284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922



# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q2008 | **OrderDate:** | 5/9/2025 3:21:23 PM |
| **Client:** | JACOBS Engineering Group, Inc. | **Project:** | Former Schlumberger Site Princeton NJ 2025 |
| **Contact:** | Mary I. Murphy | **Location:** | L41,VOA Ref. #3 Water |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q2008-01** | **IDW-AQ-DRUM-633-05092025** | **Water** | | | **05/09/25** | | | **05/09/25** |
| | | | Diesel Range Organics | 8015D | | 05/13/25 | 05/13/25 | |
| | | | Gasoline Range Organics | 8015D | | | 05/12/25 | |

# SAMPLE DATA

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 05/09/25 |
| Project: | Former Schlumberger Site Princeton NJ 2025 | Date Received: | 05/09/25 |
| Client Sample ID: | IDW-AQ-DRUM-633-05092025 | SDG No.: | Q2008 |
| Lab Sample ID: | Q2008-01 | Matrix: | Water |
| Analytical Method: | 8015D GRO | % Solid: | 0 Decanted: |
| Sample Wt/Vol: | 5 Units: mL | 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 |
|---|---|---|---|
| FB031697.D | 1 | 05/12/25 11:44 | FB051225 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| GRO | GRO | 75.0 | | 6.00 | 45.0 | ug/L |
| **SURROGATES** | | | | | | |
| 98-08-8 | Alpha,Alpha,Alpha-Trifluoroto | 23.7 | | 50 - 150 | 118% | 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

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## WATER GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: JACOBS Engineering Group, Inc.

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

| EPA SAMPLE NO. | S1 AAA-TFT | S2 | S3 | S4 | TOT OUT |
|---|---|---|---|---|---|
| VBF0512W1 | 88 | | | | 0 |
| BSF0512W1 | 92 | | | | 0 |
| IDW-AQ-DRUM-633-05092025 | 118 | | | | 0 |
| BSF0512W2 | 94 | | | | 0 |

| | QC LIMITS |
|---|---|
| AAA-TFT | For Water : 50-150<br>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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## WATER GASOLINE RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLIC

**Lab Name:** Chemtech **Client:** JACOBS Engineering Group, Inc.

**Lab Code:** CHEM **Cas No:** Q2008 **SAS No :** Q2008 **SDG No:** Q2008

**Matrix Spike - EPA Sample No :** BSF0512W1 **Datafile:** FB031696.D

| COMPOUND | SPIKE ADDED ug/L | CONCENTRATION ug/L | LCS/LCSD CONCENTRATION ug/L | % REC | QC LIMITS |
|---|---|---|---|---|---|
| GRO | 180 | 0 | 163 | 91 | 50-150 |

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## WATER GASOLINE RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLIC

**Lab Name:** Chemtech **Client:** JACOBS Engineering Group, Inc.

**Lab Code:** CHEM **Cas No:** Q2008 **SAS No :** Q2008 **SDG No:** Q2008

**Matrix Spike - EPA Sample No :** BSF0512W2 **Datafile:** FB031698.D

| COMPOUND | SPIKE ADDED ug/L | CONCENTRATION ug/L | LCS/LCSD CONCENTRATION ug/L | % REC | QC LIMITS |
|---|---|---|---|---|---|
| GRO | 180 | 0 | 185 | 103 | 50-150 |

LCS/LCSD % Recovery RPD : 12.6

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# METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBF0512W1

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG NO.: Q2008

Lab File ID: FB031695.D Lab Sample ID: VBF0512W1

Date Analyzed: 05/12/25 Time Analyzed: 10:20

GC Column: RTX-502.2 ID: 0.53 (mm) Heated Purge: (Y/N) N

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 |
|---|---|---|---|
| BSF0512W1 | BSF0512W1 | FB031696.D | 05/12/25 |
| IDW-AQ-DRUM-633-05092025 | Q2008-01 | FB031697.D | 05/12/25 |
| BSF0512W2 | BSF0512W2 | FB031698.D | 05/12/25 |

COMMENTS:

# QC SAMPLE DATA

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ 2025 | Date Received: | |
| Client Sample ID: | VBF0512W1 | SDG No.: | Q2008 |
| Lab Sample ID: | VBF0512W1 | Matrix: | Water |
| Analytical Method: | 8015D GRO | % Solid: | 0 Decanted: |
| Sample Wt/Vol: | 5 Units: mL | 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 |
|---|---|---|---|
| FB031695.D | 1 | 05/12/25 10:20 | FB051225 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| GRO | GRO | 6.00 | U | 6.00 | 45.0 | ug/L |
| **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
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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

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ 2025 | Date Received: | |
| Client Sample ID: | BSF0512W1 | SDG No.: | Q2008 |
| Lab Sample ID: | BSF0512W1 | Matrix: | Water |
| Analytical Method: | 8015D GRO | % Solid: | 0 Decanted: |
| Sample Wt/Vol: | 5 Units: mL | 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 |
|---|---|---|---|
| FB031696.D | 1 | 05/12/25 11:16 | FB051225 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| GRO | GRO | 163 | | 6.00 | 45.0 | ug/L |
| **SURROGATES** | | | | | | |
| 98-08-8 | Alpha,Alpha,Alpha-Trifluoroto | 18.4 | | 50 - 150 | 92% | SPK: 20 |

Comments:

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ 2025 | Date Received: | |
| Client Sample ID: | BSF0512W2 | SDG No.: | Q2008 |
| Lab Sample ID: | BSF0512W2 | Matrix: | Water |
| Analytical Method: | 8015D GRO | % Solid: | 0 Decanted: |
| Sample Wt/Vol: | 5 Units: mL | 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 |
|---|---|---|---|
| FB031698.D | 1 | 05/12/25 12:55 | FB051225 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| GRO | GRO | 185 | | 6.00 | 45.0 | ug/L |
| **SURROGATES** | | | | | | |
| 98-08-8 | Alpha,Alpha,Alpha-Trifluoroto | 18.7 | | 50 - 150 | 94% | 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
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J = Estimated Value
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N = Presumptive Evidence of a Compound
* = Values outside of QC limits
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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

# CALIBRATION SUMMARY

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## GASOLINE RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: JACO05

ProjectID: Former Schlumberger Site Princeton NJ 2025

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

| Calibration Sequence : FB042325 | | Test : Gasoline Range Organics | |
|---|---|---|---|
| **Concentration (PPB)** | **Area Count** | **Reference Factor** | **File ID** |
| 45 | 1404536 | 31212 | FB031638.D |
| 90 | 2828773 | 31431 | FB031639.D |
| 180 | 5982574 | 33237 | FB031640.D |
| 450 | 16361923 | 36360 | FB031641.D |
| 900 | 31441842 | 34935 | FB031642.D |

**AVG RF :** 33435 **% RSD : 6.655** **AVG RT : 8.7924**

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## GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

**20 PPB GRO STD**

Lab Name: Chemtech Contract: JACO05

ProjectID: Former Schlumberger Site Princeton NJ 2025

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

DataFile: FB031694.D Analyst Name: YP/AJ Analyst Date: 05-12-2025

| Conc. (PPB) | Area Count | RF | Average RF | %D |
|---|---|---|---|---|
| 180 | 6211245 | 34507 | 33435 | 3.206 |

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## GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY

**20 PPB GRO STD**

Lab Name: Chemtech Contract: JACO05

ProjectID: Former Schlumberger Site Princeton NJ 2025

Lab Code: CHEM Case No.: Q2008 SAS No.: Q2008 SDG No.: Q2008

DataFile: FB031699.D Analyst Name: YP/AJ Analyst Date: 05-12-2025

| Conc. (PPB) | Area Count | RF | Average RF | %D |
|---|---|---|---|---|
| 180 | 5654010 | 31411 | 33435 | 6.054 |

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# Analytical Sequence

**Client:** JACOBS Engineering Group, Inc. **SDG No.:** Q2008

**Project:** Former Schlumberger Site Princeton NJ 2025 **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** **8.7924**

| EPA SAMPLE NO. | LAB SAMPLE ID | DATE AND TIME ANALYZED | DATAFILE | RT | # |
|---|---|---|---|---|---|
| 20 PPB GRO STD | 20 PPB GRO STD | 12 May 2025 9:40 | FB031694.D | 8.787 | |
| VBF0512W1 | VBF0512W1 | 12 May 2025 10:20 | FB031695.D | 8.790 | |
| BSF0512W1 | BSF0512W1 | 12 May 2025 11:16 | FB031696.D | 8.792 | |
| IDW-AQ-DRUM-633-05092025 | Q2008-01 | 12 May 2025 11:44 | FB031697.D | 8.792 | |
| BSF0512W2 | BSF0512W2 | 12 May 2025 12:55 | FB031698.D | 8.791 | |
| 20 PPB GRO STD | 20 PPB GRO STD | 12 May 2025 13:53 | FB031699.D | 8.791 | |

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

| QC Limits | Lower Limit | Upper Limits |
|---|---|---|
| (± 0.10 minutes) | 8.6924 | 8.8924 |