

## LAB CHRONICLE

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

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
<b>Q2436-01</b>	<b>TP-70</b>	<b>SOIL</b>			<b>06/25/25</b>			<b>06/26/25</b>
			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	
<b>Q2436-02</b>	<b>TP-69</b>	<b>SOIL</b>			<b>06/25/25</b>			<b>06/26/25</b>
			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	
<b>Q2436-03</b>	<b>TP-85</b>	<b>SOIL</b>			<b>06/25/25</b>			<b>06/26/25</b>
			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	
<b>Q2436-04</b>	<b>TP-86</b>	<b>SOIL</b>			<b>06/25/25</b>			<b>06/26/25</b>
			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	
<b>Q2436-05</b>	<b>TP-84</b>	<b>SOIL</b>			<b>06/25/25</b>			<b>06/26/25</b>
			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	
<b>Q2436-06</b>	<b>TP-83</b>	<b>SOIL</b>			<b>06/25/25</b>			<b>06/26/25</b>
			Diesel Range Organics	8015D		06/30/25	06/30/25	

## LAB CHRONICLE

<b>Q2436-07</b>	<b>TP-87</b>	<b>SOIL</b>	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
					<b>06/26/25</b>		<b>06/26/25</b>
<b>Q2436-08</b>	<b>TP-100</b>	<b>SOIL</b>	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
<b>Q2436-09</b>	<b>TP-99</b>	<b>SOIL</b>			<b>06/26/25</b>		<b>06/26/25</b>
			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
<b>Q2436-10</b>	<b>TP-82</b>	<b>SOIL</b>	Pesticide-TCL	8081B		06/27/25	06/28/25
					<b>06/26/25</b>		<b>06/26/25</b>
			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 GRO	% Solid:	82.1
Sample Wt/Vol:	4.7	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		Test:	Gasoline Range Organics
Prep Method :		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031949.D	1	06/27/25 12:20	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	11.0	U	11.0	58.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	14.2		50 - 150	71%	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 GRO	% Solid:	82
Sample Wt/Vol:	4.03	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
FB031961.D	1	06/27/25 18:25	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	12.0	U	12.0	68.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.7		50 - 150	78%	SPK: 20

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## 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 GRO	% Solid:	85.1
Sample Wt/Vol:	4.32	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		Test:	Gasoline Range Organics
Prep Method :		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031951.D	1	06/27/25 13:14	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	11.0	U	11.0	61.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.7		50 - 150	78%	SPK: 20

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## 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 GRO	% Solid:	88.7
Sample Wt/Vol:	4.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		Test:	Gasoline Range Organics
Prep Method :		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031971.D	50	06/30/25 12:59	FB063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	589	J	571	3110	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	24.7		50 - 150	123%	SPK: 20

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## 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 GRO	% Solid:	92.3
Sample Wt/Vol:	4.18	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		Test:	Gasoline Range Organics
Prep Method :		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031953.D	1	06/27/25 14:09	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	11.0	U	11.0	58.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	13.7		50 - 150	68%	SPK: 20

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## 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 GRO	% Solid:	90.6
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
FB031956.D	1	06/27/25 16:06	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	9.00	U	9.00	50.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	14.0		50 - 150	70%	SPK: 20

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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:	TP-87	SDG No.:	Q2436
Lab Sample ID:	Q2436-07	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	89.9
Sample Wt/Vol:	5.2	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		Test:	Gasoline Range Organics
Prep Method :		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031969.D	1	06/30/25 12:04	FB063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	9.00	U	9.00	48.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	14.8		50 - 150	74%	SPK: 20

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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:	TP-100	SDG No.:	Q2436
Lab Sample ID:	Q2436-08	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	85.6
Sample Wt/Vol:	6	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Final Vol:	5
GPC Factor :		Test:	Gasoline Range Organics
Prep Method :		Injection Volume :	

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031958.D	1	06/27/25 17:01	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	8.00	U	8.00	44.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.1		50 - 150	76%	SPK: 20

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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:	TP-99	SDG No.:	Q2436
Lab Sample ID:	Q2436-09	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	92.2
Sample Wt/Vol:	4.5	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
FB031959.D	1	06/27/25 17:29	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	11.0	J	10.0	54.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.7		50 - 150	78%	SPK: 20

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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:	TP-82	SDG No.:	Q2436
Lab Sample ID:	Q2436-10	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	92
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
FB031970.D	1	06/30/25 12:31	FB063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	9.00	U	9.00	49.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	17.1		50 - 150	85%	SPK: 20

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# QC SUMMARY

**SOIL GASOLINE 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 AAA-TFT	S2	S3	S4	TOT OUT
VPF0627S1	76				0
BSF0627S1	84				0
TP-70	71				0
TP-85	78				0
TP-84	68				0
TP-83	70				0
TP-100	76				0
TP-99	78				0
TP-69	78				0
BSF0627S3	88				0
VPF0630S1	80				0
VPF0630S2	85				0
BSF0630S1	86				0
TP-87	74				0
TP-82	85				0
TP-86	123				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:** Q2436 **SAS No :** Q2436 **SDG No:** Q2436  
**Matrix Spike - EPA Sample No :** BSF0627S1 **Datafile:** FB031948.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
GRO	180	0	154	86	50-150



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

**Lab Name:** Chemtech **Client:** CDM Smith  
**Lab Code:** CHEM **Cas No:** Q2436 **SAS No :** Q2436 **SDG No:** Q2436  
**Matrix Spike - EPA Sample No :** BSF0627S3 **Datafile:** FB031962.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
GRO	180	0	156	87	50-150

LCS/LCSD % Recovery RPD : 1.3

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

**Lab Name:** Chemtech **Client:** CDM Smith  
**Lab Code:** CHEM **Cas No:** Q2436 **SAS No :** Q2436 **SDG No:** Q2436  
**Matrix Spike - EPA Sample No :** BSF0630S1 **Datafile:** FB031967.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
GRO	180	0	168	93	50-150

METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF0627S1

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2436

SAS No.: Q2436 SDG NO.: Q2436

Lab File ID: FB031946.D

Lab Sample ID: VBF0627S1

Date Analyzed: 06/27/25

Time Analyzed: 10:24

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
BSF0627S1	BSF0627S1	FB031948.D	06/27/25
TP-70	Q2436-01	FB031949.D	06/27/25
TP-85	Q2436-03	FB031951.D	06/27/25
TP-84	Q2436-05	FB031953.D	06/27/25
TP-83	Q2436-06	FB031956.D	06/27/25
TP-100	Q2436-08	FB031958.D	06/27/25
TP-99	Q2436-09	FB031959.D	06/27/25
TP-69	Q2436-02	FB031961.D	06/27/25
BSF0627S3	BSF0627S3	FB031962.D	06/27/25

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_

METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF0630S1

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2436

SAS No.: Q2436 SDG NO.: Q2436

Lab File ID: FB031965.D

Lab Sample ID: VBF0630S1

Date Analyzed: 06/30/25

Time Analyzed: 10:12

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
BSF0630S1	BSF0630S1	FB031967.D	06/30/25
TP-87	Q2436-07	FB031969.D	06/30/25
TP-82	Q2436-10	FB031970.D	06/30/25

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_

METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF0630S2

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2436

SAS No.: Q2436 SDG NO.: Q2436

Lab File ID: FB031966.D

Lab Sample ID: VBF0630S2

Date Analyzed: 06/30/25

Time Analyzed: 10:40

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-86	Q2436-04	FB031971.D	06/30/25

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_



# QC SAMPLE DATA

## Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VBF0627S1	SDG No.:	Q2436
Lab Sample ID:	VBF0627S1	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
FB031946.D	1	06/27/25 10:24	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	8.00	U	8.00	45.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.2		50 - 150	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:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VBF0630S1	SDG No.:	Q2436
Lab Sample ID:	VBF0630S1	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
FB031965.D	1	06/30/25 10:12	FB063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	8.00	U	8.00	45.0	ug/kg
<b>SURROGATES</b>						
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:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VBF0630S2	SDG No.:	Q2436
Lab Sample ID:	VBF0630S2	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
FB031966.D	50	06/30/25 10:40	FB063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	413	U	413	2250	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	17.1		50 - 150	85%	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:	BSF0627S1	SDG No.:	Q2436
Lab Sample ID:	BSF0627S1	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
FB031948.D	1	06/27/25 11:19	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	154		8.00	45.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	16.8		50 - 150	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:	BSF0630S1	SDG No.:	Q2436
Lab Sample ID:	BSF0630S1	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
FB031967.D	1	06/30/25 11:08	FB063025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	168		8.00	45.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	17.2		50 - 150	86%	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:	BSF0627S3	SDG No.:	Q2436
Lab Sample ID:	BSF0627S3	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
FB031962.D	1	06/27/25 18:53	FB062725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
GRO	GRO	156		8.00	45.0	ug/kg
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	17.6		50 - 150	88%	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

**GASOLINE 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 : 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.: Q2436 SAS No.: Q2436 SDG No.: Q2436  
DataFile: FB031945.D Analyst Name: YP/AJ Analyst Date: 06-27-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	4972296	27624	29754	7.159

**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.: Q2436 SAS No.: Q2436 SDG No.: Q2436  
DataFile: FB031955.D Analyst Name: YP/AJ Analyst Date: 06-27-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	4580542	25447	29754	14.475



**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.: Q2436 SAS No.: Q2436 SDG No.: Q2436  
DataFile: FB031963.D Analyst Name: YP/AJ Analyst Date: 06-27-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	4575171	25418	29754	14.573

**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.: Q2436 SAS No.: Q2436 SDG No.: Q2436  
DataFile: FB031964.D Analyst Name: YP/AJ Analyst Date: 06-30-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	4611565	25620	29754	13.894

**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.: Q2436 SAS No.: Q2436 SDG No.: Q2436  
DataFile: FB031973.D Analyst Name: YP/AJ Analyst Date: 06-30-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	5074480	28192	29754	5.25

**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.: Q2436 SAS No.: Q2436 SDG No.: Q2436  
DataFile: FB031984.D Analyst Name: YP/AJ Analyst Date: 06-30-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	5073667	28187	29754	5.267

### Analytical Sequence

Client: CDM Smith

SDG No.: Q2436

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 <b>8.798</b>					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
20 PPB GRO STD	20 PPB GRO STD	27 Jun 2025 9:38	FB031945.D	8.792	
VBF0627S1	VBF0627S1	27 Jun 2025 10:24	FB031946.D	8.795	
BSF0627S1	BSF0627S1	27 Jun 2025 11:19	FB031948.D	8.795	
TP-70	Q2436-01	27 Jun 2025 12:20	FB031949.D	8.624	*
TP-85	Q2436-03	27 Jun 2025 13:14	FB031951.D	8.663	*
TP-84	Q2436-05	27 Jun 2025 14:09	FB031953.D	8.796	
20 PPB GRO STD	20 PPB GRO STD	27 Jun 2025 15:21	FB031955.D	8.796	
TP-83	Q2436-06	27 Jun 2025 16:06	FB031956.D	8.629	*
TP-100	Q2436-08	27 Jun 2025 17:01	FB031958.D	8.624	*
TP-99	Q2436-09	27 Jun 2025 17:29	FB031959.D	8.637	*
TP-69	Q2436-02	27 Jun 2025 18:25	FB031961.D	8.796	
BSF0627S3	BSF0627S3	27 Jun 2025 18:53	FB031962.D	8.796	
20 PPB GRO STD	20 PPB GRO STD	27 Jun 2025 19:20	FB031963.D	8.796	
20 PPB GRO STD	20 PPB GRO STD	30 Jun 2025 9:27	FB031964.D	8.789	
VBF0630S1	VBF0630S1	30 Jun 2025 10:12	FB031965.D	8.796	
VBF0630S2	VBF0630S2	30 Jun 2025 10:40	FB031966.D	8.798	
BSF0630S1	BSF0630S1	30 Jun 2025 11:08	FB031967.D	8.798	
TP-87	Q2436-07	30 Jun 2025 12:04	FB031969.D	8.572	*
TP-82	Q2436-10	30 Jun 2025 12:31	FB031970.D	8.546	*
TP-86	Q2436-04	30 Jun 2025 12:59	FB031971.D	8.523	*
20 PPB GRO STD	20 PPB GRO STD	30 Jun 2025 13:54	FB031973.D	8.802	