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LAB CHRONICLE

OrderID:	Q1206	**OrderDate:**	1/28/2025 11:18:51 AM
Client:	RU2 Engineering, LLC	**Project:**	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	**Location:**	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1206-01	**JPP-20.1-012725**	**SOIL**			**01/27/25**			**01/28/25**
			Diesel Range Organics	8015D		01/29/25	01/30/25	
			Gasoline Range Organics	8015D			01/29/25	
Q1206-05	**JPP-16.3-012725**	**SOIL**			**01/27/25**			**01/28/25**
			Diesel Range Organics	8015D		01/29/25	01/30/25	
			Gasoline Range Organics	8015D			01/29/25	

SAMPLE DATA

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.1-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-01	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	85.5 Decanted:
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031369.D	1	01/29/25 15:01	FB012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	53.0	U	9.00	53.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	16.5		50 - 150	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

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.3-012725	SDG No.:	Q1206
Lab Sample ID:	Q1206-05	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	85.9 Decanted:
Sample Wt/Vol:	5.09 Units: g	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031370.D	1	01/29/25 15:28	FB012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	51.0	U	9.00	51.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	12.8		50 - 150	64%	SPK: 20

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QC SUMMARY

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SOIL GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: RU2 Engineering, LLC

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

EPA SAMPLE NO.	S1 AAA-TFT	S2	S3	S4	TOT OUT
VBF0129S1	86				0
BSF0129S1	94				0
BSF0129S2	88				0
JPP-20.1-012725	83				0
JPP-16.3-012725	64				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

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

Lab Name: Chemtech **Client:** RU2 Engineering, LLC

Lab Code: CHEM **Cas No:** Q1206 **SAS No :** Q1206 **SDG No:** Q1206

Matrix Spike - EPA Sample No : BSF0129S1 **Datafile:** FB031359.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
GRO	180	0	205	114	50-150

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

Lab Name: Chemtech **Client:** RU2 Engineering, LLC

Lab Code: CHEM **Cas No:** Q1206 **SAS No :** Q1206 **SDG No:** Q1206

Matrix Spike - EPA Sample No : BSF0129S2 **Datafile:** FB031367.D

COMPOUND	SPIKE ADDED ug/kg	CONCENTRATION ug/kg	LCS/LCSD CONCENTRATION ug/kg	% REC	QC LIMITS
GRO	180	0	183	102	50-150

LCS/LCSD % Recovery RPD : 10.14

Alliance TECHNICAL GROUP
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METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF0129S1

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG NO.: Q1206

Lab File ID: FB031357.D Lab Sample ID: VBF0129S1

Date Analyzed: 01/29/25 Time Analyzed: 9:17

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
BSF0129S1	BSF0129S1	FB031359.D	01/29/25
BSF0129S2	BSF0129S2	FB031367.D	01/29/25
JPP-20.1-012725	Q1206-01	FB031369.D	01/29/25
JPP-16.3-012725	Q1206-05	FB031370.D	01/29/25

COMMENTS:

QC SAMPLE DATA

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	VBF0129S1	SDG No.:	Q1206
Lab Sample ID:	VBF0129S1	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	100 Decanted:
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 :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031357.D	1	01/29/25 9:17	FB012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	45.0	U	8.00	45.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	17.1		50 - 150	86%	SPK: 20

Comments:

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() = Laboratory InHouse Limit

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	BSF0129S1	SDG No.:	Q1206
Lab Sample ID:	BSF0129S1	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	100 Decanted:
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 :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031359.D	1	01/29/25 10:11	FB012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	205		8.00	45.0	ug/kg
SURROGATES						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	18.9		50 - 150	94%	SPK: 20

Comments:

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MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	BSF0129S2	SDG No.:	Q1206
Lab Sample ID:	BSF0129S2	Matrix:	SOIL
Analytical Method:	8015D GRO	% Solid:	100 Decanted:
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 :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB031367.D	1	01/29/25 14:07	FB012925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
GRO	GRO	183		8.00	45.0	ug/kg
SURROGATES						
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
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CALIBRATION SUMMARY

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GASOLINE RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: RUTW01

ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

Calibration Sequence : FB011525		Test : Gasoline Range Organics	
Concentration (PPB)	**Area Count**	**Reference Factor**	**File ID**
45	1619248	35983	FB031307.D
90	2849383	31660	FB031308.D
180	5927461	32930	FB031309.D
450	17402832	38673	FB031310.D
900	36014388	40016	FB031311.D
AVG RF : 35852	**% RSD : 10.001**		**AVG RT : 8.7886**

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GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

20 PPB GRO STD

Lab Name: Chemtech Contract: RUTW01

ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

DataFile: FB031356.D Analyst Name: YP/AJ Analyst Date: 01-29-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	6971344	38730	35852	8.027

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GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

20 PPB GRO STD

Lab Name: Chemtech Contract: RUTW01

ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

DataFile: FB031368.D Analyst Name: YP/AJ Analyst Date: 01-29-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	6618938	36772	35852	2.566

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GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

20 PPB GRO STD

Lab Name: Chemtech Contract: RUTW01

ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Lab Code: CHEM Case No.: Q1206 SAS No.: Q1206 SDG No.: Q1206

DataFile: FB031374.D Analyst Name: YP/AJ Analyst Date: 01-29-2025

Conc. (PPB)	Area Count	RF	Average RF	%D
180	6660371	37002	35852	3.208

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Analytical Sequence

Client: RU2 Engineering, LLC **SDG No.:** Q1206

Project: NYCDDC SANTWOBR Brooklyn Bridge BBMCR **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 **8.7886**

EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
20 PPB GRO STD	20 PPB GRO STD	29 Jan 2025 8:39	FB031356.D	8.789	
VBF0129S1	VBF0129S1	29 Jan 2025 9:17	FB031357.D	8.793	
BSF0129S1	BSF0129S1	29 Jan 2025 10:11	FB031359.D	8.796	
BSF0129S2	BSF0129S2	29 Jan 2025 14:07	FB031367.D	8.795	
20 PPB GRO STD	20 PPB GRO STD	29 Jan 2025 14:34	FB031368.D	8.795	
JPP-20.1-012725	Q1206-01	29 Jan 2025 15:01	FB031369.D	8.795	
JPP-16.3-012725	Q1206-05	29 Jan 2025 15:28	FB031370.D	8.795	
20 PPB GRO STD	20 PPB GRO STD	29 Jan 2025 17:15	FB031374.D	8.794	

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

QC Limits	Lower Limit	Upper Limits
(± 0.10 minutes)	8.6886	8.8886