

## **DATA PACKAGE**

METALS

**PROJECT NAME : FORMER SCHLUMBERGER STC PTC SITE D3868221**

**JACOBS ENGINEERING GROUP, INC.**

**412 Mt. Kemble Ave**

**Downtown Building**

**Morristown, NJ - 07960**

**Phone No: 9732670555**

**ORDER ID : Q1769**

**ATTENTION : John Ynfante**



**Laboratory Certification ID # 20012**



1) Signature Page	3
2) Case Narrative	4
2.1) Metals-MS- Case Narrative	4
3) Qualifier Page	6
4) QA Checklist	7
5) Metals-MS Data	8
6) Shipping Document	16
6.1) CHAIN OF CUSTODY	17
6.2) Lab Certificate	18

1
2
3
4
5
6

## Cover Page

**Order ID :** Q1769

**Project ID :** Former Schlumberger STC PTC Site D3868221

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

### Lab Sample Number

Q1769-02  
Q1769-03  
Q1769-04  
Q1769-08  
Q1769-09  
Q1769-10  
Q1769-11

### Client Sample Number

S-875-K1-SO-1.0-1.5-040925  
S-874-K1-SO-1.0-1.5-040925  
S-874-K1-SO-1.0-1.5-040925-FD  
EB01-040925  
S-873-K1-SO-1.0-1.5-040925  
S-873-K1-SO-1.0-1.5-040925MS  
S-873-K1-SO-1.0-1.5-040925MSD

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: 5/15/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.**

**Project Name: Former Schlumberger STC PTC Site D3868221**

**Project # N/A**

**Order ID # Q1769**

**Test Name: Metals Group4**

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

6 Solid samples were received on 04/09/2025.

1 Water sample was received on 04/09/2025.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Metals Group4. This data package contains results for Metals Group4.

### **C. Analytical Techniques:**

The analysis of Metals Group4 was based on method 6020B and digestion based on method 3050 (soils) and 3010 (waters).

### **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 (S-873-K1-SO-1.0-1.5-040925MS) analysis met criteria for all samples except for Silver due to matrix interference.

The Matrix Spike Duplicate (S-873-K1-SO-1.0-1.5-040925MSD) analysis met criteria for all samples except for Silver 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:**

All samples analyzed and reported with straight 5X dilution because of soil sample matrix was very smelly and possible contains organic chemical interference which causes enhancement effect to the internal standard causing QC failure and possible not the correct concentration of required analyte.

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.



The projects has been revised due to sample EB01-040925 (lab ID Q1769-08) was analyzed and data were reported by 6010D instead of 6020B, and Client ID updated for Q1769-02, Q1769-03, Q1769-04, Q1769-09, Q1769-10 and Q1769-11 as per client request.

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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:

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

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1769

Completed

For thorough review, the report must have the following:

#### GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

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

✓

#### COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

#### CHAIN OF CUSTODY:

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

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

#### ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 05/15/2025

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

<b>SDG No.:</b>	Q1769	<b>Order ID:</b>	Q1769
<b>Client:</b>	JACOBS Engineering Group, Inc.	<b>Project ID:</b>	Former Schlumberger STC PTC Site D386

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
<b>Client ID :</b> Q1769-02	<b>S-875-K1-SO-1.0-1.5-040925</b> S-875-K1-SO-1.0-1.5-040925	SOIL	Silver	6.96	D	0.078	0.30	mg/Kg
<b>Client ID :</b> Q1769-03	<b>S-874-K1-SO-1.0-1.5-040925</b> S-874-K1-SO-1.0-1.5-040925	SOIL	Silver	37.2	D	0.092	0.35	mg/Kg
<b>Client ID :</b> Q1769-04	<b>S-874-K1-SO-1.0-1.5-040925-FD</b> S-874-K1-SO-1.0-1.5-040925-FD	SOIL	Silver	44.6	D	0.096	0.37	mg/Kg
<b>Client ID :</b> Q1769-09	<b>S-873-K1-SO-1.0-1.5-040925</b> S-873-K1-SO-1.0-1.5-040925	SOIL	Silver	13.7	D	0.093	0.36	mg/Kg





# SAMPLE DATA

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/09/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/09/25
Client Sample ID:	S-875-K1-SO-1.0-1.5-040925	SDG No.:	Q1769
Lab Sample ID:	Q1769-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	78.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-22-4	Silver	6.96	DN	5	0.078	0.30	mg/Kg	04/10/25 13:05	04/11/25 14:21	6020B	SW3050

Color Before:	Black	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group4			

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/09/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/09/25
Client Sample ID:	S-874-K1-SO-1.0-1.5-040925	SDG No.:	Q1769
Lab Sample ID:	Q1769-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	61.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-22-4	Silver	37.2	DN	5	0.092	0.35	mg/Kg	04/10/25 13:05	04/11/25 14:24	6020B	SW3050

Color Before:	Black	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group4			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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

OR = Over Range

N =Spiked sample recovery not within control limits

### Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/09/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/09/25
Client Sample ID:	S-874-K1-SO-1.0-1.5-040925-FD	SDG No.:	Q1769
Lab Sample ID:	Q1769-04	Matrix:	SOIL
Level (low/med):	low	% Solid:	62.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-22-4	Silver	44.6	DN	5	0.096	0.37	mg/Kg	04/10/25 13:05	04/11/25 14:27	6020B	SW3050

Color Before:	Black	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group4			

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/09/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/09/25
Client Sample ID:	EB01-040925	SDG No.:	Q1769
Lab Sample ID:	Q1769-08	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.
7440-22-4	Silver	0.060	U	1	0.060	1.00	ug/L	05/05/25 11:20	05/13/25 16:55	6020B	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group4			

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
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 N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/09/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/09/25
Client Sample ID:	S-873-K1-SO-1.0-1.5-040925	SDG No.:	Q1769
Lab Sample ID:	Q1769-09	Matrix:	SOIL
Level (low/med):	low	% Solid:	67.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-22-4	Silver	13.7	DN	5	0.093	0.36	mg/Kg	04/10/25 13:05	04/11/25 14:31	6020B	SW3050

Color Before:	Black	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group4			

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N =Spiked sample recovery not within control limits

## LAB CHRONICLE

<b>OrderID:</b>	Q1769	<b>OrderDate:</b>	4/9/2025 4:31:06 PM
<b>Client:</b>	JACOBS Engineering Group, Inc.	<b>Project:</b>	Former Schlumberger STC PTC Site D3868221
<b>Contact:</b>	John Ynfante	<b>Location:</b>	L31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
<b>Q1769-02</b>	<b>S-875-K1-SO-1.0-1.5-040925</b>	<b>SOIL</b>			<b>04/09/25</b>			<b>04/09/25</b>
			Metals Group4	6020B		04/10/25	04/11/25	
<b>Q1769-03</b>	<b>S-874-K1-SO-1.0-1.5-040925</b>	<b>SOIL</b>			<b>04/09/25</b>			<b>04/09/25</b>
			Metals Group4	6020B		04/10/25	04/11/25	
<b>Q1769-04</b>	<b>S-874-K1-SO-1.0-1.5-040925-FD</b>	<b>SOIL</b>			<b>04/09/25</b>			<b>04/09/25</b>
			Metals Group4	6020B		04/10/25	04/11/25	
<b>Q1769-08</b>	<b>EB01-040925</b>	<b>Water</b>			<b>04/09/25</b>			<b>04/09/25</b>
			Metals Group4	6020B		05/05/25	05/13/25	
<b>Q1769-09</b>	<b>S-873-K1-SO-1.0-1.5-040925</b>	<b>SOIL</b>			<b>04/09/25</b>			<b>04/09/25</b>
			Metals Group4	6020B		04/10/25	04/11/25	



# SHIPPING DOCUMENTS



CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Jacobs  
ADDRESS: 412 Mt Kemble Ave Suite 100  
CITY Morrisstown STATE: NJ ZIP: 07960  
ATTENTION: John Yufante John.Yufante@Jacobs.com  
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC  
PROJECT NO.: 03868221 LOCATION: Pinebar Junction  
PROJECT MANAGER: Mary Murphy  
e-mail: Mary.Murphy@Jacobs.com  
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:  
ADDRESS:  
CITY STATE: ZIP:  
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard DAYS\*  
HARDCOPY (DATA PACKAGE): DAYS\*  
EDD: DAYS\*

\*TO BE APPROVED BY CHEMTECH  
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)  
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP  
☒ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B  
+ Raw Data ☐ Other  
☐ EDD FORMAT

1. 2. 3. 4. 5. 6. 7. 8. 9.  
Ag (60208) SPLP Ag (60208/132) (HOLD) Ag (60208)

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		E	E	B/E							
1.	S-878-KI-SO-1.0-1.5-040925	SO	X		4/9/25	1005	1	✓	✓								HOLD!!
2.	S-875-KI-SO-1.0-1.5-040925	SO	X		4/9/25	1030	1	✓	✓								HOLD SPLP!
3.	S-874-KI-SO-1.0-1.5-040925	SO	X		4/9/25	1100	1	✓	✓								HOLD SPLP!
4.	S-874-KI-SO-1.0-1.5-040925-FD	SO	X		4/9/25	1105	1	✓	✓								HOLD SPLP!
5.	S-877-KI-SO-1.0-1.5-040925	SO	X		4/9/25	1235	1	✓	✓								HOLD!!
6.	S-873-KI-SO-1.0-1.5-040925	SO	X		4/9/25	1255	3	✓	✓								MS/MSD HOLD SPLP!
7.	S-876-KI-SO-1.0-1.5-040925	SO	X		4/9/25	1350	1	✓	✓								HOLD!!
8.	EB01-040925	DI	X	X	4/9/25	1420	1			✓							
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>4-9-25 1637</u>	RECEIVED BY: 1. <u>[Signature]</u> <u>4-9-25 1637</u>
RELINQUISHED BY SAMPLER: 2. <u>[Signature]</u>	DATE/TIME:	RECEIVED BY: 2. <u>[Signature]</u>
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>1800 4-9-25</u>	RECEIVED BY: 3. <u>[Signature]</u>

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.3 °C

Comments: Hold all SPLP analysis  
Hold entire sample for S-876, S-877, S-878

Temp 3.3°C Adjustment Factor + 1 DTR Gun #1.

Page 1 of 1 CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete  
☐ YES ☐ NO

### Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488