

# 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: P3457

**ATTENTION : Mary I. Murphy** 



Laboratory Certification ID # 20012





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

Laboratory Name :	Alliance Technical Group LLC	Client :	JACOBS Engineering Group, Inc.
Project Location :	Princeton Junction, NJ	Project Number :	D3779922
Laboratory Sample ID	(s) : <u>P3467</u>	Sampling Date(s) :	8/02/2024

List DKQP Methods Used (e.g., 8260,8270, et Cetra) 6010D,7196A,7470A,8260D,8270-Modified,8270E, 200.7

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?	V	Yes		No	
1A	Were the method specified handling, preservation, and holding time requirements met?	$\mathbf{\nabla}$	Yes		No	
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)		Yes		No	✓ 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)?	V	Yes		No	
3	Were samples received at an appropriate temperature (4±2° C)?	V	Yes		No	□ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?		Yes	V	No	
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	Ø	Yes		No	
	b)Were these reporting limits met?	$\square$	Yes		No	□ 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?	V	Yes		No	
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?		Yes	$\checkmark$	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."

1



### **Cover Page**

- Order ID : P3467
- Project ID : Former Schlumberger Site Princeton NJ
  - **Client :** JACOBS Engineering Group, Inc.

#### Lab Sample Number

**Client Sample Number** 

P3467-01 P3467-02 919-J-WS-080224 TB-03-080224

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: 10/28/2024

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 # P3467 Test Name: VOCMS Group6

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

2 Water samples were received on 08/02/2024.

#### **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 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 Samples for MS/MSD for VOC analysis were not provided with this set of samples therefore lab used from another project.

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\_\_\_\_\_



### CASE NARRATIVE

JACOBS Engineering Group, Inc. Project Name: Former Schlumberger Site Princeton NJ Project # N/A Chemtech Project # P3467 Test Name: SVOCMS Group3

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

2 Water samples were received on 08/02/2024.

#### **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 except for 919-J-WS-080224 [Terphenyl-d14 - 138%], this compound 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 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 20% in the Initial Calibration method (Method 8270Sim-BN080524.M) for 1,4-Dioxane, this compound is passing on Linear Regression.

The Continuous Calibration met the requirements . The Tuning criteria met requirements.



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\_\_\_\_\_



### CASE NARRATIVE

JACOBS Engineering Group, Inc. Project Name: Former Schlumberger Site Princeton NJ Project # N/A Chemtech Project # P3467 Test Name: SVOCMS Group6

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

2 Water samples were received on 08/02/2024.

#### **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\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe 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 PB162489BL [2,4,6-Tribromophenol - 122%, Phenol-d6 - 111% and Terphenyl-d14 - 136%], 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 {P3466-02MS} with File ID: BF139004.D recoveries met the requirements for all compounds except for Fluoranthene[132%], this compound did not meet the NJDKQP criteria but met the in-house criteria also Benzaldehyde[0%] this compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {P3466-03MSD} with File ID: BF139005.D recoveries met the acceptable requirements except for 2-Methylphenol[69%], Fluoranthene[132%], these compounds did not meet the NJDKQP criteria but met the in-house criteria and 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 BF138879.D met the requirements except for Benzaldehyde, is marginally biased low therefore no corrective action was 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 8 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	

2.3



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### CASE NARRATIVE

JACOBS Engineering Group, Inc. Project Name: Former Schlumberger Site Princeton NJ Project # N/A Chemtech Project # P3467 Test Name: Metals Group5

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

2 Water samples were received on 08/02/2024.

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

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, Metals Group5, 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	

24



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### CASE NARRATIVE

JACOBS Engineering Group, Inc. Project Name: Former Schlumberger Site Princeton NJ Project # N/A Chemtech Project # P3467 Test Name: Metals Group4,Mercury

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

2 Water samples were received on 08/02/2024.

#### **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 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:**

This Data Package has been revised due to Parameter List Change.

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\_\_\_\_\_



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### CASE NARRATIVE

JACOBS Engineering Group, Inc. Project Name: Former Schlumberger Site Princeton NJ Project # N/A Chemtech Project # P3467 Test Name: Hexavalent Chromium

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

2 Water samples were received on 08/02/2024.

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

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

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	



### 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				
Ε	Indicates the reported value is estimated because of the presence of interference				
Μ	Indicates Duplicate injection precision not met.				
Ν	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 OR	<ul> <li>Method qualifiers</li> <li>"P" for ICP instrument</li> <li>"PM" for ICP when Microwave Digestion is used</li> <li>"CV" for Manual Cold Vapor AA</li> <li>"AV" for automated Cold Vapor AA</li> <li>"CA" for MIDI-Distillation Spectrophotometric</li> <li>"AS" for Semi – Automated Spectrophotometric</li> <li>"C" for Manual Spectrophotometric</li> <li>"T" for Titrimetric</li> <li>"NR" for analyte not required to be analyzed</li> <li>Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.</li> </ul>				
Q	Indicates the LCS did not meet the control limits requirements				
Н	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".
Ε	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.
Р	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".
Ν	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.
Α	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

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#### APPENDIX A

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

Project #: P3467

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 Castody 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

SOHIL JODHANI **QA Review Signature:** 

Date: 10/28/2024

Completed



#### Hit Summary Sheet SW-846

SDG No.:	P3467						
Client:	JACOBS Engineer	ring Group, In	с.				
Sample ID	Client ID	Matrix	Parameter	Concentration	C MDL	RDL	Units
Client ID:	919-J-WS-080224						
P3467-01	919-J-WS-080224	Water	Acetone	13.7	1.40	5.00	ug/L
			Total Voc :	13.7			
			<b>Total Concentration:</b>	13.7			

A B C D

5





A B C D



Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/02/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/02/24
Client Sample ID:	919-J-WS-080224	SDG No.:	P3467
Lab Sample ID:	P3467-01	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	
VN083281.D	1			08/14/24 06:28	VN081324	
AS 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	13.7		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

B C

D

5

P3467



Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/02/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/02/24
Client Sample ID:	919-J-WS-080224	SDG No.:	P3467
Lab Sample ID:	P3467-01	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	
VN083281.D	1			08/14/24 06:28	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	57.2		70 (74) - 130 (125)	114%	SPK: 50
1868-53-7	Dibromofluoromethane	53.1		70 (75) - 130 (124)	106%	SPK: 50
2037-26-5	Toluene-d8	54.1		70 (86) - 130 (113)	108%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.1		70 (77) - 130 (121)	112%	SPK: 50
INTERNAL STAN	DARDS					
363-72-4	Pentafluorobenzene	134000	8.224			
540-36-3	1,4-Difluorobenzene	262000	9.1			
3114-55-4	Chlorobenzene-d5	268000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	117000	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



Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/02/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/02/24
Client Sample ID:	TB-03-080224	SDG No.:	P3467
Lab Sample ID:	P3467-02	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	
VN083282.D	1			08/14/24 06:52	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

B C

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P3467



Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/02/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/02/24
Client Sample ID:	TB-03-080224	SDG No.:	P3467
Lab Sample ID:	P3467-02	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	
VN083282.D	1			08/14/24 06:52	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	57.6		70 (74) - 130 (125)	115%	SPK: 50
1868-53-7	Dibromofluoromethane	51.7		70 (75) - 130 (124)	103%	SPK: 50
2037-26-5	Toluene-d8	53.2		70 (86) - 130 (113)	106%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.5		70 (77) - 130 (121)	107%	SPK: 50
INTERNAL STAN	DARDS					
363-72-4	Pentafluorobenzene	126000	8.224			
540-36-3	1,4-Difluorobenzene	250000	9.1			
3114-55-4	Chlorobenzene-d5	249000	11.865			
3855-82-1	1,4-Dichlorobenzene-d4	103000	13.788			

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



# 5

B C

D

### LAB CHRONICLE

Client: JACOBS Engineering Group, Inc.		OrderDate: Project: Location:	8/2/2024 4:30:0 Former Schlum D21,VOA Ref. #	berger Site Pri	nceton NJ			
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3467-01	919-J-WS-080224	Water	VOCMS Group6	8260-Low	08/02/24		08/14/24	08/02/24
P3467-02	TB-03-080224	Water	VOCMS Group6	8260-Low	08/02/24		08/14/24	08/02/24



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#### Hit Summary Sheet SW-846

SDG No.:	P3467				
Client:	JACOBS Engine	eering Group, Inc.			
Sample ID Client ID :	Client ID	Matrix	Parameter	Concentration C MDL	RDL Units
				0.000	
			<b>Total Svoc :</b>	0.00	
			<b>Total Concentration:</b>	0.00	





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A B C D



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		Report	t of Anal	ysis			
Client:	JACOBS Engineerir	ng Group, Inc.		Date	Collected:	08/02/24	
Project:	Former Schlumberge	er Site Princeton NJ	ſ	Date	Received:	08/02/24	
Client Sample ID	919-J-WS-080224			SDG	No.:	P3467	
Lab Sample ID:	P3467-01			Matri		Water	
-							
Analytical Metho	od: SW8270SIM			% So	lid:	0	
Sample Wt/Vol:	950 Units:	mL		Final	Vol:	1000	uL
Soil Aliquot Vol:		uL		Test:		SVOCM	S Group3
Extraction Type :		Decan	ted : N	Level	:	LOW	
Injection Volume		GPC Factor :	1.0	GPC	Cleanup :	N	PH :
-		or e ración .	1.0	Gre	Cicaliup .		111.
Prep Method :	SW3510C						
File ID/Qc Batch:	Dilution:	Prep Date		Date Analyzed	1	Prep Batch I	D
BN033278.D	1	08/05/24 11	1:14	08/06/24 17:5	9	PB162490	
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
91-20-3	2-Methylnaphthalene	0.030	U U	0.030		0.11	ug/L ug/L
208-96-8	Acenaphthylene	0.020	U	0.020		0.11	ug/L ug/L
83-32-9	Acenaphthene	0.020	U	0.020		0.11	ug/L 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	0.020	Ū	0.020		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	0.030	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		0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 (30) - 150 (15		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 (30) - 150 (15		115%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		30 (11) - 130 (17:	-	85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		30 (10) - 130 (17)		91%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	30 (54) - 130 (17	1)	138%	SPK: 0.4
INTERNAL STAN		0.65					
3855-82-1	1,4-Dichlorobenzene-d4	968	7.553				
1146-65-2	Naphthalene-d8	3820	10.287				
15067-26-2	Acenaphthene-d10	2490	14.111				

1517-22-2

Phenanthrene-d10

16.89

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		Repor	rt of Analy	rsis		
Client:	JACOBS Engineerin	ng Group, Inc.		Date Collected:	08/02/24	
Project:	Former Schlumberg	er Site Princeton N	1]	Date Received:	08/02/24	
Client Sample ID:	919-J-WS-080224			SDG No.:	P3467	
Lab Sample ID:	P3467-01			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 :		Deca	nted : N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N P	PH :
Prep Method :	SW3510C					
File ID/Qc Batch:	Dilution:	Prep Date		Date Analyzed	Prep Batch ID	
BN033278.D	1	08/05/24		08/06/24 17:59	PB162490	
CAS Number Pa	arameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
1719-03-5 C	hrysene-d12	7470	21.104			
1520-96-3 Ре	erylene-d12	8400	23.271			

- 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



# A B C

D

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### LAB CHRONICLE

OrderID: Client: Contact:	JACOBS Engineering Group, Inc.			OrderDate: Project: Location:	Project: Former Schlumberger Site Princeton NJ			
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3467-01	919-J-WS-080224	Water			08/02/24			08/02/24
			SVOCMS Group3	8270-Modifie d		08/05/24	08/06/24	



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В	
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### Hit Summary Sheet SW-846

SDG No.:	P3467					
Client:	JACOBS Engineering Group, Inc.					
Sample ID Client ID :	Client ID	Matrix	Parameter	Concentration C MDL	RDL Units	
				0.000		
			Total Svoc :	0.00		
			<b>Total Concentration:</b>	0.00		







A B C D



7

		]	Report	t of An	alysis			
Client:	JACOBS Engineer	ing Group, I	nc.			Date Collected:	08/02/24	
Project: Former Schlumberge		ger Site Prin	ceton NJ			Date Received:	08/02/24	
Client Sample IE		-				SDG No.:	P3467	
-								
Lab Sample ID:	P3467-01					Matrix:	Water	
Analytical Metho	od: SW8270					% Solid:	0	
Sample Wt/Vol:	950 Units:	mL				Final Vol:	1000	uL
Soil Aliquot Vol:	:	uL				Test:	SVOCM	S Group6
Extraction Type	:		Decan	ted :	Ν	Level :	LOW	
Injection Volume		GPC 1	Factor :	1.0		GPC Cleanup :	N	PH :
Prep Method :	SW3510C	0101	uotor .	1.0		Gi e ciculiup .		
File ID/Qc Batch:	Dilution:	Dr	ep Date		Dat	e Analyzed	Drop Datah 1	ID
			-	2.25		-	Prep Batch	
BF138922.D	1	08.	/05/24 08	3:25	08/1	10/24 21:25	PB162489	
CAS Number	Parameter	Co	nc.	Qualifi	er MDL		LOQ / CRQL	Units
ARGETS								
10-86-1	Pyridine	1	.60	U	1.60		5.30	ug/L
00-52-7	Benzaldehyde	4	.20	U	4.20		10.5	ug/L
5-48-7	2-Methylphenol	1	.20	U	1.20		5.30	ug/L
5794-96-9	3+4-Methylphenols	1	.20	U	1.20		10.5	ug/L
7-72-1	Hexachloroethane	1	.10	U	1.10		5.30	ug/L
8-95-3	Nitrobenzene	1	.30	U	1.30		5.30	ug/L
1-20-3	Naphthalene	1	.10	U	1.10		5.30	ug/L
7-68-3	Hexachlorobutadiene	1	.30	U	1.30		5.30	ug/L
1-57-6	2-Methylnaphthalene	1	.20	U	1.20		5.30	ug/L
8-06-2	2,4,6-Trichlorophenol	C	.94	U	0.94		5.30	ug/L
5-95-4	2,4,5-Trichlorophenol	1	.10	U	1.10		5.30	ug/L
08-96-8	Acenaphthylene	1	.10	U	1.10		5.30	ug/L
3-32-9	Acenaphthene	C	.85	U	0.85		5.30	ug/L
32-64-9	Dibenzofuran		.98	U	0.98		5.30	ug/L
21-14-2	2,4-Dinitrotoluene		.60	U	1.60		5.30	ug/L
6-73-7	Fluorene		.00	U	1.00		5.30	ug/L
18-74-1	Hexachlorobenzene		.20	U	1.20		5.30	ug/L
7-86-5	Pentachlorophenol		.90	U	1.90		10.5	ug/L
5-01-8	Phenanthrene		.94	U	0.94		5.30	ug/L
20-12-7	Anthracene		.10	Ŭ	1.10		5.30	ug/L
6-74-8	Carbazole		.20	Ŭ	1.20		5.30	ug/L
4-74-2	Di-n-butylphthalate		.50	U	1.50		5.30	ug/L
· · -	Fluoranthene		.40	U	1.40		5.30	ug/L
06-44-0	Pyrene		.10	U	1.40		5.30	ug/L
				U	0.99		5.30	ug/L ug/L
29-00-0		ſ	99				0.00	u도/ L
06-44-0 29-00-0 6-55-3 18-01-9	Benzo(a)anthracene		.99				5 30	
29-00-0 6-55-3 18-01-9	Benzo(a)anthracene Chrysene	C	.91	U	0.91		5.30 5.30	ug/L
29-00-0 6-55-3	Benzo(a)anthracene	0 2					5.30 5.30 5.30	



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Report of Analysis									
Client:	JACOBS Engine	ering Group, Inc.		Date Collected:	08/02/24				
Project:	Former Schlumb	erger Site Princeton N	J	Date Received:	08/02/24				
Client Sample ID:	919-J-WS-08022	24		SDG No.:	P3467				
Lab Sample ID:	P3467-01			Matrix:	Water				
Analytical Method:	SW8270			% Solid:	0				
Sample Wt/Vol:	950 Units	s: mL		Final Vol:	1000	uL			
Soil Aliquot Vol:		uL		Test:	SVOCMS C	broup6			
Extraction Type :		Decar	nted : N	Level :	LOW				
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N PH	H:			
Prep Method :	SW3510C								
File ID/Qc Batch:	Dilution:	Prep Date		Date Analyzed	Prep Batch ID				
BF138922.D	1	08/05/24 0	8:25	08/10/24 21:25	PB162489				
CAS Number Para	meter	Conc.	Oualifier	MDL	LOQ / CRQL	Units			

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
50-32-8	Benzo(a)pyrene	1.80	U	1.80	5.30	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	1.10	U	1.10	5.30	ug/L
53-70-3	Dibenzo(a,h)anthracene	1.20	U	1.20	5.30	ug/L
191-24-2	Benzo(g,h,i)perylene	1.20	U	1.20	5.30	ug/L
123-91-1	1,4-Dioxane	1.30	U	1.30	5.30	ug/L
90-12-0	1-Methylnaphthalene	0.91	U	0.91	5.30	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	74.5		15 (10) - 110 (139)	50%	SPK: 150
13127-88-3	Phenol-d6	47.2		15 (10) - 110 (134)	31%	SPK: 150
4165-60-0	Nitrobenzene-d5	101		30 (49) - 130 (133)	101%	SPK: 100
321-60-8	2-Fluorobiphenyl	99.3		30 (52) - 130 (132)	99%	SPK: 100
118-79-6	2,4,6-Tribromophenol	148		15 (32) - 110 (145)	99%	SPK: 150
1718-51-0	Terphenyl-d14	99.1		30 (36) - 130 (145)	99%	SPK: 100
INTERNAL STAN	NDARDS					
3855-82-1	1,4-Dichlorobenzene-d4	37700	6.84			
1146-65-2	Naphthalene-d8	148000	8.122			
15067-26-2	Acenaphthene-d10	79700	9.869			
1517-22-2	Phenanthrene-d10	125000	11.357			
1719-03-5	Chrysene-d12	68400	13.998			
1520-96-3	Perylene-d12	79700	15.462			

- 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



## A B C D

### LAB CHRONICLE

OrderID: Client: Contact:	JACOBS Engineering Group, Inc.				OrderDate:8/2/2024 4:30:00 PMProject:Former Schlumberger Site Princeton NJLocation:D21,VOA Ref. #3 Water				
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received	
P3467-01	919-J-WS-080224	Water	SVOCMS Group3 SVOCMS Group6	8270-Modified 8270E	08/02/24	08/05/24 08/05/24	08/06/24 08/10/24	08/02/24	



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#### Hit Summary Sheet SW-846

SDG No.: Client:	P3467 JACOBS Engineering Gro	Order ID: Project ID		P3467 Former Schlumberger Site Princeto		NJ		
Sample ID	Client ID	Matrix	Parameter	Concentration	С	MDL	RDL	Units
Client ID : P3467-01	<b>919-J-WS-080224</b> 919-J-WS-080224	Water	Dissolved Silica	6830		64.0	428	ug/L

A

8





Revised

8

A B C D



Silica

Silica

#### **Report of Analysis**

				Report of A	alysis					
Client:		JAC	COBS Engineering Group,	Inc.		Date Collected	: 08/02	2/24		С
Project:		For	mer Schlumberger Site Pri	Date Received		D				
Client S	ample ID:	919-	-J-WS-080224		SDG No.:	P346	7			
Lab Sam	ple ID:	P34	67-01			Matrix:	Wate	r		
Level (lo	ow/med):	low				% Solid:	0			
Cas	Parameter	Conc.	Qua. DF MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.	
Dissolved	Dissolved	6830	1 64.0	428	ug/L	10/24/24 11:45	10/24/24 22:03	EPA 200.7	7	1

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Metals Group5				
-	of Quantitation od Detection Limit			<ul> <li>J = Estimated Value</li> <li>B = Analyte Found in Associated Method Blank</li> <li>* = indicates the duplicate analysis is not within control limits.</li> <li>E = Indicates the reported value is estimated because of the presence of interference.</li> </ul>	
Q = indicates I	LCS control criteria did not	meet requirements		OR = Over Range	
P3467			37 (	N =Spiked sample recovery not within control limits of <b>49</b>	Revised



## A

D

#### LAB CHRONICLE

OrderID: Client: Contact:	P3467 JACOBS Engineering Group, I Mary I. Murphy	nc.		OrderDate: Project: Location:	8/2/2024 4:30:0 Former Schlum D21,VOA Ref. #	berger Site Pri	nceton NJ	
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3467-01	919-J-WS-080224	Water			08/02/24			08/02/24
			Mercury	7470A		08/12/24	08/13/24	
			Metals Group4	6020B		08/23/24	08/25/24	
			Metals Group5	200.7		10/24/24	10/24/24	



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### Hit Summary Sheet SW-846

SDG No.:	P3467			Order ID:		P3467		
Client:	JACOBS Engineering Grou	ıp, Inc.		Project ID	:	Former Schlumb	erger Site Princetor	n NJ
Sample ID	Client ID	Matrix	Parameter	Concentration	С	MDL	RDL	Units
Client ID :	919-J-WS-080224							
P3467-01	919-J-WS-080224	Water	Aluminum	1150		1.98	20.0	ug/L
P3467-01	919-J-WS-080224	Water	Antimony	0.47	J	0.11	2.00	ug/L
P3467-01	919-J-WS-080224	Water	Arsenic	5.56		0.090	1.00	ug/L
P3467-01	919-J-WS-080224	Water	Barium	76.0		0.30	10.0	ug/L
P3467-01	919-J-WS-080224	Water	Calcium	15800		62.5	500	ug/L
P3467-01	919-J-WS-080224	Water	Chromium	3.52		0.40	2.00	ug/L
P3467-01	919-J-WS-080224	Water	Cobalt	2.15		0.062	1.00	ug/L
P3467-01	919-J-WS-080224	Water	Copper	22.7		0.40	2.00	ug/L
P3467-01	919-J-WS-080224	Water	Iron	10900		9.60	50.0	ug/L
P3467-01	919-J-WS-080224	Water	Lead	16.7		0.11	1.00	ug/L
P3467-01	919-J-WS-080224	Water	Magnesium	2770		26.6	500	ug/L
P3467-01	919-J-WS-080224	Water	Manganese	526		0.24	1.00	ug/L
P3467-01	919-J-WS-080224	Water	Nickel	3.26		0.18	1.00	ug/L
P3467-01	919-J-WS-080224	Water	Mercury	0.25		0.081	0.20	ug/L
P3467-01	919-J-WS-080224	Water	Potassium	2530		46.1	500	ug/L
P3467-01	919-J-WS-080224	Water	Silver	0.23	J	0.077	1.00	ug/L
P3467-01	919-J-WS-080224	Water	Sodium	48000		85.8	500	ug/L
P3467-01	919-J-WS-080224	Water	Vanadium	4.85	J	0.072	5.00	ug/L
P3467-01	919-J-WS-080224	Water	Zinc	141		0.56	5.00	ug/L

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A B C D



#### **Report of Analysis**

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/02/24	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/02/24	I
Client Sample ID:	919-J-WS-080224	SDG No.:	P3467	l
Lab Sample ID:	P3467-01	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	1150		1	1.98	20.0	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-36-0	Antimony	0.47	J	1	0.11	2.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-38-2	Arsenic	5.56		1	0.090	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-39-3	Barium	76.0		1	0.30	10.0	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-41-7	Beryllium	0.16	U	1	0.16	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-43-9	Cadmium	0.30	U	1	0.30	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-70-2	Calcium	15800		1	62.5	500	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-47-3	Chromium	3.52		1	0.40	2.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-48-4	Cobalt	2.15		1	0.062	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-50-8	Copper	22.7		1	0.40	2.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7439-89-6	Iron	10900		1	9.60	50.0	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7439-92-1	Lead	16.7		1	0.11	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7439-95-4	Magnesium	2770		1	26.6	500	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7439-96-5	Manganese	526		1	0.24	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7439-97-6	Mercury	0.25		1	0.081	0.20	ug/L	08/12/24 16:13	08/13/24 10:49	SW7470A	
7440-02-0	Nickel	3.26		1	0.18	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-09-7	Potassium	2530		1	46.1	500	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7782-49-2	Selenium	1.38	U	1	1.38	5.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-22-4	Silver	0.23	JN	1	0.077	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-23-5	Sodium	48000		1	85.8	500	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-28-0	Thallium	0.085	U	1	0.085	1.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-62-2	Vanadium	4.85	J	1	0.072	5.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-66-6	Zinc	141		1	0.56	5.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture: Medium
Color After:	Colorless	Clarity After:	N/A	Artifacts: N/A
Comments:	Mercury			
U = Not Detec	cted			J = Estimated Value
	of Quantitation			B = Analyte Found in Associated Method Blank
MDL = Metho	od Detection Limit			* = indicates the duplicate analysis is not within control limits.
LOD = Limit	of Detection			E = Indicates the reported value is estimated because of the presence
D = Dilution				of interference.
Q = indicates LCS control criteria did not meet requirements				OR = Over Range
				N =Spiked sample recovery not within control limits

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Revised

B C D



B C

D

Q

#### LAB CHRONICLE

OrderID: Client: Contact:	P3467 JACOBS Engineering Group, I Mary I. Murphy	nc.		OrderDate: Project: Location:	8/2/2024 4:30:0 Former Schlum D21,VOA Ref. #	berger Site Pri	nceton NJ	
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3467-01	919-J-WS-080224	Water			08/02/24			08/02/24
			Mercury Metals Group4	7470A 6020B		08/12/24 08/23/24	08/13/24 08/25/24	





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#### **Report of Analysis**

Client:	JACOBS Engineering Group,	Inc.	Date	Collected:	08/02/24	13:25
Project:	Former Schlumberger Site Pri	nceton NJ	Date	Received:	08/02/24	
Client Sample ID:	919-J-WS-080224		SDG	No.:	P3467	
Lab Sample ID:	P3467-01		Matri	ix:	WATER	
			% So	lid:	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		08/03/24 08:44	4 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

- E = Indicates the reported value is estimated because of the presence of interference.
- OR = Over Range
- N =Spiked sample recovery not within control limits

<sup>\* =</sup> indicates the duplicate analysis is not within control limits.





#### LAB CHRONICLE

OrderID: Client: Contact:	P3467 JACOBS Engineering Group, I Mary I. Murphy	nc.		OrderDate: Project: Location:	8/2/2024 4:30:0 Former Schlum D21,VOA Ref. #	berger Site Pri	nceton NJ	
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3467-01	919-J-WS-080224	WATER			08/02/24 13:25			08/02/24
			Hexavalent Chromium	7196A			08/03/24 08:44	



# <u>SHIPPING</u> DOCUMENTS

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

www.chemtech.net

CHEMTECH PROJECT NO. P3467 QUOTE NO. <sup>COC Number</sup> 2041309

11.1

	CLIENT INFORMATION		-	CLIENT F	PROJECT II	NFORM	ATION				-	Ind.	CLIEN	IT BILLI	NG INF	ORMATION	a.
COMPANY:	REPORT TO BE SENT TO:	PROJEC	T NA	ME: STC	PIC					BILL	то: И	lany	Hurp	hy		PO#:	
ADDRESS:	412 Mt Kemble Ave Suite #100	PROJECT	NO.:	D377492	Z LOC	ATION:	Princeh	is In	chin	ADDF		/	1	]			
	state: NJ ZIP: 07960			AGER: A	1				<i>`</i>	CITY ST			STAT	ſE:	ZIP:		
	John Ynfante			. Murph		1 1							PHO	IONE:			
	1) 41 4 - 1719 FAX:	PHONE: (261) 936-0586 FAX:						ANALYSIS									
	DATA TURNAROUND INFORMATION	THONE.	DATA DELIVERABLE INFORMATION														
EDD:	ATA PACKAGE): DAYS* DAYS* DAYS* DAYS* DAYS* VED BY CHEMTECH	Level 2	(Resul (Resul	ts Only) ts + QC) ts + QC u	NJ Reduce	ed 🖬 U	S EPA C	LP 🧳	Sales P	All Str	12 12 12 12 12 12 12 12 12 12 12 12 12 1	HAS				$\left  \right $	
STANDARD HA	TANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS							/ 2	3	PRE	5 SERVA	TIVES	<u> </u>	8	9	C	OMMENTS
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE		COLL	MPLE ECTION TIME	# OF BOTTLES	A/E	<b>E</b> 2	₿/E 3	E	5	6	7	8	9		fy Preservatives D-NaOH E-ICE F-OTHER
1.	919-J-WS-080224	WS	X	( 8/2/24	1325	8	2	4	1	1							
2.	TB-03-080224	DI	X		1505	1	1										
3.																	
4.																	
5.																	
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10.																	
1. Us RELINQUISHED BY 2.	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY         Conditions of bottles of coolers at receipt:       COMPLIANT       COMPLI						°C SV <i>DL</i> \$;										
* P	DAD 8-2-24 3.																
opyright @ 2023 P3467	WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY Revis																





### 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



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

#### LOGIN REPORT/SAMPLE TRANSFER

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	Order ID :	P3467	JACO05		C	order Date :	8/2/2024 4:30:00 PM		Project Mgr :			
<b>Client Contact :</b>		<ul> <li>: JACOBS Engineering Grou</li> <li>: Mary I. Murphy</li> <li>: JACOBS Engineering Grou</li> </ul>		•		Former Schlumberger Site	<b>Report Type :</b> Level 4 <b>EDD Type :</b> CH2MHILL					
						8/2/2024 12:00:00 AM						
						ase Order :	15:45	Hard Copy Date :				
Invoic	e Contact :	Mary I. M	urphy						Date Signoff :			
LAB ID	CLIEN	T ID		MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD		FAX DATE	DUE DATES
P3467-01	ç	919- <b>J</b> -WS-	080224	Water	08/02/2024	13:25						
							VOCMS Group6		8260-Low	10 Bus. Days		
P3467-02		TB-03-08	30224	Water	08/02/2024	15:05						
							VOCMS Group6		8260-Low	10 Bus. Days		

Relinguished By : 850 Date / Time : 8-5-24

Received By :	Son		. 1	1 1	
Date / Time :	8/5/24	8.50	net	7	

Storage Area: VOA Refridgerator Room

P3467

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