

## **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 : P3596**

**ATTENTION : Mary I. Murphy**



**Laboratory Certification ID # 20012**



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

1

Laboratory Name : Alliance Technical Group LLC Client : JACOBS Engineering Group, Inc.  
 Project Location : Princeton Junction, NJ Project Number : D3779922  
 Laboratory Sample ID(s) : P3596 Sampling Date(s) : 8/13/2024  
 List DKQP Methods Used (e.g., 8260,8270, et Cetra) **6020B,7196A,7470A,8260-Low,8270-Modified,8270E**

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?  b)Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 :** P3596

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

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

**Lab Sample Number**

P3596-01  
P3596-02  
P3596-03

**Client Sample Number**

918-J-WS-081324  
918-J-WS-081324-FD  
TB-01-081324

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 : \_\_\_\_\_

Date: 9/5/2024

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 # P3596**

**Test Name: VOCMS Group6**

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

3 Water samples were received on 08/13/2024.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, 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 RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate 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:**

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

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\_\_\_\_\_

## **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.**

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

**Project # N/A**

**Chemtech Project # P3596**

**Test Name: SVOCMS Group3**

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

3 Water samples were received on 08/13/2024.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, 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.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate 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 BN033465.D met the requirements except for 2,4,6-Tribromophenol , The above failure compound not associated with the client parameters list, therefore no corrective action was taken.

The Tuning criteria met requirements.

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

The Sample 918-J-WS-081324, have the concentration of target compound below method detection limits; therefore it is not reported as Hit in Form1.

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.

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Signature\_\_\_\_\_



## **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.**

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

**Project # N/A**

**Chemtech Project # P3596**

**Test Name: SVOCMS Group6**

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

3 Water samples were received on 08/13/2024.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, 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\_M 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 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 except for 918-J-WS-081324-FD [2,4,6-Tribromophenol - 114%]. these compound did not meet the NJDKQP criteria but met the in-house criteria , Therefor no corrective action was required.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The % RSD is greater than 15% in the Initial Calibration (Method 8270-BM081024.M) for Benzaldehyde, this compound is passing on Quadratic regression.

The Continuous Calibration File ID BM047290.D met the requirements except for Terphenyl-d14 . Which is not our target compound, therefore no corrective action 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.

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## **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.**

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

**Project # N/A**

**Chemtech Project # P3596**

**Test Name: Metals Group4,Mercury**

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

3 Water samples were received on 08/13/2024.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, 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 (918-J-WS-081324-FDDUP) analysis met criteria for all samples except for Arsenic due to sample matrix interference.

The Matrix Spike (918-J-WS-081324-FDMS) analysis met criteria for all samples except for Molybdenum and Silver due to Chemical Interference during Digestion Process.

The Matrix Spike Duplicate (918-J-WS-081324-FDMSD) analysis met criteria for all samples except for Molybdenum and 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 (918-J-WS-081324-FDL) met criteria for all samples except for Aluminum, Iron, and Manganese due to sample matrix interference.

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

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.

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Signature\_\_\_\_\_



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

## **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.**

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

**Project # N/A**

**Chemtech Project # P3596**

**Test Name: Hexavalent Chromium**

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

3 Water samples were received on 08/13/2024.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, 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:**

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## DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

<b>J</b>	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).
<b>U</b>	Indicates the analyte was analyzed for, but not detected.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>E</b>	Indicates the reported value is estimated because of the presence of interference
<b>M</b>	Indicates Duplicate injection precision not met.
<b>N</b>	Indicates the spiked sample recovery is not within control limits.
<b>S</b>	Indicates the reported value was determined by the Method of Standard Addition (MSA).
<b>*</b>	Indicates that the duplicate analysis is not within control limits.
<b>+</b>	Indicates the correlation coefficient for the MSA is less than 0.995.
<b>D</b>	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
<b>M</b>	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
<b>OR</b>	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements
<b>H</b>	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	Indicates an estimated value. This flag is used: <ol style="list-style-type: none"><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 flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.</li></ol>
B	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 #: P3596

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)

✓

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

✓

Collect information for each project id from server. Were all requirements followed

✓

#### 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

✓

#### CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

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 Custody

✓

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?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

1st Level QA Review Signature: SOHIL JODHANI

Date: 09/05/2024

2nd Level QA Review Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**Hit Summary Sheet**  
SW-846

SDG No.: P3596

Client: JACOBS Engineering Group, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
<b>Client ID:</b>	<b>918-J-WS-081324</b>							
P3596-01	918-J-WS-081324	Water	Acetone	4.90	J	1.40	5.00	ug/L
			<b>Total Voc :</b>	4.90				
			<b>Total Concentration:</b>	4.90				
<b>Client ID:</b>	<b>918-J-WS-081324-FD</b>							
P3596-02	918-J-WS-081324-F	Water	Acetone	5.10		1.40	5.00	ug/L
			<b>Total Voc :</b>	5.10				
			<b>Total Concentration:</b>	5.10				
<b>Client ID:</b>	<b>TB-01-081324</b>							
P3596-03	TB-01-081324	Water	Acetone	2.10	J	1.40	5.00	ug/L
			<b>Total Voc :</b>	2.10				
			<b>Total Concentration:</b>	2.10				



# SAMPLE DATA

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324	SDG No.:	P3596
Lab Sample ID:	P3596-01	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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083309.D	1		08/14/24 18:29	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
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
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	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
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
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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324	SDG No.:	P3596
Lab Sample ID:	P3596-01	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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN083309.D	1		08/14/24 18:29	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	59.1		70 (74) - 130 (125)	118%	SPK: 50
1868-53-7	Dibromofluoromethane	54.5		70 (75) - 130 (124)	109%	SPK: 50
2037-26-5	Toluene-d8	53.9		70 (86) - 130 (113)	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.9		70 (77) - 130 (121)	116%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	128000	8.224			
540-36-3	1,4-Difluorobenzene	253000	9.1			
3114-55-4	Chlorobenzene-d5	263000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	116000	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

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324-FD	SDG No.:	P3596
Lab Sample ID:	P3596-02	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
VN083310.D	1		08/14/24 18:54	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
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
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
67-64-1	Acetone	5.10		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
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
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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324-FD	SDG No.:	P3596
Lab Sample ID:	P3596-02	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
VN083310.D	1		08/14/24 18:54	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	59.4		70 (74) - 130 (125)	119%	SPK: 50
1868-53-7	Dibromofluoromethane	54.6		70 (75) - 130 (124)	109%	SPK: 50
2037-26-5	Toluene-d8	54.3		70 (86) - 130 (113)	109%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.0		70 (77) - 130 (121)	112%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	123000	8.224			
540-36-3	1,4-Difluorobenzene	243000	9.106			
3114-55-4	Chlorobenzene-d5	249000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	107000	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

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	TB-01-081324	SDG No.:	P3596
Lab Sample ID:	P3596-03	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
VN083307.D	1		08/14/24 17:41	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
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
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	1.00	ug/L
67-64-1	Acetone	2.10	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
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
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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	TB-01-081324	SDG No.:	P3596
Lab Sample ID:	P3596-03	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
VN083307.D	1		08/14/24 17:41	VN081424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	57.1		70 (74) - 130 (125)	114%	SPK: 50
1868-53-7	Dibromofluoromethane	53.8		70 (75) - 130 (124)	108%	SPK: 50
2037-26-5	Toluene-d8	53.6		70 (86) - 130 (113)	107%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.3		70 (77) - 130 (121)	113%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	129000	8.23			
540-36-3	1,4-Difluorobenzene	250000	9.1			
3114-55-4	Chlorobenzene-d5	255000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	110000	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

<b>OrderID:</b>	P3596	<b>OrderDate:</b>	8/13/2024 1:10:00 PM
<b>Client:</b>	JACOBS Engineering Group, Inc.	<b>Project:</b>	Former Schlumberger Site Princeton NJ
<b>Contact:</b>	Mary I. Murphy	<b>Location:</b>	D21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3596-01	918-J-WS-081324	Water	VOCMS Group6	8260-Low	08/13/24		08/14/24	08/13/24
P3596-02	918-J-WS-081324-F D	Water	VOCMS Group6	8260-Low	08/13/24		08/14/24	08/13/24
P3596-03	TB-01-081324	Water	VOCMS Group6	8260-Low	08/13/24		08/14/24	08/13/24

### Hit Summary Sheet SW-846

**SDG No.:** P3596  
**Client:** JACOBS Engineering Group, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	RDL	Units
Client ID : 918-J-WS-081324								
P3596-01	918-J-WS-081324	WATER	Fluorene	0.110		0.02	0.1	ug/L
P3596-01	918-J-WS-081324	WATER	Phenanthrene	0.050	J	0.02	0.1	ug/L
P3596-01	918-J-WS-081324	WATER	Anthracene	0.030	J	0.02	0.1	ug/L
P3596-01	918-J-WS-081324	WATER	Fluoranthene	0.080	J	0.02	0.1	ug/L
P3596-01	918-J-WS-081324	WATER	Pyrene	0.050	J	0.02	0.1	ug/L
P3596-01	918-J-WS-081324	WATER	Benzo(a)anthracene	0.030	J	0.02	0.1	ug/L
P3596-01	918-J-WS-081324	WATER	Chrysene	0.040	J	0.03	0.1	ug/L
P3596-01	918-J-WS-081324	WATER	Benzo(b)fluoranthene	0.040	J	0.03	0.1	ug/L
Total Svoc :						0.43		
Total Concentration:						0.43		
Client ID : 918-J-WS-081324-FD								
P3596-02	918-J-WS-081324-FD	WATER	Fluorene	0.040	J	0.02	0.11	ug/L
P3596-02	918-J-WS-081324-FD	WATER	Phenanthrene	0.040	J	0.02	0.11	ug/L
P3596-02	918-J-WS-081324-FD	WATER	Fluoranthene	0.060	J	0.02	0.11	ug/L
P3596-02	918-J-WS-081324-FD	WATER	Pyrene	0.040	J	0.02	0.11	ug/L
P3596-02	918-J-WS-081324-FD	WATER	Chrysene	0.030	J	0.03	0.11	ug/L
P3596-02	918-J-WS-081324-FD	WATER	Benzo(b)fluoranthene	0.030	J	0.03	0.11	ug/L
Total Svoc :						0.24		
Total Concentration:						0.24		



# SAMPLE DATA

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324	SDG No.:	P3596
Lab Sample ID:	P3596-01	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	990 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
BN033458.D	1	08/14/24 08:45	08/17/24 08:27	PB162723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
91-20-3	Naphthalene	0.020	U	0.020	0.10	ug/L
91-57-6	2-Methylnaphthalene	0.030	U	0.030	0.10	ug/L
208-96-8	Acenaphthylene	0.020	U	0.020	0.10	ug/L
83-32-9	Acenaphthene	0.020	U	0.020	0.10	ug/L
86-73-7	Fluorene	0.11		0.020	0.10	ug/L
85-01-8	Phenanthrene	0.050	J	0.020	0.10	ug/L
120-12-7	Anthracene	0.030	J	0.020	0.10	ug/L
206-44-0	Fluoranthene	0.080	J	0.020	0.10	ug/L
129-00-0	Pyrene	0.050	J	0.020	0.10	ug/L
56-55-3	Benzo(a)anthracene	0.030	J	0.020	0.10	ug/L
218-01-9	Chrysene	0.040	J	0.030	0.10	ug/L
205-99-2	Benzo(b)fluoranthene	0.040	J	0.030	0.10	ug/L
207-08-9	Benzo(k)fluoranthene	0.030	U	0.030	0.10	ug/L
50-32-8	Benzo(a)pyrene	0.060	U	0.060	0.10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.040	U	0.040	0.10	ug/L
53-70-3	Dibenzo(a,h)anthracene	0.040	U	0.040	0.10	ug/L
191-24-2	Benzo(g,h,i)perylene	0.040	U	0.040	0.10	ug/L
123-91-1	1,4-Dioxane	0.070	U	0.070	0.20	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.29		30 (20) - 150 (139)	74%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 (30) - 150 (150)	100%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		30 (27) - 130 (123)	90%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		30 (34) - 130 (132)	88%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		30 (35) - 130 (157)	120%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	7350	7.559			
1146-65-2	Naphthalene-d8	20100	10.325			
15067-26-2	Acenaphthene-d10	10100	14.199			
1517-22-2	Phenanthrene-d10	21200	16.942			

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324	SDG No.:	P3596
Lab Sample ID:	P3596-01	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	990 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
BN033458.D	1	08/14/24 08:45	08/17/24 08:27	PB162723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
1719-03-5	Chrysene-d12	18500	21.148			
1520-96-3	Perylene-d12	19500	23.323			

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

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324-FD	SDG No.:	P3596
Lab Sample ID:	P3596-02	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	950 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
BN033459.D	1	08/14/24 08:45	08/17/24 09:04	PB162723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
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	0.040	J	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	0.060	J	0.020	0.11	ug/L
129-00-0	Pyrene	0.040	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	J	0.030	0.11	ug/L
205-99-2	Benzo(b)fluoranthene	0.030	J	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	0.21	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.28		30 (20) - 150 (139)	71%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 (30) - 150 (150)	99%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		30 (27) - 130 (123)	85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		30 (34) - 130 (132)	79%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		30 (35) - 130 (157)	122%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	6780	7.559			
1146-65-2	Naphthalene-d8	18500	10.325			
15067-26-2	Acenaphthene-d10	9150	14.199			
1517-22-2	Phenanthrene-d10	18700	16.942			

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324-FD	SDG No.:	P3596
Lab Sample ID:	P3596-02	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	950 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
BN033459.D	1	08/14/24 08:45	08/17/24 09:04	PB162723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
1719-03-5	Chrysene-d12	15900	21.148			
1520-96-3	Perylene-d12	16800	23.32			

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

<b>OrderID:</b>	P3596	<b>OrderDate:</b>	8/13/2024 1:10:00 PM
<b>Client:</b>	JACOBS Engineering Group, Inc.	<b>Project:</b>	Former Schlumberger Site Princeton NJ
<b>Contact:</b>	Mary I. Murphy	<b>Location:</b>	D21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3596-01	918-J-WS-081324	Water	SVOCMS Group3	8270-Modified	08/13/24	08/14/24	08/17/24	08/13/24
P3596-02	918-J-WS-081324-FD	Water	SVOCMS Group3	8270-Modified	08/13/24	08/14/24	08/17/24	08/13/24





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

**Hit Summary Sheet**  
**SW-846**

**SDG No.:** P3596  
**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			



# SAMPLE DATA

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324	SDG No.:	P3596
Lab Sample ID:	P3596-01	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 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
BM047300.D	1	08/14/24 08:25	08/21/24 16:26	PB162722

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
110-86-1	Pyridine	1.60	U	1.60	5.20	ug/L
100-52-7	Benzaldehyde	4.10	U	4.10	10.3	ug/L
95-48-7	2-Methylphenol	1.20	U	1.20	5.20	ug/L
98-86-2	Acetophenone	1.10	U	1.10	5.20	ug/L
65794-96-9	3+4-Methylphenols	1.20	U	1.20	10.3	ug/L
98-95-3	Nitrobenzene	1.30	U	1.30	5.20	ug/L
120-83-2	2,4-Dichlorophenol	0.91	U	0.91	5.20	ug/L
91-20-3	Naphthalene	1.10	U	1.10	5.20	ug/L
87-68-3	Hexachlorobutadiene	1.30	U	1.30	5.20	ug/L
91-57-6	2-Methylnaphthalene	1.20	U	1.20	5.20	ug/L
88-06-2	2,4,6-Trichlorophenol	0.92	U	0.92	5.20	ug/L
95-95-4	2,4,5-Trichlorophenol	1.00	U	1.00	5.20	ug/L
208-96-8	Acenaphthylene	1.10	U	1.10	5.20	ug/L
83-32-9	Acenaphthene	0.84	U	0.84	5.20	ug/L
132-64-9	Dibenzofuran	0.96	U	0.96	5.20	ug/L
86-73-7	Fluorene	0.99	U	0.99	5.20	ug/L
118-74-1	Hexachlorobenzene	1.20	U	1.20	5.20	ug/L
87-86-5	Pentachlorophenol	1.90	U	1.90	10.3	ug/L
85-01-8	Phenanthrene	0.92	U	0.92	5.20	ug/L
86-74-8	Carbazole	1.20	U	1.20	5.20	ug/L
84-74-2	Di-n-butylphthalate	1.50	U	1.50	5.20	ug/L
206-44-0	Fluoranthene	1.30	U	1.30	5.20	ug/L
129-00-0	Pyrene	1.10	U	1.10	5.20	ug/L
56-55-3	Benzo(a)anthracene	0.97	U	0.97	5.20	ug/L
218-01-9	Chrysene	0.89	U	0.89	5.20	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	1.90	U	1.90	5.20	ug/L
205-99-2	Benzo(b)fluoranthene	1.20	U	1.20	5.20	ug/L
207-08-9	Benzo(k)fluoranthene	1.20	U	1.20	5.20	ug/L
50-32-8	Benzo(a)pyrene	1.70	U	1.70	5.20	ug/L

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324	SDG No.:	P3596
Lab Sample ID:	P3596-01	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	970 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
BM047300.D	1	08/14/24 08:25	08/21/24 16:26	PB162722

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
193-39-5	Indeno(1,2,3-cd)pyrene	1.10	U	1.10	5.20	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.20	U	1.20	5.20	ug/L
191-24-2	Benzo(g,h,i)perylene	1.20	U	1.20	5.20	ug/L
123-91-1	1,4-Dioxane	1.30	U	1.30	5.20	ug/L
90-12-0	1-Methylnaphthalene	0.89	U	0.89	5.20	ug/L
<b>SURROGATES</b>						
367-12-4	2-Fluorophenol	54.5		15 (10) - 110 (139)	36%	SPK: 150
13127-88-3	Phenol-d6	31.8		15 (10) - 110 (134)	21%	SPK: 150
4165-60-0	Nitrobenzene-d5	75.7		30 (49) - 130 (133)	76%	SPK: 100
321-60-8	2-Fluorobiphenyl	78.3		30 (52) - 130 (132)	78%	SPK: 100
118-79-6	2,4,6-Tribromophenol	164		15 (44) - 110 (137)	110%	SPK: 150
1718-51-0	Terphenyl-d14	102		30 (48) - 130 (125)	102%	SPK: 100
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	184000	7.351			
1146-65-2	Naphthalene-d8	678000	10.11			
15067-26-2	Acenaphthene-d10	451000	14.01			
1517-22-2	Phenanthrene-d10	1020000	16.78			
1719-03-5	Chrysene-d12	1110000	21.021			
1520-96-3	Perylene-d12	1130000	23.709			

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

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324-FD	SDG No.:	P3596
Lab Sample ID:	P3596-02	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	960 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
BM047298.D	1	08/14/24 08:25	08/21/24 15:06	PB162722

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
110-86-1	Pyridine	1.60	U	1.60	5.20	ug/L
100-52-7	Benzaldehyde	4.20	U	4.20	10.4	ug/L
95-48-7	2-Methylphenol	1.20	U	1.20	5.20	ug/L
98-86-2	Acetophenone	1.10	U	1.10	5.20	ug/L
65794-96-9	3+4-Methylphenols	1.20	U	1.20	10.4	ug/L
98-95-3	Nitrobenzene	1.30	U	1.30	5.20	ug/L
120-83-2	2,4-Dichlorophenol	0.92	U	0.92	5.20	ug/L
91-20-3	Naphthalene	1.10	U	1.10	5.20	ug/L
87-68-3	Hexachlorobutadiene	1.30	U	1.30	5.20	ug/L
91-57-6	2-Methylnaphthalene	1.20	U	1.20	5.20	ug/L
88-06-2	2,4,6-Trichlorophenol	0.93	U	0.93	5.20	ug/L
95-95-4	2,4,5-Trichlorophenol	1.10	U	1.10	5.20	ug/L
208-96-8	Acenaphthylene	1.10	U	1.10	5.20	ug/L
83-32-9	Acenaphthene	0.84	U	0.84	5.20	ug/L
132-64-9	Dibenzofuran	0.97	U	0.97	5.20	ug/L
86-73-7	Fluorene	1.00	U	1.00	5.20	ug/L
118-74-1	Hexachlorobenzene	1.20	U	1.20	5.20	ug/L
87-86-5	Pentachlorophenol	1.90	U	1.90	10.4	ug/L
85-01-8	Phenanthrene	0.93	U	0.93	5.20	ug/L
86-74-8	Carbazole	1.20	U	1.20	5.20	ug/L
84-74-2	Di-n-butylphthalate	1.50	U	1.50	5.20	ug/L
206-44-0	Fluoranthene	1.30	U	1.30	5.20	ug/L
129-00-0	Pyrene	1.10	U	1.10	5.20	ug/L
56-55-3	Benzo(a)anthracene	0.98	U	0.98	5.20	ug/L
218-01-9	Chrysene	0.90	U	0.90	5.20	ug/L
117-81-7	Bis(2-ethylhexyl)phthalate	2.00	U	2.00	5.20	ug/L
205-99-2	Benzo(b)fluoranthene	1.20	U	1.20	5.20	ug/L
207-08-9	Benzo(k)fluoranthene	1.20	U	1.20	5.20	ug/L
50-32-8	Benzo(a)pyrene	1.70	U	1.70	5.20	ug/L

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324-FD	SDG No.:	P3596
Lab Sample ID:	P3596-02	Matrix:	Water
Analytical Method:	SW8270	% Solid:	0
Sample Wt/Vol:	960 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
BM047298.D	1	08/14/24 08:25	08/21/24 15:06	PB162722

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
193-39-5	Indeno(1,2,3-cd)pyrene	1.10	U	1.10	5.20	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.20	U	1.20	5.20	ug/L
191-24-2	Benzo(g,h,i)perylene	1.20	U	1.20	5.20	ug/L
123-91-1	1,4-Dioxane	1.30	U	1.30	5.20	ug/L
90-12-0	1-Methylnaphthalene	0.90	U	0.90	5.20	ug/L
<b>SURROGATES</b>						
367-12-4	2-Fluorophenol	54.0		15 (10) - 110 (139)	36%	SPK: 150
13127-88-3	Phenol-d6	32.9		15 (10) - 110 (134)	22%	SPK: 150
4165-60-0	Nitrobenzene-d5	72.3		30 (49) - 130 (133)	72%	SPK: 100
321-60-8	2-Fluorobiphenyl	77.4		30 (52) - 130 (132)	77%	SPK: 100
118-79-6	2,4,6-Tribromophenol	171	*	15 (44) - 110 (137)	114%	SPK: 150
1718-51-0	Terphenyl-d14	102		30 (48) - 130 (125)	102%	SPK: 100
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	190000	7.352			
1146-65-2	Naphthalene-d8	707000	10.11			
15067-26-2	Acenaphthene-d10	486000	14.016			
1517-22-2	Phenanthrene-d10	1100000	16.78			
1719-03-5	Chrysene-d12	1200000	21.021			
1520-96-3	Perylene-d12	1270000	23.715			

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:	P3596	OrderDate:	8/13/2024 1:10:00 PM
Client:	JACOBS Engineering Group, Inc.	Project:	Former Schlumberger Site Princeton NJ
Contact:	Mary I. Murphy	Location:	D21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3596-01	918-J-WS-081324	Water	SVOCMS Group3	8270-Modified	08/13/24	08/14/24	08/17/24	08/13/24
			SVOCMS Group6	8270E		08/14/24	08/21/24	
P3596-02	918-J-WS-081324-FD	Water	SVOCMS Group3	8270-Modified	08/13/24	08/14/24	08/17/24	08/13/24
			SVOCMS Group6	8270E		08/14/24	08/21/24	

### Hit Summary Sheet SW-846

**SDG No.:** P3596 **Order ID:** P3596  
**Client:** JACOBS Engineering Group, Inc. **Project ID:** Former Schlumberger Site Princeton NJ

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
<b>Client ID : 918-J-WS-081324</b>								
P3596-01	918-J-WS-081324	Water	Aluminum	108		1.98	20.0	ug/L
P3596-01	918-J-WS-081324	Water	Antimony	0.34	J	0.11	2.00	ug/L
P3596-01	918-J-WS-081324	Water	Arsenic	2.21		0.090	1.00	ug/L
P3596-01	918-J-WS-081324	Water	Barium	58.1		0.30	10.0	ug/L
P3596-01	918-J-WS-081324	Water	Calcium	19000		62.5	500	ug/L
P3596-01	918-J-WS-081324	Water	Chromium	2.24		0.40	2.00	ug/L
P3596-01	918-J-WS-081324	Water	Cobalt	0.72	J	0.062	1.00	ug/L
P3596-01	918-J-WS-081324	Water	Copper	78.5		0.40	2.00	ug/L
P3596-01	918-J-WS-081324	Water	Iron	3570		9.60	50.0	ug/L
P3596-01	918-J-WS-081324	Water	Lead	1.81		0.11	1.00	ug/L
P3596-01	918-J-WS-081324	Water	Magnesium	3420		26.6	500	ug/L
P3596-01	918-J-WS-081324	Water	Manganese	510		0.24	1.00	ug/L
P3596-01	918-J-WS-081324	Water	Nickel	14.0		0.18	1.00	ug/L
P3596-01	918-J-WS-081324	Water	Potassium	2760		46.1	500	ug/L
P3596-01	918-J-WS-081324	Water	Tin	0.21	J	0.12	5.00	ug/L
P3596-01	918-J-WS-081324	Water	Sodium	68100		85.8	500	ug/L
P3596-01	918-J-WS-081324	Water	Vanadium	1.06	J	0.072	5.00	ug/L
P3596-01	918-J-WS-081324	Water	Zinc	28.7		0.56	5.00	ug/L
P3596-01	918-J-WS-081324	Water	Strontium	128		0.35	1.00	ug/L
P3596-01	918-J-WS-081324	Water	Titanium	2.26	J	0.26	5.00	ug/L
<b>Client ID : 918-J-WS-081324-FD</b>								
P3596-02	918-J-WS-081324-FD	Water	Aluminum	88.2		1.98	20.0	ug/L
P3596-02	918-J-WS-081324-FD	Water	Antimony	0.23	J	0.11	2.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Arsenic	1.74		0.090	1.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Barium	57.6		0.30	10.0	ug/L
P3596-02	918-J-WS-081324-FD	Water	Calcium	19100		62.5	500	ug/L
P3596-02	918-J-WS-081324-FD	Water	Chromium	1.21	J	0.40	2.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Cobalt	0.74	J	0.062	1.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Copper	3.59		0.40	2.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Iron	3340		9.60	50.0	ug/L
P3596-02	918-J-WS-081324-FD	Water	Lead	1.75		0.11	1.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Magnesium	3440		26.6	500	ug/L
P3596-02	918-J-WS-081324-FD	Water	Manganese	511		0.24	1.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Nickel	1.28		0.18	1.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Potassium	2770		46.1	500	ug/L
P3596-02	918-J-WS-081324-FD	Water	Sodium	68300		85.8	500	ug/L
P3596-02	918-J-WS-081324-FD	Water	Vanadium	0.98	J	0.072	5.00	ug/L



**Hit Summary Sheet**  
**SW-846**

<b>SDG No.:</b>	P3596	<b>Order ID:</b>	P3596
<b>Client:</b>	JACOBS Engineering Group, Inc.	<b>Project ID:</b>	Former Schlumberger Site Princeton NJ

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
P3596-02	918-J-WS-081324-FD	Water	Zinc	36.8		0.56	5.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Strontium	129		0.35	1.00	ug/L
P3596-02	918-J-WS-081324-FD	Water	Titanium	1.40	J	0.26	5.00	ug/L

A

B

C

D



# SAMPLE DATA

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324	SDG No.:	P3596
Lab Sample ID:	P3596-01	Matrix:	Water
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	108		1	1.98	20.0	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-36-0	Antimony	0.34	J	1	0.11	2.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-38-2	Arsenic	2.21	*	1	0.090	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-39-3	Barium	58.1		1	0.30	10.0	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-41-7	Beryllium	0.16	U	1	0.16	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-43-9	Cadmium	0.30	U	1	0.30	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-70-2	Calcium	19000		1	62.5	500	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-47-3	Chromium	2.24		1	0.40	2.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-48-4	Cobalt	0.72	J	1	0.062	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-50-8	Copper	78.5		1	0.40	2.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7439-89-6	Iron	3570		1	9.60	50.0	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7439-92-1	Lead	1.81		1	0.11	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7439-95-4	Magnesium	3420		1	26.6	500	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7439-96-5	Manganese	510		1	0.24	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	08/18/24 13:50	08/19/24 11:18	SW7470A	
7439-98-7	Molybdenum	0.93	UN	1	0.93	5.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-02-0	Nickel	14.0		1	0.18	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-09-7	Potassium	2760		1	46.1	500	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7782-49-2	Selenium	1.38	U	1	1.38	5.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-22-4	Silver	0.077	UN	1	0.077	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-23-5	Sodium	68100		1	85.8	500	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-24-6	Strontium	128		1	0.35	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-28-0	Thallium	0.085	U	1	0.085	1.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-31-5	Tin	0.21	J	1	0.12	5.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-32-6	Titanium	2.26	J	1	0.26	5.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-62-2	Vanadium	1.06	J	1	0.072	5.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A
7440-66-6	Zinc	28.7		1	0.56	5.00	ug/L	09/04/24 12:30	09/04/24 15:20	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
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  
N = Spiked sample recovery not within control limits

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324-FD	SDG No.:	P3596
Lab Sample ID:	P3596-02	Matrix:	Water
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	88.2		1	1.98	20.0	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-36-0	Antimony	0.23	J	1	0.11	2.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-38-2	Arsenic	1.74	*	1	0.090	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-39-3	Barium	57.6		1	0.30	10.0	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-41-7	Beryllium	0.16	U	1	0.16	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-43-9	Cadmium	0.30	U	1	0.30	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-70-2	Calcium	19100		1	62.5	500	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-47-3	Chromium	1.21	J	1	0.40	2.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-48-4	Cobalt	0.74	J	1	0.062	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-50-8	Copper	3.59		1	0.40	2.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7439-89-6	Iron	3340		1	9.60	50.0	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7439-92-1	Lead	1.75		1	0.11	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7439-95-4	Magnesium	3440		1	26.6	500	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7439-96-5	Manganese	511		1	0.24	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7439-97-6	Mercury	0.081	U	1	0.081	0.20	ug/L	08/18/24 13:50	08/19/24 11:20	SW7470A	
7439-98-7	Molybdenum	0.93	UN	1	0.93	5.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-02-0	Nickel	1.28		1	0.18	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-09-7	Potassium	2770		1	46.1	500	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7782-49-2	Selenium	1.38	U	1	1.38	5.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-22-4	Silver	0.077	UN	1	0.077	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-23-5	Sodium	68300		1	85.8	500	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-24-6	Strontium	129		1	0.35	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-28-0	Thallium	0.085	U	1	0.085	1.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-31-5	Tin	0.12	U	1	0.12	5.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-32-6	Titanium	1.40	J	1	0.26	5.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-62-2	Vanadium	0.98	J	1	0.072	5.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A
7440-66-6	Zinc	36.8		1	0.56	5.00	ug/L	09/04/24 12:30	09/04/24 15:23	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
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

N = Spiked sample recovery not within control limits

LAB CHRONICLE

<b>OrderID:</b>	P3596	<b>OrderDate:</b>	8/13/2024 1:10:00 PM
<b>Client:</b>	JACOBS Engineering Group, Inc.	<b>Project:</b>	Former Schlumberger Site Princeton NJ
<b>Contact:</b>	Mary I. Murphy	<b>Location:</b>	D21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3596-01	918-J-WS-081324	Water	Mercury	7470A	08/13/24	08/18/24	08/19/24	08/13/24
			Metals Group4	6020B		09/04/24	09/04/24	
P3596-02	918-J-WS-081324-F D	Water	Mercury	7470A	08/13/24	08/18/24	08/19/24	08/13/24
			Metals Group4	6020B		09/04/24	09/04/24	



# SAMPLE DATA

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24 11:15
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324	SDG No.:	P3596
Lab Sample ID:	P3596-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Dissolved Hexavalent Chromium	0.0030	U	1	0.0030	0.010	mg/L		08/13/24 16:29	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  
N = Spiked sample recovery not within control limits

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/13/24 11:20
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/13/24
Client Sample ID:	918-J-WS-081324-FD	SDG No.:	P3596
Lab Sample ID:	P3596-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Dissolved Hexavalent Chromium	0.0030	U	1	0.0030	0.010	mg/L		08/13/24 16:33	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.  
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OR = Over Range  
N = Spiked sample recovery not within control limits



LAB CHRONICLE

OrderID:	P3596	OrderDate:	8/13/2024 1:10:00 PM
Client:	JACOBS Engineering Group, Inc.	Project:	Former Schlumberger Site Princeton NJ
Contact:	Mary I. Murphy	Location:	D21,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3596-01	918-J-WS-081324	WATER	Hexavalent Chromium	7196A	08/13/24 11:15		08/13/24 16:29	08/13/24
P3596-02	918-J-WS-081324-F D	WATER	Hexavalent Chromium	7196A	08/13/24 11:20		08/13/24 16:33	08/13/24



# SHIPPING DOCUMENTS

# CHEMTECH

## CHAIN OF CUSTODY RECORD

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

CHEMTECH PROJECT NO.

QUOTE NO.

COC Number 2041313

10

10.1

### CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Jacobs

ADDRESS: 412 Mt Kemble Ave Suite #100

CITY: Morristown STATE: NJ ZIP: 07960

ATTENTION: John Yufante

PHONE: (281) 414-1719 FAX:

### CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC

PROJECT NO.: D3779922 LOCATION: Princeton Junction

PROJECT MANAGER: Mary Murphy

e-mail: Mary.Murphy@Jacobs.com

PHONE: (201) 936-8586 FAX:

### CLIENT BILLING INFORMATION

BILL TO: Mary Murphy

PO#:

ADDRESS:

CITY

STATE:

ZIP:

ATTENTION:

PHONE:

ANALYSIS

### DATA TURNAROUND INFORMATION

FAX (RUSH) Standard TAT DAYS\*

HARDCOPY (DATA PACKAGE): DAYS\*

EDD: DAYS\*

\*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

### DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)

☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP

☒ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B

+ Raw Data ☐ Other

☐ EDD FORMAT

VOCs 8/20/04  
SVOCs 8/20/04  
PAHs 8/20/04  
Metals 8/20/04  
Cr(VI) 7/19/04  
20050604

### PRESERVATIVES

### COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		A/E	E	B/E	E						
1.	918-J-WS-081324	WS		X	8-13-24	1115	8	2	4	1	1						
2.	918-J-WS-081324-FD	WS		X	8-13-24	1120	8	2	4	1	1						
3.	TB-01-081324	DI		X	8-13-24	1200	1	1									
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

### SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Conditions of bottles or coolers at receipt:
1. [Signature]	8-13-24 1245	[Signature]	<input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP 3.0 °C
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Comments:
2.			See attached table for required analytes list of ECO-VOCs, ECO-SVOCs, and ECO metals
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
3. [Signature]	8-13-24 1405		2 L of extra volume for SVOC + PAH analysis

Page 1 of 1

CLIENT: ☐ Hand Delivered ☐ Other  
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete  
☐ YES ☐ NO

**Laboratory Certification**

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

10

10.3

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : P3596 JACO05

Order Date : 8/13/2024 1:10:00 PM

Project Mgr : Yazmeen

Client Name : JACOBS Engineering Grou

Project Name : Former Schlumberger Site I

Report Type : Level 4

Client Contact : Mary I. Murphy

Receive DateTime : 8/13/2024 12:00:00 AM

EDD Type : CH2MHILL

Invoice Name : JACOBS Engineering Grou

Purchase Order :

Hard Copy Date :

Invoice Contact : Mary I. Murphy

Date Signoff : 8/13/2024 3:37:47 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P3596-01	918-J-WS-081324	Water	08/13/2024	11:15					
					VOCMS Group6		8260-Low	10 Bus. Days	
P3596-02	918-J-WS-081324-FD	Water	08/13/2024	11:20					
					VOCMS Group6		8260-Low	10 Bus. Days	
P3596-03	TB-01-081324	Water	08/13/2024	12:00					
					VOCMS Group6		8260-Low	10 Bus. Days	

Relinquished By :

Date / Time : 8/13/24 1540

Received By :

Date / Time : 8/13/24 1540

Storage Area : VOA Refridgerator Room