



284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	O1232	OrderDate:	1/19/2023 1:44:00 PM
Client:	Louis Berger U.S., Inc., A WSP Company	Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR
Contact:	Jonathan Ganz	Location:	N11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
O1232-03	WC-17	SOIL			01/18/23			01/19/23
			Diesel Range Organics	8015D		01/20/23	01/20/23	
			Gasoline Range Organics	8015D			01/20/23	

SAMPLE DATA

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	WC-17	SDG No.:	O1232
Lab Sample ID:	O1232-03	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	91.4
Sample Wt/Vol:	5 Units: g	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB029149.D	50	01/20/23 15:02	FB012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	847	J	198	2460	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	17.7		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

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QC SUMMARY



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SOIL GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: Louis Berger U.S., Inc., A WSP Company
Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232

EPA SAMPLE NO.	S1 AAA-TFT	S2	S3	S4	TOT OUT
VBF0120S2	88				0
BSF0120S1	88				0
WC-17	88				0
WC-17MS	102				0
WC-17MSD	94				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

A
B
C
D
E
F



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SOIL GASOLINE RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech Client: Louis Berger U.S., Inc., A WSP Company
Lab Code: CHEM Cas No: O1232 SAS No : O1232 SDG No: O1232
Client SampleID : WC-17MS Datafile: FB029150.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
GRO	9692	847	10039	95%		50-150



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SOIL GASOLINE RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech Client: Louis Berger U.S., Inc., A WSP Company
Lab Code: CHEM Cas No: O1232 SAS No : O1232 SDG No: O1232
Client SampleID : WC-17MSD Datafile: FB029151.D

COMPOUND	SPIKE ADDED ug/kg	SAMPLE CONCENTRATION ug/kg	MS/MSD CONCENTRATION ug/kg	% REC	Qual	QC LIMITS
GRO	9847	847	9063	83%		50-150

MS/MSD % Recovery RPD : 12.8



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

Lab Name: Chemtech Client: Louis Berger U.S., Inc., A WSP Company
Lab Code: CHEM Cas No: O1232 SAS No : O1232 SDG No: O1232
Matrix Spike - EPA Sample No : BSF0120S1 Datafile: FB029144.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
GRO	180	0	177	98	50-150

A
B
C
D
E
F



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METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF0120S2

Lab Name: CHEMTECH

Contract: loui01

Lab Code: CHEM Case No.: O1232

SAS No.: O1232 SDG NO.: O1232

Lab File ID: FB029143.D

Lab Sample ID: VBF0120S2

Date Analyzed: 01/20/23

Time Analyzed: 11:18

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
BSF0120S1	BSF0120S1	FB029144.D	01/20/23
WC-17	O1232-03	FB029149.D	01/20/23
WC-17MS	O1232-03MS	FB029150.D	01/20/23
WC-17MSD	O1232-03MSD	FB029151.D	01/20/23

COMMENTS:

QC SAMPLE DATA

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VBFO120S2	SDG No.:	O1232
Lab Sample ID:	VBFO120S2	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 :	SW3541		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB029143.D	50	01/20/23 11:18	FB012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	181	U	181	2250	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	17.6		50 - 150	88%	SPK: 20

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	BSF0120S1	SDG No.:	O1232
Lab Sample ID:	BSF0120S1	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	100
Sample Wt/Vol:	5 Units: g	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	5 mL
Extraction Type:		Test:	Gasoline Range Organics
GPC Factor :	PH :	Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB029144.D	1	01/20/23 11:55	FB012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	177		4.00	45.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	17.5		50 - 150	88%	SPK: 20

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	WC-17MS	SDG No.:	O1232
Lab Sample ID:	O1232-03MS	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	91.4
Sample Wt/Vol:	5.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Gasoline Range Organics
GPC Factor :		Injection Volume :	
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB029150.D	50	01/20/23 15:39	FB012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	10000		195	2420	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	20.4		50 - 150	102%	SPK: 20

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

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	WC-17MSD	SDG No.:	O1232
Lab Sample ID:	O1232-03MSD	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	91.4
Sample Wt/Vol:	5 Units: g	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB029151.D	50	01/20/23 16:16	FB012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	9060		198	2460	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	18.8		50 - 150	94%	SPK: 20

Comments:

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CALIBRATION SUMMARY



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GASOLINE RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: loui01
ProjectID: NYCDDC Phase II SCI Arthur Kill Road CEQR
Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232

Calibration Sequence : FB011723		Test : Gasoline Range Organics	
Concentration (PPB)	Area Count	Reference Factor	File ID
45	622989	13844	FB029115.D
90	1667787	18531	FB029116.D
180	3442113	19123	FB029117.D
450	8424970	18722	FB029118.D
900	16352397	18169	FB029119.D
AVG RF : 17678		% RSD : 12.279	AVG RT : 8.7888



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GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

20 PPB GRO STD

Lab Name: Chemtech Contract: loui01
ProjectID: NYCDDC Phase II SCI Arthur Kill Road CEQR
Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232
DataFile: FB029141.D Analyst Name: AJ/MA Analyst Date: 01-20-2023

Conc. (PPB)	Area Count	RF	Average RF	%D
180	3112952	17294	17678	2.172

A
B
C
D
E
F



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GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

20 PPB GRO STD

Lab Name: Chemtech Contract: loui01
ProjectID: NYCDDC Phase II SCI Arthur Kill Road CEQR
Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232
DataFile: FB029152.D Analyst Name: AJ/MA Analyst Date: 01-20-2023

Conc. (PPB)	Area Count	RF	Average RF	%D
180	2759829	15332	17678	13.271

A
B
C
D
E
F

Analytical Sequence

Client: Louis Berger U.S., Inc., A WSP Company

SDG No.: O1232

Project: NYCDDC Phase II SCI Arthur Kill Road CEQR

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 8.7888					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
20 PPB GRO STD	20 PPB GRO STD	20 Jan 2023 10:04	FB029141.D	8.789	
VBF0120S2	VBF0120S2	20 Jan 2023 11:18	FB029143.D	8.793	
BSF0120S1	BSF0120S1	20 Jan 2023 11:55	FB029144.D	8.792	
WC-17	O1232-03	20 Jan 2023 15:02	FB029149.D	8.792	
WC-17MS	O1232-03MS	20 Jan 2023 15:39	FB029150.D	8.791	
WC-17MSD	O1232-03MSD	20 Jan 2023 16:16	FB029151.D	8.796	
20 PPB GRO STD	20 PPB GRO STD	20 Jan 2023 16:54	FB029152.D	8.793	

Column used to flag RT values with an * values outside of QC limits

QC Limits
(± 0.10 minutes)

Lower Limit
8.6888

Upper Limits
8.8888