

LAB CHRONICLE

OrderID:	Q2436	OrderDate:	6/26/2025 3:41:00 PM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	D51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2436-01	TP-70	SOIL			06/25/25			06/26/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			Gasoline Range Organics	8015D			06/27/25	
			PCB	8082A		06/27/25	06/27/25	
			Pesticide-TCL	8081B		06/27/25	06/28/25	
Q2436-02	TP-69	SOIL			06/25/25			06/26/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			Gasoline Range Organics	8015D			06/27/25	
			PCB	8082A		06/27/25	06/27/25	
			Pesticide-TCL	8081B		06/27/25	06/28/25	
Q2436-03	TP-85	SOIL			06/25/25			06/26/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			Gasoline Range Organics	8015D			06/27/25	
			PCB	8082A		06/27/25	06/27/25	
			Pesticide-TCL	8081B		06/27/25	06/28/25	
Q2436-04	TP-86	SOIL			06/25/25			06/26/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			Gasoline Range Organics	8015D			06/30/25	
			PCB	8082A		06/27/25	06/27/25	
			Pesticide-TCL	8081B		06/27/25	06/28/25	
Q2436-05	TP-84	SOIL			06/25/25			06/26/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	
			Gasoline Range Organics	8015D			06/27/25	
			PCB	8082A		06/27/25	06/27/25	
			Pesticide-TCL	8081B		06/27/25	06/28/25	
Q2436-06	TP-83	SOIL			06/25/25			06/26/25
			Diesel Range Organics	8015D		06/30/25	06/30/25	

LAB CHRONICLE

Q2436-07	TP-87	SOIL	Gasoline Range Organics	8015D		06/27/25	06/27/25
			PCB	8082A		06/27/25	06/27/25
			Pesticide-TCL	8081B		06/27/25	06/28/25
					06/26/25		06/26/25
Q2436-08	TP-100	SOIL	Diesel Range Organics	8015D		06/30/25	06/30/25
			Gasoline Range Organics	8015D			06/30/25
			PCB	8082A		06/27/25	06/27/25
			Pesticide-TCL	8081B		06/27/25	06/28/25
Q2436-09	TP-99	SOIL			06/26/25		06/26/25
			Diesel Range Organics	8015D		06/30/25	06/30/25
			Gasoline Range Organics	8015D			06/27/25
			PCB	8082A		06/27/25	06/27/25
Q2436-10	TP-82	SOIL	Pesticide-TCL	8081B		06/27/25	06/28/25
					06/26/25		06/26/25
			Diesel Range Organics	8015D		06/30/25	07/01/25
			Gasoline Range Organics	8015D			06/30/25
			PCB	8082A		06/27/25	06/27/25
			Pesticide-TCL	8081B		06/27/25	06/28/25



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	06/25/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-70	SDG No.:	Q2436
Lab Sample ID:	Q2436-01	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	82.1
Sample Wt/Vol:	30.01	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
FG016178.D	1	06/30/25 08:00	06/30/25 15:09	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	2220		206	2030	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.2		37 - 130	51%	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:	06/25/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-69	SDG No.:	Q2436
Lab Sample ID:	Q2436-02	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	82
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
FG016179.D	1	06/30/25 08:00	06/30/25 15:39	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	2420		206	2030	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.0		37 - 130	50%	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:	06/25/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-85	SDG No.:	Q2436
Lab Sample ID:	Q2436-03	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	85.1
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
FG016180.D	1	06/30/25 08:00	06/30/25 16:09	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1770	J	198	1950	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.2		37 - 130	51%	SPK: 20

Comments:

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 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
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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:	06/25/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-86	SDG No.:	Q2436
Lab Sample ID:	Q2436-04	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	88.7
Sample Wt/Vol:	30.01	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
FG016181.D	1	06/30/25 08:00	06/30/25 18:11	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	2310		190	1880	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.1		37 - 130	51%	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:	06/25/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-84	SDG No.:	Q2436
Lab Sample ID:	Q2436-05	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	92.3
Sample Wt/Vol:	30.02	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
FG016182.D	1	06/30/25 08:00	06/30/25 18:41	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1790	J	183	1810	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.0		37 - 130	50%	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:	06/25/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-83	SDG No.:	Q2436
Lab Sample ID:	Q2436-06	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	90.6
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
FG016183.D	1	06/30/25 08:00	06/30/25 19:11	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	2030		186	1840	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	10.3		37 - 130	51%	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:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-87	SDG No.:	Q2436
Lab Sample ID:	Q2436-07	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	89.9
Sample Wt/Vol:	30.07	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
FG016184.D	1	06/30/25 08:00	06/30/25 19:41	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1580	J	188	1850	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	8.42		37 - 130	42%	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:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-100	SDG No.:	Q2436
Lab Sample ID:	Q2436-08	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	85.6
Sample Wt/Vol:	30.04	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
FG016185.D	1	06/30/25 08:00	06/30/25 20:11	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	3810		197	1940	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	9.03		37 - 130	45%	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:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-99	SDG No.:	Q2436
Lab Sample ID:	Q2436-09	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	92.2
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
FG016186.D	1	06/30/25 08:00	06/30/25 20:41	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1590	J	183	1810	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	9.15		37 - 130	46%	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:	06/26/25
Project:	South River WM Replacement	Date Received:	06/26/25
Client Sample ID:	TP-82	SDG No.:	Q2436
Lab Sample ID:	Q2436-10	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	92
Sample Wt/Vol:	30.09	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
FG016195.D	1	06/30/25 09:50	07/01/25 10:04	PB168658

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
DRO	DRO	1160	J	183	1810	ug/kg
SURROGATES						
16416-32-3	Tetracosane-d50	8.04		37 - 130	40%	SPK: 20

Comments:

U = Not Detected
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 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
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QC SUMMARY

SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: CDM Smith
Lab Code: CHEM Case No.: Q2436 SAS No.: Q2436 SDG No.: Q2436

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FF016042.D	84				0
PIBLK-FF016055.D	79				0
PIBLK-FG016175.D	81				0
PIBLK-FG016188.D	83				0
PIBLK-FG016192.D	101				0
PIBLK-FG016196.D	84				0
PB168658BL	114				0
PB168658BS	72				0
TP-35MS	74				0
TP-35MSD	74				0
TP-70	51				0
TP-69	50				0
TP-85	51				0
TP-86	51				0
TP-84	50				0
TP-83	51				0
TP-87	42				0
TP-100	45				0
TP-99	46				0
TP-82	40				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:** Q2436 **SAS No :** Q2436 **SDG No:** Q2436
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:** Q2436 **SAS No :** Q2436 **SDG No:** Q2436
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:** Q2436 **SAS No :** Q2436 **SDG No:** Q2436
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.: Q2436

SAS No.: Q2436 SDG NO.: Q2436

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-35MS	Q2413-01MS	FF016048.D	06/30/25
TP-35MSD	Q2413-01MSD	FF016049.D	06/30/25
TP-70	Q2436-01	FG016178.D	06/30/25
TP-69	Q2436-02	FG016179.D	06/30/25
TP-85	Q2436-03	FG016180.D	06/30/25
TP-86	Q2436-04	FG016181.D	06/30/25
TP-84	Q2436-05	FG016182.D	06/30/25
TP-83	Q2436-06	FG016183.D	06/30/25
TP-87	Q2436-07	FG016184.D	06/30/25
TP-100	Q2436-08	FG016185.D	06/30/25
TP-99	Q2436-09	FG016186.D	06/30/25
TP-82	Q2436-10	FG016195.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.:	Q2436
Lab Sample ID:	PB168658BL	Matrix:	SOIL
Analytical Method:	8015D DRO	% Solid:	100
Sample Wt/Vol:	30.01	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
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.:	Q2436
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.:	Q2436
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:	06/30/25
Project:	South River WM Replacement	Date Received:	06/30/25
Client Sample ID:	PIBLK-FG016175.D	SDG No.:	Q2436
Lab Sample ID:	I.BLK-FG016175.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
FG016175.D	1		06/30/25	FG063025

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	16.3		29 - 130	81%	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-FG016188.D	SDG No.:	Q2436
Lab Sample ID:	I.BLK-FG016188.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016188.D	1		06/30/25	FG063025

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	16.6		29 - 130	83%	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-FG016192.D	SDG No.:	Q2436
Lab Sample ID:	I.BLK-FG016192.D	Matrix:	Water
Analytical Method:	8015D DRO	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Diesel Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3510		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FG016192.D	1		07/01/25	FG070125

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	20.2		29 - 130	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:	07/01/25
Project:	South River WM Replacement	Date Received:	07/01/25
Client Sample ID:	PIBLK-FG016196.D	SDG No.:	Q2436
Lab Sample ID:	I.BLK-FG016196.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
FG016196.D	1		07/01/25	FG070125

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:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	PB168658BS	SDG No.:	Q2436
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:		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
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.:	Q2436
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.:	Q2436
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.: Q2436 SAS No.: Q2436 SDG No.: Q2436

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 INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: CAMP02
 ProjectID: South River WM Replacement
 Lab Code: CHEM Case No.: Q2436 SAS No.: Q2436 SDG No.: Q2436

Calibration Sequence : FG061325		Test : Diesel Range Organics	
Concentration (PPM)	Area Count	Reference Factor	File ID
1000	121978597	121979	FG016063.D
500	61365081	122730	FG016064.D
200	26234834	131174	FG016065.D
100	13396741	133967	FG016066.D
50	7145066	142901	FG016067.D
AVG RF : 130550		% RSD : 6.625	AVG RT : 15.1972

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.: Q2436 SAS No.: Q2436 SDG No.: Q2436
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.: Q2436 SAS No.: Q2436 SDG No.: Q2436
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

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.: Q2436 SAS No.: Q2436 SDG No.: Q2436
DataFile: FG016176.D Analyst Name: YP\AJ Analyst Date: 06-30-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	60927530	121855	130550	6.66

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.: Q2436 SAS No.: Q2436 SDG No.: Q2436
DataFile: FG016189.D Analyst Name: YP\AJ Analyst Date: 06-30-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	63940567	127881	130550	2.044

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.: Q2436 SAS No.: Q2436 SDG No.: Q2436
DataFile: FG016193.D Analyst Name: YP\AJ Analyst Date: 07-01-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	65241935	130484	130550	0.051

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.: Q2436 SAS No.: Q2436 SDG No.: Q2436
DataFile: FG016197.D Analyst Name: YP\AJ Analyst Date: 07-01-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	65157320	130315	130550	0.18

Analytical Sequence

Client: CDM Smith

SDG No.: Q2436

Project: South River WM Replacement

Instrument ID: FID_G

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-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	
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	
PIBLK03	LBLK03	30 Jun 2025 13:39	FG016175.D	15.199	
50 PPM TRPH STD	50 PPM TRPH STD	30 Jun 2025 14:09	FG016176.D	15.201	
TP-70	Q2436-01	30 Jun 2025 15:09	FG016178.D	15.198	
TP-69	Q2436-02	30 Jun 2025 15:39	FG016179.D	15.198	
TP-85	Q2436-03	30 Jun 2025 16:09	FG016180.D	15.198	
TP-86	Q2436-04	30 Jun 2025 18:11	FG016181.D	15.198	
TP-84	Q2436-05	30 Jun 2025 18:41	FG016182.D	15.198	
TP-83	Q2436-06	30 Jun 2025 19:11	FG016183.D	15.198	
TP-87	Q2436-07	30 Jun 2025 19:41	FG016184.D	15.198	
TP-100	Q2436-08	30 Jun 2025 20:11	FG016185.D	15.199	
TP-99	Q2436-09	30 Jun 2025 20:41	FG016186.D	15.200	
PIBLK04	LBLK04	30 Jun 2025 21:40	FG016188.D	15.198	
50 PPM TRPH STD	50 PPM TRPH STD	30 Jun 2025 22:10	FG016189.D	15.202	
PIBLK05	LBLK05	01 Jul 2025 08:28	FG016192.D	15.198	
50 PPM TRPH STD	50 PPM TRPH STD	01 Jul 2025 08:58	FG016193.D	15.202	
TP-82	Q2436-10	01 Jul 2025 10:04	FG016195.D	15.197	
PIBLK06	LBLK06	01 Jul 2025 10:35	FG016196.D	15.198	
50 PPM TRPH STD	50 PPM TRPH STD	01 Jul 2025 11:04	FG016197.D	15.202	