

#### **ANALYTICAL RESULTS SUMMARY**

VOLATILE ORGANICS GENERAL CHEMISTRY METALS SEMI-VOLATILE ORGANICS

**PROJECT NAME: FORMER SCHLUMBERGER SITE PRINCETON NJ** 

**JACOBS ENGINEERING GROUP, INC.** 

412 Mt. Kemble Ave

**Downtown Building** 

Morristown, NJ - 07960

Phone No: 9732670555

ORDER ID: P3440

**ATTENTION: Mary I. Murphy** 







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#### 1

# DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name : Alliance Technical Group LLC Client : JACOBS Engine						Grou	p, Inc.		
Projec	t Location :	Princeton, NJ	Project Number :	D3779922					
Labora	atory Sample ID	(s): <u>P3440</u>	Sampling Date(s):	8/01/2024					
List DI	KQP Methods U	sed (e.g., 8260,8270, et Cetra)	Low,8270-Modif	ied,82	270E,2	200.7			
1	specified QA/C explain any crit	tical method referenced in this la PC performance criteria followed, teria falling outside of acceptable f Known Quality performance sta	including the requirement to guidelines, as specified in th		$\overline{\mathbf{N}}$	Yes		No	
1A	Were the meth	od specified handling, preservati	on, and holding time requiren	nents met?	V	Yes		No	
1B		Was the EPH method conducted respective DKQ methods)	without significant modification	ons (see		Yes		No	☑ N/A
2		es received by the laboratory in ne associated chain-of-custody d		at	$\overline{\mathbf{V}}$	Yes		No	
3	Were samples	received at an appropriate tempo	erature (4±2° C)?		V	Yes		No	□ N/A
4	Were all QA/Qe standards ach	C performance criteria specified ileved?	in the NJDEP DKQP			Yes	$\checkmark$	No	
5		ng limits specified or referenced to the laboratory prior to sample			V	Yes		No	
	b)Were these r	eporting limits met?			V	Yes		No	□ N/A
6	results reporte	tical method referenced in this la ed for all constituents identified in e DKQP documents and/or site-	the method-specific analyte		V	Yes		No	
7	Are project-spe	ecific matrix spikes and/or labora	tory duplicates included in thi	s data set?	$\overline{\mathbf{V}}$	Yes		No	

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."



#### **Cover Page**

Order ID: P3440

**Project ID:** Former Schlumberger Site Princeton NJ

**Client:** JACOBS Engineering Group, Inc.

#### **Lab Sample Number**

#### **Client Sample Number**

P3440-01	923-K1-WS-080124
P3440-02	923-K1-WS-080124MS
P3440-03	923-K1-WS-080124MSD
P3440-04	922-K1-WS-080124
P3440-05	TB-01-080124

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 9:30 am, Dec 10, 2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012





#### **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.** 

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A

Chemtech Project # P3440 Test Name: VOCMS Group6

#### A. Number of Samples and Date of Receipt:

5 Water samples were received on 08/01/2024.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOC-SIMGroup1, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for VOCMS Group6.

#### C. Analytical Techniques:

The analysis performed on instrument MSVOA\_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.The analysis of VOCMS Group6 was based on method 8260D.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

The Tuning criteria met requirements.

#### **E. Additional Comments:**

This data package has been revised due to parameter list changed.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

#### **F. Manual Integration Comments:**



Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Signature\_\_\_\_N. N. Pandya

**APPROVED** 

By Nimisha Pandya, QA/QC Supervisor at 9:31 am, Dec 10, 2024





#### CASE NARRATIVE

**JACOBS Engineering Group, Inc.** 

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A

Chemtech Project # P3440 Test Name: SVOCMS Group3

#### A. Number of Samples and Date of Receipt:

5 Water samples were received on 08/01/2024.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOC-SIMGroup1, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for SVOCMS Group3.

#### C. Analytical Techniques:

The samples were analyzed on instrument BNA\_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOCMS Group3 was based on method 8270-Modified and extraction was done based on method 3510.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for 923-K1-WS-080124MSD [Terphenyl-d14 - 134%] and 922-K1-WS-080124 [Terphenyl-d14 - 148%] these compounds did not meet the NJDKQP criteria but met the in-house criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS {P3440-02MS} with File ID: BN033232.D recoveries met the requirements for all compounds except for 2-Methylnaphthalene[68%], Phenanthrene[136%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {P3440-03MSD} with File ID: BN033233.D recoveries met the acceptable requirements except for Phenanthrene[152%] this compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The RPD met criteria.

The Blank Spike met requirements for all samples.



The Blank analysis did not indicate the presence of lab contamination.

The % RSD is greater than 20% in the Initial Calibration method (Method 8270Sim-BN080524.M) for 1,4-Dioxane, this compound is passing on Linear Regression.

The Continuous Calibration File ID BN033228.D met the requirements except for Benzo(b)fluoranthene is failing marginally low and and 2,4,6-Tribromophenol, failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken.

The Tuning criteria met requirements.

#### **E. Additional Comments:**

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

#### F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

N. N. Pandya

**APPROVED** 

By Nimisha Pandya, QA/QC Supervisor at 9:31 am, Dec 10, 2024



#### **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.** 

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A

Chemtech Project # P3440 Test Name: SVOCMS Group6

#### A. Number of Samples and Date of Receipt:

5 Water samples were received on 08/01/2024.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOC-SIMGroup1, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for SVOCMS Group6.

#### C. Analytical Techniques:

The samples were analyzed on instrument BNA\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um df The analysis of SVOCMS Group6 was based on method 8270E and extraction was done based on method 3510.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS {P3440-02MS} with File ID: BF138838.D recoveries met the requirements for all compounds except for Benzaldehyde[0%] this compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {P3440-03MSD} with File ID: BF138839.D recoveries met the acceptable requirements except for Benzaldehyde[0%] this compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration File ID BF138834.D met the requirements except for Pentachlorophenol but The associate samples have no positive hit in associated samples therefore no corrective action taken.





The Tuning criteria met requirements.

#### E. Additional Comments:

This data Package has been revised due to parameter list changed The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

#### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_N. N. Pankya

**APPROVED** 

By Nimisha Pandya, QA/QC Supervisor at 9:31 am, Dec 10, 2024



#### **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.** 

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A

Chemtech Project # P3440 Test Name: Metals Group5

#### A. Number of Samples and Date of Receipt:

5 Water samples were received on 08/01/2024.

#### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, Metals Group5, SVOC-SIMGroup1, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for Metals Group5.

#### C. Analytical Techniques:

The analysis and digestion of Metals Group5 was based on method 200.7.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

#### E. Additional Comments:

This Data Package has been revised due to Metals Group5 test added as per Client Request.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature N. N. Pandya

**APPROVED** 

By Nimisha Pandya, QA/QC Supervisor at 9:31 am, Dec 10, 2024





#### **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.** 

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A

**Chemtech Project # P3440** 

**Test Name: Metals Group4, Mercury** 

#### A. Number of Samples and Date of Receipt:

5 Water samples were received on 08/01/2024.

#### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOC-SIMGroup1, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for Metals Group4, Mercury.

#### C. Analytical Techniques:

The analysis of Metals Group4 was based on method 6020B, digestion based on method 3010 (waters). The analysis and digestion of Mercury was based on method 7470A.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (923-K1-WS-080124MS) analysis met criteria for all samples except for Silver due to Chemical Interference during Digestion Process.

The Matrix Spike Duplicate (923-K1-WS-080124MSD) analysis met criteria for all samples except for Silver due to Chemical Interference during Digestion Process.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

#### E. Additional Comments:

The data package has been revised due to the parameter list change as per client request.

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed



above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_ N. N. Pandya

## **APPROVED**

By Nimisha Pandya, QA/QC Supervisor at 9:32 am, Dec 10, 2024



#### CASE NARRATIVE

**JACOBS Engineering Group, Inc.** 

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A

**Chemtech Project # P3440** 

**Test Name: Hexavalent Chromium** 

#### A. Number of Samples and Date of Receipt:

5 Water samples were received on 08/01/2024.

#### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOC-SIMGroup1, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for Hexavalent Chromium.

#### C. Analytical Techniques:

The analysis of Hexavalent Chromium was based on method 7196A.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

#### E. Additional Comments:

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

N. N. Pankya.

**APPROVED** 

By Nimisha Pandya, QA/QC Supervisor at 9:32 am, Dec 10, 2024

Revised



#### DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following "Results Qualifiers" are used:

- J Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
- U Indicates the analyte was analyzed for, but not detected.
- ND Indicates the analyte was analyzed for, but not detected
- E Indicates the reported value is estimated because of the presence of interference
- M Indicates Duplicate injection precision not met.
- N Indicates the spiked sample recovery is not within control limits.
- S Indicates the reported value was determined by the Method of Standard Addition (MSA).
- \* Indicates that the duplicate analysis is not within control limits.
- + Indicates the correlation coefficient for the MSA is less than 0.995.
- D Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
- M Method qualifiers
  - **"P"** for ICP instrument
  - "PM" for ICP when Microwave Digestion is used
  - "CV" for Manual Cold Vapor AA
  - "AV" for automated Cold Vapor AA
  - "CA" for MIDI-Distillation Spectrophotometric "AS" for Semi –Automated Spectrophotometric
  - "C" for Manual Spectrophotometric
  - **"T"** for Titrimetric
  - "NR" for analyte not required to be analyzed
- OR Indicates the analyte's concentration exceeds the calibrated range of the
  - instrument for that specific analysis.
- Q Indicates the LCS did not meet the control limits requirements
- H Sample Analysis Out Of Hold Time



## DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following "Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	<ul> <li>Indicates an estimated value. This flag is used:</li> <li>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)</li> <li>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.</li> </ul>
В	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements



#### APPENDIX A

#### **QA REVIEW GENERAL DOCUMENTATION**

Project #: P3440

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page)	<u> </u>
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	<del>'</del> <del>'</del> <del>'</del>
Collect information for each project id from server. Were all requirements followed	<u> </u>
COVER PAGE:	_
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	<u> </u>
CHAIN OF CUSTODY:	_
Do requested analyses on Chain of Custody agree with form I results	<u> </u>
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	<u> </u>
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	_ ✓
ANALYTICAL:	
Was method requirement followed?	<u> </u>
Was client requirement followed?	<u> </u>
Does the case narrative summarize all QC failure?	<del>'</del> <del>'</del> <del>'</del> <del>'</del> <del>'</del> <del>'</del> <del>'</del> <del>'</del>
All runlogs and manual integration are reviewed for requirements	<u></u>
All manual calculations and /or hand notations verified	<u> </u>

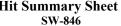
QA Review Signature: SOHIL JODHANI Date: 10/30/2024



# **Hit Summary Sheet**

SDG No.: P3440

Client: JACOBS Engineering Group, Inc.







Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	923-K1-WS-08012	4						
P3440-01	923-K1-WS-08012	4 Water	Acetone	4.90	J	1.40	5.00	ug/L
P3440-01	923-K1-WS-08012	4 Water	Toluene	0.71	J	0.18	1.00	ug/L
			Total Voc:	5.61				
			<b>Total Concentration:</b>	5.61				
Client ID:	922-K1-WS-08012	4						
P3440-04	922-K1-WS-08012	4 Water	Toluene	1.10		0.18	1.00	ug/L
			Total Voc:	1.10				
			<b>Total Concentration:</b>	1.10				





# В

D

# SAMPLE DATA



#### **Report of Analysis**

JACOBS Engineering Group, Inc. Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 923-K1-WS-080124 SDG No.: P3440

Lab Sample ID: P3440-01 Matrix: Water

Analytical Method: SW8260 % Solid: 0

Sample Wt/Vol: 5 Units: mL Final Vol: 5000 uL

Soil Aliquot Vol: uL Test: VOCMS Group6

GC Column: RXI-624 ID: 0.25 Level: LOW

Prep Method:

Client:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VN083251.D 1 08/13/24 12:30 VN081324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	4.90	J	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-88-3	Toluene	0.71	J	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L

P3440



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

SDG No.:

#### **Report of Analysis**

923-K1-WS-080124

JACOBS Engineering Group, Inc.

Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Lab Sample ID: P3440-01 Matrix: Water

Analytical Method: SW8260 % Solid: 0

Sample Wt/Vol: 5 Units: mL Final Vol: 5000 uL

Soil Aliquot Vol: uL Test: VOCMS Group6

GC Column: RXI-624 ID: 0.25 Level: LOW

Prep Method:

Client:

Client Sample ID:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID VN083251.D 1 08/13/24 12:30 VN081324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
1330-20-7	Total Xylenes	0.45	U	0.45	3.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	56.1		70 (74) - 130 (125)	112%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		70 (75) - 130 (124)	105%	SPK: 50
2037-26-5	Toluene-d8	53.3		70 (86) - 130 (113)	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.2		70 (77) - 130 (121)	112%	SPK: 50
INTERNAL STA	NDARDS					
363-72-4	Pentafluorobenzene	149000	8.224			
540-36-3	1,4-Difluorobenzene	288000	9.1			
3114-55-4	Chlorobenzene-d5	294000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	131000	13.794			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



#### **Report of Analysis**

JACOBS Engineering Group, Inc. Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 922-K1-WS-080124 SDG No.: P3440

Lab Sample ID:P3440-04Matrix:WaterAnalytical Method:SW8260% Solid:0

Sample Wt/Vol: 5 Units: mL Final Vol: 5000 uL

Soil Aliquot Vol: uL Test: VOCMS Group6

GC Column: RXI-624 ID: 0.25 Level: LOW

Prep Method:

Client:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VN083261.D 1 08/13/24 16:31 VN081324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-88-3	Toluene	1.10		0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L

uL



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

% Solid:

#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24 Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

P3440 Client Sample ID: 922-K1-WS-080124 SDG No.:

Lab Sample ID: P3440-04 Matrix: Water

Analytical Method: SW8260 Final Vol: Sample Wt/Vol: 5 Units: mL5000

Test: VOCMS Group6 Soil Aliquot Vol: uL

ID: 0.25 Level: LOW GC Column: RXI-624

Prep Method:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID VN083261.D 1 08/13/24 16:31 VN081324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
1330-20-7	Total Xylenes	0.45	U	0.45	3.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.0		70 (74) - 130 (125)	110%	SPK: 50
1868-53-7	Dibromofluoromethane	52.4		70 (75) - 130 (124)	105%	SPK: 50
2037-26-5	Toluene-d8	52.8		70 (86) - 130 (113)	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.8		70 (77) - 130 (121)	110%	SPK: 50
INTERNAL STA	ANDARDS					
363-72-4	Pentafluorobenzene	132000	8.224			
540-36-3	1,4-Difluorobenzene	256000	9.106			
3114-55-4	Chlorobenzene-d5	256000	11.865			
3855-82-1	1.4-Dichlorobenzene-d4	112000	13.794			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



#### **Report of Analysis**

JACOBS Engineering Group, Inc.

Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: TB-01-080124 SDG No.: P3440

Lab Sample ID: P3440-05 Matrix: Water

Analytical Method: SW8260 % Solid: 0

Sample Wt/Vol: 5 Units: mL Final Vol: 5000 uL

Soil Aliquot Vol: uL Test: VOCMS Group6

GC Column: RXI-624 ID: 0.25 Level: LOW

Prep Method:

Client:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VN083262.D 1 08/13/24 16:56 VN081324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.21	U	0.21	1.00	ug/L
74-87-3	Chloromethane	0.35	U	0.35	1.00	ug/L
75-01-4	Vinyl Chloride	0.34	U	0.34	1.00	ug/L
74-83-9	Bromomethane	1.40	U	1.40	5.00	ug/L
75-00-3	Chloroethane	0.56	U	0.56	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.26	U	0.26	1.00	ug/L
67-64-1	Acetone	1.40	U	1.40	5.00	ug/L
75-15-0	Carbon Disulfide	0.32	U	0.32	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.16	U	0.16	1.00	ug/L
75-09-2	Methylene Chloride	0.32	U	0.32	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
75-34-3	1,1-Dichloroethane	0.23	U	0.23	1.00	ug/L
110-82-7	Cyclohexane	1.60	U	1.60	5.00	ug/L
78-93-3	2-Butanone	1.30	U	1.30	5.00	ug/L
56-23-5	Carbon Tetrachloride	0.25	U	0.25	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.25	U	0.25	1.00	ug/L
67-66-3	Chloroform	0.26	U	0.26	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.19	U	0.19	1.00	ug/L
108-87-2	Methylcyclohexane	0.19	U	0.19	1.00	ug/L
71-43-2	Benzene	0.16	U	0.16	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.24	U	0.24	1.00	ug/L
79-01-6	Trichloroethene	0.32	U	0.32	1.00	ug/L
75-27-4	Bromodichloromethane	0.24	U	0.24	1.00	ug/L
108-88-3	Toluene	0.18	U	0.18	1.00	ug/L
79-00-5	1,1,2-Trichloroethane	0.21	U	0.21	1.00	ug/L
124-48-1	Dibromochloromethane	0.18	U	0.18	1.00	ug/L
127-18-4	Tetrachloroethene	0.25	U	0.25	1.00	ug/L
108-90-7	Chlorobenzene	0.13	U	0.13	1.00	ug/L
100-41-4	Ethyl Benzene	0.16	U	0.16	1.00	ug/L



#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: TB-01-080124 SDG No.: P3440
Lab Sample ID: P3440-05 Matrix: Water

Analytical Method: SW8260 % Solid: 0

Sample Wt/Vol: 5 Units: mL Final Vol: 5000 uL

Soil Aliquot Vol: uL Test: VOCMS Group6

GC Column: RXI-624 ID: 0.25 Level: LOW

Prep Method:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VN083262.D 1 08/13/24 16:56 VN081324

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
179601-23-1	m/p-Xylenes	0.31	U	0.31	2.00	ug/L
1330-20-7	Total Xylenes	0.45	U	0.45	3.00	ug/L
95-47-6	o-Xylene	0.14	U	0.14	1.00	ug/L
98-82-8	Isopropylbenzene	0.13	U	0.13	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	0.27	U	0.27	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.19	U	0.19	1.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	56.6		70 (74) - 130 (125)	113%	SPK: 50
1868-53-7	Dibromofluoromethane	52.9		70 (75) - 130 (124)	106%	SPK: 50
2037-26-5	Toluene-d8	53.3		70 (86) - 130 (113)	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.1		70 (77) - 130 (121)	114%	SPK: 50
INTERNAL STAI	NDARDS					
363-72-4	Pentafluorobenzene	143000	8.229			
540-36-3	1,4-Difluorobenzene	276000	9.106			
3114-55-4	Chlorobenzene-d5	284000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	127000	13.794			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



LAB CHRONICLE

OrderID: P3440

Client: JACOBS Engineering Group, Inc.

Contact: Mary I. Murphy

**OrderDate:** 8/1/2024 12:28:00 PM

**Project:** Former Schlumberger Site Princeton NJ

Location: D31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3440-01	923-K1-WS-080124	Water			08/01/24			08/01/24
			VOCMS Group6	8260-Low			08/13/24	
P3440-04	922-K1-WS-080124	Water			08/01/24			08/01/24
			VOCMS Group6	8260-Low			08/13/24	
P3440-05	TB-01-080124	Water			08/01/24			08/01/24
			VOCMS Group6	8260-Low			08/13/24	

P3440 **26 of 58** Revised

А

В

С







#### Hit Summary Sheet SW-846

**SDG No.:** P3440

Client: JACOBS Engineering Group, Inc.

Sample ID Client ID:	Client ID 922-K1-WS-080124	Parameter		Concentration	С	MDL	RDL	Units
P3440-04	922-K1-WS-080124	WATER	Phenanthrene	0.040	J	0.02	0.11	ug/L
P3440-04	922-K1-WS-080124	WATER	Fluoranthene	0.040	J	0.02	0.11	ug/L
P3440-04	922-K1-WS-080124	WATER	Pyrene	0.030	J	0.02	0.11	ug/L
			Total Svoc : Total Concentration:			.11 .11		





# Α



# SAMPLE DATA





#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

 Client Sample ID:
 923-K1-WS-080124
 SDG No.:
 P3440

 Lab Sample ID:
 P3440-01
 Matrix:
 Water

Analytical Method: SW8270SIM % Solid: 0

Sample Wt/Vol: 910 Units: mL Final Vol: 1000 uL
Soil Aliquot Vol: uL Test: SVOCMS Group3

Extraction Type: Decanted: N Level: LOW

Injection Volume : GPC Factor : 1.0 GPC Cleanup : N PH :

Prep Method: SW3510C

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BN033231 D
 1
 08/02/24 09:25
 08/03/24 10:24
 PB162464

BN033231.D	I	08/02/24 09:25		08/03/24 10:24	PB162464	
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
91-20-3	Naphthalene	0.030	U	0.030	0.11	ug/L
91-57-6	2-Methylnaphthalene	0.030	U	0.030	0.11	ug/L
208-96-8	Acenaphthylene	0.020	U	0.020	0.11	ug/L
83-32-9	Acenaphthene	0.020	U	0.020	0.11	ug/L
86-73-7	Fluorene	0.020	U	0.020	0.11	ug/L
85-01-8	Phenanthrene	0.020	U	0.020	0.11	ug/L
120-12-7	Anthracene	0.030	U	0.030	0.11	ug/L
206-44-0	Fluoranthene	0.030	U	0.030	0.11	ug/L
129-00-0	Pyrene	0.020	U	0.020	0.11	ug/L
56-55-3	Benzo(a)anthracene	0.020	U	0.020	0.11	ug/L
218-01-9	Chrysene	0.030	U	0.030	0.11	ug/L
205-99-2	Benzo(b)fluoranthene	0.040	U	0.040	0.11	ug/L
207-08-9	Benzo(k)fluoranthene	0.040	U	0.040	0.11	ug/L
50-32-8	Benzo(a)pyrene	0.060	U	0.060	0.11	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.040	U	0.040	0.11	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.040	U	0.040	0.11	ug/L
191-24-2	Benzo(g,h,i)perylene	0.040	U	0.040	0.11	ug/L
123-91-1	1,4-Dioxane	0.070	U	0.070	0.22	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.24		30 (30) - 150 (150)	61%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.31		30 (30) - 150 (150)	77%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.24		30 (11) - 130 (175)	60%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.28		30 (10) - 130 (175)	71%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		30 (54) - 130 (171)	89%	SPK: 0.4
INTERNAL STA	ANDARDS					
3855-82-1	1,4-Dichlorobenzene-d4	2960	7.524			
1146-65-2	Naphthalene-d8	9520	10.297			
15067-26-2	Acenaphthene-d10	5300	14.144			
1517-22-2	Phenanthrene-d10	10000	16.915			
3440			29 of 58			



#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 923-K1-WS-080124 SDG No.: P3440

Lab Sample ID: P3440-01 Matrix: Water

Analytical Method: SW8270SIM % Solid: 0

Sample Wt/Vol: 910 Units: mL Final Vol: 1000 uL

Soil Aliquot Vol: uL Test: SVOCMS Group3

Extraction Type: Decanted: N Level: LOW

Injection Volume : GPC Factor : 1.0 GPC Cleanup : N PH :

Prep Method: SW3510C

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BN033231.D
 1
 08/02/24 09:25
 08/03/24 10:24
 PB162464

 CAS Number
 Parameter
 Conc.
 Qualifier
 MDL
 LOQ / CRQL
 Units

 1719-03-5
 Chrysene-d12
 8930
 21.131

 1520-96-3
 Perylene-d12
 10300
 23.307

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Test:





#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24 Date Received: 08/01/24 Project: Former Schlumberger Site Princeton NJ

Client Sample ID: 922-K1-WS-080124 SDG No.: P3440 Water Lab Sample ID: P3440-04 Matrix:

Analytical Method: % Solid: 0 SW8270SIM

uL

Sample Wt/Vol: 930 Units: mL Final Vol: 1000 uL SVOCMS Group3

Level: Extraction Type: Decanted: Ν LOW

Injection Volume: GPC Factor: GPC Cleanup: Ν PH:

SW3510C Prep Method:

Soil Aliquot Vol:

File ID/Qc Batch: Dilution: Prep Date Prep Batch ID Date Analyzed BN033234 D 08/02/24 09:25 08/03/24 12:12 PB162464

BN033234.D	1	08/02/24 09:25		08/03/24 12:12	PB162464		
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units	
TARGETS							
91-20-3	Naphthalene	0.030	U	0.030	0.11	ug/L	
91-57-6	2-Methylnaphthalene	0.030	U	0.030	0.11	ug/L	
208-96-8	Acenaphthylene	0.020	U	0.020	0.11	ug/L	
83-32-9	Acenaphthene	0.020	U	0.020	0.11	ug/L	
86-73-7	Fluorene	0.020	U	0.020	0.11	ug/L	
85-01-8	Phenanthrene	0.040	J	0.020	0.11	ug/L	
120-12-7	Anthracene	0.030	U	0.030	0.11	ug/L	
206-44-0	Fluoranthene	0.040	J	0.020	0.11	ug/L	
129-00-0	Pyrene	0.030	J	0.020	0.11	ug/L	
56-55-3	Benzo(a)anthracene	0.020	U	0.020	0.11	ug/L	
218-01-9	Chrysene	0.030	U	0.030	0.11	ug/L	
205-99-2	Benzo(b)fluoranthene	0.030	U	0.030	0.11	ug/L	
207-08-9	Benzo(k)fluoranthene	0.040	U	0.040	0.11	ug/L	
50-32-8	Benzo(a)pyrene	0.060	U	0.060	0.11	ug/L	
193-39-5	Indeno(1,2,3-cd)pyrene	0.040	U	0.040	0.11	ug/L	
53-70-3	Dibenzo(a,h)anthracene	0.040	U	0.040	0.11	ug/L	
191-24-2	Benzo(g,h,i)perylene	0.040	U	0.040	0.11	ug/L	
123-91-1	1,4-Dioxane	0.070	U	0.070	0.22	ug/L	
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.27		30 (30) - 150 (150)	68%	SPK: 0.4	
93951-69-0	Fluoranthene-d10	0.34		30 (30) - 150 (150)	86%	SPK: 0.4	
4165-60-0	Nitrobenzene-d5	0.30		30 (11) - 130 (175)	75%	SPK: 0.4	
321-60-8	2-Fluorobiphenyl	0.29		30 (10) - 130 (175)	72%	SPK: 0.4	
1718-51-0	Terphenyl-d14	0.59	*	30 (54) - 130 (171)	148%	SPK: 0.4	
INTERNAL STA							
3855-82-1	1,4-Dichlorobenzene-d4	2480	7.539				
1146-65-2	Naphthalene-d8	8660	10.298				
15067-26-2	Acenaphthene-d10	4990	14.144				
1517-22-2	Phenanthrene-d10	10600	16.915				
3440			31 of 58				



Lab Sample ID:

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

Matrix:

Water

#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 922-K1-WS-080124 SDG No.: P3440

Analytical Method: SW8270SIM % Solid: 0

Sample Wt/Vol: 930 Units: mL Final Vol: 1000 uL

Soil Aliquot Vol: uL Test: SVOCMS Group3

Extraction Type: Decanted: N Level: LOW

Injection Volume : GPC Factor : 1.0 GPC Cleanup : N PH :

Prep Method: SW3510C

P3440-04

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BN033234.D
 1
 08/02/24 09:25
 08/03/24 12:12
 PB162464

 CAS Number
 Parameter
 Conc.
 Qualifier
 MDL
 LOQ/CRQL
 Units

 1719-03-5
 Chrysene-d12
 7010
 21.131

 1520-96-3
 Perylene-d12
 6900
 23.312

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



#### LAB CHRONICLE

OrderID: P3440

Client: JACOBS Engineering Group, Inc.

Contact: Mary I. Murphy

**OrderDate:** 8/1/2024 12:28:00 PM

**Project:** Former Schlumberger Site Princeton NJ

Location: D31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3440-01	923-K1-WS-080124	Water			08/01/24			08/01/24
			SVOCMS Group3	8270-Modifie d		08/02/24	08/03/24	
			SVOCMS Group6	8270E		08/02/24	08/07/24	
P3440-04	922-K1-WS-080124	Water			08/01/24			08/01/24
			SVOCMS Group3	8270-Modifie d		08/02/24	08/03/24	
			SVOCMS Group6	8270E		08/02/24	08/07/24	

P3440 Revised

A

В

C





В

В

D

#### Hit Summary Sheet SW-846

**SDG No.:** P3440

Client: JACOBS Engineering Group, Inc.

Sample ID Client ID Matrix Parameter Concentration C MDL RDL Units

Client ID:

0.000

Total Svoc: 0.00
Total Concentration: 0.00







C

# SAMPLE DATA

uL



Client:

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

#### **Report of Analysis**

JACOBS Engineering Group, Inc. Date Collected: 08/01/24

Final Vol:

Project: Date Received: 08/01/24 Former Schlumberger Site Princeton NJ

Client Sample ID: 923-K1-WS-080124 SDG No.: P3440

Lab Sample ID: P3440-01 Matrix: Water

% Solid: 0 Analytical Method: SW8270

Sample Wt/Vol: 1000 SVOCMS Group6 Soil Aliquot Vol: uL Test:

Level: Extraction Type: Decanted: Ν LOW

Injection Volume: GPC Factor: GPC Cleanup: Ν PH:

SW3510C Prep Method:

880

Units:

mL

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID 1 BF138837.D 08/02/24 09:23 08/07/24 12:34 PB162463

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
110-86-1	Pyridine	1.80	U	1.80	5.70	ug/L
100-52-7	Benzaldehyde	4.50	U	4.50	11.4	ug/L
95-48-7	2-Methylphenol	1.30	U	1.30	5.70	ug/L
65794-96-9	3+4-Methylphenols	1.30	U	1.30	11.4	ug/L
67-72-1	Hexachloroethane	1.10	U	1.10	5.70	ug/L
98-95-3	Nitrobenzene	1.40	U	1.40	5.70	ug/L
91-20-3	Naphthalene	1.20	U	1.20	5.70	ug/L
87-68-3	Hexachlorobutadiene	1.40	U	1.40	5.70	ug/L
91-57-6	2-Methylnaphthalene	1.30	U	1.30	5.70	ug/L
88-06-2	2,4,6-Trichlorophenol	1.00	U	1.00	5.70	ug/L
95-95-4	2,4,5-Trichlorophenol	1.10	U	1.10	5.70	ug/L
208-96-8	Acenaphthylene	1.20	U	1.20	5.70	ug/L
83-32-9	Acenaphthene	0.92	U	0.92	5.70	ug/L
132-64-9	Dibenzofuran	1.10	U	1.10	5.70	ug/L
121-14-2	2,4-Dinitrotoluene	1.70	U	1.70	5.70	ug/L
86-73-7	Fluorene	1.10	U	1.10	5.70	ug/L
118-74-1	Hexachlorobenzene	1.30	U	1.30	5.70	ug/L
87-86-5	Pentachlorophenol	2.10	U	2.10	11.4	ug/L
85-01-8	Phenanthrene	1.00	U	1.00	5.70	ug/L
120-12-7	Anthracene	1.20	U	1.20	5.70	ug/L
86-74-8	Carbazole	1.30	U	1.30	5.70	ug/L
84-74-2	Di-n-butylphthalate	1.70	U	1.70	5.70	ug/L
206-44-0	Fluoranthene	1.50	U	1.50	5.70	ug/L
129-00-0	Pyrene	1.20	U	1.20	5.70	ug/L
56-55-3	Benzo(a)anthracene	1.10	U	1.10	5.70	ug/L
218-01-9	Chrysene	0.98	U	0.98	5.70	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	2.10	U	2.10	5.70	ug/L
205-99-2	Benzo(b)fluoranthene	1.30	U	1.30	5.70	ug/L
207-08-9	Benzo(k)fluoranthene	1.40	U	1.40	5.70	ug/L



Client:

Lab Sample ID:

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

#### **Report of Analysis**

P3440-01

JACOBS Engineering Group, Inc.

Date Collected: 08/01/24

Matrix:

Water

uL

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 923-K1-WS-080124 SDG No.: P3440

Analytical Method: SW8270 % Solid: 0

Sample Wt/Vol: 880 Units: mL Final Vol: 1000

Soil Aliquot Vol: uL Test: SVOCMS Group6

Extraction Type: Decanted: N Level: LOW

Injection Volume : GPC Factor : 1.0 GPC Cleanup : N PH :

Prep Method: SW3510C

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BF138837.D
 1
 08/02/24 09:23
 08/07/24 12:34
 PB162463

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
50-32-8	Benzo(a)pyrene	1.90	U	1.90	5.70	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1.20	U	1.20	5.70	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.30	U	1.30	5.70	ug/L
191-24-2	Benzo(g,h,i)perylene	1.30	U	1.30	5.70	ug/L
123-91-1	1,4-Dioxane	1.40	U	1.40	5.70	ug/L
90-12-0	1-Methylnaphthalene	0.98	U	0.98	5.70	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	63.6		15 (10) - 110 (139)	42%	SPK: 150
13127-88-3	Phenol-d6	38.2		15 (10) - 110 (134)	25%	SPK: 150
4165-60-0	Nitrobenzene-d5	94.8		30 (49) - 130 (133)	95%	SPK: 100
321-60-8	2-Fluorobiphenyl	98.3		30 (52) - 130 (132)	98%	SPK: 100
118-79-6	2,4,6-Tribromophenol	154		15 (32) - 110 (145)	102%	SPK: 150
1718-51-0	Terphenyl-d14	114		30 (36) - 130 (145)	114%	SPK: 100
INTERNAL STA	ANDARDS					
3855-82-1	1,4-Dichlorobenzene-d4	45200	6.84			
1146-65-2	Naphthalene-d8	184000	8.116			
15067-26-2	Acenaphthene-d10	98300	9.869			
1517-22-2	Phenanthrene-d10	162000	11.357			
1719-03-5	Chrysene-d12	84400	13.992			
1520-96-3	Perylene-d12	89900	15.457			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



Client:

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

#### **Report of Analysis**

Date Collected:

Test:

08/01/24

LOW

PH:

Project: Date Received: 08/01/24 Former Schlumberger Site Princeton NJ

Client Sample ID: 922-K1-WS-080124 SDG No.: P3440

Lab Sample ID: P3440-04 Matrix: Water

% Solid: 0 Analytical Method: SW8270

uL

JACOBS Engineering Group, Inc.

Sample Wt/Vol: 890 Units: mL Final Vol: 1000 uL

Ν

SVOCMS Group6 Soil Aliquot Vol: Level:

Decanted:

Extraction Type: Injection Volume: GPC Factor: GPC Cleanup: Ν

SW3510C Prep Method:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

BF138840.D 1 08/02/24 09:23 08/07/24 14:05 PB162463

BF138840.D	I	08/02/24	09.23	08/07/24 14:05	PB102403		
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units	
TARGETS							
110-86-1	Pyridine	1.70	U	1.70	5.60	ug/L	
100-52-7	Benzaldehyde	4.50	U	4.50	11.2	ug/L	
95-48-7	2-Methylphenol	1.30	U	1.30	5.60	ug/L	
65794-96-9	3+4-Methylphenols	1.30	U	1.30	11.2	ug/L	
67-72-1	Hexachloroethane	1.10	U	1.10	5.60	ug/L	
98-95-3	Nitrobenzene	1.40	U	1.40	5.60	ug/L	
91-20-3	Naphthalene	1.10	U	1.10	5.60	ug/L	
87-68-3	Hexachlorobutadiene	1.40	U	1.40	5.60	ug/L	
91-57-6	2-Methylnaphthalene	1.30	U	1.30	5.60	ug/L	
88-06-2	2,4,6-Trichlorophenol	1.00	U	1.00	5.60	ug/L	
95-95-4	2,4,5-Trichlorophenol	1.10	U	1.10	5.60	ug/L	
208-96-8	Acenaphthylene	1.20	U	1.20	5.60	ug/L	
83-32-9	Acenaphthene	0.91	U	0.91	5.60	ug/L	
132-64-9	Dibenzofuran	1.00	U	1.00	5.60	ug/L	
121-14-2	2,4-Dinitrotoluene	1.70	U	1.70	5.60	ug/L	
86-73-7	Fluorene	1.10	U	1.10	5.60	ug/L	
118-74-1	Hexachlorobenzene	1.30	U	1.30	5.60	ug/L	
87-86-5	Pentachlorophenol	2.10	U	2.10	11.2	ug/L	
85-01-8	Phenanthrene	1.00	U	1.00	5.60	ug/L	
120-12-7	Anthracene	1.20	U	1.20	5.60	ug/L	
86-74-8	Carbazole	1.30	U	1.30	5.60	ug/L	
84-74-2	Di-n-butylphthalate	1.70	U	1.70	5.60	ug/L	
206-44-0	Fluoranthene	1.40	U	1.40	5.60	ug/L	
129-00-0	Pyrene	1.20	U	1.20	5.60	ug/L	
56-55-3	Benzo(a)anthracene	1.10	U	1.10	5.60	ug/L	
218-01-9	Chrysene	0.97	U	0.97	5.60	ug/L	
117-81-7	Bis(2-ethylhexyl)phthalate	2.10	U	2.10	5.60	ug/L	
205-99-2	Benzo(b)fluoranthene	1.30	U	1.30	5.60	ug/L	
207-08-9	Benzo(k)fluoranthene	1.30	U	1.30	5.60	ug/L	

08/01/24



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

#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected:

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 922-K1-WS-080124 SDG No.: P3440

Lab Sample ID: P3440-04 Matrix: Water

Analytical Method: SW8270 % Solid: 0

Sample Wt/Vol: 890 Units: mL Final Vol: 1000 uL

Soil Aliquot Vol: uL Test: SVOCMS Group6

Extraction Type: Decanted: N Level: LOW

Injection Volume: GPC Factor: 1.0 GPC Cleanup: N PH:

Prep Method: SW3510C

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BF138840.D
 1
 08/02/24 09:23
 08/07/24 14:05
 PB162463

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
50-32-8	Benzo(a)pyrene	1.90	U	1.90	5.60	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1.10	U	1.10	5.60	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.30	U	1.30	5.60	ug/L
191-24-2	Benzo(g,h,i)perylene	1.30	U	1.30	5.60	ug/L
123-91-1	1,4-Dioxane	1.40	U	1.40	5.60	ug/L
90-12-0	1-Methylnaphthalene	0.97	U	0.97	5.60	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	57.9		15 (10) - 110 (139)	39%	SPK: 150
13127-88-3	Phenol-d6	34.5		15 (10) - 110 (134)	23%	SPK: 150
4165-60-0	Nitrobenzene-d5	92.4		30 (49) - 130 (133)	92%	SPK: 100
321-60-8	2-Fluorobiphenyl	96.8		30 (52) - 130 (132)	97%	SPK: 100
118-79-6	2,4,6-Tribromophenol	147		15 (32) - 110 (145)	98%	SPK: 150
1718-51-0	Terphenyl-d14	108		30 (36) - 130 (145)	108%	SPK: 100
INTERNAL STA	ANDARDS					
3855-82-1	1,4-Dichlorobenzene-d4	41800	6.84			
1146-65-2	Naphthalene-d8	170000	8.116			
15067-26-2	Acenaphthene-d10	89900	9.869			
1517-22-2	Phenanthrene-d10	146000	11.357			
1719-03-5	Chrysene-d12	76100	13.998			
1520-96-3	Perylene-d12	79900	15.457			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



#### LAB CHRONICLE

OrderID: P3440

Client: JACOBS Engineering Group, Inc.

Contact: Mary I. Murphy

**OrderDate:** 8/1/2024 12:28:00 PM

**Project:** Former Schlumberger Site Princeton NJ

Location: D31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3440-01	923-K1-WS-080124	Water			08/01/24			08/01/24
			SVOCMS Group3 SVOCMS Group6	8270-Modified 8270E		08/02/24 08/02/24	08/03/24 08/07/24	
P3440-04	922-K1-WS-080124	Water			08/01/24			08/01/24
			SVOCMS Group3 SVOCMS Group6	8270-Modified 8270E		08/02/24 08/02/24	08/03/24 08/07/24	

P3440 **40 of 58** Revised

А

D

C

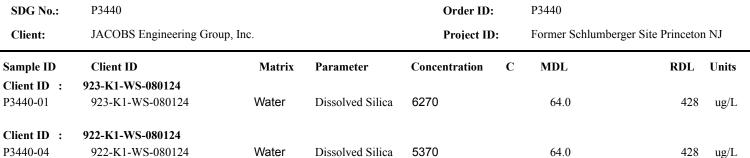




284 Sheffield Street, Mountainside, New Jersey 07092, Phone: 908 789 8900,

Fax: 908 789 8922

#### Hit Summary Sheet SW-846















# SAMPLE DATA

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

Fax: 908 789 8922

#### **Report of Analysis**



Cas	Parameter	Conc.	Qua. DF MD	L LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
Dissolved	Dissolved	6270	1 64.0	428	ug/L	10/28/24 12:00	10/28/24 15:11	EPA 200.7	
Silica	Silica								

Color Before: C

Colorless

Clarity Before:

Clear

Texture:

Color After:

Colorless

Clarity After:

Clear

Artifacts:

Comments:

Metals Group5

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence

of interference.

OR = Over Range

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

Fax: 908 789 8922

#### **Report of Analysis**



Cas	Parameter	Conc.	Qua. DF MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
Dissolved	Dissolved	5370	1 64.0	428	ug/L	10/28/24 12:00	10/28/24 15:45	EPA 200.7	
Silica	Silica								

Color Before: Colorless

Clarity Before:

Clear

Texture:

Color After: Colorless

Clarity After:

Clear

Artifacts:

Comments:

Metals Group5

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence

of interference.

OR = Over Range



#### LAB CHRONICLE

OrderID: P3440

Client: JACOBS Engineering Group, Inc.

Contact: Mary I. Murphy

**OrderDate:** 8/1/2024 12:28:00 PM

**Project:** Former Schlumberger Site Princeton NJ

Location: D31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3440-01	923-K1-WS-080124	Water			08/01/24			08/01/24
			Mercury	7470A		08/12/24	08/13/24	
			Metals Group4	6020B		08/23/24	08/25/24	
			Metals Group5	200.7		10/28/24	10/28/24	
P3440-04	922-K1-WS-080124	Water			08/01/24			08/01/24
			Mercury	7470A		08/12/24	08/13/24	
			Metals Group4	6020B		08/23/24	08/25/24	
			Metals Group5	200.7		10/28/24	10/28/24	

P3440 **45 of 58** Revised

A

В

C



P3440

SDG No.:

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

Fax: 908 789 8922

#### Hit Summary Sheet SW-846

Order ID: P3440

Client: JACOBS Engineering Group, Inc. Project ID: Former Schlumberger Site Princeton NJ

Client:	JACOBS Engineering Grou		Project ID	<b>)</b> :	Former Schlumberger Site Princeton NJ			
Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	923-K1-WS-080124							
P3440-01	923-K1-WS-080124	Water	Aluminum	62.5		1.98	20.0	ug/L
P3440-01	923-K1-WS-080124	Water	Arsenic	0.79	J	0.090	1.00	ug/L
P3440-01	923-K1-WS-080124	Water	Barium	64.4		0.30	10.0	ug/L
P3440-01	923-K1-WS-080124	Water	Calcium	22300		62.5	500	ug/L
P3440-01	923-K1-WS-080124	Water	Cobalt	0.62	J	0.062	1.00	ug/L
P3440-01	923-K1-WS-080124	Water	Copper	0.83	J	0.40	2.00	ug/L
P3440-01	923-K1-WS-080124	Water	Iron	3220		9.60	50.0	ug/L
P3440-01	923-K1-WS-080124	Water	Lead	0.52	J	0.11	1.00	ug/L
P3440-01	923-K1-WS-080124	Water	Magnesium	4260		26.6	500	ug/L
P3440-01	923-K1-WS-080124	Water	Manganese	859		0.24	1.00	ug/L
P3440-01	923-K1-WS-080124	Water	Nickel	0.65	J	0.18	1.00	ug/L
P3440-01	923-K1-WS-080124	Water	Potassium	3940		46.1	500	ug/L
P3440-01	923-K1-WS-080124	Water	Sodium	96900		85.8	500	ug/L
P3440-01	923-K1-WS-080124	Water	Vanadium	0.53	J	0.072	5.00	ug/L
P3440-01	923-K1-WS-080124	Water	Zinc	3.92	J	0.56	5.00	ug/L
Client ID:	922-K1-WS-080124							
P3440-04	922-K1-WS-080124	Water	Aluminum	54.2		1.98	20.0	ug/L
P3440-04	922-K1-WS-080124	Water	Arsenic	0.39	J	0.090	1.00	ug/L
P3440-04	922-K1-WS-080124	Water	Barium	84.9		0.30	10.0	ug/L
P3440-04	922-K1-WS-080124	Water	Calcium	38500		62.5	500	ug/L
P3440-04	922-K1-WS-080124	Water	Chromium	0.50	J	0.40	2.00	ug/L
P3440-04	922-K1-WS-080124	Water	Cobalt	5.23		0.062	1.00	ug/L
P3440-04	922-K1-WS-080124	Water	Iron	5110		9.60	50.0	ug/L
P3440-04	922-K1-WS-080124	Water	Lead	0.14	J	0.11	1.00	ug/L
P3440-04	922-K1-WS-080124	Water	Magnesium	8650		26.6	500	ug/L
P3440-04	922-K1-WS-080124	Water	Manganese	1100		0.24	1.00	ug/L
P3440-04	922-K1-WS-080124	Water	Nickel	0.94	J	0.18	1.00	ug/L
P3440-04	922-K1-WS-080124	Water	Potassium	6700		46.1	500	ug/L
P3440-04	922-K1-WS-080124	Water	Sodium	228000		85.8	500	ug/L
P3440-04	922-K1-WS-080124	Water	Vanadium	0.32	J	0.072	5.00	ug/L
P3440-04	922-K1-WS-080124	Water	Zinc	20.8		0.56	5.00	ug/L







С

## SAMPLE DATA

Matrix:

Water



Lab Sample ID:

Fax: 908 789 8922

P3440-01

#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 923-K1-WS-080124 SDG No.: P3440

Level (low/med): low % Solid: 0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	62.5		1	1.98	20.0	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-36-0	Antimony	0.11	U	1	0.11	2.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-38-2	Arsenic	0.79	J	1	0.090	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-39-3	Barium	64.4		1	0.30	10.0	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-41-7	Beryllium	0.16	U	1	0.16	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-43-9	Cadmium	0.30	U	1	0.30	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-70-2	Calcium	22300		1	62.5	500	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-47-3	Chromium	0.40	U	1	0.40	2.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-48-4	Cobalt	0.62	J	1	0.062	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-50-8	Copper	0.83	J	1	0.40	2.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7439-89-6	Iron	3220		1	9.60	50.0	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7439-92-1	Lead	0.52	J	1	0.11	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7439-95-4	Magnesium	4260		1	26.6	500	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7439-96-5	Manganese	859		1	0.24	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	08/12/24 16:13	08/13/24 10:23	SW7470A	1
7440-02-0	Nickel	0.65	J	1	0.18	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-09-7	Potassium	3940		1	46.1	500	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7782-49-2	Selenium	1.38	U	1	1.38	5.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-22-4	Silver	0.077	UN	1	0.077	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-23-5	Sodium	96900		1	85.8	500	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-28-0	Thallium	0.085	U	1	0.085	1.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-62-2	Vanadium	0.53	J	1	0.072	5.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A
7440-66-6	Zinc	3.92	J	1	0.56	5.00	ug/L	08/23/24 15:00	08/25/24 18:13	SW6020	3010A

Color Before: Colorless Clarity Before: Clear Texture: Medium Color After: Colorless Clarity After: N/A Artifacts: N/A

Comments: Mercury

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

Water



P3440-04

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

Matrix:

#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24 Project: Date Received: 08/01/24 Former Schlumberger Site Princeton NJ

Client Sample ID: 922-K1-WS-080124 SDG No.: P3440

Lab Sample ID: Level (low/med): % Solid: 0 low

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	54.2		1	1.98	20.0	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-36-0	Antimony	0.11	U	1	0.11	2.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-38-2	Arsenic	0.39	J	1	0.090	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-39-3	Barium	84.9		1	0.30	10.0	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-41-7	Beryllium	0.16	U	1	0.16	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-43-9	Cadmium	0.30	U	1	0.30	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-70-2	Calcium	38500		1	62.5	500	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-47-3	Chromium	0.50	J	1	0.40	2.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-48-4	Cobalt	5.23		1	0.062	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-50-8	Copper	0.40	U	1	0.40	2.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7439-89-6	Iron	5110		1	9.60	50.0	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7439-92-1	Lead	0.14	J	1	0.11	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7439-95-4	Magnesium	8650		1	26.6	500	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7439-96-5	Manganese	1100		1	0.24	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	08/12/24 16:13	08/13/24 10:39	SW7470A	<u>.</u>
7440-02-0	Nickel	0.94	J	1	0.18	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-09-7	Potassium	6700		1	46.1	500	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7782-49-2	Selenium	1.38	U	1	1.38	5.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-22-4	Silver	0.077	UN	1	0.077	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-23-5	Sodium	228000		1	85.8	500	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-28-0	Thallium	0.085	U	1	0.085	1.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-62-2	Vanadium	0.32	J	1	0.072	5.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A
7440-66-6	Zinc	20.8		1	0.56	5.00	ug/L	08/23/24 15:00	08/25/24 18:22	SW6020	3010A

Color Before: Colorless Clarity Before: Clear Texture: Medium Color After: Colorless Clarity After: N/A Artifacts: N/A

Comments: Mercury

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range



LAB CHRONICLE

P3440 OrderID:

JACOBS Engineering Group, Inc. Client:

Mary I. Murphy Contact:

8/1/2024 12:28:00 PM OrderDate:

Former Schlumberger Site Princeton NJ Project:

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3440-01	923-K1-WS-080124	Water			08/01/24			08/01/24
			Mercury	7470A		08/12/24	08/13/24	
			Metals Group4	6020B		08/23/24	08/25/24	
			Metals Group5	200.7		10/28/24	10/28/24	
P3440-04	922-K1-WS-080124	Water			08/01/24			08/01/24
			Mercury	7470A		08/12/24	08/13/24	
			Metals Group4	6020B		08/23/24	08/25/24	
			Metals Group5	200.7		10/28/24	10/28/24	

Location: D31,VOA Ref. #3 Water







### SAMPLE DATA



Matrix:

WATER



P3440-01

Lab Sample ID:

Chromium

#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24 09:15

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 923-K1-WS-080124 SDG No.: P3440

% Solid: 0

Parameter	Conc. Qu	ua.	DF MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Dissolved Hexavalent	0.0030 L	U	1 0.0030	0.010	mg/L		08/01/24 15:34	7196A

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range



Matrix:

WATER



P3440-04

Lab Sample ID:

#### **Report of Analysis**

Client: JACOBS Engineering Group, Inc. Date Collected: 08/01/24 11:10

Project: Former Schlumberger Site Princeton NJ Date Received: 08/01/24

Client Sample ID: 922-K1-WS-080124 SDG No.: P3440

% Solid: 0

Parameter	Conc. Qua	. DF MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Dissolved Hexavalent	0.0030 U	1 0.0030	0.010	mg/L		08/01/24 15:38	7196A
Chromium							

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range





#### LAB CHRONICLE

OrderID: P3440

Client: JACOBS Engineering Group, Inc.

Contact: Mary I. Murphy

OrderDate: 8/1/2024 12:28:00 PM

Project: Former Schlumberger Site Princeton NJ

Location: D31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3440-01	923-K1-WS-080124	WATER			08/01/24			08/01/24
			Hexavalent Chromium	7196A	09:15		08/01/24	
P3440-04	922-K1-WS-080124	WATER			08/01/24		15:34	08/01/24
					11:10			
			Hexavalent Chromium	7196A			08/01/24 15:38	





## SHIPPING DOCUMENTS



### 284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 • Fax (908) 789-8922 www.chemtech.net

CHEMTECH PROJECT NO.

QUOTE NO.

P3446

coc Number 2041306

11

CLIENT INFORMATION		The second		CLIENT P	ROJECT II	NFORM	ATION				14.0	1 21	CLIEN	IT BILLI	NG INF	ORMATION	198	
COMPANY: Jacks		PROJE	CT N	IAME	stc	PTC					BILL	ro: 14	lacy i	Murp	hy		PO#:	
ADDRESS: 412 Mt Kemble Ave Suik H/00			PROJECT NO.: D3779972 LOCATION: Princeton Judion ADDRESS:															
CITY MONISTOWN STATE: NJ ZIP: 07960			PROJECT MANAGER: Mary Murphy							CITY					STAT	 ΓΕ:	ZIP:	
ATTENTION: J. hu Yukank		e-mail:	Mai	ru, i	Morph	ja Jacol	× . 00	ท			ATTE	NTION:				PHO		-11
								-					75	1	ANA	LYSIS		F 2 200
PHONE (281) 414-1719 FAX:  DATA TURNAROUND INFORMATION				-	36- 058	RABLE IN	XX:	ATION	1114									
FAX (RUSH)  DAYS*  DAYS*  TO BE APPROVED BY CHEMTECH  STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS			1 (Res 2 (Res	sults ( sults + sults + a)	Only)	Level 4 (QC NJ Reduce NYS ASP A Other	C + Full F	Raw Data	D	260 PA	_	200 1 TO 10	Harak 6	/	/8	/9		
CHEMTECH			SAM			MPLE	LES	1	. Nr	- 1		SERVA	TIVES			•		MMENTS
SAMPLE IDEN		SAMPLE MATRIX	COMP	GRAB III	DATE	TIME	# OF BOTTLES	A/E	2	8/E	E 4	5	6	7	8	9	A-HCI B-HN03 C-H2SO4	Preservatives D-NaOH E-ICE F-OTHER
1. 923-K1-WS-	H 08012V	ws		X	8/1/24	0915	18	6	6	3	3						MS/MS	
2. 972- KI-WS-0801		WS			8/1/24	1110	6	2	2	ī	Ī						7.7.	
3. 16-01-680121	,	DI			8/1/24	1200	1	1										
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RELINQUISHED BY SAMPLER:  A JAPAN  BELINQUISHED BY SAMPLER:  DATE/TIME:	RECEIVED BY:	8	12	29	Condition Commer	ons of bottles hts: See	affact - me	s at receip	sti a c	COMPLIANT	a Noi	anaj	ytes	COOLER TE	ECO	3 -VUG	, Eco-sv	1905 ,
BANDO BY SAMPLEA DATE/TIME:	RECEIVED BY:  3				Page	of _		CLIENT CHEMTE		Hand De		□ Of	ther ld Samp	ling			Shipment YES	





Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

Fax: 908 789 8922

#### LOGIN REPORT/SAMPLE TRANSFER

Order ID: P3440

Invoice Contact: Mary I. Murphy

JACO05

Order Date: 8/1/2024 12:28:00 PM

Project Mgr:

Client Name: JACOBS Engineering Grou

Project Name: Former Schlumberger Site I

Report Type: Level 4

Client Contact: Mary I. Murphy

Receive DateTime: 8/1/2024 2:00:00 PM

EDD Type: CH2MHILL

Invoice Name: JACOBS Engineering Grou

Purchase Order:

Hard Copy Date:

Date Signoff:

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD		FAX DATE	DUE DATES
P3440-01	923-K1-WS-080124	Water	08/01/2024	09:15						
					VOCMS Group6		8260-Low	10 Bus. Days		
P3440-02	P3440-01MS	Water	08/01/2024	09:15			¥			
					VOCMS Group6		8260-Low	10 Bus. Days		
P3440-03	P3440-01MSD	Water	08/01/2024	09:15						
					VOCMS Group6		8260-Low	10 Bus. Days		
P3440-04	922-K1-WS-080124	Water	08/01/2024	11:10						
					VOCMS Group6		8260-Low	10 Bus. Days		
P3440-05	TB-01-080124	Water	08/01/2024	12:00						
					VOCMS Group6		8260-Low	10 Bus. Days		

Relinguished By ;

Date / Time:

14.20 RgH4

Storage Area: VOA Refridgerator Room