	6.638	508.980	500.000	1.8
Aroclor-1260-3	6.706	6.589	6.789	485.230	500.000	-3.0
Aroclor-1260-4	7.175	7.060	7.260	463.340	500.000	-7.3
Aroclor-1260-5	7.417	7.302	7.502	476.860	500.000	-4.6
Decachlorobiphenyl	8.811	8.697	8.897	51.100	50.000	2.2
Tetrachloro-m-xylene	3.806	3.688	3.888	49.010	50.000	-2.0

Analytical Sequence

Client: CDM Smith	SDG No.: Q2413	
Project: South River WM Replacement	Instrument ID: ECD_P	
GC Column: ZB-MR1	ID: 0.32 (mm)	Inst. Calib. Date(s): 06/17/2025 06/17/2025

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
IBLK	IBLK	06/17/2025	09:47	PP072990.D	10.19	4.49
AR1660ICC1000	AR1660ICC1000	06/17/2025	10:04	PP072991.D	10.19	4.49
AR1660ICC750	AR1660ICC750	06/17/2025	10:20	PP072992.D	10.19	4.49
AR1660ICC500	AR1660ICC500	06/17/2025	10:37	PP072993.D	10.19	4.49
AR1660ICC250	AR1660ICC250	06/17/2025	10:53	PP072994.D	10.19	4.49
AR1660ICC050	AR1660ICC050	06/17/2025	11:43	PP072995.D	10.19	4.50
AR1221ICC500	AR1221ICC500	06/17/2025	12:00	PP072996.D	10.18	4.49
AR1232ICC500	AR1232ICC500	06/17/2025	12:16	PP072997.D	10.19	4.50
AR1242ICC1000	AR1242ICC1000	06/17/2025	14:27	PP072998.D	10.19	4.49
AR1242ICC750	AR1242ICC750	06/17/2025	14:43	PP072999.D	10.19	4.49
AR1242ICC500	AR1242ICC500	06/17/2025	15:00	PP073000.D	10.19	4.49
AR1242ICC250	AR1242ICC250	06/17/2025	15:16	PP073001.D	10.19	4.49
AR1242ICC050	AR1242ICC050	06/17/2025	15:32	PP073002.D	10.18	4.49
AR1248ICC1000	AR1248ICC1000	06/17/2025	15:49	PP073003.D	10.19	4.49
AR1248ICC750	AR1248ICC750	06/17/2025	16:21	PP073004.D	10.19	4.49
AR1248ICC500	AR1248ICC500	06/17/2025	16:37	PP073005.D	10.19	4.49
AR1248ICC250	AR1248ICC250	06/17/2025	16:54	PP073006.D	10.19	4.49
AR1248ICC050	AR1248ICC050	06/17/2025	17:10	PP073007.D	10.18	4.49
AR1254ICC1000	AR1254ICC1000	06/17/2025	17:26	PP073008.D	10.19	4.49
AR1254ICC750	AR1254ICC750	06/17/2025	17:43	PP073009.D	10.19	4.49
AR1254ICC500	AR1254ICC500	06/17/2025	17:59	PP073010.D	10.19	4.49
AR1254ICC250	AR1254ICC250	06/17/2025	18:15	PP073011.D	10.19	4.49
AR1254ICC050	AR1254ICC050	06/17/2025	18:32	PP073012.D	10.19	4.49
AR1262ICC500	AR1262ICC500	06/17/2025	18:48	PP073013.D	10.19	4.49
AR1268ICC1000	AR1268ICC1000	06/17/2025	19:04	PP073014.D	10.19	4.49
AR1268ICC750	AR1268ICC750	06/17/2025	19:21	PP073015.D	10.18	4.49
AR1268ICC500	AR1268ICC500	06/17/2025	19:37	PP073016.D	10.18	4.49
AR1268ICC250	AR1268ICC250	06/17/2025	19:53	PP073017.D	10.19	4.50
AR1268ICC050	AR1268ICC050	06/17/2025	20:10	PP073018.D	10.18	4.49
AR1660CCC500	AR1660CCC500	06/26/2025	09:04	PP073279.D	10.18	4.49
IBLK	IBLK	06/26/2025	10:09	PP073283.D	10.18	4.49
PB168622BL	PB168622BL	06/26/2025	12:25	PP073289.D	10.18	4.49
PB168622BS	PB168622BS	06/26/2025	12:42	PP073290.D	10.18	4.49
COP-SOIL-PILEMS	Q2409-02MS	06/26/2025	13:15	PP073292.D	10.18	4.49
COP-SOIL-PILEMSD	Q2409-02MSD	06/26/2025	13:31	PP073293.D	10.18	4.49
AR1660CCC500	AR1660CCC500	06/26/2025	14:37	PP073294.D	10.18	4.49
IBLK	IBLK	06/26/2025	15:42	PP073298.D	10.18	4.49
TP-35	Q2413-01	06/26/2025	15:58	PP073299.D	10.18	4.49
TP-34	Q2413-02	06/26/2025	16:15	PP073300.D	10.18	4.49
TP-77	Q2413-03	06/26/2025	16:31	PP073301.D	10.18	4.49
TP-74	Q2413-04	06/26/2025	16:47	PP073302.D	10.18	4.49
TP-73	Q2413-05	06/26/2025	17:04	PP073303.D	10.18	4.49

Analytical Sequence

TP-72	Q2413-06	06/26/2025	17:20	PP073304.D	10.18	4.49
AR1660CCC500	AR1660CCC500	06/26/2025	19:30	PP073309.D	10.18	4.49
LBLK	LBLK	06/26/2025	20:35	PP073313.D	10.18	4.49

Analytical Sequence

Client: CDM Smith	SDG No.: Q2413	
Project: South River WM Replacement	Instrument ID: ECD_P	
GC Column: ZB-MR2	ID: 0.32 (mm)	Inst. Calib. Date(s): 06/17/2025 06/17/2025

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
IBLK	IBLK	06/17/2025	09:47	PP072990.D	8.80	3.79
AR1660ICC1000	AR1660ICC1000	06/17/2025	10:04	PP072991.D	8.80	3.79
AR1660ICC750	AR1660ICC750	06/17/2025	10:20	PP072992.D	8.80	3.79
AR1660ICC500	AR1660ICC500	06/17/2025	10:37	PP072993.D	8.80	3.79
AR1660ICC250	AR1660ICC250	06/17/2025	10:53	PP072994.D	8.80	3.79
AR1660ICC050	AR1660ICC050	06/17/2025	11:43	PP072995.D	8.80	3.79
AR1221ICC500	AR1221ICC500	06/17/2025	12:00	PP072996.D	8.80	3.79
AR1232ICC500	AR1232ICC500	06/17/2025	12:16	PP072997.D	8.80	3.79
AR1242ICC1000	AR1242ICC1000	06/17/2025	14:27	PP072998.D	8.80	3.79
AR1242ICC750	AR1242ICC750	06/17/2025	14:43	PP072999.D	8.80	3.79
AR1242ICC500	AR1242ICC500	06/17/2025	15:00	PP073000.D	8.80	3.79
AR1242ICC250	AR1242ICC250	06/17/2025	15:16	PP073001.D	8.80	3.79
AR1242ICC050	AR1242ICC050	06/17/2025	15:32	PP073002.D	8.80	3.79
AR1248ICC1000	AR1248ICC1000	06/17/2025	15:49	PP073003.D	8.80	3.79
AR1248ICC750	AR1248ICC750	06/17/2025	16:21	PP073004.D	8.80	3.79
AR1248ICC500	AR1248ICC500	06/17/2025	16:37	PP073005.D	8.80	3.79
AR1248ICC250	AR1248ICC250	06/17/2025	16:54	PP073006.D	8.80	3.79
AR1248ICC050	AR1248ICC050	06/17/2025	17:10	PP073007.D	8.80	3.79
AR1254ICC1000	AR1254ICC1000	06/17/2025	17:26	PP073008.D	8.80	3.79
AR1254ICC750	AR1254ICC750	06/17/2025	17:43	PP073009.D	8.80	3.79
AR1254ICC500	AR1254ICC500	06/17/2025	17:59	PP073010.D	8.80	3.79
AR1254ICC250	AR1254ICC250	06/17/2025	18:15	PP073011.D	8.80	3.79
AR1254ICC050	AR1254ICC050	06/17/2025	18:32	PP073012.D	8.80	3.79
AR1262ICC500	AR1262ICC500	06/17/2025	18:48	PP073013.D	8.80	3.79
AR1268ICC1000	AR1268ICC1000	06/17/2025	19:04	PP073014.D	8.80	3.79
AR1268ICC750	AR1268ICC750	06/17/2025	19:21	PP073015.D	8.80	3.79
AR1268ICC500	AR1268ICC500	06/17/2025	19:37	PP073016.D	8.80	3.79
AR1268ICC250	AR1268ICC250	06/17/2025	19:53	PP073017.D	8.80	3.79
AR1268ICC050	AR1268ICC050	06/17/2025	20:10	PP073018.D	8.80	3.79
AR1660CCC500	AR1660CCC500	06/26/2025	09:04	PP073279.D	8.79	3.78
IBLK	IBLK	06/26/2025	10:09	PP073283.D	8.79	3.78
PB168622BL	PB168622BL	06/26/2025	12:25	PP073289.D	8.79	3.79
PB168622BS	PB168622BS	06/26/2025	12:42	PP073290.D	8.79	3.79
COP-SOIL-PILEMS	Q2409-02MS	06/26/2025	13:15	PP073292.D	8.79	3.79
COP-SOIL-PILEMSD	Q2409-02MSD	06/26/2025	13:31	PP073293.D	8.79	3.79
AR1660CCC500	AR1660CCC500	06/26/2025	14:37	PP073294.D	8.79	3.79
IBLK	IBLK	06/26/2025	15:42	PP073298.D	8.79	3.78
TP-35	Q2413-01	06/26/2025	15:58	PP073299.D	8.79	3.79
TP-34	Q2413-02	06/26/2025	16:15	PP073300.D	8.79	3.79
TP-77	Q2413-03	06/26/2025	16:31	PP073301.D	8.79	3.79
TP-74	Q2413-04	06/26/2025	16:47	PP073302.D	8.79	3.79
TP-73	Q2413-05	06/26/2025	17:04	PP073303.D	8.79	3.79

Analytical Sequence

TP-72	Q2413-06	06/26/2025	17:20	PP073304.D	8.79	3.79
AR1660CCC500	AR1660CCC500	06/26/2025	19:30	PP073309.D	8.81	3.81
I.BLK	I.BLK	06/26/2025	20:35	PP073313.D	8.79	3.78



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168622BL	SDG No.:	Q2413
Lab Sample ID:	PB168622BL	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	100
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073289.D	1	06/26/25 08:20	06/26/25 12:25	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	3.90	U	3.90	17.0	ug/kg
11104-28-2	Aroclor-1221	4.00	U	4.00	17.0	ug/kg
11141-16-5	Aroclor-1232	3.70	U	3.70	17.0	ug/kg
53469-21-9	Aroclor-1242	4.00	U	4.00	17.0	ug/kg
12672-29-6	Aroclor-1248	5.90	U	5.90	17.0	ug/kg
11097-69-1	Aroclor-1254	3.20	U	3.20	17.0	ug/kg
37324-23-5	Aroclor-1262	5.00	U	5.00	17.0	ug/kg
11100-14-4	Aroclor-1268	3.60	U	3.60	17.0	ug/kg
11096-82-5	Aroclor-1260	3.20	U	3.20	17.0	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	19.3		32 - 144	96%	SPK: 20
2051-24-3	Decachlorobiphenyl	21.1		32 - 175	106%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/17/25
Project:	South River WM Replacement	Date Received:	06/17/25
Client Sample ID:	PIBLK-PP072990.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PP072990.D	Matrix:	WATER
Analytical Method:	8082A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	5030	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP072990.D	1		06/17/25	pp061725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.097	U	0.097	0.50	ug/L
11104-28-2	Aroclor-1221	0.13	U	0.13	0.50	ug/L
11141-16-5	Aroclor-1232	0.096	U	0.096	0.50	ug/L
53469-21-9	Aroclor-1242	0.12	U	0.12	0.50	ug/L
12672-29-6	Aroclor-1248	0.071	U	0.071	0.50	ug/L
11097-69-1	Aroclor-1254	0.094	U	0.094	0.50	ug/L
11096-82-5	Aroclor-1260	0.081	U	0.081	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.11	U	0.11	0.50	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	17.3		60 - 140	86%	SPK: 20
2051-24-3	Decachlorobiphenyl	17.2		60 - 140	86%	SPK: 20

Comments:

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Report of Analysis

Client:	CDM Smith	Date Collected:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	PIBLK-PP073283.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PP073283.D	Matrix:	WATER
Analytical Method:	8082A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	5030	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073283.D	1		06/26/25	pp062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.097	U	0.097	0.50	ug/L
11104-28-2	Aroclor-1221	0.13	U	0.13	0.50	ug/L
11141-16-5	Aroclor-1232	0.096	U	0.096	0.50	ug/L
53469-21-9	Aroclor-1242	0.12	U	0.12	0.50	ug/L
12672-29-6	Aroclor-1248	0.071	U	0.071	0.50	ug/L
11097-69-1	Aroclor-1254	0.094	U	0.094	0.50	ug/L
11096-82-5	Aroclor-1260	0.081	U	0.081	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.11	U	0.11	0.50	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	18.8		60 - 140	94%	SPK: 20
2051-24-3	Decachlorobiphenyl	18.6		60 - 140	93%	SPK: 20

Comments:

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M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

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S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	PIBLK-PP073298.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PP073298.D	Matrix:	WATER
Analytical Method:	8082A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	5030	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073298.D	1		06/26/25	pp062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.097	U	0.097	0.50	ug/L
11104-28-2	Aroclor-1221	0.13	U	0.13	0.50	ug/L
11141-16-5	Aroclor-1232	0.096	U	0.096	0.50	ug/L
53469-21-9	Aroclor-1242	0.12	U	0.12	0.50	ug/L
12672-29-6	Aroclor-1248	0.071	U	0.071	0.50	ug/L
11097-69-1	Aroclor-1254	0.094	U	0.094	0.50	ug/L
11096-82-5	Aroclor-1260	0.081	U	0.081	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.11	U	0.11	0.50	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	18.3		60 - 140	91%	SPK: 20
2051-24-3	Decachlorobiphenyl	18.9		60 - 140	95%	SPK: 20

Comments:

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M = MS/MSD acceptance criteria did not meet requirements

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B = Analyte Found in Associated Method Blank

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* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	PIBLK-PP073313.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PP073313.D	Matrix:	WATER
Analytical Method:	8082A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	5030	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073313.D	1		06/26/25	pp062625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
12674-11-2	Aroclor-1016	0.097	U	0.097	0.50	ug/L
11104-28-2	Aroclor-1221	0.13	U	0.13	0.50	ug/L
11141-16-5	Aroclor-1232	0.096	U	0.096	0.50	ug/L
53469-21-9	Aroclor-1242	0.12	U	0.12	0.50	ug/L
12672-29-6	Aroclor-1248	0.071	U	0.071	0.50	ug/L
11097-69-1	Aroclor-1254	0.094	U	0.094	0.50	ug/L
11096-82-5	Aroclor-1260	0.081	U	0.081	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.11	U	0.11	0.50	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	17.4		60 - 140	87%	SPK: 20
2051-24-3	Decachlorobiphenyl	16.9		60 - 140	85%	SPK: 20

Comments:

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M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

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D = Dilution

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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168622BS	SDG No.:	Q2413
Lab Sample ID:	PB168622BS	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	100
Sample Wt/Vol:	30.02	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073290.D	1	06/26/25 08:20	06/26/25 12:42	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	160		3.90	17.0	ug/kg
11104-28-2	Aroclor-1221	4.00	U	4.00	17.0	ug/kg
11141-16-5	Aroclor-1232	3.70	U	3.70	17.0	ug/kg
53469-21-9	Aroclor-1242	4.00	U	4.00	17.0	ug/kg
12672-29-6	Aroclor-1248	5.90	U	5.90	17.0	ug/kg
11097-69-1	Aroclor-1254	3.20	U	3.20	17.0	ug/kg
37324-23-5	Aroclor-1262	5.00	U	5.00	17.0	ug/kg
11100-14-4	Aroclor-1268	3.60	U	3.60	17.0	ug/kg
11096-82-5	Aroclor-1260	159		3.20	17.0	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	20.2		32 - 144	101%	SPK: 20
2051-24-3	Decachlorobiphenyl	23.0		32 - 175	115%	SPK: 20

Comments:

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B = Analyte Found in Associated Method Blank

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S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	COP-SOIL-PILEMS	SDG No.:	Q2413
Lab Sample ID:	Q2409-02MS	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	96.4
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073292.D	1	06/26/25 08:20	06/26/25 13:15	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	163		4.10	17.6	ug/kg
11104-28-2	Aroclor-1221	4.20	U	4.20	17.6	ug/kg
11141-16-5	Aroclor-1232	3.90	U	3.90	17.6	ug/kg
53469-21-9	Aroclor-1242	4.20	U	4.20	17.6	ug/kg
12672-29-6	Aroclor-1248	6.10	U	6.10	17.6	ug/kg
11097-69-1	Aroclor-1254	135		3.30	17.6	ug/kg
37324-23-5	Aroclor-1262	5.20	U	5.20	17.6	ug/kg
11100-14-4	Aroclor-1268	3.70	U	3.70	17.6	ug/kg
11096-82-5	Aroclor-1260	195		3.30	17.6	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	20.0		32 - 144	100%	SPK: 20
2051-24-3	Decachlorobiphenyl	22.7		32 - 175	113%	SPK: 20

Comments:

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D = Dilution

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Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	COP-SOIL-PILEMSD	SDG No.:	Q2413
Lab Sample ID:	Q2409-02MSD	Matrix:	SOIL
Analytical Method:	8082A	% Solid:	96.4
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	PCB
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP073293.D	1	06/26/25 08:20	06/26/25 13:31	PB168622

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
12674-11-2	Aroclor-1016	163		4.10	17.6	ug/kg
11104-28-2	Aroclor-1221	4.20	U	4.20	17.6	ug/kg
11141-16-5	Aroclor-1232	3.90	U	3.90	17.6	ug/kg
53469-21-9	Aroclor-1242	4.20	U	4.20	17.6	ug/kg
12672-29-6	Aroclor-1248	6.10	U	6.10	17.6	ug/kg
11097-69-1	Aroclor-1254	126		3.30	17.6	ug/kg
37324-23-5	Aroclor-1262	5.20	U	5.20	17.6	ug/kg
11100-14-4	Aroclor-1268	3.70	U	3.70	17.6	ug/kg
11096-82-5	Aroclor-1260	202		3.30	17.6	ug/kg
SURROGATES						
877-09-8	Tetrachloro-m-xylene	19.3		32 - 144	97%	SPK: 20
2051-24-3	Decachlorobiphenyl	23.0		32 - 175	115%	SPK: 20

Comments:

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MDL = Method Detection Limit

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LAB CHRONICLE

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

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2413-01	TP-35	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			Herbicide	8151A		06/26/25	06/27/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-02	TP-34	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			Herbicide	8151A		06/26/25	06/27/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-03	TP-77	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			Herbicide	8151A		06/26/25	06/27/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-04	TP-74	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	07/01/25	
			Herbicide	8151A		06/26/25	06/27/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-05	TP-73	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	07/01/25	
			Herbicide	8151A		06/26/25	06/27/25	

LAB CHRONICLE

Q2413-06	TP-72	SOIL	PCB	8082A	06/26/25	06/26/25	06/24/25	06/24/25
			Pesticide-TCL	8081B	06/26/25	06/27/25		
			Gasoline Range Organics	8015D		06/26/25		
		Diesel Range Organics	8015D	06/30/25	07/01/25			
		Gasoline Range Organics	8015D		06/26/25			
		Herbicide	8151A	06/26/25	06/27/25			
		PCB	8082A	06/26/25	06/26/25			
		Pesticide-TCL	8081B	06/26/25	06/27/25			

A

B

C

D

E

F

G

H



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

Hit Summary Sheet
SW-846

SDG No.: Q2413

Order ID: Q2413

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
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Client ID :

Total Concentration: 0.000

A
B
C
D
E
F
G
H



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	88.8
Sample Wt/Vol:	30.04	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	8151A		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030844.D	1	06/26/25 13:00	06/27/25 19:29	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	8.70	U	8.70	75.4	ug/Kg
120-36-5	DICHLORPROP	14.4	U	14.4	75.4	ug/Kg
94-75-7	2,4-D	10.2	U	10.2	75.4	ug/Kg
93-72-1	2,4,5-TP (Silvex)	10.2	U	10.2	75.4	ug/Kg
93-76-5	2,4,5-T	9.80	U	9.80	75.4	ug/Kg
94-82-6	2,4-DB	27.2	U	27.2	75.4	ug/Kg
88-85-7	DINOSEB	12.1	U	12.1	75.4	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	232		10 - 141	46%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	92
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030845.D	1	06/26/25 13:00	06/27/25 19:53	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	8.40	U	8.40	72.7	ug/Kg
120-36-5	DICHLORPROP	13.9	U	13.9	72.7	ug/Kg
94-75-7	2,4-D	9.80	U	9.80	72.7	ug/Kg
93-72-1	2,4,5-TP (Silvex)	9.80	U	9.80	72.7	ug/Kg
93-76-5	2,4,5-T	9.40	U	9.40	72.7	ug/Kg
94-82-6	2,4-DB	26.3	U	26.3	72.7	ug/Kg
88-85-7	DINOSEB	11.7	U	11.7	72.7	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	289		10 - 141	58%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

E = Value Exceeds Calibration Range

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	91.4
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030846.D	1	06/26/25 13:00	06/27/25 20:17	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	8.50	U	8.50	73.3	ug/Kg
120-36-5	DICHLORPROP	14.0	U	14.0	73.3	ug/Kg
94-75-7	2,4-D	9.90	U	9.90	73.3	ug/Kg
93-72-1	2,4,5-TP (Silvex)	9.90	U	9.90	73.3	ug/Kg
93-76-5	2,4,5-T	9.50	U	9.50	73.3	ug/Kg
94-82-6	2,4-DB	26.5	U	26.5	73.3	ug/Kg
88-85-7	DINOSEB	11.8	U	11.8	73.3	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	610		10 - 141	122%	SPK: 500

Comments:

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	89.5
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	8151A		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030847.D	1	06/26/25 13:00	06/27/25 20:41	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	8.70	U	8.70	74.8	ug/Kg
120-36-5	DICHLORPROP	14.3	U	14.3	74.8	ug/Kg
94-75-7	2,4-D	10.1	U	10.1	74.8	ug/Kg
93-72-1	2,4,5-TP (Silvex)	10.1	U	10.1	74.8	ug/Kg
93-76-5	2,4,5-T	9.70	U	9.70	74.8	ug/Kg
94-82-6	2,4-DB	27.0	U	27.0	74.8	ug/Kg
88-85-7	DINOSEB	12.1	U	12.1	74.8	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	550		10 - 141	110%	SPK: 500

Comments:

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LOD = Limit of Detection

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	77.1
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030848.D	1	06/26/25 13:00	06/27/25 21:05	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	10.0	U	10.0	86.7	ug/Kg
120-36-5	DICHLORPROP	16.6	U	16.6	86.7	ug/Kg
94-75-7	2,4-D	11.7	U	11.7	86.7	ug/Kg
93-72-1	2,4,5-TP (Silvex)	11.7	U	11.7	86.7	ug/Kg
93-76-5	2,4,5-T	11.3	U	11.3	86.7	ug/Kg
94-82-6	2,4-DB	31.3	U	31.3	86.7	ug/Kg
88-85-7	DINOSEB	14.0	U	14.0	86.7	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	273		10 - 141	55%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	87
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030851.D	1	06/26/25 13:00	06/27/25 22:41	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	8.90	U	8.90	76.9	ug/Kg
120-36-5	DICHLORPROP	14.7	U	14.7	76.9	ug/Kg
94-75-7	2,4-D	10.4	U	10.4	76.9	ug/Kg
93-72-1	2,4,5-TP (Silvex)	10.4	U	10.4	76.9	ug/Kg
93-76-5	2,4,5-T	10.0	U	10.0	76.9	ug/Kg
94-82-6	2,4-DB	27.8	U	27.8	76.9	ug/Kg
88-85-7	DINOSEB	12.4	U	12.4	76.9	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	238		10 - 141	48%	SPK: 500

Comments:

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LOQ = Limit of Quantitation

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LOD = Limit of Detection

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P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



QC SUMMARY

Surrogate Summary

SDG No.: **Q2413**

Client: **CDM Smith**

Analytical Method: **8151A**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PS030738.D	PIBLK-PS030738.D	2,4-DCAA	1	500	414	83		61	136
		2,4-DCAA	2	500	487	97		61	136
I.BLK-PS030837.D	PIBLK-PS030837.D	2,4-DCAA	1	500	530	106		61	136
		2,4-DCAA	2	500	577	115		61	136
PB168634BS	PB168634BS	2,4-DCAA	1	500	515	103		10	141
		2,4-DCAA	2	500	507	101		10	141
Q2405-01MS	MH-M/NMS	2,4-DCAA	1	500	309	62		10	141
		2,4-DCAA	2	500	307	61		10	141
Q2405-01MSD	MH-M/NMSD	2,4-DCAA	1	500	309	62		10	141
		2,4-DCAA	2	500	308	62		10	141
Q2413-01	TP-35	2,4-DCAA	1	500	216	43		10	141
		2,4-DCAA	2	500	232	46		10	141
Q2413-02	TP-34	2,4-DCAA	1	500	289	58		10	141
		2,4-DCAA	2	500	263	53		10	141
Q2413-03	TP-77	2,4-DCAA	1	500	415	83		10	141
		2,4-DCAA	2	500	610	122		10	141
Q2413-04	TP-74	2,4-DCAA	1	500	335	67		10	141
		2,4-DCAA	2	500	550	110		10	141
Q2413-05	TP-73	2,4-DCAA	1	500	253	51		10	141
		2,4-DCAA	2	500	273	55		10	141
I.BLK-PS030849.D	PIBLK-PS030849.D	2,4-DCAA	1	500	532	106		61	136
		2,4-DCAA	2	500	573	115		61	136
Q2413-06	TP-72	2,4-DCAA	1	500	238	48		10	141
		2,4-DCAA	2	500	211	42		10	141
I.BLK-PS030858.D	PIBLK-PS030858.D	2,4-DCAA	1	500	549	110		61	136
		2,4-DCAA	2	500	591	118		61	136
I.BLK-PS030861.D	PIBLK-PS030861.D	2,4-DCAA	1	500	464	93		61	136
		2,4-DCAA	2	500	484	97		61	136
PB168634BL	PB168634BL	2,4-DCAA	1	500	446	89		10	141
		2,4-DCAA	2	500	563	113		10	141
I.BLK-PS030865.D	PIBLK-PS030865.D	2,4-DCAA	1	500	464	93		61	136
		2,4-DCAA	2	500	486	97		61	136

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8151A</u>
Client:	<u>CDM Smith</u>	DataFile :	<u>PS030842.D</u>

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: Q2405-01MS (Column 1)	MH-M/NMS											
	DICAMBA	183.1	0	101	ug/Kg	55				10	112	
	DICHLORPROP	183.1	0	109	ug/Kg	60				10	113	
	2,4-D	183.1	0	131	ug/Kg	72				10	144	
	2,4,5-TP(Silvex)	183.1	0	113	ug/Kg	62				10	114	
	2,4,5-T	183.1	0	112	ug/Kg	61				10	115	
	2,4-DB	183.1	0	91.5	ug/Kg	50				10	140	
Client Sample ID: Q2405-01MS (Column 2)	Dinoseb	183.1	0	15.3	ug/Kg	8	*			10	118	
	MH-M/NMS											
	DICAMBA	183.1	0	101	ug/Kg	55				10	112	
	DICHLORPROP	183.1	0	114	ug/Kg	62				10	113	
	2,4-D	183.1	0	115	ug/Kg	63				10	144	
	2,4,5-TP(Silvex)	183.1	0	114	ug/Kg	62				10	114	
	2,4,5-T	183.1	0	109	ug/Kg	60				10	115	
	2,4-DB	183.1	0	104	ug/Kg	57				10	140	
	Dinoseb	183.1	0	15.4	ug/Kg	8	*			10	118	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2413</u>	Analytical Method:	<u>8151A</u>
Client:	<u>CDM Smith</u>	DataFile :	<u>PS030843.D</u>

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: Q2405-01MSD (Column 1)	MH-M/NMSD											
	DICAMBA	183.2	0	100	ug/Kg	55		0		10	112	20
	DICHLORPROP	183.2	0	109	ug/Kg	59		2		10	113	20
	2,4-D	183.2	0	132	ug/Kg	72		0		10	144	20
	2,4,5-TP(Silvex)	183.2	0	113	ug/Kg	62		0		10	114	20
	2,4,5-T	183.2	0	113	ug/Kg	62		2		10	115	20
	2,4-DB	183.2	0	93.9	ug/Kg	51		2		10	140	20
Client Sample ID: Q2405-01MSD (Column 2)	Dinoseb	183.2	0	16.0	ug/Kg	9	*	12		10	118	20
	MH-M/NMSD											
	DICAMBA	183.2	0	101	ug/Kg	55		0		10	112	20
	DICHLORPROP	183.2	0	111	ug/Kg	61		2		10	113	20
	2,4-D	183.2	0	120	ug/Kg	66		5		10	144	20
	2,4,5-TP(Silvex)	183.2	0	114	ug/Kg	62		0		10	114	20
	2,4,5-T	183.2	0	109	ug/Kg	59		2		10	115	20
	2,4-DB	183.2	0	104	ug/Kg	57		0		10	140	20
	Dinoseb	183.2	0	15.5	ug/Kg	8	*	0		10	118	20

**SW-846**

Datafile : PS030840.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD	Limits	
								Qual	Low	High
PB168634BS (Column 1)	DICAMBA	166.6	163	ug/Kg	98				72	129
	DICHLORPROP	166.6	156	ug/Kg	94				77	135
	2,4-D	166.6	160	ug/Kg	96				65	144
	2,4,5-TP(Silvex)	166.6	168	ug/Kg	101				74	146
	2,4,5-T	166.6	174	ug/Kg	104				77	134
	2,4-DB	166.6	183	ug/Kg	110				72	122
	Dinoseb	166.6	167	ug/Kg	100				74	132
PB168634BS (Column 2)	DICAMBA	166.6	160	ug/Kg	96				72	129
	DICHLORPROP	166.6	155	ug/Kg	93				77	135
	2,4-D	166.6	156	ug/Kg	94				65	144
	2,4,5-TP(Silvex)	166.6	163	ug/Kg	98				74	146
	2,4,5-T	166.6	165	ug/Kg	99				77	134
	2,4-DB	166.6	161	ug/Kg	97				72	122
	Dinoseb	166.6	158	ug/Kg	95				74	132

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168634BL

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: PB168634BL

Lab File ID: PS030863.D

Matrix: (soil/water) Solid

Extraction: (Type) SOXH

Sulfur Cleanup: (Y/N) N

Date Extracted: 06/26/2025

Date Analyzed (1): 06/30/2025

Date Analyzed (2): 06/30/2025

Time Analyzed (1): 16:33

Time Analyzed (2): 16:33

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column (1): RTX-CLP ID: 0.32 (mm)

GC Column (2): RTX-CLP2 ID: 0.32 (mm)

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
PB168634BS	PB168634BS	PS030840.D	06/27/2025	06/27/2025
MH-M/NMS	Q2405-01MS	PS030842.D	06/27/2025	06/27/2025
MH-M/NMSD	Q2405-01MSD	PS030843.D	06/27/2025	06/27/2025
TP-35	Q2413-01	PS030844.D	06/27/2025	06/27/2025
TP-34	Q2413-02	PS030845.D	06/27/2025	06/27/2025
TP-77	Q2413-03	PS030846.D	06/27/2025	06/27/2025
TP-74	Q2413-04	PS030847.D	06/27/2025	06/27/2025
TP-73	Q2413-05	PS030848.D	06/27/2025	06/27/2025
TP-72	Q2413-06	PS030851.D	06/27/2025	06/27/2025

COMMENTS: _____



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith		Date Collected:		
Project:	South River WM Replacement		Date Received:		
Client Sample ID:	PB168634BL		SDG No.:	Q2413	
Lab Sample ID:	PB168634BL		Matrix:	SOIL	
Analytical Method:	8151A		% Solid:	100	Decanted:
Sample Wt/Vol:	30.02	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030863.D	1	06/26/25 13:00	06/30/25 16:33	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	7.70	U	7.70	67.0	ug/Kg
120-36-5	DICHLORPROP	12.8	U	12.8	67.0	ug/Kg
94-75-7	2,4-D	9.00	U	9.00	67.0	ug/Kg
93-72-1	2,4,5-TP (Silvex)	9.10	U	9.10	67.0	ug/Kg
93-76-5	2,4,5-T	8.70	U	8.70	67.0	ug/Kg
94-82-6	2,4-DB	24.2	U	24.2	67.0	ug/Kg
88-85-7	DINOSEB	10.8	U	10.8	67.0	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	563		10 - 141	113%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/18/25
Project:	South River WM Replacement	Date Received:	06/18/25
Client Sample ID:	PIBLK-PS030738.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PS030738.D	Matrix:	WATER
Analytical Method:	8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030738.D	1		06/18/25	PS061825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.65	U	0.65	2.00	ug/L
120-36-5	DICHLORPROP	0.76	U	0.76	2.00	ug/L
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
93-76-5	2,4,5-T	0.71	U	0.71	2.00	ug/L
94-82-6	2,4-DB	0.65	U	0.65	2.00	ug/L
88-85-7	DINOSEB	0.89	U	0.89	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	487		61 - 136	97%	SPK: 500

Comments:

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M = MS/MSD acceptance criteria did not meet requirements

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/27/25
Project:	South River WM Replacement	Date Received:	06/27/25
Client Sample ID:	PIBLK-PS030837.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PS030837.D	Matrix:	WATER
Analytical Method:	8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030837.D	1		06/27/25	ps062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.65	U	0.65	2.00	ug/L
120-36-5	DICHLORPROP	0.76	U	0.76	2.00	ug/L
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
93-76-5	2,4,5-T	0.71	U	0.71	2.00	ug/L
94-82-6	2,4-DB	0.65	U	0.65	2.00	ug/L
88-85-7	DINOSEB	0.89	U	0.89	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	577		61 - 136	115%	SPK: 500

Comments:

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/27/25
Project:	South River WM Replacement	Date Received:	06/27/25
Client Sample ID:	PIBLK-PS030849.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PS030849.D	Matrix:	WATER
Analytical Method:	8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030849.D	1		06/27/25	ps062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.65	U	0.65	2.00	ug/L
120-36-5	DICHLORPROP	0.76	U	0.76	2.00	ug/L
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
93-76-5	2,4,5-T	0.71	U	0.71	2.00	ug/L
94-82-6	2,4-DB	0.65	U	0.65	2.00	ug/L
88-85-7	DINOSEB	0.89	U	0.89	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	573		61 - 136	115%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/28/25
Project:	South River WM Replacement	Date Received:	06/28/25
Client Sample ID:	PIBLK-PS030858.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PS030858.D	Matrix:	WATER
Analytical Method:	8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030858.D	1		06/28/25	ps062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.65	U	0.65	2.00	ug/L
120-36-5	DICHLORPROP	0.76	U	0.76	2.00	ug/L
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
93-76-5	2,4,5-T	0.71	U	0.71	2.00	ug/L
94-82-6	2,4-DB	0.65	U	0.65	2.00	ug/L
88-85-7	DINOSEB	0.89	U	0.89	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	591		61 - 136	118%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/30/25
Project:	South River WM Replacement	Date Received:	06/30/25
Client Sample ID:	PIBLK-PS030861.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PS030861.D	Matrix:	WATER
Analytical Method:	8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030861.D	1		06/30/25	ps063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.65	U	0.65	2.00	ug/L
120-36-5	DICHLORPROP	0.76	U	0.76	2.00	ug/L
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
93-76-5	2,4,5-T	0.71	U	0.71	2.00	ug/L
94-82-6	2,4-DB	0.65	U	0.65	2.00	ug/L
88-85-7	DINOSEB	0.89	U	0.89	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	484		61 - 136	97%	SPK: 500

Comments:

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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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/30/25
Project:	South River WM Replacement	Date Received:	06/30/25
Client Sample ID:	PIBLK-PS030865.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-PS030865.D	Matrix:	WATER
Analytical Method:	8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030865.D	1		06/30/25	ps063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.65	U	0.65	2.00	ug/L
120-36-5	DICHLORPROP	0.76	U	0.76	2.00	ug/L
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
93-76-5	2,4,5-T	0.71	U	0.71	2.00	ug/L
94-82-6	2,4-DB	0.65	U	0.65	2.00	ug/L
88-85-7	DINOSEB	0.89	U	0.89	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	486		61 - 136	97%	SPK: 500

Comments:

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M = MS/MSD acceptance criteria did not meet requirements

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D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168634BS	SDG No.:	Q2413
Lab Sample ID:	PB168634BS	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	100
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030840.D	1	06/26/25 13:00	06/27/25 17:52	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	163		7.70	67.0	ug/Kg
120-36-5	DICHLORPROP	156		12.8	67.0	ug/Kg
94-75-7	2,4-D	160		9.00	67.0	ug/Kg
93-72-1	2,4,5-TP (Silvex)	168		9.10	67.0	ug/Kg
93-76-5	2,4,5-T	174		8.70	67.0	ug/Kg
94-82-6	2,4-DB	183		24.2	67.0	ug/Kg
88-85-7	DINOSEB	167		10.8	67.0	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	515		10 - 141	103%	SPK: 500

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Q = indicates LCS control criteria did not meet requirements

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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	MH-M/NMS	SDG No.:	Q2413
Lab Sample ID:	Q2405-01MS	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	90.8
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030842.D	1	06/26/25 13:00	06/27/25 18:40	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	101		8.50	73.6	ug/Kg
120-36-5	DICHLORPROP	114		14.1	73.6	ug/Kg
94-75-7	2,4-D	131		9.90	73.6	ug/Kg
93-72-1	2,4,5-TP (Silvex)	114		10.0	73.6	ug/Kg
93-76-5	2,4,5-T	112		9.60	73.6	ug/Kg
94-82-6	2,4-DB	104		26.6	73.6	ug/Kg
88-85-7	DINOSEB	15.4	J	11.9	73.6	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	309		10 - 141	62%	SPK: 500

Comments:

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() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	MH-M/NMSD	SDG No.:	Q2413
Lab Sample ID:	Q2405-01MSD	Matrix:	SOIL
Analytical Method:	8151A	% Solid:	90.8
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	8151A		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS030843.D	1	06/26/25 13:00	06/27/25 19:04	PB168634

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	101		8.50	73.6	ug/Kg
120-36-5	DICHLORPROP	111		14.1	73.6	ug/Kg
94-75-7	2,4-D	132		9.90	73.6	ug/Kg
93-72-1	2,4,5-TP (Silvex)	114		10.0	73.6	ug/Kg
93-76-5	2,4,5-T	113		9.60	73.6	ug/Kg
94-82-6	2,4-DB	104		26.6	73.6	ug/Kg
88-85-7	DINOSEB	16.0	J	11.9	73.6	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	309		10 - 141	62%	SPK: 500

Comments:

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D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



CALIBRATION SUMMARY

A
B
C
D
E
F
G
H

Calibration Times: 11:25 13:29

LAB FILE ID:	RT 200 =	<u>PS030739.D</u>	RT 500 =	<u>PS030740.D</u>
	RT 750 =	PS030741.D	RT 1000 =	PS030742.D
			RT 1500 =	PS030743.D

[illegible]

A
B
C
D
E
F
G
H

GC Column: RTX-CLP2 ID: 0.32 (mm)

[illegible]

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: CAMP02

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

Instrument ID: ECD_S **Calibration Date(s):** 06/18/2025 06/18/2025
Calibration Times: 11:25 13:29

GC Column: RTX-CLP **ID:** 0.32 (mm)

LAB FILE ID: CF 200 = <u>PS030739.D</u>CF 500 = <u>PS030740.D</u> CF 750 = <u>PS030741.D</u>CF 1000 = <u>PS030742.D</u>CF 1500 = <u>PS030743.D</u>							
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-T	17256700000	16680000000	16830000000	16187900000	15311000000	16453200000	5
2,4,5-TP(Silvex)	22282500000	20395400000	19977900000	18863900000	18632300000	20030400000	7
2,4-D	3868070000	3398090000	3305570000	3150720000	3499600000	3444410000	8
2,4-DB	2481600000	2363020000	2407410000	2376040000	1839440000	2293500000	11
2,4-DCAA	4451200000	3788090000	3593380000	3449860000	3089450000	3674390000	14
DICAMBA	17792700000	15914300000	15443300000	14605900000	12319200000	15215100000	13
DICHLORPROP	4637630000	3720970000	3496760000	3281660000	3591790000	3745760000	14
Dinoseb	15211800000	14001800000	13914000000	13244000000	12994300000	13873200000	6

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: CAMP02

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

Instrument ID: ECD_S **Calibration Date(s):** 06/18/2025 06/18/2025
Calibration Times: 11:25 13:29

GC Column: RTX-CLP2 **ID:** 0.32 (mm)

LAB FILE ID:		CF 200 = <u>PS030739.D</u>		CF 500 = <u>PS030740.D</u>			
CF 750 = <u>PS030741.D</u>		CF 1000 = <u>PS030742.D</u>		CF 1500 = <u>PS030743.D</u>			
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-T	15648900000	14018900000	13695900000	12933300000	12026100000	13664600000	10
2,4,5-TP(Silvex)	16493700000	14706300000	14316500000	13463300000	13163600000	14428700000	9
2,4-D	1965540000	1671750000	1622570000	1523690000	1713470000	1699410000	10
2,4-DB	1373320000	1199380000	1163600000	1108750000	1069470000	1182900000	10
2,4-DCAA	1283250000	1084080000	1050700000	993038000	948747000	1071960000	12
DICAMBA	7304970000	6653080000	6566460000	6277600000	5963960000	6553210000	8
DICHLORPROP	1855180000	1562920000	1498450000	1412800000	1533120000	1572500000	11
Dinoseb	12099400000	10862400000	10728600000	10218500000	9997410000	10781200000	8

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 17:04 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.53	7.54	7.44	7.64	0.01
2,4-DCAA	7.34	7.35	7.25	7.45	0.01
DICHLORPROP	8.24	8.25	8.15	8.35	0.01
2,4-D	8.48	8.49	8.39	8.59	0.01
2,4,5-TP(Silvex)	9.36	9.38	9.28	9.48	0.02
2,4,5-T	9.66	9.67	9.57	9.77	0.01
2,4-DB	10.23	10.25	10.15	10.35	0.02
Dinoseb	11.45	11.47	11.37	11.57	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 17:04 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.97	7.97	7.87	8.07	0.00
2,4-DCAA	7.77	7.77	7.67	7.87	0.00
DICHLORPROP	8.69	8.69	8.59	8.79	0.00
2,4-D	9.02	9.03	8.93	9.13	0.01
2,4,5-TP(Silvex)	9.93	9.93	9.83	10.03	0.00
2,4,5-T	10.36	10.36	10.26	10.46	0.00
2,4-DB	10.92	10.93	10.83	11.03	0.01
Dinoseb	11.31	11.31	11.21	11.41	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL01 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC750 Data File : PS030838.D Time Analyzed: 17:04

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	9.657	9.568	9.768	752.430	712.500	5.6
2,4,5-TP(Silvex)	9.363	9.275	9.475	711.660	712.500	-0.1
2,4-D	8.476	8.386	8.586	681.510	705.000	-3.3
2,4-DB	10.234	10.147	10.347	812.930	712.500	14.1
2,4-DCAA	7.339	7.249	7.449	717.100	750.000	-4.4
DICAMBA	7.531	7.439	7.639	689.260	705.000	-2.2
DICHLORPROP	8.243	8.153	8.353	647.060	705.000	-8.2
Dinoseb	11.453	11.366	11.566	712.890	705.000	1.1

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL01 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC750 Data File : PS030838.D Time Analyzed: 17:04

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-T	10.356	10.259	10.459	699.200	712.500	-1.9
2,4,5-TP(Silvex)	9.929	9.833	10.033	691.030	712.500	-3.0
2,4-D	9.024	8.927	9.127	659.170	705.000	-6.5
2,4-DB	10.923	10.827	11.027	674.590	712.500	-5.3
2,4-DCAA	7.767	7.670	7.870	708.520	750.000	-5.5
DICAMBA	7.970	7.872	8.072	688.710	705.000	-2.3
DICHLORPROP	8.688	8.591	8.791	652.280	705.000	-7.5
Dinoseb	11.308	11.211	11.411	679.930	705.000	-3.6

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 21:53 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.53	7.54	7.44	7.64	0.01
2,4-DCAA	7.34	7.35	7.25	7.45	0.01
DICHLORPROP	8.24	8.25	8.15	8.35	0.01
2,4-D	8.47	8.49	8.39	8.59	0.02
2,4,5-TP(Silvex)	9.36	9.38	9.28	9.48	0.02
2,4,5-T	9.66	9.67	9.57	9.77	0.01
2,4-DB	10.23	10.25	10.15	10.35	0.02
Dinoseb	11.45	11.47	11.37	11.57	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/27/2025 **Initial Calibration Date(s):** 06/18/2025 06/18/2025

Continuing Calib Time: 21:53 **Initial Calibration Time(s):** 11:25 13:29

GC Column: RTX-CLP2 **ID:** 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.97	7.97	7.87	8.07	0.00
2,4-DCAA	7.77	7.77	7.67	7.87	0.00
DICHLORPROP	8.69	8.69	8.59	8.79	0.00
2,4-D	9.02	9.03	8.93	9.13	0.01
2,4,5-TP(Silvex)	9.93	9.93	9.83	10.03	0.00
2,4,5-T	10.36	10.36	10.26	10.46	0.01
2,4-DB	10.92	10.93	10.83	11.03	0.01
Dinoseb	11.31	11.31	11.21	11.41	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL02 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC750 Data File : PS030850.D Time Analyzed: 21:53

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	9.656	9.568	9.768	730.330	712.500	2.5
2,4,5-TP(Silvex)	9.361	9.275	9.475	683.420	712.500	-4.1
2,4-D	8.474	8.386	8.586	659.940	705.000	-6.4
2,4-DB	10.233	10.147	10.347	787.750	712.500	10.6
2,4-DCAA	7.339	7.249	7.449	703.400	750.000	-6.2
DICAMBA	7.530	7.439	7.639	652.000	705.000	-7.5
DICHLORPROP	8.243	8.153	8.353	622.390	705.000	-11.7
Dinoseb	11.452	11.366	11.566	680.110	705.000	-3.5

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL02 Date Analyzed: 06/27/2025

Lab Sample No.: PSTDCCC750 Data File : PS030850.D Time Analyzed: 21:53

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-T	10.355	10.259	10.459	673.490	712.500	-5.5
2,4,5-TP(Silvex)	9.929	9.833	10.033	664.000	712.500	-6.8
2,4-D	9.024	8.927	9.127	634.280	705.000	-10.0
2,4-DB	10.922	10.827	11.027	645.730	712.500	-9.4
2,4-DCAA	7.767	7.670	7.870	682.230	750.000	-9.0
DICAMBA	7.969	7.872	8.072	662.330	705.000	-6.1
DICHLORPROP	8.688	8.591	8.791	622.740	705.000	-11.7
Dinoseb	11.308	11.211	11.411	650.390	705.000	-7.7

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/28/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 01:55 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.53	7.54	7.44	7.64	0.01
2,4-DCAA	7.34	7.35	7.25	7.45	0.01
DICHLORPROP	8.24	8.25	8.15	8.35	0.01
2,4-D	8.47	8.49	8.39	8.59	0.02
2,4,5-TP(Silvex)	9.36	9.38	9.28	9.48	0.02
2,4,5-T	9.66	9.67	9.57	9.77	0.02
2,4-DB	10.23	10.25	10.15	10.35	0.02
Dinoseb	11.45	11.47	11.37	11.57	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/28/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 01:55 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.97	7.97	7.87	8.07	0.00
2,4-DCAA	7.77	7.77	7.67	7.87	0.00
DICHLORPROP	8.69	8.69	8.59	8.79	0.00
2,4-D	9.02	9.03	8.93	9.13	0.01
2,4,5-TP(Silvex)	9.93	9.93	9.83	10.03	0.00
2,4,5-T	10.36	10.36	10.26	10.46	0.01
2,4-DB	10.92	10.93	10.83	11.03	0.01
Dinoseb	11.31	11.31	11.21	11.41	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL03 Date Analyzed: 06/28/2025

Lab Sample No.: PSTDCCC750 Data File : PS030859.D Time Analyzed: 01:55

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	9.655	9.568	9.768	761.830	712.500	6.9
2,4,5-TP(Silvex)	9.362	9.275	9.475	703.060	712.500	-1.3
2,4-D	8.474	8.386	8.586	682.180	705.000	-3.2
2,4-DB	10.232	10.147	10.347	803.530	712.500	12.8
2,4-DCAA	7.339	7.249	7.449	690.510	750.000	-7.9
DICAMBA	7.529	7.439	7.639	681.160	705.000	-3.4
DICHLORPROP	8.243	8.153	8.353	635.220	705.000	-9.9
Dinoseb	11.449	11.366	11.566	680.910	705.000	-3.4

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL03 Date Analyzed: 06/28/2025

Lab Sample No.: PSTDCCC750 Data File : PS030859.D Time Analyzed: 01:55

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-T	10.355	10.259	10.459	687.080	712.500	-3.6
2,4,5-TP(Silvex)	9.929	9.833	10.033	677.480	712.500	-4.9
2,4-D	9.022	8.927	9.127	664.420	705.000	-5.8
2,4-DB	10.922	10.827	11.027	667.890	712.500	-6.3
2,4-DCAA	7.766	7.670	7.870	694.470	750.000	-7.4
DICAMBA	7.969	7.872	8.072	673.860	705.000	-4.4
DICHLORPROP	8.688	8.591	8.791	634.380	705.000	-10.0
Dinoseb	11.307	11.211	11.411	645.120	705.000	-8.5

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/30/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 13:00 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.53	7.54	7.44	7.64	0.01
2,4-DCAA	7.34	7.35	7.25	7.45	0.01
DICHLORPROP	8.25	8.25	8.15	8.35	0.01
2,4-D	8.48	8.49	8.39	8.59	0.01
2,4,5-TP(Silvex)	9.37	9.38	9.28	9.48	0.02
2,4,5-T	9.66	9.67	9.57	9.77	0.01
2,4-DB	10.24	10.25	10.15	10.35	0.01
Dinoseb	11.45	11.47	11.37	11.57	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/30/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 13:00 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.97	7.97	7.87	8.07	0.00
2,4-DCAA	7.76	7.77	7.67	7.87	0.01
DICHLORPROP	8.68	8.69	8.59	8.79	0.01
2,4-D	9.02	9.03	8.93	9.13	0.01
2,4,5-TP(Silvex)	9.93	9.93	9.83	10.03	0.00
2,4,5-T	10.35	10.36	10.26	10.46	0.01
2,4-DB	10.92	10.93	10.83	11.03	0.01
Dinoseb	11.30	11.31	11.21	11.41	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL04 Date Analyzed: 06/30/2025

Lab Sample No.: PSTDCCC750 Data File : PS030862.D Time Analyzed: 13:00

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-T	9.660	9.568	9.768	755.930	712.500	6.1
2,4,5-TP(Silvex)	9.365	9.275	9.475	706.160	712.500	-0.9
2,4-D	8.477	8.386	8.586	768.500	705.000	9.0
2,4-DB	10.237	10.147	10.347	779.940	712.500	9.5
2,4-DCAA	7.342	7.249	7.449	707.790	750.000	-5.6
DICAMBA	7.532	7.439	7.639	677.030	705.000	-4.0
DICHLORPROP	8.245	8.153	8.353	742.000	705.000	5.2
Dinoseb	11.454	11.366	11.566	709.220	705.000	0.6

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL04 Date Analyzed: 06/30/2025

Lab Sample No.: PSTDCCC750 Data File : PS030862.D Time Analyzed: 13:00

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-T	10.352	10.259	10.459	662.340	712.500	-7.0
2,4,5-TP(Silvex)	9.925	9.833	10.033	654.920	712.500	-8.1
2,4-D	9.020	8.927	9.127	622.260	705.000	-11.7
2,4-DB	10.919	10.827	11.027	642.880	712.500	-9.8
2,4-DCAA	7.763	7.670	7.870	687.130	750.000	-8.4
DICAMBA	7.966	7.872	8.072	641.910	705.000	-8.9
DICHLORPROP	8.684	8.591	8.791	619.130	705.000	-12.2
Dinoseb	11.304	11.211	11.411	636.090	705.000	-9.8

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/30/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 17:49 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.53	7.54	7.44	7.64	0.01
2,4-DCAA	7.34	7.35	7.25	7.45	0.01
DICHLORPROP	8.24	8.25	8.15	8.35	0.01
2,4-D	8.48	8.49	8.39	8.59	0.01
2,4,5-TP(Silvex)	9.36	9.38	9.28	9.48	0.02
2,4,5-T	9.66	9.67	9.57	9.77	0.01
2,4-DB	10.23	10.25	10.15	10.35	0.02
Dinoseb	11.45	11.47	11.37	11.57	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

Continuing Calib Date: 06/30/2025 Initial Calibration Date(s): 06/18/2025 06/18/2025

Continuing Calib Time: 17:49 Initial Calibration Time(s): 11:25 13:29

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.97	7.97	7.87	8.07	0.00
2,4-DCAA	7.77	7.77	7.67	7.87	0.00
DICHLORPROP	8.69	8.69	8.59	8.79	0.00
2,4-D	9.03	9.03	8.93	9.13	0.01
2,4,5-TP(Silvex)	9.93	9.93	9.83	10.03	0.00
2,4,5-T	10.36	10.36	10.26	10.46	0.00
2,4-DB	10.92	10.93	10.83	11.03	0.01
Dinoseb	11.31	11.31	11.21	11.41	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL05 Date Analyzed: 06/30/2025

Lab Sample No.: PSTDCCC750 Data File : PS030866.D Time Analyzed: 17:49

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-T	9.656	9.568	9.768	763.330	712.500	7.1
2,4,5-TP(Silvex)	9.363	9.275	9.475	714.320	712.500	0.3
2,4-D	8.475	8.386	8.586	687.580	705.000	-2.5
2,4-DB	10.233	10.147	10.347	797.880	712.500	12.0
2,4-DCAA	7.340	7.249	7.449	704.330	750.000	-6.1
DICAMBA	7.530	7.439	7.639	684.800	705.000	-2.9
DICHLORPROP	8.243	8.153	8.353	644.430	705.000	-8.6
Dinoseb	11.452	11.366	11.566	711.590	705.000	0.9

CALIBRATION VERIFICATION SUMMARY

Contract: CAMP02

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

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 06/18/2025 06/18/2025

Client Sample No.: CCAL05 Date Analyzed: 06/30/2025

Lab Sample No.: PSTDCCC750 Data File : PS030866.D Time Analyzed: 17:49

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-T	10.357	10.259	10.459	679.450	712.500	-4.6
2,4,5-TP(Silvex)	9.930	9.833	10.033	670.610	712.500	-5.9
2,4-D	9.025	8.927	9.127	630.620	705.000	-10.6
2,4-DB	10.924	10.827	11.027	664.790	712.500	-6.7
2,4-DCAA	7.768	7.670	7.870	687.550	750.000	-8.3
DICAMBA	7.970	7.872	8.072	661.910	705.000	-6.1
DICHLORPROP	8.689	8.591	8.791	635.760	705.000	-9.8
Dinoseb	11.310	11.211	11.411	654.820	705.000	-7.1

Analytical Sequence

Client: CDM Smith	SDG No.: Q2413
Project: South River WM Replacement	Instrument ID: ECD_S
GC Column: RTX-CLP	ID: 0.32 (mm) Inst. Calib. Date(s): 06/18/2025 06/18/2025

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	06/18/2025	11:01	PS030738.D	7.35	0.00
HSTDICC200	HSTDICC200	06/18/2025	11:25	PS030739.D	7.35	0.00
HSTDICC500	HSTDICC500	06/18/2025	11:49	PS030740.D	7.35	0.00
HSTDICC750	HSTDICC750	06/18/2025	12:13	PS030741.D	7.35	0.00
HSTDICC1000	HSTDICC1000	06/18/2025	12:37	PS030742.D	7.35	0.00
HSTDICC1500	HSTDICC1500	06/18/2025	13:29	PS030743.D	7.35	0.00
IBLK	IBLK	06/27/2025	16:40	PS030837.D	7.34	0.00
PSTDCCC750	PSTDCCC750	06/27/2025	17:04	PS030838.D	7.34	0.00
PB168634BS	PB168634BS	06/27/2025	17:52	PS030840.D	7.34	0.00
MH-M/NMS	Q2405-01MS	06/27/2025	18:40	PS030842.D	7.34	0.00
MH-M/NMSD	Q2405-01MSD	06/27/2025	19:04	PS030843.D	7.34	0.00
TP-35	Q2413-01	06/27/2025	19:29	PS030844.D	7.34	0.00
TP-34	Q2413-02	06/27/2025	19:53	PS030845.D	7.34	0.00
TP-77	Q2413-03	06/27/2025	20:17	PS030846.D	7.34	0.00
TP-74	Q2413-04	06/27/2025	20:41	PS030847.D	7.34	0.00
TP-73	Q2413-05	06/27/2025	21:05	PS030848.D	7.34	0.00
IBLK	IBLK	06/27/2025	21:29	PS030849.D	7.34	0.00
PSTDCCC750	PSTDCCC750	06/27/2025	21:53	PS030850.D	7.34	0.00
TP-72	Q2413-06	06/27/2025	22:41	PS030851.D	7.34	0.00
IBLK	IBLK	06/28/2025	01:31	PS030858.D	7.34	0.00
PSTDCCC750	PSTDCCC750	06/28/2025	01:55	PS030859.D	7.34	0.00
IBLK	IBLK	06/30/2025	09:29	PS030861.D	7.34	0.00
PSTDCCC750	PSTDCCC750	06/30/2025	13:00	PS030862.D	7.34	0.00
PB168634BL	PB168634BL	06/30/2025	16:33	PS030863.D	7.34	0.00
IBLK	IBLK	06/30/2025	17:25	PS030865.D	7.34	0.00
PSTDCCC750	PSTDCCC750	06/30/2025	17:49	PS030866.D	7.34	0.00

Analytical Sequence

Client: CDM Smith	SDG No.: Q2413
Project: South River WM Replacement	Instrument ID: ECD_S
GC Column: RTX-CLP2	ID: 0.32 (mm) Inst. Calib. Date(s): 06/18/2025 06/18/2025

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	06/18/2025	11:01	PS030738.D	7.77	0.00
HSTDICC200	HSTDICC200	06/18/2025	11:25	PS030739.D	7.77	0.00
HSTDICC500	HSTDICC500	06/18/2025	11:49	PS030740.D	7.77	0.00
HSTDICC750	HSTDICC750	06/18/2025	12:13	PS030741.D	7.77	0.00
HSTDICC1000	HSTDICC1000	06/18/2025	12:37	PS030742.D	7.77	0.00
HSTDICC1500	HSTDICC1500	06/18/2025	13:29	PS030743.D	7.77	0.00
IBLK	IBLK	06/27/2025	16:40	PS030837.D	7.77	0.00
PSTDCCC750	PSTDCCC750	06/27/2025	17:04	PS030838.D	7.77	0.00
PB168634BS	PB168634BS	06/27/2025	17:52	PS030840.D	7.77	0.00
MH-M/NMS	Q2405-01MS	06/27/2025	18:40	PS030842.D	7.77	0.00
MH-M/NMSD	Q2405-01MSD	06/27/2025	19:04	PS030843.D	7.77	0.00
TP-35	Q2413-01	06/27/2025	19:29	PS030844.D	7.77	0.00
TP-34	Q2413-02	06/27/2025	19:53	PS030845.D	7.77	0.00
TP-77	Q2413-03	06/27/2025	20:17	PS030846.D	7.77	0.00
TP-74	Q2413-04	06/27/2025	20:41	PS030847.D	7.77	0.00
TP-73	Q2413-05	06/27/2025	21:05	PS030848.D	7.77	0.00
IBLK	IBLK	06/27/2025	21:29	PS030849.D	7.77	0.00
PSTDCCC750	PSTDCCC750	06/27/2025	21:53	PS030850.D	7.77	0.00
TP-72	Q2413-06	06/27/2025	22:41	PS030851.D	7.77	0.00
IBLK	IBLK	06/28/2025	01:31	PS030858.D	7.77	0.00
PSTDCCC750	PSTDCCC750	06/28/2025	01:55	PS030859.D	7.77	0.00
IBLK	IBLK	06/30/2025	09:29	PS030861.D	7.77	0.00
PSTDCCC750	PSTDCCC750	06/30/2025	13:00	PS030862.D	7.76	0.00
PB168634BL	PB168634BL	06/30/2025	16:33	PS030863.D	7.76	0.00
IBLK	IBLK	06/30/2025	17:25	PS030865.D	7.77	0.00
PSTDCCC750	PSTDCCC750	06/30/2025	17:49	PS030866.D	7.77	0.00

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

MH-M/NMS

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: Q2405-01MS

Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP ID: 0.32 (mm)

GC Column: (2): RTX-CLP2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DICHLORPROP	1	8.24	8.19	8.29	109	4.5
	2	8.69	8.64	8.74	114	
2,4-D	1	8.48	8.43	8.53	131	13
	2	9.02	8.97	9.07	115	
2,4,5-TP(Silvex)	1	9.36	9.31	9.41	113	0.9
	2	9.93	9.88	9.98	114	
2,4,5-T	1	9.66	9.61	9.71	112	2.7
	2	10.36	10.31	10.41	109	
2,4-DB	1	10.24	10.19	10.29	91.5	12.8
	2	10.92	10.87	10.97	104	
Dinoseb	1	11.45	11.40	11.50	15.3	0.7
	2	11.31	11.26	11.36	15.4	
DICAMBA	1	7.53	7.48	7.58	101	0
	2	7.97	7.92	8.02	101	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

MH-M/NMSD

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab Sample ID: Q2405-01MSD

Date(s) Analyzed: 06/27/2025 06/27/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP ID: 0.32 (mm)

GC Column: (2): RTX-CLP2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4,5-TP(Silvex)	1	9.36	9.31	9.41	113	0.9
	2	9.93	9.88	9.98	114	
2,4,5-T	1	9.66	9.61	9.71	113	3.6
	2	10.36	10.31	10.41	109	
DICHLORPROP	1	8.24	8.19	8.29	109	1.8
	2	8.69	8.64	8.74	111	
2,4-D	1	8.48	8.43	8.53	132	9.5
	2	9.02	8.97	9.07	120	
2,4-DB	1	10.24	10.19	10.29	93.9	10.2
	2	10.92	10.87	10.97	104	
Dinoseb	1	11.45	11.40	11.50	16.0	3.2
	2	11.31	11.26	11.36	15.5	
DICAMBA	1	7.53	7.48	7.58	100	1
	2	7.97	7.92	8.02	101	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB168634BS

Contract: CAMP02

Lab Code: CHEM

Case No.: Q2413

SAS No.: Q2413

SDG NO.: Q2413

Lab Sample ID: PB168634BS

Date(s) Analyzed: 06/27/2025

06/27/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP

ID: 0.32 (mm)

GC Column: (2): RTX-CLP2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DICHLORPROP	1	8.24	8.19	8.29	156	0.6
	2	8.69	8.64	8.74	155	
Dinoseb	1	11.45	11.40	11.50	167	5.5
	2	11.31	11.26	11.36	158	
DICAMBA	1	7.53	7.48	7.58	163	1.9
	2	7.97	7.92	8.02	160	
2,4,5-T	1	9.66	9.61	9.71	174	5.3
	2	10.36	10.31	10.41	165	
2,4,5-TP(Silvex)	1	9.36	9.31	9.41	168	3
	2	9.93	9.88	9.98	163	
2,4-D	1	8.48	8.43	8.53	160	2.5
	2	9.02	8.97	9.07	156	
2,4-DB	1	10.24	10.19	10.29	183	12.8
	2	10.92	10.87	10.97	161	

LAB CHRONICLE

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

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2413-01	TP-35	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-02	TP-34	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-03	TP-77	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-04	TP-74	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	07/01/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-05	TP-73	SOIL			06/23/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	07/01/25	
			PCB	8082A		06/26/25	06/26/25	
			Pesticide-TCL	8081B		06/26/25	06/27/25	
			Gasoline Range Organics	8015D			06/26/25	
Q2413-06	TP-72	SOIL			06/24/25			06/24/25
			Diesel Range Organics	8015D		06/30/25	07/01/25	

LAB CHRONICLE

Gasoline Range Organics	8015D		06/26/25
PCB	8082A	06/26/25	06/26/25
Pesticide-TCL	8081B	06/26/25	06/27/25

A

B

C

D

E

F



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	88.8
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016047.D	1	06/30/25 09:50	06/30/25 21:40	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	30100		190	1870	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	16.8		37 - 130	84%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	92
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016050.D	1	06/30/25 09:50	06/30/25 23:10	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	5600		183	1810	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	9.11		37 - 130	46%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	91.4
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016051.D	1	06/30/25 09:50	06/30/25 23:40	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	18800		184	1820	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	15.2		37 - 130	76%	SPK: 20

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range
 P = Indicates >25% difference for detected concentrations between the two GC columns
 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
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89.5
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016052.D	1	06/30/25 09:50	07/01/25 0:09	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	5100		188	1860	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	12.3		37 - 130	62%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	77.1
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016053.D	1	06/30/25 09:50	07/01/25 0:39	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	7220		219	2160	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	11.3		37 - 130	56%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	87
Sample Wt/Vol:	30.05	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016054.D	1	06/30/25 09:50	07/01/25 1:09	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	3710		194	1910	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.4		37 - 130	52%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



QC SUMMARY

SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: CDM Smith
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FF016042.D	84				0
PIBLK-FF016055.D	79				0
PB168658BL	114				0
PB168658BS	72				0
TP-35	84				0
TP-35MS	74				0
TP-35MSD	74				0
TP-34	46				0
TP-77	76				0
TP-74	62				0
TP-73	56				0
TP-72	52				0

QC LIMITS

TETRACOSANE-d50

For Water : 29-130

For Soil : 37-130

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate Diluted Out

SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2413 **SAS No :** Q2413 **SDG No:** Q2413
Client SampleID : TP-35MS **Datafile:** FF016048.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	7493	30100	33011	38%	*	68-131

SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** CDM Smith
Lab Code: CHEM **Cas No:** Q2413 **SAS No :** Q2413 **SDG No:** Q2413
Client SampleID : TP-35MSD **Datafile:** FF016049.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
DRO	7488	30100	32647	34%	*	68-131

MS/MSD % Recovery RPD : 13.3

SOIL DIESEL RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RI

Lab Name: Chemtech Client: CDM Smith
Lab Code: CHEM Cas No: Q2413 SAS No : Q2413 SDG No: Q2413
Matrix Spike - EPA Sample No : PB168658BS Datafile: FF016046.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
DRO	6662	0	4925	74	68-131

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB168658BL

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2413

SAS No.: Q2413 SDG NO.: Q2413

Lab File ID: FF016045.D

Lab Sample ID: PB168658BL

Instrument ID: FF

Date Extracted: 06/30/2025

Matrix: (soil/water) Soil

Date Analyzed: 06/30/25

Level: (low/med) low

Time Analyzed: 20:41

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168658BS	PB168658BS	FF016046.D	06/30/25
TP-35	Q2413-01	FF016047.D	06/30/25
TP-35MS	Q2413-01MS	FF016048.D	06/30/25
TP-35MSD	Q2413-01MSD	FF016049.D	06/30/25
TP-34	Q2413-02	FF016050.D	06/30/25
TP-77	Q2413-03	FF016051.D	06/30/25
TP-74	Q2413-04	FF016052.D	07/01/25
TP-73	Q2413-05	FF016053.D	07/01/25
TP-72	Q2413-06	FF016054.D	07/01/25

COMMENTS: _____



QC SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168658BL	SDG No.:	Q2413
Lab Sample ID:	PB168658BL	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100 Decanted:
Sample Wt/Vol:	30.01 Units: g	Final Vol:	1 mL
Soil Aliquot Vol:	uL	Test:	Diesel Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016045.D	1	06/30/25 09:50	06/30/25 20:41	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	169	U	169	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	22.8		37 - 130	114%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/30/25
Project:	South River WM Replacement	Date Received:	06/30/25
Client Sample ID:	PIBLK-FF016042.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-FF016042.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	1 mL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :	PH :	Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016042.D	1		06/30/25	FF063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	16.8		29 - 130	84%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	07/01/25
Project:	South River WM Replacement	Date Received:	07/01/25
Client Sample ID:	PIBLK-FF016055.D	SDG No.:	Q2413
Lab Sample ID:	I.BLK-FF016055.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	1 mL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :	PH :	Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016055.D	1		07/01/25	FF063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
DRO	DRO	6.00	U	6.00	50.0	ug/L
SURROGATES						
16416-32-3	Tetracosane-d50	15.8		29 - 130	79%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168658BS	SDG No.:	Q2413
Lab Sample ID:	PB168658BS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100
Sample Wt/Vol:	30.02	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016046.D	1	06/30/25 09:50	06/30/25 21:11	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	4930		169	1670	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	14.3		37 - 130	72%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35MS	SDG No.:	Q2413
Lab Sample ID:	Q2413-01MS	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	88.8
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016048.D	1	06/30/25 09:50	06/30/25 22:10	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	33000		190	1870	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	14.9		37 - 130	74%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35MSD	SDG No.:	Q2413
Lab Sample ID:	Q2413-01MSD	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	88.8
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	1
GPC Factor :		PH :	
Prep Method :	SW3541	Decanted:	
		Test:	Diesel Range Organics
		Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FF016049.D	1	06/30/25 09:50	06/30/25 22:40	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	32600		190	1870	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	14.8		37 - 130	74%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

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

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



CALIBRATION SUMMARY

DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: CAMP02
 ProjectID: South River WM Replacement
 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413

Calibration Sequence : FF061325		Test : Diesel Range Organics	
Concentration (PPM)	Area Count	Reference Factor	File ID
1000	128762116	128762	FF015964.D
500	64295722	128591	FF015965.D
200	27169561	135848	FF015966.D
100	13526499	135265	FF015967.D
50	7306219	146124	FF015968.D
AVG RF : 134918		% RSD : 5.299	AVG RT : 15.0944

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413
DataFile: FF016043.D Analyst Name: YP\AJ Analyst Date: 06-30-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	65882919	131766	134918	2.336

DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

50 PPM TRPH STD

Lab Name: Chemtech Contract: CAMP02
ProjectID: South River WM Replacement
Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413 SDG No.: Q2413
DataFile: FF016056.D Analyst Name: YP\AJ Analyst Date: 07-01-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	66132155	132264	134918	1.967

Analytical Sequence

Client: CDM Smith

SDG No.: Q2413

Project: South River WM Replacement

Instrument ID: FID_F

GC Column: RXI-1MS **ID:** 0.18 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

MEAN SUROGATE RT FROM INITIAL CALIBRATION 15.0944					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	LBLK01	30 Jun 2025 18:41	FF016042.D	15.094	
50 PPM TRPH STD	50 PPM TRPH STD	30 Jun 2025 19:11	FF016043.D	15.097	
PB168658BL	PB168658BL	30 Jun 2025 20:41	FF016045.D	15.093	
PB168658BS	PB168658BS	30 Jun 2025 21:11	FF016046.D	15.093	
TP-35	Q2413-01	30 Jun 2025 21:40	FF016047.D	15.095	
TP-35MS	Q2413-01MS	30 Jun 2025 22:10	FF016048.D	15.094	
TP-35MSD	Q2413-01MSD	30 Jun 2025 22:40	FF016049.D	15.094	
TP-34	Q2413-02	30 Jun 2025 23:10	FF016050.D	15.093	
TP-77	Q2413-03	30 Jun 2025 23:40	FF016051.D	15.094	
TP-74	Q2413-04	01 Jul 2025 00:09	FF016052.D	15.094	
TP-73	Q2413-05	01 Jul 2025 00:39	FF016053.D	15.094	
TP-72	Q2413-06	01 Jul 2025 01:09	FF016054.D	15.095	
PIBLK02	LBLK02	01 Jul 2025 01:38	FF016055.D	15.093	
50 PPM TRPH STD	50 PPM TRPH STD	01 Jul 2025 02:08	FF016056.D	15.096	

Column used to flag RT values with an * values outside of QC limits

QC Limits
(± 0.10 minutes)

Lower Limit
14.9944

Upper Limits
15.1944

LAB CHRONICLE

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

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2413-01	TP-35	SOIL	Metals ICP-TAL	6010D	06/23/25	06/26/25	06/27/25	06/24/25
			Mercury	7471B		06/26/25	06/26/25	
Q2413-02	TP-34	SOIL	Metals ICP-TAL	6010D	06/23/25	06/26/25	06/27/25	06/24/25
			Mercury	7471B		06/26/25	06/26/25	
Q2413-03	TP-77	SOIL	Metals ICP-TAL	6010D	06/23/25	06/26/25	06/27/25	06/24/25
			Mercury	7471B		06/26/25	06/26/25	
Q2413-04	TP-74	SOIL	Metals ICP-TAL	6010D	06/23/25	06/26/25	06/27/25	06/24/25
			Mercury	7471B		06/26/25	06/26/25	
Q2413-05	TP-73	SOIL	Metals ICP-TAL	6010D	06/23/25	06/26/25	06/27/25	06/24/25
			Mercury	7471B		06/26/25	06/26/25	
Q2413-06	TP-72	SOIL	Mercury	7471B	06/24/25	06/26/25	06/26/25	06/24/25
			Metals ICP-TAL	6010D		06/26/25	06/27/25	

Hit Summary Sheet SW-846

SDG No.: Q2413 **Order ID:** Q2413
Client: CDM Smith **Project ID:** South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-35								
Q2413-01	TP-35	SOIL	Aluminum	7550		0.80	4.73	mg/Kg
Q2413-01	TP-35	SOIL	Antimony	1.16	J	0.21	2.37	mg/Kg
Q2413-01	TP-35	SOIL	Arsenic	6.94		0.18	0.95	mg/Kg
Q2413-01	TP-35	SOIL	Barium	18.5		0.69	4.73	mg/Kg
Q2413-01	TP-35	SOIL	Beryllium	0.79		0.024	0.28	mg/Kg
Q2413-01	TP-35	SOIL	Calcium	239		10.5	94.6	mg/Kg
Q2413-01	TP-35	SOIL	Chromium	12.3		0.044	0.47	mg/Kg
Q2413-01	TP-35	SOIL	Cobalt	4.49		0.095	1.42	mg/Kg
Q2413-01	TP-35	SOIL	Copper	4.24		0.21	0.95	mg/Kg
Q2413-01	TP-35	SOIL	Iron	22300		3.78	4.73	mg/Kg
Q2413-01	TP-35	SOIL	Lead	10.6		0.12	0.57	mg/Kg
Q2413-01	TP-35	SOIL	Magnesium	503		11.4	94.6	mg/Kg
Q2413-01	TP-35	SOIL	Manganese	50.0		0.13	0.95	mg/Kg
Q2413-01	TP-35	SOIL	Mercury	0.023		0.0080	0.014	mg/Kg
Q2413-01	TP-35	SOIL	Nickel	7.64		0.12	1.89	mg/Kg
Q2413-01	TP-35	SOIL	Potassium	445		26.2	94.6	mg/Kg
Q2413-01	TP-35	SOIL	Selenium	7.10		0.25	0.95	mg/Kg
Q2413-01	TP-35	SOIL	Silver	0.38	J	0.11	0.47	mg/Kg
Q2413-01	TP-35	SOIL	Sodium	138		16.8	94.6	mg/Kg
Q2413-01	TP-35	SOIL	Vanadium	24.8		0.24	1.89	mg/Kg
Q2413-01	TP-35	SOIL	Zinc	21.3		0.10	1.89	mg/Kg
Client ID : TP-34								
Q2413-02	TP-34	SOIL	Aluminum	3590		0.82	4.90	mg/Kg
Q2413-02	TP-34	SOIL	Antimony	0.74	J	0.22	2.45	mg/Kg
Q2413-02	TP-34	SOIL	Arsenic	3.33		0.19	0.98	mg/Kg
Q2413-02	TP-34	SOIL	Barium	6.11		0.72	4.90	mg/Kg
Q2413-02	TP-34	SOIL	Beryllium	0.42		0.024	0.29	mg/Kg
Q2413-02	TP-34	SOIL	Calcium	119		10.9	97.9	mg/Kg
Q2413-02	TP-34	SOIL	Chromium	12.1		0.046	0.49	mg/Kg
Q2413-02	TP-34	SOIL	Cobalt	1.52		0.098	1.47	mg/Kg
Q2413-02	TP-34	SOIL	Copper	5.05		0.22	0.98	mg/Kg
Q2413-02	TP-34	SOIL	Iron	11500		3.91	4.90	mg/Kg
Q2413-02	TP-34	SOIL	Lead	9.44		0.13	0.59	mg/Kg
Q2413-02	TP-34	SOIL	Magnesium	170		11.8	97.9	mg/Kg
Q2413-02	TP-34	SOIL	Manganese	16.1		0.14	0.98	mg/Kg
Q2413-02	TP-34	SOIL	Mercury	0.024		0.0080	0.014	mg/Kg
Q2413-02	TP-34	SOIL	Nickel	3.07		0.13	1.96	mg/Kg

Hit Summary Sheet SW-846

SDG No.: Q2413

Order ID: Q2413

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2413-02	TP-34	SOIL	Potassium	155		27.1	97.9	mg/Kg
Q2413-02	TP-34	SOIL	Selenium	3.84		0.26	0.98	mg/Kg
Q2413-02	TP-34	SOIL	Silver	0.24	J	0.12	0.49	mg/Kg
Q2413-02	TP-34	SOIL	Sodium	84.3	J	17.4	97.9	mg/Kg
Q2413-02	TP-34	SOIL	Vanadium	19.4		0.25	1.96	mg/Kg
Q2413-02	TP-34	SOIL	Zinc	14.6		0.11	1.96	mg/Kg
Client ID : TP-77								
Q2413-03	TP-77	SOIL	Aluminum	8720		0.83	4.95	mg/Kg
Q2413-03	TP-77	SOIL	Antimony	1.49	J	0.22	2.48	mg/Kg
Q2413-03	TP-77	SOIL	Arsenic	11.0		0.19	0.99	mg/Kg
Q2413-03	TP-77	SOIL	Barium	18.0		0.72	4.95	mg/Kg
Q2413-03	TP-77	SOIL	Beryllium	1.03		0.025	0.30	mg/Kg
Q2413-03	TP-77	SOIL	Calcium	92.1	J	11.0	99.0	mg/Kg
Q2413-03	TP-77	SOIL	Chromium	13.1		0.047	0.50	mg/Kg
Q2413-03	TP-77	SOIL	Cobalt	2.30		0.099	1.49	mg/Kg
Q2413-03	TP-77	SOIL	Copper	0.68	J	0.22	0.99	mg/Kg
Q2413-03	TP-77	SOIL	Iron	30600		3.95	4.95	mg/Kg
Q2413-03	TP-77	SOIL	Lead	8.28		0.13	0.59	mg/Kg
Q2413-03	TP-77	SOIL	Magnesium	387		11.9	99.0	mg/Kg
Q2413-03	TP-77	SOIL	Manganese	26.4		0.14	0.99	mg/Kg
Q2413-03	TP-77	SOIL	Mercury	0.016		0.0080	0.014	mg/Kg
Q2413-03	TP-77	SOIL	Nickel	7.00		0.13	1.98	mg/Kg
Q2413-03	TP-77	SOIL	Potassium	889		27.4	99.0	mg/Kg
Q2413-03	TP-77	SOIL	Selenium	9.86		0.26	0.99	mg/Kg
Q2413-03	TP-77	SOIL	Silver	0.34	J	0.12	0.50	mg/Kg
Q2413-03	TP-77	SOIL	Sodium	267		17.6	99.0	mg/Kg
Q2413-03	TP-77	SOIL	Vanadium	26.8		0.25	1.98	mg/Kg
Q2413-03	TP-77	SOIL	Zinc	20.9		0.11	1.98	mg/Kg
Client ID : TP-74								
Q2413-04	TP-74	SOIL	Aluminum	7510		0.89	5.32	mg/Kg
Q2413-04	TP-74	SOIL	Antimony	1.16	J	0.23	2.66	mg/Kg
Q2413-04	TP-74	SOIL	Arsenic	9.31		0.20	1.06	mg/Kg
Q2413-04	TP-74	SOIL	Barium	35.5		0.78	5.32	mg/Kg
Q2413-04	TP-74	SOIL	Beryllium	0.82		0.027	0.32	mg/Kg
Q2413-04	TP-74	SOIL	Calcium	158		11.8	106	mg/Kg
Q2413-04	TP-74	SOIL	Chromium	9.18		0.050	0.53	mg/Kg
Q2413-04	TP-74	SOIL	Cobalt	6.13		0.11	1.60	mg/Kg
Q2413-04	TP-74	SOIL	Copper	1.04	J	0.23	1.06	mg/Kg
Q2413-04	TP-74	SOIL	Iron	24600		4.25	5.32	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2413

Order ID: Q2413

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2413-04	TP-74	SOIL	Lead	9.20		0.14	0.64	mg/Kg
Q2413-04	TP-74	SOIL	Magnesium	272		12.8	106	mg/Kg
Q2413-04	TP-74	SOIL	Manganese	76.2		0.15	1.06	mg/Kg
Q2413-04	TP-74	SOIL	Mercury	0.012	J	0.0090	0.015	mg/Kg
Q2413-04	TP-74	SOIL	Nickel	5.54		0.14	2.13	mg/Kg
Q2413-04	TP-74	SOIL	Potassium	560		29.5	106	mg/Kg
Q2413-04	TP-74	SOIL	Selenium	7.99		0.28	1.06	mg/Kg
Q2413-04	TP-74	SOIL	Silver	0.59		0.13	0.53	mg/Kg
Q2413-04	TP-74	SOIL	Sodium	428		18.9	106	mg/Kg
Q2413-04	TP-74	SOIL	Vanadium	20.5		0.27	2.13	mg/Kg
Q2413-04	TP-74	SOIL	Zinc	20.7		0.12	2.13	mg/Kg

Client ID : TP-73

Q2413-05	TP-73	SOIL	Aluminum	3080		1.00	5.95	mg/Kg
Q2413-05	TP-73	SOIL	Antimony	0.36	J	0.26	2.97	mg/Kg
Q2413-05	TP-73	SOIL	Arsenic	1.76		0.23	1.19	mg/Kg
Q2413-05	TP-73	SOIL	Barium	35.7		0.87	5.95	mg/Kg
Q2413-05	TP-73	SOIL	Beryllium	0.28	J	0.030	0.36	mg/Kg
Q2413-05	TP-73	SOIL	Calcium	171		13.2	119	mg/Kg
Q2413-05	TP-73	SOIL	Chromium	3.79		0.056	0.60	mg/Kg
Q2413-05	TP-73	SOIL	Cobalt	0.36	J	0.12	1.78	mg/Kg
Q2413-05	TP-73	SOIL	Copper	2.91		0.26	1.19	mg/Kg
Q2413-05	TP-73	SOIL	Iron	3620		4.75	5.95	mg/Kg
Q2413-05	TP-73	SOIL	Lead	9.44		0.16	0.71	mg/Kg
Q2413-05	TP-73	SOIL	Magnesium	104	J	14.3	119	mg/Kg
Q2413-05	TP-73	SOIL	Manganese	5.60		0.17	1.19	mg/Kg
Q2413-05	TP-73	SOIL	Mercury	0.026		0.0090	0.016	mg/Kg
Q2413-05	TP-73	SOIL	Nickel	1.24	J	0.16	2.38	mg/Kg
Q2413-05	TP-73	SOIL	Potassium	170		33.0	119	mg/Kg
Q2413-05	TP-73	SOIL	Selenium	1.38		0.31	1.19	mg/Kg
Q2413-05	TP-73	SOIL	Sodium	165		21.2	119	mg/Kg
Q2413-05	TP-73	SOIL	Vanadium	6.06		0.30	2.38	mg/Kg
Q2413-05	TP-73	SOIL	Zinc	5.43		0.13	2.38	mg/Kg

Client ID : TP-72

Q2413-06	TP-72	SOIL	Aluminum	4570		0.89	5.32	mg/Kg
Q2413-06	TP-72	SOIL	Antimony	0.79	J	0.23	2.66	mg/Kg
Q2413-06	TP-72	SOIL	Arsenic	6.60		0.20	1.06	mg/Kg
Q2413-06	TP-72	SOIL	Barium	22.4		0.78	5.32	mg/Kg
Q2413-06	TP-72	SOIL	Beryllium	0.57		0.027	0.32	mg/Kg
Q2413-06	TP-72	SOIL	Calcium	371		11.8	106	mg/Kg

Hit Summary Sheet
SW-846

SDG No.:	Q2413	Order ID:	Q2413
Client:	CDM Smith	Project ID:	South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2413-06	TP-72	SOIL	Chromium	7.90		0.050	0.53	mg/Kg
Q2413-06	TP-72	SOIL	Cobalt	2.69		0.11	1.60	mg/Kg
Q2413-06	TP-72	SOIL	Copper	4.46		0.23	1.06	mg/Kg
Q2413-06	TP-72	SOIL	Iron	16000		4.25	5.32	mg/Kg
Q2413-06	TP-72	SOIL	Lead	6.00		0.14	0.64	mg/Kg
Q2413-06	TP-72	SOIL	Magnesium	428		12.8	106	mg/Kg
Q2413-06	TP-72	SOIL	Manganese	37.9		0.15	1.06	mg/Kg
Q2413-06	TP-72	SOIL	Mercury	0.019		0.0080	0.014	mg/Kg
Q2413-06	TP-72	SOIL	Nickel	4.12		0.14	2.13	mg/Kg
Q2413-06	TP-72	SOIL	Potassium	570		29.5	106	mg/Kg
Q2413-06	TP-72	SOIL	Selenium	4.93		0.28	1.06	mg/Kg
Q2413-06	TP-72	SOIL	Silver	0.19	J	0.13	0.53	mg/Kg
Q2413-06	TP-72	SOIL	Sodium	225		18.9	106	mg/Kg
Q2413-06	TP-72	SOIL	Vanadium	20.0		0.27	2.13	mg/Kg
Q2413-06	TP-72	SOIL	Zinc	13.0		0.12	2.13	mg/Kg



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-35	SDG No.:	Q2413
Lab Sample ID:	Q2413-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	88.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	7550		1	0.80	4.73	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-36-0	Antimony	1.16	JN	1	0.21	2.37	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-38-2	Arsenic	6.94		1	0.18	0.95	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-39-3	Barium	18.5		1	0.69	4.73	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-41-7	Beryllium	0.79		1	0.024	0.28	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-43-9	Cadmium	0.023	U	1	0.023	0.28	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-70-2	Calcium	239		1	10.5	94.6	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-47-3	Chromium	12.3		1	0.044	0.47	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-48-4	Cobalt	4.49		1	0.095	1.42	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-50-8	Copper	4.24		1	0.21	0.95	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7439-89-6	Iron	22300		1	3.78	4.73	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7439-92-1	Lead	10.6		1	0.12	0.57	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7439-95-4	Magnesium	503		1	11.4	94.6	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7439-96-5	Manganese	50.0		1	0.13	0.95	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7439-97-6	Mercury	0.023		1	0.0080	0.014	mg/Kg	06/26/25 12:15	06/26/25 15:03	7471B	
7440-02-0	Nickel	7.64		1	0.12	1.89	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-09-7	Potassium	445	N	1	26.2	94.6	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7782-49-2	Selenium	7.10		1	0.25	0.95	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-22-4	Silver	0.38	J	1	0.11	0.47	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-23-5	Sodium	138		1	16.8	94.6	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-28-0	Thallium	0.22	U	1	0.22	1.89	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-62-2	Vanadium	24.8	N	1	0.24	1.89	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050
7440-66-6	Zinc	21.3	N	1	0.10	1.89	mg/Kg	06/26/25 10:20	06/27/25 18:28	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-34	SDG No.:	Q2413
Lab Sample ID:	Q2413-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	92

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	3590		1	0.82	4.90	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-36-0	Antimony	0.74	JN	1	0.22	2.45	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-38-2	Arsenic	3.33		1	0.19	0.98	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-39-3	Barium	6.11		1	0.72	4.90	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-41-7	Beryllium	0.42		1	0.024	0.29	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-43-9	Cadmium	0.024	U	1	0.024	0.29	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-70-2	Calcium	119		1	10.9	97.9	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-47-3	Chromium	12.1		1	0.046	0.49	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-48-4	Cobalt	1.52		1	0.098	1.47	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-50-8	Copper	5.05		1	0.22	0.98	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7439-89-6	Iron	11500		1	3.91	4.90	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7439-92-1	Lead	9.44		1	0.13	0.59	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7439-95-4	Magnesium	170		1	11.8	97.9	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7439-96-5	Manganese	16.1		1	0.14	0.98	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7439-97-6	Mercury	0.024		1	0.0080	0.014	mg/Kg	06/26/25 12:15	06/26/25 15:05	7471B	
7440-02-0	Nickel	3.07		1	0.13	1.96	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-09-7	Potassium	155	N	1	27.1	97.9	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7782-49-2	Selenium	3.84		1	0.26	0.98	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-22-4	Silver	0.24	J	1	0.12	0.49	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-23-5	Sodium	84.3	J	1	17.4	97.9	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-28-0	Thallium	0.23	U	1	0.23	1.96	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-62-2	Vanadium	19.4	N	1	0.25	1.96	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050
7440-66-6	Zinc	14.6	N	1	0.11	1.96	mg/Kg	06/26/25 10:20	06/27/25 18:33	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-77	SDG No.:	Q2413
Lab Sample ID:	Q2413-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	91.4

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	8720		1	0.83	4.95	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-36-0	Antimony	1.49	JN	1	0.22	2.48	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-38-2	Arsenic	11.0		1	0.19	0.99	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-39-3	Barium	18.0		1	0.72	4.95	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-41-7	Beryllium	1.03		1	0.025	0.30	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-43-9	Cadmium	0.024	U	1	0.024	0.30	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-70-2	Calcium	92.1	J	1	11.0	99.0	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-47-3	Chromium	13.1		1	0.047	0.50	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-48-4	Cobalt	2.30		1	0.099	1.49	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-50-8	Copper	0.68	J	1	0.22	0.99	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7439-89-6	Iron	30600		1	3.95	4.95	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7439-92-1	Lead	8.28		1	0.13	0.59	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7439-95-4	Magnesium	387		1	11.9	99.0	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7439-96-5	Manganese	26.4		1	0.14	0.99	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7439-97-6	Mercury	0.016		1	0.0080	0.014	mg/Kg	06/26/25 12:15	06/26/25 15:07	7471B	
7440-02-0	Nickel	7.00		1	0.13	1.98	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-09-7	Potassium	889	N	1	27.4	99.0	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7782-49-2	Selenium	9.86		1	0.26	0.99	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-22-4	Silver	0.34	J	1	0.12	0.50	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-23-5	Sodium	267		1	17.6	99.0	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-28-0	Thallium	0.23	U	1	0.23	1.98	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-62-2	Vanadium	26.8	N	1	0.25	1.98	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050
7440-66-6	Zinc	20.9	N	1	0.11	1.98	mg/Kg	06/26/25 10:20	06/27/25 18:37	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-74	SDG No.:	Q2413
Lab Sample ID:	Q2413-04	Matrix:	SOIL
Level (low/med):	low	% Solid:	89.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	7510		1	0.89	5.32	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-36-0	Antimony	1.16	JN	1	0.23	2.66	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-38-2	Arsenic	9.31		1	0.20	1.06	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-39-3	Barium	35.5		1	0.78	5.32	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-41-7	Beryllium	0.82		1	0.027	0.32	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-43-9	Cadmium	0.026	U	1	0.026	0.32	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-70-2	Calcium	158		1	11.8	106	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-47-3	Chromium	9.18		1	0.050	0.53	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-48-4	Cobalt	6.13		1	0.11	1.60	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-50-8	Copper	1.04	J	1	0.23	1.06	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7439-89-6	Iron	24600		1	4.25	5.32	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7439-92-1	Lead	9.20		1	0.14	0.64	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7439-95-4	Magnesium	272		1	12.8	106	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7439-96-5	Manganese	76.2		1	0.15	1.06	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7439-97-6	Mercury	0.012	J	1	0.0090	0.015	mg/Kg	06/26/25 12:15	06/26/25 15:09	7471B	
7440-02-0	Nickel	5.54		1	0.14	2.13	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-09-7	Potassium	560	N	1	29.5	106	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7782-49-2	Selenium	7.99		1	0.28	1.06	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-22-4	Silver	0.59		1	0.13	0.53	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-23-5	Sodium	428		1	18.9	106	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-28-0	Thallium	0.25	U	1	0.25	2.13	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-62-2	Vanadium	20.5	N	1	0.27	2.13	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050
7440-66-6	Zinc	20.7	N	1	0.12	2.13	mg/Kg	06/26/25 10:20	06/27/25 18:50	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	06/23/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-73	SDG No.:	Q2413
Lab Sample ID:	Q2413-05	Matrix:	SOIL
Level (low/med):	low	% Solid:	77.1

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	3080		1	1.00	5.95	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-36-0	Antimony	0.36	JN	1	0.26	2.97	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-38-2	Arsenic	1.76		1	0.23	1.19	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-39-3	Barium	35.7		1	0.87	5.95	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-41-7	Beryllium	0.28	J	1	0.030	0.36	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-43-9	Cadmium	0.029	U	1	0.029	0.36	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-70-2	Calcium	171		1	13.2	119	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-47-3	Chromium	3.79		1	0.056	0.60	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-48-4	Cobalt	0.36	J	1	0.12	1.78	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-50-8	Copper	2.91		1	0.26	1.19	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7439-89-6	Iron	3620		1	4.75	5.95	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7439-92-1	Lead	9.44		1	0.16	0.71	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7439-95-4	Magnesium	104	J	1	14.3	119	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7439-96-5	Manganese	5.60		1	0.17	1.19	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7439-97-6	Mercury	0.026		1	0.0090	0.016	mg/Kg	06/26/25 12:15	06/26/25 15:16	7471B	
7440-02-0	Nickel	1.24	J	1	0.16	2.38	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-09-7	Potassium	170	N	1	33.0	119	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7782-49-2	Selenium	1.38		1	0.31	1.19	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-22-4	Silver	0.14	U	1	0.14	0.60	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-23-5	Sodium	165		1	21.2	119	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-28-0	Thallium	0.27	U	1	0.27	2.38	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-62-2	Vanadium	6.06	N	1	0.30	2.38	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050
7440-66-6	Zinc	5.43	N	1	0.13	2.38	mg/Kg	06/26/25 10:20	06/27/25 18:54	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	06/24/25
Project:	South River WM Replacement	Date Received:	06/24/25
Client Sample ID:	TP-72	SDG No.:	Q2413
Lab Sample ID:	Q2413-06	Matrix:	SOIL
Level (low/med):	low	% Solid:	87

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	4570		1	0.89	5.32	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-36-0	Antimony	0.79	JN	1	0.23	2.66	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-38-2	Arsenic	6.60		1	0.20	1.06	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-39-3	Barium	22.4		1	0.78	5.32	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-41-7	Beryllium	0.57		1	0.027	0.32	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-43-9	Cadmium	0.026	U	1	0.026	0.32	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-70-2	Calcium	371		1	11.8	106	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-47-3	Chromium	7.90		1	0.050	0.53	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-48-4	Cobalt	2.69		1	0.11	1.60	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-50-8	Copper	4.46		1	0.23	1.06	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7439-89-6	Iron	16000		1	4.25	5.32	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7439-92-1	Lead	6.00		1	0.14	0.64	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7439-95-4	Magnesium	428		1	12.8	106	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7439-96-5	Manganese	37.9		1	0.15	1.06	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7439-97-6	Mercury	0.019		1	0.0080	0.014	mg/Kg	06/26/25 12:15	06/26/25 15:18	7471B	
7440-02-0	Nickel	4.12		1	0.14	2.13	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-09-7	Potassium	570	N	1	29.5	106	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7782-49-2	Selenium	4.93		1	0.28	1.06	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-22-4	Silver	0.19	J	1	0.13	0.53	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-23-5	Sodium	225		1	18.9	106	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-28-0	Thallium	0.25	U	1	0.25	2.13	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-62-2	Vanadium	20.0	N	1	0.27	2.13	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050
7440-66-6	Zinc	13.0	N	1	0.12	2.13	mg/Kg	06/26/25 10:20	06/27/25 18:59	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

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OR = Over Range

N = Spiked sample recovery not within control limits



METAL CALIBRATION DATA

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV08	Mercury	3.92	4.0	98	90 - 110	CV	06/26/2025	14:34	1b136298

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV23	Mercury	4.94	5.0	99	90 - 110	CV	06/26/2025	14:39	1b136298
CCV24	Mercury	4.79	5.0	96	90 - 110	CV	06/26/2025	15:12	1b136298
CCV25	Mercury	4.69	5.0	94	90 - 110	CV	06/26/2025	15:40	1b136298
CCV26	Mercury	4.76	5.0	95	90 - 110	CV	06/26/2025	16:20	1b136298

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith SDG No.: Q2413
Contract: CAMP02 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	7840	8000	98	90 - 110	P	06/27/2025	11:45	LB136319
	Antimony	4280	4000	107	90 - 110	P	06/27/2025	11:45	LB136319
	Arsenic	3910	4000	98	90 - 110	P	06/27/2025	11:45	LB136319
	Barium	8020	8000	100	90 - 110	P	06/27/2025	11:45	LB136319
	Beryllium	204	200	102	90 - 110	P	06/27/2025	11:45	LB136319
	Cadmium	1990	2000	100	90 - 110	P	06/27/2025	11:45	LB136319
	Calcium	19600	20000	98	90 - 110	P	06/27/2025	11:45	LB136319
	Chromium	757	800	95	90 - 110	P	06/27/2025	11:45	LB136319
	Cobalt	1970	2000	99	90 - 110	P	06/27/2025	11:45	LB136319
	Copper	1040	1000	104	90 - 110	P	06/27/2025	11:45	LB136319
	Iron	3850	4000	96	90 - 110	P	06/27/2025	11:45	LB136319
	Lead	3950	4000	99	90 - 110	P	06/27/2025	11:45	LB136319
	Magnesium	20200	20000	101	90 - 110	P	06/27/2025	11:45	LB136319
	Manganese	1990	2000	100	90 - 110	P	06/27/2025	11:45	LB136319
	Nickel	1950	2000	98	90 - 110	P	06/27/2025	11:45	LB136319
	Potassium	19500	20000	97	90 - 110	P	06/27/2025	11:45	LB136319
	Selenium	4050	4000	101	90 - 110	P	06/27/2025	11:45	LB136319
	Silver	941	1000	94	90 - 110	P	06/27/2025	11:45	LB136319
	Sodium	20500	20000	102	90 - 110	P	06/27/2025	11:45	LB136319
	Thallium	3950	4000	99	90 - 110	P	06/27/2025	11:45	LB136319
	Vanadium	2020	2000	101	90 - 110	P	06/27/2025	11:45	LB136319
	Zinc	2030	2000	101	90 - 110	P	06/27/2025	11:45	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith SDG No.: Q2413
Contract: CAMP02 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	94.7	100	95	80 - 120	P	06/27/2025	12:03	LB136319
	Antimony	57.4	50.0	115	80 - 120	P	06/27/2025	12:03	LB136319
	Arsenic	16.7	20.0	84	80 - 120	P	06/27/2025	12:03	LB136319
	Barium	99.9	100	100	80 - 120	P	06/27/2025	12:03	LB136319
	Beryllium	6.43	6.0	107	80 - 120	P	06/27/2025	12:03	LB136319
	Cadmium	5.74	6.0	96	80 - 120	P	06/27/2025	12:03	LB136319
	Calcium	2080	2000	104	80 - 120	P	06/27/2025	12:03	LB136319
	Chromium	11.1	10.0	112	80 - 120	P	06/27/2025	12:03	LB136319
	Cobalt	30.3	30.0	101	80 - 120	P	06/27/2025	12:03	LB136319
	Copper	22.3	20.0	112	80 - 120	P	06/27/2025	12:03	LB136319
	Iron	111	100	111	80 - 120	P	06/27/2025	12:03	LB136319
	Lead	10.3	12.0	86	80 - 120	P	06/27/2025	12:03	LB136319
	Magnesium	2270	2000	114	80 - 120	P	06/27/2025	12:03	LB136319
	Manganese	22.8	20.0	114	80 - 120	P	06/27/2025	12:03	LB136319
	Nickel	39.8	40.0	100	80 - 120	P	06/27/2025	12:03	LB136319
	Potassium	1800	2000	90	80 - 120	P	06/27/2025	12:03	LB136319
	Selenium	19.5	20.0	98	80 - 120	P	06/27/2025	12:03	LB136319
	Silver	10.7	10.0	107	80 - 120	P	06/27/2025	12:03	LB136319
	Sodium	1900	2000	95	80 - 120	P	06/27/2025	12:03	LB136319
	Thallium	40.7	40.0	102	80 - 120	P	06/27/2025	12:03	LB136319
	Vanadium	47.8	40.0	119	80 - 120	P	06/27/2025	12:03	LB136319
	Zinc	34.2	40.0	85	80 - 120	P	06/27/2025	12:03	LB136319

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith SDG No.: Q2413
 Contract: CAMP02 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9460	10000	95	90 - 110	P	06/27/2025	13:22	LB136319
	Antimony	5000	5000	100	90 - 110	P	06/27/2025	13:22	LB136319
	Arsenic	4830	5000	97	90 - 110	P	06/27/2025	13:22	LB136319
	Barium	10100	10000	101	90 - 110	P	06/27/2025	13:22	LB136319
	Beryllium	250	250	100	90 - 110	P	06/27/2025	13:22	LB136319
	Cadmium	2460	2500	99	90 - 110	P	06/27/2025	13:22	LB136319
	Calcium	24700	25000	99	90 - 110	P	06/27/2025	13:22	LB136319
	Chromium	1030	1000	103	90 - 110	P	06/27/2025	13:22	LB136319
	Cobalt	2470	2500	99	90 - 110	P	06/27/2025	13:22	LB136319
	Copper	1250	1250	100	90 - 110	P	06/27/2025	13:22	LB136319
	Iron	5370	5000	108	90 - 110	P	06/27/2025	13:22	LB136319
	Lead	4980	5000	100	90 - 110	P	06/27/2025	13:22	LB136319
	Magnesium	25700	25000	103	90 - 110	P	06/27/2025	13:22	LB136319
	Manganese	2520	2500	101	90 - 110	P	06/27/2025	13:22	LB136319
	Nickel	2510	2500	100	90 - 110	P	06/27/2025	13:22	LB136319
	Potassium	24900	25000	99	90 - 110	P	06/27/2025	13:22	LB136319
	Selenium	5040	5000	101	90 - 110	P	06/27/2025	13:22	LB136319
	Silver	1230	1250	99	90 - 110	P	06/27/2025	13:22	LB136319
	Sodium	25000	25000	100	90 - 110	P	06/27/2025	13:22	LB136319
	Thallium	5000	5000	100	90 - 110	P	06/27/2025	13:22	LB136319
	Vanadium	2480	2500	99	90 - 110	P	06/27/2025	13:22	LB136319
	Zinc	2510	2500	101	90 - 110	P	06/27/2025	13:22	LB136319
CCV02	Aluminum	9650	10000	96	90 - 110	P	06/27/2025	14:19	LB136319
	Antimony	5050	5000	101	90 - 110	P	06/27/2025	14:19	LB136319
	Arsenic	4900	5000	98	90 - 110	P	06/27/2025	14:19	LB136319
	Barium	10200	10000	102	90 - 110	P	06/27/2025	14:19	LB136319
	Beryllium	256	250	102	90 - 110	P	06/27/2025	14:19	LB136319
	Cadmium	2500	2500	100	90 - 110	P	06/27/2025	14:19	LB136319
	Calcium	25000	25000	100	90 - 110	P	06/27/2025	14:19	LB136319
	Chromium	1010	1000	101	90 - 110	P	06/27/2025	14:19	LB136319
	Cobalt	2510	2500	100	90 - 110	P	06/27/2025	14:19	LB136319
	Copper	1290	1250	103	90 - 110	P	06/27/2025	14:19	LB136319
	Iron	5250	5000	105	90 - 110	P	06/27/2025	14:19	LB136319
	Lead	5070	5000	101	90 - 110	P	06/27/2025	14:19	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith **SDG No.:** Q2413

Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Magnesium	26100	25000	104	90 - 110	P	06/27/2025	14:19	LB136319
	Manganese	2540	2500	102	90 - 110	P	06/27/2025	14:19	LB136319
	Nickel	2530	2500	101	90 - 110	P	06/27/2025	14:19	LB136319
	Potassium	25600	25000	102	90 - 110	P	06/27/2025	14:19	LB136319
	Selenium	5100	5000	102	90 - 110	P	06/27/2025	14:19	LB136319
	Silver	1260	1250	101	90 - 110	P	06/27/2025	14:19	LB136319
	Sodium	25800	25000	103	90 - 110	P	06/27/2025	14:19	LB136319
	Thallium	5080	5000	102	90 - 110	P	06/27/2025	14:19	LB136319
	Vanadium	2500	2500	100	90 - 110	P	06/27/2025	14:19	LB136319
	Zinc	2550	2500	102	90 - 110	P	06/27/2025	14:19	LB136319
CCV03	Aluminum	9690	10000	97	90 - 110	P	06/27/2025	15:12	LB136319
	Antimony	5100	5000	102	90 - 110	P	06/27/2025	15:12	LB136319
	Arsenic	4930	5000	99	90 - 110	P	06/27/2025	15:12	LB136319
	Barium	10300	10000	103	90 - 110	P	06/27/2025	15:12	LB136319
	Beryllium	257	250	103	90 - 110	P	06/27/2025	15:12	LB136319
	Cadmium	2530	2500	101	90 - 110	P	06/27/2025	15:12	LB136319
	Calcium	25400	25000	102	90 - 110	P	06/27/2025	15:12	LB136319
	Chromium	1040	1000	104	90 - 110	P	06/27/2025	15:12	LB136319
	Cobalt	2540	2500	102	90 - 110	P	06/27/2025	15:12	LB136319
	Copper	1290	1250	103	90 - 110	P	06/27/2025	15:12	LB136319
	Iron	5340	5000	107	90 - 110	P	06/27/2025	15:12	LB136319
	Lead	5120	5000	102	90 - 110	P	06/27/2025	15:12	LB136319
	Magnesium	26300	25000	105	90 - 110	P	06/27/2025	15:12	LB136319
	Manganese	2560	2500	103	90 - 110	P	06/27/2025	15:12	LB136319
	Nickel	2560	2500	103	90 - 110	P	06/27/2025	15:12	LB136319
	Potassium	25800	25000	103	90 - 110	P	06/27/2025	15:12	LB136319
	Selenium	5170	5000	103	90 - 110	P	06/27/2025	15:12	LB136319
	Silver	1270	1250	102	90 - 110	P	06/27/2025	15:12	LB136319
	Sodium	26000	25000	104	90 - 110	P	06/27/2025	15:12	LB136319
	Thallium	5140	5000	103	90 - 110	P	06/27/2025	15:12	LB136319
	Vanadium	2550	2500	102	90 - 110	P	06/27/2025	15:12	LB136319
	Zinc	2560	2500	102	90 - 110	P	06/27/2025	15:12	LB136319
CCV04	Aluminum	10300	10000	103	90 - 110	P	06/27/2025	16:04	LB136319
	Antimony	5110	5000	102	90 - 110	P	06/27/2025	16:04	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith SDG No.: Q2413
 Contract: CAMP02 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Arsenic	4940	5000	99	90 - 110	P	06/27/2025	16:04	LB136319
	Barium	10300	10000	103	90 - 110	P	06/27/2025	16:04	LB136319
	Beryllium	256	250	102	90 - 110	P	06/27/2025	16:04	LB136319
	Cadmium	2530	2500	101	90 - 110	P	06/27/2025	16:04	LB136319
	Calcium	25400	25000	102	90 - 110	P	06/27/2025	16:04	LB136319
	Chromium	1010	1000	101	90 - 110	P	06/27/2025	16:04	LB136319
	Cobalt	2540	2500	102	90 - 110	P	06/27/2025	16:04	LB136319
	Copper	1290	1250	103	90 - 110	P	06/27/2025	16:04	LB136319
	Iron	5250	5000	105	90 - 110	P	06/27/2025	16:04	LB136319
	Lead	5120	5000	102	90 - 110	P	06/27/2025	16:04	LB136319
	Magnesium	26100	25000	105	90 - 110	P	06/27/2025	16:04	LB136319
	Manganese	2580	2500	103	90 - 110	P	06/27/2025	16:04	LB136319
	Nickel	2550	2500	102	90 - 110	P	06/27/2025	16:04	LB136319
	Potassium	25800	25000	103	90 - 110	P	06/27/2025	16:04	LB136319
	Selenium	5160	5000	103	90 - 110	P	06/27/2025	16:04	LB136319
	Silver	1260	1250	101	90 - 110	P	06/27/2025	16:04	LB136319
	Sodium	26000	25000	104	90 - 110	P	06/27/2025	16:04	LB136319
	Thallium	5130	5000	102	90 - 110	P	06/27/2025	16:04	LB136319
	Vanadium	2550	2500	102	90 - 110	P	06/27/2025	16:04	LB136319
	Zinc	2570	2500	103	90 - 110	P	06/27/2025	16:04	LB136319
CCV05	Aluminum	9590	10000	96	90 - 110	P	06/27/2025	16:56	LB136319
	Antimony	4950	5000	99	90 - 110	P	06/27/2025	16:56	LB136319
	Arsenic	4820	5000	96	90 - 110	P	06/27/2025	16:56	LB136319
	Barium	10200	10000	102	90 - 110	P	06/27/2025	16:56	LB136319
	Beryllium	255	250	102	90 - 110	P	06/27/2025	16:56	LB136319
	Cadmium	2460	2500	98	90 - 110	P	06/27/2025	16:56	LB136319
	Calcium	24800	25000	99	90 - 110	P	06/27/2025	16:56	LB136319
	Chromium	1040	1000	104	90 - 110	P	06/27/2025	16:56	LB136319
	Cobalt	2460	2500	98	90 - 110	P	06/27/2025	16:56	LB136319
	Copper	1280	1250	102	90 - 110	P	06/27/2025	16:56	LB136319
	Iron	5380	5000	108	90 - 110	P	06/27/2025	16:56	LB136319
	Lead	4960	5000	99	90 - 110	P	06/27/2025	16:56	LB136319
	Magnesium	25300	25000	101	90 - 110	P	06/27/2025	16:56	LB136319
	Manganese	2490	2500	100	90 - 110	P	06/27/2025	16:56	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith **SDG No.:** Q2413

Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Nickel	2500	2500	100	90 - 110	P	06/27/2025	16:56	LB136319
	Potassium	25700	25000	103	90 - 110	P	06/27/2025	16:56	LB136319
	Selenium	4980	5000	100	90 - 110	P	06/27/2025	16:56	LB136319
	Silver	1230	1250	98	90 - 110	P	06/27/2025	16:56	LB136319
	Sodium	25900	25000	104	90 - 110	P	06/27/2025	16:56	LB136319
	Thallium	4980	5000	100	90 - 110	P	06/27/2025	16:56	LB136319
	Vanadium	2470	2500	99	90 - 110	P	06/27/2025	16:56	LB136319
	Zinc	2480	2500	99	90 - 110	P	06/27/2025	16:56	LB136319
CCV06	Aluminum	9580	10000	96	90 - 110	P	06/27/2025	17:49	LB136319
	Antimony	5020	5000	100	90 - 110	P	06/27/2025	17:49	LB136319
	Arsenic	4880	5000	98	90 - 110	P	06/27/2025	17:49	LB136319
	Barium	10400	10000	104	90 - 110	P	06/27/2025	17:49	LB136319
	Beryllium	254	250	102	90 - 110	P	06/27/2025	17:49	LB136319
	Cadmium	2480	2500	99	90 - 110	P	06/27/2025	17:49	LB136319
	Calcium	24900	25000	100	90 - 110	P	06/27/2025	17:49	LB136319
	Chromium	1030	1000	103	90 - 110	P	06/27/2025	17:49	LB136319
	Cobalt	2480	2500	99	90 - 110	P	06/27/2025	17:49	LB136319
	Copper	1280	1250	102	90 - 110	P	06/27/2025	17:49	LB136319
	Iron	5430	5000	109	90 - 110	P	06/27/2025	17:49	LB136319
	Lead	5000	5000	100	90 - 110	P	06/27/2025	17:49	LB136319
	Magnesium	25800	25000	103	90 - 110	P	06/27/2025	17:49	LB136319
	Manganese	2540	2500	102	90 - 110	P	06/27/2025	17:49	LB136319
	Nickel	2530	2500	101	90 - 110	P	06/27/2025	17:49	LB136319
	Potassium	25700	25000	103	90 - 110	P	06/27/2025	17:49	LB136319
	Selenium	5030	5000	101	90 - 110	P	06/27/2025	17:49	LB136319
	Silver	1220	1250	97	90 - 110	P	06/27/2025	17:49	LB136319
	Sodium	26100	25000	105	90 - 110	P	06/27/2025	17:49	LB136319
	Thallium	5060	5000	101	90 - 110	P	06/27/2025	17:49	LB136319
	Vanadium	2520	2500	101	90 - 110	P	06/27/2025	17:49	LB136319
	Zinc	2560	2500	102	90 - 110	P	06/27/2025	17:49	LB136319
CCV07	Aluminum	9940	10000	99	90 - 110	P	06/27/2025	18:41	LB136319
	Antimony	5140	5000	103	90 - 110	P	06/27/2025	18:41	LB136319
	Arsenic	5050	5000	101	90 - 110	P	06/27/2025	18:41	LB136319
	Barium	10600	10000	106	90 - 110	P	06/27/2025	18:41	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith SDG No.: Q2413
 Contract: CAMP02 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV07	Beryllium	260	250	104	90 - 110	P	06/27/2025	18:41	LB136319
	Cadmium	2550	2500	102	90 - 110	P	06/27/2025	18:41	LB136319
	Calcium	25300	25000	101	90 - 110	P	06/27/2025	18:41	LB136319
	Chromium	1030	1000	103	90 - 110	P	06/27/2025	18:41	LB136319
	Cobalt	2540	2500	102	90 - 110	P	06/27/2025	18:41	LB136319
	Copper	1310	1250	105	90 - 110	P	06/27/2025	18:41	LB136319
	Iron	5380	5000	108	90 - 110	P	06/27/2025	18:41	LB136319
	Lead	5120	5000	102	90 - 110	P	06/27/2025	18:41	LB136319
	Magnesium	26100	25000	104	90 - 110	P	06/27/2025	18:41	LB136319
	Manganese	2590	2500	103	90 - 110	P	06/27/2025	18:41	LB136319
	Nickel	2570	2500	103	90 - 110	P	06/27/2025	18:41	LB136319
	Potassium	26400	25000	106	90 - 110	P	06/27/2025	18:41	LB136319
	Selenium	5140	5000	103	90 - 110	P	06/27/2025	18:41	LB136319
	Silver	1240	1250	99	90 - 110	P	06/27/2025	18:41	LB136319
	Sodium	26800	25000	107	90 - 110	P	06/27/2025	18:41	LB136319
	Thallium	5190	5000	104	90 - 110	P	06/27/2025	18:41	LB136319
	Vanadium	2610	2500	104	90 - 110	P	06/27/2025	18:41	LB136319
	Zinc	2630	2500	105	90 - 110	P	06/27/2025	18:41	LB136319
CCV08	Aluminum	9930	10000	99	90 - 110	P	06/27/2025	19:29	LB136319
	Antimony	5100	5000	102	90 - 110	P	06/27/2025	19:29	LB136319
	Arsenic	5000	5000	100	90 - 110	P	06/27/2025	19:29	LB136319
	Barium	10500	10000	105	90 - 110	P	06/27/2025	19:29	LB136319
	Beryllium	256	250	102	90 - 110	P	06/27/2025	19:29	LB136319
	Cadmium	2520	2500	101	90 - 110	P	06/27/2025	19:29	LB136319
	Calcium	25100	25000	100	90 - 110	P	06/27/2025	19:29	LB136319
	Chromium	1010	1000	100	90 - 110	P	06/27/2025	19:29	LB136319
	Cobalt	2520	2500	101	90 - 110	P	06/27/2025	19:29	LB136319
	Copper	1290	1250	104	90 - 110	P	06/27/2025	19:29	LB136319
	Iron	5200	5000	104	90 - 110	P	06/27/2025	19:29	LB136319
	Lead	5040	5000	101	90 - 110	P	06/27/2025	19:29	LB136319
	Magnesium	25600	25000	102	90 - 110	P	06/27/2025	19:29	LB136319
	Manganese	2530	2500	101	90 - 110	P	06/27/2025	19:29	LB136319
	Nickel	2530	2500	101	90 - 110	P	06/27/2025	19:29	LB136319
	Potassium	26300	25000	105	90 - 110	P	06/27/2025	19:29	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV08	Selenium	5060	5000	101	90 - 110	P	06/27/2025	19:29	LB136319
	Silver	1220	1250	98	90 - 110	P	06/27/2025	19:29	LB136319
	Sodium	26500	25000	106	90 - 110	P	06/27/2025	19:29	LB136319
	Thallium	5130	5000	103	90 - 110	P	06/27/2025	19:29	LB136319
	Vanadium	2550	2500	102	90 - 110	P	06/27/2025	19:29	LB136319
	Zinc	2610	2500	104	90 - 110	P	06/27/2025	19:29	LB136319

Metals

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CRDL STANDARD FOR AA & ICP

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413
Initial Calibration Source: _____
Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.21	0.2	105	70 - 130	CV	06/26/2025	14:44	lb136298
CRI01	Aluminum	92.6	100	93	65 - 135	P	06/27/2025	12:58	LB136319
	Antimony	56.3	50.0	113	65 - 135	P	06/27/2025	12:58	LB136319
	Arsenic	16.9	20.0	84	65 - 135	P	06/27/2025	12:58	LB136319
	Barium	106	100	106	65 - 135	P	06/27/2025	12:58	LB136319
	Beryllium	6.39	6.0	106	65 - 135	P	06/27/2025	12:58	LB136319
	Cadmium	5.61	6.0	94	65 - 135	P	06/27/2025	12:58	LB136319
	Calcium	2090	2000	104	65 - 135	P	06/27/2025	12:58	LB136319
	Chromium	12.6	10.0	126	65 - 135	P	06/27/2025	12:58	LB136319
	Cobalt	30.4	30.0	101	65 - 135	P	06/27/2025	12:58	LB136319
	Copper	23.3	20.0	116	65 - 135	P	06/27/2025	12:58	LB136319
	Iron	109	100	108	65 - 135	P	06/27/2025	12:58	LB136319
	Lead	12.2	12.0	101	65 - 135	P	06/27/2025	12:58	LB136319
	Magnesium	2330	2000	117	65 - 135	P	06/27/2025	12:58	LB136319
	Manganese	22.7	20.0	114	65 - 135	P	06/27/2025	12:58	LB136319
	Nickel	40.0	40.0	100	65 - 135	P	06/27/2025	12:58	LB136319
	Potassium	1640	2000	82	65 - 135	P	06/27/2025	12:58	LB136319
	Selenium	20.1	20.0	100	65 - 135	P	06/27/2025	12:58	LB136319
	Silver	11.2	10.0	112	65 - 135	P	06/27/2025	12:58	LB136319
	Sodium	1900	2000	95	65 - 135	P	06/27/2025	12:58	LB136319
	Thallium	40.8	40.0	102	65 - 135	P	06/27/2025	12:58	LB136319
	Vanadium	39.3	40.0	98	65 - 135	P	06/27/2025	12:58	LB136319
	Zinc	34.2	40.0	86	65 - 135	P	06/27/2025	12:58	LB136319



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

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	CDM Smith				SDG No.:	Q2413			
Contract:	CAMP02	Lab Code:	CHEM	Case No.:	Q2413	SAS No.:	Q2413		
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB08	Mercury	0.076	+/-0.2	U	0.20	CV	06/26/2025	14:37	lb136298

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB23	Mercury	0.076	+/-0.2	U	0.20	CV	06/26/2025	14:41	lb136298
CCB24	Mercury	0.076	+/-0.2	U	0.20	CV	06/26/2025	15:14	lb136298
CCB25	Mercury	0.076	+/-0.2	U	0.20	CV	06/26/2025	15:43	lb136298
CCB26	Mercury	0.076	+/-0.2	U	0.20	CV	06/26/2025	16:22	lb136298

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	11.3	+/-50	U	100	P	06/27/2025	12:54	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	12:54	LB136319
	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	12:54	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	12:54	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	12:54	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	12:54	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	12:54	LB136319
	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	12:54	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	12:54	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	12:54	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	12:54	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	12:54	LB136319
	Magnesium	244	+/-1000	U	2000	P	06/27/2025	12:54	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	12:54	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	12:54	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	12:54	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	12:54	LB136319
	Silver	1.62	+/-5	U	10.0	P	06/27/2025	12:54	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	12:54	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	12:54	LB136319
	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	12:54	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	12:54	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: CDM Smith		SDG No.: Q2413							
Contract: CAMP02	Lab Code: CHEM	Case No.: Q2413	SAS No.: Q2413						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	11.3	+/-50	U	100	P	06/27/2025	13:31	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	13:31	LB136319
	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	13:31	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	13:31	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	13:31	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	13:31	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	13:31	LB136319
	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	13:31	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	13:31	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	13:31	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	13:31	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	13:31	LB136319
	Magnesium	244	+/-1000	U	2000	P	06/27/2025	13:31	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	13:31	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	13:31	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	13:31	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	13:31	LB136319
	Silver	1.62	+/-5	U	10.0	P	06/27/2025	13:31	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	13:31	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	13:31	LB136319
	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	13:31	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	13:31	LB136319
CCB02	Aluminum	11.3	+/-50	U	100	P	06/27/2025	14:24	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	14:24	LB136319
	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	14:24	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	14:24	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	14:24	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	14:24	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	14:24	LB136319
	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	14:24	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	14:24	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	14:24	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	14:24	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	14:24	LB136319
	Magnesium	244	+/-1000	U	2000	P	06/27/2025	14:24	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	14:24	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	14:24	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	14:24	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	14:24	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: CDM Smith		SDG No.: Q2413							
Contract: CAMP02	Lab Code: CHEM	Case No.: Q2413	SAS No.: Q2413						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	1.62	+/-5	U	10.0	P	06/27/2025	14:24	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	14:24	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	14:24	LB136319
	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	14:24	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	14:24	LB136319
CCB03	Aluminum	11.3	+/-50	U	100	P	06/27/2025	15:16	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	15:16	LB136319
	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	15:16	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	15:16	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	15:16	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	15:16	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	15:16	LB136319
	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	15:16	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	15:16	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	15:16	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	15:16	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	15:16	LB136319
	Magnesium	244	+/-1000	U	2000	P	06/27/2025	15:16	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	15:16	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	15:16	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	15:16	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	15:16	LB136319
	Silver	1.62	+/-5	U	10.0	P	06/27/2025	15:16	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	15:16	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	15:16	LB136319
	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	15:16	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	15:16	LB136319
CCB04	Aluminum	11.3	+/-50	U	100	P	06/27/2025	16:09	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	16:09	LB136319
	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	16:09	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	16:09	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	16:09	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	16:09	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	16:09	LB136319
	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	16:09	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	16:09	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	16:09	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	16:09	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	16:09	LB136319



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Client:	CDM Smith		SDG No.:	Q2413	
Contract:	CAMP02	Lab Code:	CHEM	Case No.:	Q2413
				SAS No.:	Q2413

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	244	+/-1000	U	2000	P	06/27/2025	16:09	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	16:09	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	16:09	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	16:09	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	16:09	LB136319
	Silver	1.62	+/-5	U	10.0	P	06/27/2025	16:09	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	16:09	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	16:09	LB136319
	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	16:09	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	16:09	LB136319
CCB05	Aluminum	11.3	+/-50	U	100	P	06/27/2025	17:01	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	17:01	LB136319
	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	17:01	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	17:01	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	17:01	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	17:01	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	17:01	LB136319
	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	17:01	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	17:01	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	17:01	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	17:01	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	17:01	LB136319
	Magnesium	244	+/-1000	U	2000	P	06/27/2025	17:01	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	17:01	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	17:01	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	17:01	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	17:01	LB136319
	Silver	1.62	+/-5	U	10.0	P	06/27/2025	17:01	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	17:01	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	17:01	LB136319
CCB06	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	17:01	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	17:01	LB136319
	Aluminum	11.3	+/-50	U	100	P	06/27/2025	17:53	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	17:53	LB136319
	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	17:53	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	17:53	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	17:53	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	17:53	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	17:53	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: CDM Smith		SDG No.: Q2413							
Contract: CAMP02	Lab Code: CHEM	Case No.: Q2413	SAS No.: Q2413						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	17:53	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	17:53	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	17:53	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	17:53	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	17:53	LB136319
	Magnesium	244	+/-1000	U	2000	P	06/27/2025	17:53	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	17:53	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	17:53	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	17:53	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	17:53	LB136319
	Silver	1.62	+/-5	U	10.0	P	06/27/2025	17:53	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	17:53	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	17:53	LB136319
	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	17:53	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	17:53	LB136319
CCB07	Aluminum	11.3	+/-50	U	100	P	06/27/2025	18:46	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	18:46	LB136319
	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	18:46	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	18:46	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	18:46	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	18:46	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	18:46	LB136319
	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	18:46	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	18:46	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	18:46	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	18:46	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	18:46	LB136319
	Magnesium	244	+/-1000	U	2000	P	06/27/2025	18:46	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	18:46	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	18:46	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	18:46	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	18:46	LB136319
	Silver	1.62	+/-5	U	10.0	P	06/27/2025	18:46	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	18:46	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	18:46	LB136319
	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	18:46	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	18:46	LB136319
CCB08	Aluminum	11.3	+/-50	U	100	P	06/27/2025	19:33	LB136319
	Antimony	6.76	+/-25	U	50.0	P	06/27/2025	19:33	LB136319

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB08	Arsenic	5.12	+/-10	U	20.0	P	06/27/2025	19:33	LB136319
	Barium	14.6	+/-50	U	100	P	06/27/2025	19:33	LB136319
	Beryllium	0.56	+/-3	U	6.00	P	06/27/2025	19:33	LB136319
	Cadmium	0.50	+/-3	U	6.00	P	06/27/2025	19:33	LB136319
	Calcium	234	+/-1000	U	2000	P	06/27/2025	19:33	LB136319
	Chromium	2.12	+/-5	U	10.0	P	06/27/2025	19:33	LB136319
	Cobalt	2.26	+/-15	U	30.0	P	06/27/2025	19:33	LB136319
	Copper	4.60	+/-10	U	20.0	P	06/27/2025	19:33	LB136319
	Iron	23.4	+/-50	U	100	P	06/27/2025	19:33	LB136319
	Lead	2.30	+/-6	U	12.0	P	06/27/2025	19:33	LB136319
	Magnesium	244	+/-1000	U	2000	P	06/27/2025	19:33	LB136319
	Manganese	5.94	+/-10	U	20.0	P	06/27/2025	19:33	LB136319
	Nickel	3.06	+/-20	U	40.0	P	06/27/2025	19:33	LB136319
	Potassium	918	+/-1000	U	2000	P	06/27/2025	19:33	LB136319
	Selenium	9.64	+/-10	U	20.0	P	06/27/2025	19:33	LB136319
	Silver	1.62	+/-5	U	10.0	P	06/27/2025	19:33	LB136319
	Sodium	868	+/-1000	U	2000	P	06/27/2025	19:33	LB136319
	Thallium	4.38	+/-20	U	40.0	P	06/27/2025	19:33	LB136319
	Vanadium	6.26	+/-20	U	40.0	P	06/27/2025	19:33	LB136319
	Zinc	3.50	+/-20	U	40.0	P	06/27/2025	19:33	LB136319

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: CDM Smith

SDG No.: Q2413

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB168633BL		SOLID		Batch Number:	PB168633		Prep Date:	06/26/2025	
	Mercury	0.0080	<0.013	U	0.013	CV	06/26/2025	14:51	lb136298

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: CDM Smith

SDG No.: Q2413

Instrument: P5

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB168628BL	SOLID			Batch Number:	PB168628		Prep Date:	06/26/2025	
	Aluminum	0.84	<2.5	U	5.00	P	06/27/2025	17:45	LB136319
	Antimony	0.22	<1.25	U	2.50	P	06/27/2025	17:45	LB136319
	Arsenic	0.19	<0.5	U	1.00	P	06/27/2025	17:45	LB136319
	Barium	0.73	<2.5	U	5.00	P	06/27/2025	17:45	LB136319
	Beryllium	0.025	<0.15	U	0.30	P	06/27/2025	17:45	LB136319
	Cadmium	0.024	<0.15	U	0.30	P	06/27/2025	17:45	LB136319
	Calcium	11.1	<50	U	100	P	06/27/2025	17:45	LB136319
	Chromium	0.047	<0.25	U	0.50	P	06/27/2025	17:45	LB136319
	Cobalt	0.10	<0.75	U	1.50	P	06/27/2025	17:45	LB136319
	Copper	0.22	<0.5	U	1.00	P	06/27/2025	17:45	LB136319
	Iron	3.99	<2.5	U	5.00	P	06/27/2025	17:45	LB136319
	Lead	0.13	<0.3	U	0.60	P	06/27/2025	17:45	LB136319
	Magnesium	12.0	<50	U	100	P	06/27/2025	17:45	LB136319
	Manganese	0.14	<0.5	U	1.00	P	06/27/2025	17:45	LB136319
	Nickel	0.13	<1	U	2.00	P	06/27/2025	17:45	LB136319
	Potassium	27.7	<50	U	100	P	06/27/2025	17:45	LB136319
	Selenium	0.26	<0.5	U	1.00	P	06/27/2025	17:45	LB136319
	Silver	0.12	<0.25	U	0.50	P	06/27/2025	17:45	LB136319
	Sodium	17.8	<50	U	100	P	06/27/2025	17:45	LB136319
	Thallium	0.23	<1	U	2.00	P	06/27/2025	17:45	LB136319
	Vanadium	0.28	<1	J	2.00	P	06/27/2025	17:45	LB136319
	Zinc	0.11	<1	U	2.00	P	06/27/2025	17:45	LB136319

Metals
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INTERFERENCE CHECK SAMPLE

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413
ICS Source: EPA **Instrument ID:** P5

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	240000	250000	96	216000	294000	06/27/2025	13:04	LB136319
	Antimony	21.2			-50	50	06/27/2025	13:04	LB136319
	Arsenic	1.80			-20	20	06/27/2025	13:04	LB136319
	Barium	5.72	6.0	95	-94	106	06/27/2025	13:04	LB136319
	Beryllium	1.16			-6	6	06/27/2025	13:04	LB136319
	Cadmium	-1.37	1.0	137	-5	7	06/27/2025	13:04	LB136319
	Calcium	237000	240000	99	208000	282000	06/27/2025	13:04	LB136319
	Chromium	49.2	52.0	95	42	62	06/27/2025	13:04	LB136319
	Cobalt	29.0			-30	30	06/27/2025	13:04	LB136319
	Copper	-5.04	2.0	252	-18	22	06/27/2025	13:04	LB136319
	Iron	101000	100000	101	85600	116500	06/27/2025	13:04	LB136319
	Lead	-0.17			-12	12	06/27/2025	13:04	LB136319
	Magnesium	257000	260000	99	216000	294000	06/27/2025	13:04	LB136319
	Manganese	5.41	7.0	77	-13	27	06/27/2025	13:04	LB136319
	Nickel	6.13	2.0	306	-38	42	06/27/2025	13:04	LB136319
	Potassium	10.4			0	0	06/27/2025	13:04	LB136319
	Selenium	4.19			-20	20	06/27/2025	13:04	LB136319
	Silver	4.58			-10	10	06/27/2025	13:04	LB136319
	Sodium	137			0	0	06/27/2025	13:04	LB136319
	Thallium	17.3			-40	40	06/27/2025	13:04	LB136319
	Vanadium	5.71			-40	40	06/27/2025	13:04	LB136319
	Zinc	3.40			-40	40	06/27/2025	13:04	LB136319
ICSAB01	Aluminum	236000	250000	94	209000	285000	06/27/2025	13:09	LB136319
	Antimony	633	620	102	525	711	06/27/2025	13:09	LB136319
	Arsenic	100	100	100	88.4	120	06/27/2025	13:09	LB136319
	Barium	518	540	96	437	637	06/27/2025	13:09	LB136319
	Beryllium	504	500	101	420	570	06/27/2025	13:09	LB136319
	Cadmium	994	970	102	826	1120	06/27/2025	13:09	LB136319
	Calcium	233000	230000	101	199000	271000	06/27/2025	13:09	LB136319
	Chromium	521	540	96	460	624	06/27/2025	13:09	LB136319
	Cobalt	519	480	108	404	548	06/27/2025	13:09	LB136319
	Copper	479	510	94	434	588	06/27/2025	13:09	LB136319
	Iron	99300	99000	100	84400	114500	06/27/2025	13:09	LB136319
	Lead	47.5	49.0	97	37	61	06/27/2025	13:09	LB136319
	Magnesium	252000	250000	101	210000	286000	06/27/2025	13:09	LB136319
	Manganese	502	510	98	430	584	06/27/2025	13:09	LB136319
	Nickel	975	950	103	810	1100	06/27/2025	13:09	LB136319
	Potassium	6.48			0	0	06/27/2025	13:09	LB136319
	Selenium	55.8	46.0	121	26	66	06/27/2025	13:09	LB136319
	Silver	195	200	98	170	232	06/27/2025	13:09	LB136319
	Sodium	135			0	0	06/27/2025	13:09	LB136319
	Thallium	102	110	93	68	148	06/27/2025	13:09	LB136319

Metals
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INTERFERENCE CHECK SAMPLE

Client: <u>CDM Smith</u>	SDG No.: <u>Q2413</u>
Contract: <u>CAMP02</u>	Lab Code: <u>CHEM</u>
ICS Source: <u>EPA</u>	Case No.: <u>Q2413</u>
	SAS No.: <u>Q2413</u>
	Instrument ID: <u>P5</u>

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Vanadium	487	490	99	417	565	06/27/2025	13:09	LB136319
	Zinc	1030	950	108	809	1095	06/27/2025	13:09	LB136319



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client: <u>CDM Smith</u>	level: <u>low</u>	sdg no.: <u>Q2413</u>
contract: <u>CAMP02</u>	lab code: <u>CHEM</u>	case no.: <u>Q2413</u> sas no.: <u>Q2413</u>
matrix: <u>Solid</u>	sample id: <u>Q2425-03</u>	client id: <u>COMP-3MS</u>
Percent Solids for Sample: 82.6	Spiked ID: Q2425-03MS	Percent Solids for Spike Sample: 82.6

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	13400		11400		110	1972		P
Antimony	mg/Kg	75 - 125	17.5		1.43	J	42.1	38	N	P
Arsenic	mg/Kg	75 - 125	49.4		7.98		42.1	98		P
Barium	mg/Kg	75 - 125	57.9		46.5		10.5	109		P
Beryllium	mg/Kg	75 - 125	9.94		0.86		10.5	86		P
Cadmium	mg/Kg	75 - 125	10.2		0.31	U	10.5	97		P
Calcium	mg/Kg	75 - 125	1310		1210		52.6	188		P
Chromium	mg/Kg	75 - 125	37.4		17.8		21.1	93		P
Cobalt	mg/Kg	75 - 125	18.7		7.69		10.5	104		P
Copper	mg/Kg	75 - 125	22.2		7.82		15.8	91		P
Iron	mg/Kg	75 - 125	21600		19100		160	1569		P
Lead	mg/Kg	75 - 125	65.8		15.8		52.6	95		P
Magnesium	mg/Kg	75 - 125	1890		1610		110	271		P
Manganese	mg/Kg	75 - 125	178		180		10.5	-15		P
Mercury	mg/Kg	80 - 120	0.42		0.10		0.3	107		CV
Nickel	mg/Kg	75 - 125	39.7		12.2		26.3	104		P
Potassium	mg/Kg	75 - 125	1400		760		530	122		P
Selenium	mg/Kg	75 - 125	86.2		5.97		110	76		P
Silver	mg/Kg	75 - 125	3.45		0.18	J	3.9	83		P
Sodium	mg/Kg	75 - 125	266		132		160	84		P
Thallium	mg/Kg	75 - 125	101		2.03	U	110	96		P
Vanadium	mg/Kg	75 - 125	46.5		29.2		15.8	109		P
Zinc	mg/Kg	75 - 125	39.8		27.8		10.5	114		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client:	<u>CDM Smith</u>	level:	<u>low</u>	sdg no.:	<u>Q2413</u>
contract:	<u>CAMP02</u>	lab code:	<u>CHEM</u>	case no.:	<u>Q2413</u>
matrix:	<u>Solid</u>	sample id:	<u>Q2425-03</u>	client id:	<u>COMP-3MSD</u>
Percent Solids for Sample:	82.6	Spiked ID:	Q2425-03MSD	Percent Solids for Spike Sample:	82.6

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	14800		11400		110	3258		P
Antimony	mg/Kg	75 - 125	18.4		1.43	J	42.5	40	N	P
Arsenic	mg/Kg	75 - 125	52.6		7.98		42.5	105		P
Barium	mg/Kg	75 - 125	58.6		46.5		10.6	114		P
Beryllium	mg/Kg	75 - 125	10.7		0.86		10.6	93		P
Cadmium	mg/Kg	75 - 125	10.7		0.31	U	10.6	101		P
Calcium	mg/Kg	75 - 125	1410		1210		53.1	373		P
Chromium	mg/Kg	75 - 125	41.1		17.8		21.2	110		P
Cobalt	mg/Kg	75 - 125	19.5		7.69		10.6	112		P
Copper	mg/Kg	75 - 125	24.8		7.82		15.9	106		P
Iron	mg/Kg	75 - 125	24100		19100		160	3127		P
Lead	mg/Kg	75 - 125	71.0		15.8		53.1	104		P
Magnesium	mg/Kg	75 - 125	2020		1610		110	385		P
Manganese	mg/Kg	75 - 125	162		180		10.6	-166		P
Mercury	mg/Kg	80 - 120	0.45		0.10		0.32	109		CV
Nickel	mg/Kg	75 - 125	42.0		12.2		26.5	112		P
Potassium	mg/Kg	75 - 125	1560		760		530	150	N	P
Selenium	mg/Kg	75 - 125	92.8		5.97		110	82		P
Silver	mg/Kg	75 - 125	3.51		0.18	J	4.0	84		P
Sodium	mg/Kg	75 - 125	285		132		160	96		P
Thallium	mg/Kg	75 - 125	107		2.03	U	110	101		P
Vanadium	mg/Kg	75 - 125	50.3		29.2		15.9	132	N	P
Zinc	mg/Kg	75 - 125	43.5		27.8		10.6	148	N	P

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: CDM Smith	SDG No.: Q2413	
Contract: CAMP02	Lab Code: CHEM	Case No.: Q2413 SAS No.: Q2413
Matrix: Solid	Level: LOW	Client ID: COMP-3A
Sample ID: Q2425-03	Spiked ID: Q2425-03A	

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	mg/Kg	75 - 125	32.2		1.43	J	40.7	76		P
Potassium	mg/Kg	75 - 125	1210		760		510	87		P
Vanadium	mg/Kg	75 - 125	39.9		29.2		15.3	70	N	P
Zinc	mg/Kg	75 - 125	35.2		27.8		10.2	73	N	P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: CDM Smith **Level:** LOW **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413
Matrix: Solid **Sample ID:** Q2425-03 **Client ID:** COMP-3DUP
Percent Solids for Sample: 82.6 **Duplicate ID** Q2425-03DUP **Percent Solids for Spike Sample:** 82.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	11400		12300		8		P
Antimony	mg/Kg	20	1.43	J	1.72	J	18		P
Arsenic	mg/Kg	20	7.98		8.70		9		P
Barium	mg/Kg	20	46.5		47.7		3		P
Beryllium	mg/Kg	20	0.86		0.89		3		P
Cadmium	mg/Kg	20	0.31	U	0.34	U			P
Calcium	mg/Kg	20	1210		1300		7		P
Chromium	mg/Kg	20	17.8		19.7		10		P
Cobalt	mg/Kg	20	7.69		7.96		3		P
Copper	mg/Kg	20	7.82		8.61		10		P
Iron	mg/Kg	20	19100		21200		10		P
Lead	mg/Kg	20	15.8		17.1		8		P
Magnesium	mg/Kg	20	1610		1720		7		P
Manganese	mg/Kg	20	180		162		11		P
Mercury	mg/Kg	20	0.10		0.10		4		CV
Nickel	mg/Kg	20	12.2		12.7		4		P
Potassium	mg/Kg	20	760		833		9		P
Selenium	mg/Kg	20	5.97		6.45		8		P
Silver	mg/Kg	20	0.18	J	0.17	J	2		P
Sodium	mg/Kg	20	132		138		4		P
Thallium	mg/Kg	20	2.03	U	2.25	U			P
Vanadium	mg/Kg	20	29.2		32.3		10		P
Zinc	mg/Kg	20	27.8		29.9		7		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: CDM Smith **Level:** LOW **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413
Matrix: Solid **Sample ID:** Q2425-03MS **Client ID:** COMP-3MSD
Percent Solids for Sample: 82.6 **Duplicate ID** Q2425-03MSD **Percent Solids for Spike Sample:** 82.6

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	13400		14800		10		P
Antimony	mg/Kg	20	17.5		18.4		5		P
Arsenic	mg/Kg	20	49.4		52.6		6		P
Barium	mg/Kg	20	57.9		58.6		1		P
Beryllium	mg/Kg	20	9.94		10.7		7		P
Cadmium	mg/Kg	20	10.2		10.7		5		P
Calcium	mg/Kg	20	1310		1410		7		P
Chromium	mg/Kg	20	37.4		41.1		9		P
Cobalt	mg/Kg	20	18.7		19.5		4		P
Copper	mg/Kg	20	22.2		24.8		11		P
Iron	mg/Kg	20	21600		24100		11		P
Lead	mg/Kg	20	65.8		71.0		8		P
Magnesium	mg/Kg	20	1890		2020		7		P
Manganese	mg/Kg	20	178		162		9		P
Mercury	mg/Kg	20	0.42		0.45		6		CV
Nickel	mg/Kg	20	39.7		42.0		6		P
Potassium	mg/Kg	20	1400		1560		11		P
Selenium	mg/Kg	20	86.2		92.8		7		P
Silver	mg/Kg	20	3.45		3.51		2		P
Sodium	mg/Kg	20	266		285		7		P
Thallium	mg/Kg	20	101		107		6		P
Vanadium	mg/Kg	20	46.5		50.3		8		P
Zinc	mg/Kg	20	39.8		43.5		9		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168628BS							
Aluminum	mg/Kg	100	92.8	J	93	80 - 120	P
Antimony	mg/Kg	40.0	39.5		99	80 - 120	P
Arsenic	mg/Kg	40.0	34.6		86	80 - 120	P
Barium	mg/Kg	10.0	10.1		101	80 - 120	P
Beryllium	mg/Kg	10.0	10.1		101	80 - 120	P
Cadmium	mg/Kg	10.0	9.23		92	80 - 120	P
Calcium	mg/Kg	50.0	51.5		103	80 - 120	P
Chromium	mg/Kg	20.0	18.4		92	80 - 120	P
Cobalt	mg/Kg	10.0	9.42		94	80 - 120	P
Copper	mg/Kg	15.0	15.8		105	80 - 120	P
Iron	mg/Kg	150	153		102	80 - 120	P
Lead	mg/Kg	50.0	46.6		93	80 - 120	P
Magnesium	mg/Kg	100	101		101	80 - 120	P
Manganese	mg/Kg	10.0	10.1		100	80 - 120	P
Nickel	mg/Kg	25.0	23.6		94	80 - 120	P
Potassium	mg/Kg	500	441		88	80 - 120	P
Selenium	mg/Kg	100	96.9		97	80 - 120	P
Silver	mg/Kg	3.8	3.45		91	80 - 120	P
Sodium	mg/Kg	150	147		98	80 - 120	P
Thallium	mg/Kg	100	98.4		98	80 - 120	P
Vanadium	mg/Kg	15.0	14.8		99	80 - 120	P
Zinc	mg/Kg	10.0	9.81		98	80 - 120	P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: CDM Smith **SDG No.:** Q2413
Contract: CAMP02 **Lab Code:** CHEM **Case No.:** Q2413 **SAS No.:** Q2413

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB168633BS Mercury	mg/Kg	0.26	0.25		95	80 - 120	CV

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

COMP-3L

Lab Name: Chemtech Consulting Group

Contract: CAMP02

Lab Code: CHEM Lb No.: lb136319 Lab Sample ID : Q2425-03L SDG No.: Q2413

Matrix (soil/water): Solid Level (low/med): LOW

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Differ- ence	Q	M
Aluminum	11400		13700		20		P
Antimony	1.43	J	1.96	J	37		P
Arsenic	7.98		8.15		2		P
Barium	46.5		57.5		24		P
Beryllium	0.86		1.06	J	23		P
Cadmium	0.31	U	1.53	U			P
Calcium	1210		1510		25		P
Chromium	17.8		21.3		20		P
Cobalt	7.69		7.88		3		P
Copper	7.82		9.83		26		P
Iron	19100		23800		25		P
Lead	15.8		16.6		5		P
Magnesium	1610		2030		26		P
Manganese	180		223		24		P
Mercury	0.10		0.090		9		CV
Nickel	12.2		12.0		2		P
Potassium	760		763		0		P
Selenium	5.97		6.78		14		P
Silver	0.18	J	2.54	U	100.0		P
Sodium	132		159	J	20		P
Thallium	2.03	U	10.2	U			P
Vanadium	29.2		34.5		18		P
Zinc	27.8		32.2		16		P



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: CDM Smith SDG No.: Q2413
Contract: CAMP02 Lab Code: CHEM Case No.: Q2413 SAS No.: Q2413
Instrument ID: _____ Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Aluminum	396.100	0.0000000	-0.0002060	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	-0.0075970	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

Metals

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ICP INTERELEMEN CORRECTION FACTORS

Client: CDM Smith

SDG No.: Q2413

Contract: CAMP02

Lab Code: CHEM

Case No.: Q2413

SAS No.: Q2413

Instrument ID:

Date:

Interement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interement Correction Factors For:				
		As	Ba	Be	Cd	Co
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	-0.0039600
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0054900
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: CDM Smith

SDG No.: Q2413

Contract: CAMP02

Lab Code: CHEM

Case No.: Q2413

SAS No.: Q2413

Instrument ID:

Date:

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Cr	Cu	K	Mn	Mo
Aluminum	396.100	0.0000000	0.0000000	0.0000590	0.0000000	0.0396900
Antimony	206.833	0.0122000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	-0.0000710	-0.0003400
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007860
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Iron	240.488	0.0000000	0.0000000	0.0000730	0.0000000	-0.0015250
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0017400	-0.0100400
Vanadium	292.402	-0.0025100	0.0000000	0.0000000	0.0000000	-0.0072000
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: CDM Smith

SDG No.: Q2413

Contract: CAMP02

Lab Code: CHEM

Case No.: Q2413

SAS No.: Q2413

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Aluminum	396.100	0.0000000	0.0000000	0.0012800	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Iron	240.488	0.0000000	-0.0017000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: CDM Smith

SDG No.: Q2413

Contract: CAMP02

Lab Code: CHEM

Case No.: Q2413

SAS No.: Q2413

Instrument ID:

Date:

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Sn	Ti	Tl	V	Zn
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	-0.0035600	-0.0007970	0.0000000	-0.0018900	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Cobalt	228.616	0.0000000	0.0018800	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	-0.0039700	0.0000000	-0.0115600	0.0000000
Vanadium	292.402	0.0000000	0.0005320	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>CDM Smith</u>	SDG No.:	<u>Q2413</u>
Contract:	<u>CAMP02</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q2413</u>
		SAS No.:	<u>Q2413</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168628							
PB168628BL	PB168628BL	MB	SOLID	06/26/2025	2.00	100.0	100.00
PB168628BS	PB168628BS	LCS	SOLID	06/26/2025	2.00	100.0	100.00
Q2413-01	TP-35	SAM	SOLID	06/26/2025	2.38	100.0	88.80
Q2413-02	TP-34	SAM	SOLID	06/26/2025	2.22	100.0	92.00
Q2413-03	TP-77	SAM	SOLID	06/26/2025	2.21	100.0	91.40
Q2413-04	TP-74	SAM	SOLID	06/26/2025	2.10	100.0	89.50
Q2413-05	TP-73	SAM	SOLID	06/26/2025	2.18	100.0	77.10
Q2413-06	TP-72	SAM	SOLID	06/26/2025	2.16	100.0	87.00
Q2425-03DUP	COMP-3DUP	DUP	SOLID	06/26/2025	2.15	100.0	82.60
Q2425-03MS	COMP-3MS	MS	SOLID	06/26/2025	2.30	100.0	82.60
Q2425-03MSD	COMP-3MSD	MSD	SOLID	06/26/2025	2.28	100.0	82.60

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>CDM Smith</u>	SDG No.:	<u>Q2413</u>
Contract:	<u>CAMP02</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q2413</u>
		SAS No.:	<u>Q2413</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB168633							
PB168633BL	PB168633BL	MB	SOLID	06/26/2025	0.52	35.0	100.00
PB168633BS	PB168633BS	LCS	SOLID	06/26/2025	0.54	35.0	100.00
Q2413-01	TP-35	SAM	SOLID	06/26/2025	0.57	35.0	88.80
Q2413-02	TP-34	SAM	SOLID	06/26/2025	0.53	35.0	92.00
Q2413-03	TP-77	SAM	SOLID	06/26/2025	0.56	35.0	91.40
Q2413-04	TP-74	SAM	SOLID	06/26/2025	0.51	35.0	89.50
Q2413-05	TP-73	SAM	SOLID	06/26/2025	0.57	35.0	77.10
Q2413-06	TP-72	SAM	SOLID	06/26/2025	0.58	35.0	87.00
Q2425-03DUP	COMP-3DUP	DUP	SOLID	06/26/2025	0.53	35.0	82.60
Q2425-03MS	COMP-3MS	MS	SOLID	06/26/2025	0.56	35.0	82.60
Q2425-03MSD	COMP-3MSD	MSD	SOLID	06/26/2025	0.53	35.0	82.60

metals
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ANALYSIS RUN LOG

Client: CDM Smith **Contract:** CAMP02

Lab code: CHEM **Case no.:** Q2413 **Sas no.:** Q2413 **Sdg no.:** Q2413

Instrument id number: **Method:** **Run number:** lb136298

Start date: 06/26/2025 **End date:** 06/26/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1411	HG
S0.2	S0.2	1	1413	HG
S2.5	S2.5	1	1415	HG
S5	S5	1	1418	HG
S7.5	S7.5	1	1420	HG
S10	S10	1	1431	HG
ICV08	ICV08	1	1434	HG
ICB08	ICB08	1	1437	HG
CCV23	CCV23	1	1439	HG
CCB23	CCB23	1	1441	HG
CRA	CRA	1	1444	HG
PB168633BL	PB168633BL	1	1451	HG
PB168633BS	PB168633BS	1	1458	HG
Q2413-01	TP-35	1	1503	HG
Q2413-02	TP-34	1	1505	HG
Q2413-03	TP-77	1	1507	HG
Q2413-04	TP-74	1	1509	HG
CCV24	CCV24	1	1512	HG
CCB24	CCB24	1	1514	HG
Q2413-05	TP-73	1	1516	HG
Q2413-06	TP-72	1	1518	HG
CCV25	CCV25	1	1540	HG
CCB25	CCB25	1	1543	HG
Q2425-03DUP	COMP-3DUP	1	1547	HG
Q2425-03MS	COMP-3MS	1	1554	HG
Q2425-03MSD	COMP-3MSD	1	1556	HG
Q2425-03L	COMP-3L	5	1559	HG
CCV26	CCV26	1	1620	HG
CCB26	CCB26	1	1622	HG

metals
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ANALYSIS RUN LOG

Client: CDM Smith **Contract:** CAMP02

Lab code: CHEM **Case no.:** Q2413 **Sas no.:** Q2413 **Sdg no.:** Q2413

Instrument id number: **Method:** **Run number:** LB136319

Start date: 06/27/2025 **End date:** 06/27/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1111	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1116	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1120	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1124	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1129	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1133	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1145	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1203	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1254	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1258	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1304	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1309	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1322	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1331	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1419	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1424	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1512	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1516	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1604	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1609	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1656	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1701	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB168628BL	PB168628BL	1	1745	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1749	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1753	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB168628BS	PB168628BS	1	1758	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2413-01	TP-35	1	1828	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2413-02	TP-34	1	1833	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2413-03	TP-77	1	1837	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV07	CCV07	1	1841	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	1846	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2413-04	TP-74	1	1850	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2413-05	TP-73	1	1854	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2413-06	TP-72	1	1859	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2425-03DUP	COMP-3DUP	1	1908	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2425-03L	COMP-3L	5	1912	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2425-03MS	COMP-3MS	1	1916	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2425-03MSD	COMP-3MSD	1	1920	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q2425-03A	COMP-3A	1	1925	K,Sb,V,Zn
CCV08	CCV08	1	1929	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB08	CCB08	1	1933	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn