

# 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 : P3467 ATTENTION : Mary I. Murphy

TNI PBORATORI

Laboratory Certification ID # 20012





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# **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 :

N. N. Pandya

NYDOH CERTIFICATION NO - 11376

APPROVED By Nimisha Pandya QA/QC Supervisor at 9:37 am, Aug 29, 2024

NJDEP CERTIFICATION NO - 20012

## 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) 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?		Yes		No	
1A	Were the method specified handling, preservation, and holding time requirements met?	V	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)?	$\mathbf{N}$	Yes		No	□ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?		Yes	$\checkmark$	No	
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	V	Yes		No	
	b)Were these reporting limits met?	$\checkmark$	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."



## 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:**

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.

N. N. Pandya Signature\_

**APPROVED** By Nimisha Pandya QA/QC Supervisor at 9:38 am, Aug 29, 2024 2.1



## 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.

N. N. Pandya Signature\_

APPROVED

By Nimisha Pandya QA/QC Supervisor at 9:38 am, Aug 29, 2024



## 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 df The analysis of SVOCMS Group6 was based on method 8270E and extraction was done based on method 3510.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria 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 Benzaldehyde[0%],this compound did not meet the NJDKQP criteria and in-house criteria, while Fluoranthene[132%], this compound did not meet the NJDKQP criteria but met the in-house criteria. due to matrix interference. No corrective action is required.

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 but met the in-house criteria, to matrix interference. No corrective action is required.

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:**

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:**

N. N. Pandya

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\_

APPROVED

By Nimisha Pandya QA/QC Supervisor at 9:38 am, Aug 29, 2024



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 # 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, Strontium, Titanium due to matrix interference.

The Matrix Spike Duplicate (923-K1-WS-080124MSD) analysis met criteria for all samples except for Silver, Strontium, Titanium due to matrix interference.

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

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

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

The data package has been revised due to the Analytical Method changed for Metals as per client request.

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

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

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

N. N. Pandya Signature\_

**APPROVED** 

By Nimisha Pandya QA/QC Supervisor at 9:39 am, Aug 29, 2024



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 # 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\_

N. N. Pandya

**APPROVED** 

By Nimisha Pandya QA/QC Supervisor at 9:39 am, Aug 29, 2024

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#### 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".
Е	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

Completed

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

1st Level QA Review Signature:

SOHIL JODHANI

N. N. Pandya

Date: 08/27/2024

**APPROVED** By Nimisha Pandya QA/QC Supervisor at 9:39 am, Aug 29, 2024

2nd Level QA Review Signature:



13.7

#### Hit Summary Sheet SW-846

				511-040				
SDG No.:	P3467							В
Client:	JACOBS Engineer	ring Group, Ind	с.					С
_								D
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				

Total Concentration:



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Revised



A B C D



# 5

A B C

D

Report	of Analysis
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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
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
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	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
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

Revised



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
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

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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
76-13-1	1,1,2-Trichlorotrifluoroethane	0.25	U	0.25	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
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	Ū	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

B C

D

5



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
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

OrderID: Client: Contact:	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			08/02/24		00/14/24	08/02/24
P3467-02	TB-03-080224	Water	VOCMS Group6	8260-Low 8260-Low	08/02/24		08/14/24	08/02/24



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	В	
- 1	-	

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#### Hit Summary Sheet SW-846

SDG No.:	P3467				
Client:	JACOBS Engine	ering 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	





Revised

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A B C D



		Report	t of Anal	ysis			
Client:	JACOBS Engineerir	g Group, Inc.		D	ate Collected:	08/02/24	
Project:	Former Schlumberge	er Site Princeton NJ	ſ	D	ate Received:	08/02/24	
Client Sample ID	919-J-WS-080224			S	DG No.:	P3467	
Lab Sample ID:	P3467-01				fatrix:	Water	
Analytical Metho					6 Solid:	0	
Sample Wt/Vol:	950 Units:	mL		F	inal Vol:	1000	uL
Soil Aliquot Vol:		uL		Т	est:	SVOCM	S Group3
Extraction Type :		Decan	ted : N	L	evel :	LOW	
Injection Volume	:	GPC Factor :	1.0	G	PC Cleanup :	N	PH :
Prep Method :	SW3510C				1		
		<b>D D</b>					D
File ID/Qc Batch:	Dilution:	Prep Date		Date Anal	lyzed	Prep Batch I	D
BN033278.D	1	08/05/24 11	1:14	08/06/24	17:59	PB162490	
CAS Number	Parameter	Conc.	Qualifier	MDL		LOQ / CRQL	Units
TARGETS							
91-20-3	Naphthalene	0.030	U	0.030		0.11	ug/L
91-57-6	2-Methylnaphthalene	0.030	U	0.030		0.11	ug/L
208-96-8	Acenaphthylene	0.020	U	0.020		0.11	ug/L
83-32-9	Acenaphthene	0.020	U	0.020		0.11	ug/L
86-73-7	Fluorene	0.020	U	0.020		0.11	ug/L
85-01-8	Phenanthrene	0.020	U	0.020		0.11	ug/L
120-12-7	Anthracene	0.030	U	0.030		0.11	ug/L
206-44-0	Fluoranthene	0.020	U	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					(1 = 0)		
7297-45-2	2-Methylnaphthalene-d10	0.36		30 (30) - 150		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 (30) - 150		115%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		30 (11) - 130		85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		30 (10) - 130		91%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	30 (54) - 130	(171)	138%	SPK: 0.4
INTERNAL STANI		2.62					
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

6420



		A
		В
Date Collected:	08/02/24	
Date Received:	08/02/24	С
SDG No.:	P3467	D
Matrix:	Water	
% Solid:	0	
Final Vol:	1000 uL	
Test:	SVOCMS Group3	

Client:	JACOBS I	Engineering	Group, Inc.		Date	Collected:	08/02/24	
Project:	Former Sc	hlumberger S	Site Princeton NJ		Date	Received:	08/02/24	
Client Sample ID	D: 919-J-WS-	080224			SDG	No.:	P3467	
Lab Sample ID:	P3467-01				Matu	ix:	Water	
Analytical Metho	od: SW8270SI	M			% Se	olid:	0	
Sample Wt/Vol:	950	Units: n	nL		Fina	l Vol:	1000	uL
Soil Aliquot Vol:		u	L		Test		SVOCMS Group	53
Extraction Type	:		Decan	ted : N	Leve	el :	LOW	
Injection Volume	:		GPC Factor :	1.0	GPC	Cleanup : N	PH :	
Prep Method :	SW3510C							
File ID/Qc Batch:	Dilution:		Prep Date		Date Analyze	ed F	rep Batch ID	
File ID/Qc Batch: BN033278.D	Dilution: 1		Prep Date 08/05/24 11	:14	Date Analyze 08/06/24 17:		rep Batch ID B162490	
	Dilution: 1 Parameter		-	:14 Qualifier	-	59 F	-	Units
BN033278.D	1		08/05/24 11		08/06/24 17:	59 F	PB162490	Units

- 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



D

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# LAB CHRONICLE

OrderID: Client: Contact:	P3467OrderDate:JACOBS Engineering Group, Inc.Project:Mary I. MurphyLocation:			-	8/2/2024 4:30:0 Former Schlum D21,VOA Ref. <del>3</del>	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
			SVOCMS Group3	8270-Modifie d		08/05/24	08/06/24	



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В	

7

#### Hit Summary Sheet SW-846

SDG No.:	P3467				
Client:	JACOBS Engine	ering 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	





Revised



A B C D



7

		Repor	t of Ana	lysis			
Client:	JACOBS Engineeri	ng Group, Inc.			Date Collected:	08/02/24	
Project:	Former Schlumberg	ger Site Princeton NJ	I		Date Received:	08/02/24	
Client Sample ID		, ,			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	ited : N	N	Level :	LOW	
Injection Volume	2:	GPC Factor :	1.0		GPC Cleanup :	Ν	PH :
Prep Method :	SW3510C						
File ID/Qc Batch:	Dilution:	Prep Date		Data	Analyzed	Prep Batch I	D
			0.45		-		D
BF138922.D	1	08/05/24 10	0:45	08/10	)/24 21:25	PB162489	
CAS Number	Parameter	Conc.	Qualifier	MDL		LOQ / CRQL	Units
FARGETS 110-86-1	Pyridine	1.60	U	1.60		5.30	ug/L
.00-52-7	Benzaldehyde	4.20	U	4.20		3.30 10.5	ug/L ug/L
95-48-7	2-Methylphenol	4.20 1.20	U U	4.20 1.20		5.30	
							ug/L
98-86-2	Acetophenone	1.20	U	1.20		5.30	ug/L
5794-96-9	3+4-Methylphenols	1.20	U	1.20		10.5	ug/L
8-95-3	Nitrobenzene	1.30	U	1.30		5.30	ug/L
20-83-2	2,4-Dichlorophenol	0.93	U	0.93		5.30	ug/L
01-20-3	Naphthalene	1.10	U	1.10		5.30	ug/L
37-68-3	Hexachlorobutadiene	1.30	U	1.30		5.30	ug/L
01-57-6	2-Methylnaphthalene	1.20	U	1.20		5.30	ug/L
8-06-2	2,4,6-Trichlorophenol	0.94	U	0.94		5.30	ug/L
5-95-4	2,4,5-Trichlorophenol	1.10	U	1.10		5.30	ug/L
208-96-8	Acenaphthylene	1.10	U	1.10		5.30	ug/L
3-32-9	Acenaphthene	0.85	U	0.85		5.30	ug/L
32-64-9	Dibenzofuran	0.98	U	0.98		5.30	ug/L
6-73-7	Fluorene	1.00	U	1.00		5.30	ug/L
18-74-1	Hexachlorobenzene	1.20	U	1.20		5.30	ug/L
7-86-5	Pentachlorophenol	1.90	U	1.90		10.5	ug/L
5-01-8	Phenanthrene	0.94	U	0.94		5.30	ug/L
6-74-8	Carbazole	1.20	U	1.20		5.30	ug/L
4-74-2	Di-n-butylphthalate	1.50	U	1.50		5.30	ug/L
06-44-0	Fluoranthene	1.40	U	1.40		5.30	ug/L
29-00-0	Pyrene	1.10	U	1.10		5.30	ug/L
6-55-3	Benzo(a)anthracene	0.99	U	0.99		5.30	ug/L
18-01-9	Chrysene	0.91	U	0.91		5.30	ug/L
17-81-7	Bis(2-ethylhexyl)phthalate	2.00	U	2.00		5.30	ug/L
05-99-2	Benzo(b)fluoranthene	1.20	U	1.20		5.30	ug/L
07-08-9	Benzo(k)fluoranthene	1.30	U	1.30		5.30	ug/L
207-00-9 20.22.9		1.50	U	1.00		5.30	ug/ L/

50-32-8

Benzo(a)pyrene

U

1.80

1.80

Revised

ug/L

5.30



7

		]	Report	of Anal	ysis			
Client:	JACOBS Engineer	ing Group, I	inc.			Date Collected:	08/02/24	
Project:	Former Schlumber	ger Site Prir	ceton NJ			Date Received:	08/02/24	
Client Sample ID	: 919-J-WS-080224					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 :			Decant	ed: N		Level :	LOW	*
Injection Volume	:	GPC	Factor :	1.0		GPC Cleanup :	Ν	PH :
Prep Method :	SW3510C					_		
File ID/Qc Batch:	Dilution:	Pr	ep Date		Date	Analyzed	Prep Batch I	D
BF138922.D	1	08	/05/24 10	:45	08/10	0/24 21:25	PB162489	
CAS Number	Parameter	Co	onc.	Qualifier	MDL		LOQ / CRQL	Units
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	(	).91	U	0.91		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	DARDS					
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			

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- LOD = Limit of Detection
- E = Value Exceeds Calibration Range
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- 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:	P3467 JACOBS Engineering Group, Inc. Mary I. Murphy			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
			SVOCMS Group3	8270-Modifie		08/05/24	08/06/24	
			SVOCMS Group6	d 8270E		08/05/24	08/10/24	



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#### Hit Summary Sheet SW-846

SDG No.:	P3467			Order ID:		P3467		
Client:	JACOBS Engineering Group, I	nc.		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	Tin	0.51	J	0.12	5.00	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
P3467-01	919-J-WS-080224	Water	Strontium	113		0.35	1.00	ug/L
P3467-01	919-J-WS-080224	Water	Titanium	27.8		0.26	5.00	ug/L

Revised

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Revised

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A B C D



ClientJACOBS Engineering Gloup, Inc.Date Collected.08/02/24Project:Former Schlumberger Site Princeton NJDate Received:08/02/24Client Sample ID:919-J-WS-080224SDG No.:P3467Lab Sample ID:P3467-01Matrix:WaterLevel (low/med):low% Solid:0	Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/02/24	
Client Sample ID:919-J-WS-080224SDG No.:P3467Lab Sample ID:P3467-01Matrix:Water					
Lab Sample ID:P3467-01Matrix:Water	Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/02/24	
	Client Sample ID:	919-J-WS-080224	SDG No.:	P3467	
Level (low/med): low % Solid: 0	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	
7439-98-7	Molybdenum	0.93	U	1	0.93	5.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
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
7440-24-6	Strontium	113	Ν	1	0.35	1.00	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
7440-31-5	Tin	0.51	J	1	0.12	5.00	ug/L	08/23/24 15:00	08/25/24 18:00	SW6020	3010A
7440-32-6	Titanium	27.8	Ν	1	0.26	5.00	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			
MDL = Methodologiest MDL = Limit of D = Dilution	of Quantitation od Detection Limit	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

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B C

D



# A

# LAB CHRONICLE

OrderID: Client: Contact:	P3467 JACOBS Engineering Group, II Mary I. Murphy	nc.		OrderDate: Project: Location:	8/2/2024 4:30:0 Former Schlum D21,VOA Ref. #	berger Site Pri	inceton NJ		
LabID	LabID ClientID		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 08/12/24 6020B 08/23/24				08/13/24 08/25/24	





Revised



В



# 9

# **Report of Analysis**

Client:	JACOBS Engineering Group,	Inc.	Date Collected	d: 08/02/24 13:25	
Project:	Former Schlumberger Site Pri	nceton NJ	Date Received	d: 08/02/24	
Client Sample ID:	919-J-WS-080224		SDG No.:	P3467	
Lab Sample ID:	P3467-01		Matrix:	WATER	
			% Solid:	0	
Parameter	Conc. Qua. DF MDL	LOQ / CRQL	Units Prep Dat	te Date Ana. Ana Met.	
Dissolved Hexavalent Chromium	0.0030 U 1 0.0030	0.010	mg/L	08/03/24 08:44 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



# Α

С

# LAB CHRONICLE

OrderID: Client: Contact:	P3467 JACOBS Engineering Group, I Mary I. Murphy	nc.		OrderDate: Project: Location:	ct: Former Schlumberger Site Princeton NJ							
LabID	ClientID	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

10



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

www.chemtech.net

CHEMTECH PROJECT NO. P3467 QUOTE NO. 10 COC Number 2041309

10.1

	CLIENT INFORMATION	CLIENT PROJECT INFORMATION							CLIENT BILLING INFORMATION									
COMPANY:	REPORT TO BE SENT TO:	PROJE		IAME	ste	PIC					BILL	то: 🆊	lany	Hura	hy		PO#:	
ADDRESS:					Z LOC/	TION:	muceh	is In	chin		RESS:	1	1	1				
CITY MOW						ary Mi				<i>′</i>	CITY					STAT	Έ:	ZIP:
	John Ynfante					y @ Jag					ATTE	NTION:				РНО	NE:	
	1) 41 4 - 1719 FAX:			(	'									۲	ANA	ALYSIS	The second se	
	DATA TURNAROUND INFORMATION	PHONE.	HONE: (26) 936-0586 FAX:															
FAX (RUSH) HARDCOPY (D/ EDD:	ATA PACKAGE):DAYS*DAYS*	Level     Level	DATA DELIVERABLE INFORMATION         Level 1 (Results Only)         Level 4 (QC + Full Raw Data)         Level 2 (Results + QC)         NJ Reduced         US EPA CLP         User         NYS ASP A         NYS ASP A															
	VED BY CHEMTECH RDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS	+ Ra EDD F	w Data FORM	/		Other		1	2	5 <sup>10</sup> 3	M1 4	6 5	6	/7	8	9		
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAM TY dwo			APLE ECTION TIME	# OF BOTTLES	A/E		₿/E 3	PRE	SERVA	TIVES 6	7	8	9		MMENTS y Preservatives D-NaOH E-ICE F-OTHER
1.	919-J-WS-080221	WS		X	8/2/24	1325	8	2	4	1	1			,			U HEOUT	
2.	TB-03-080224	DI			8/24		1	1	-				1					
3.						1.200												
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.		MENTER	DEL	0.11/														
RELINQUISHED BY 1. RELINQUISHED BY 2.	Y SAMPLER: DATE/TIME: RECEIVED BY:	$\sim$	-2-	62	Condition Commer	ME SAMP ons of bottles hts: Sec d ECC ectra	ettach Me	s a recei d ta ta/s	64 6	compliant v req	vired	N COMPLI analy	ant or Its h	IER DE		- U6CS	Eco-	° SVDZ\$ <sub>1</sub>
2 PC	Y SAMPLEN: DATE/TIME/74 RECEIVED BY: 3. Multe Chemica	IDN	Page	of			ECH:	Hand D Pick	ed Up		ther ld Samp	ling			Shipmen Q YES	t Complete		
P3467	WHITE - CHEMTEC	DI GOPY FOF	1 HEIU	ARIN TC	GLIENT	42 of 4	/v - CHEN . <b>4</b>	ITECH CO	УРY	PINK -	SAMPLE	R COPY						Re



# 10 10.2

#### 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



Χ.

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 :			
Client Name : JACOBS Engineering Grou		<b>Project Name :</b>		Former Schlumberger Site	E	evel 4						
Clier	nt Contact :	Mary I. M	urphy		Receive	DateTime :	8/2/2024 12:00:00 AM		EDD Type : C	H2MHILL		
Inve	oice Name :	JACOBS	Engineering Grou		Purch	ase Order :	15:45	Ha	rd 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	80224	Water	08/02/2024	15:05						
							VOCMS Group6		8260-Low	10 Bus. Days		

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

8.50 Ref 4 **Received By :** Date / Time : 8 5/24

Storage Area: VOA Refridgerator Room

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