

# **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** 







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# **Cover Page**

**Order ID:** Q1769

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

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

#### **Lab Sample Number**

#### **Client Sample Number**

Q1769-02	S-875-K1-SO-1.0-1.5-040925
Q1769-03	S-874-K1-SO-1.0-1.5-040925
Q1769-04	S-874-K1-SO-1.0-1.5-040925-FD
Q1769-08	EB01-040925
Q1769-09	S-873-K1-SO-1.0-1.5-040925
Q1769-10	S-873-K1-SO-1.0-1.5-040925MS
Q1769-11	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 :

By Nimisha Pandya, QA/QC Supervisor at 3:41 pm, May 15, 2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

5/15/2025

Date:



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

# 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.

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.

APPROVED
Signature\_\_\_\_\_\_\_By Nimisha Pandya, QA/QC Supervisor at 3:41 pm, May 15, 2025



#### DATA REPORTING QUALIFIERS- INORGANIC

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

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



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#### APPENDIX A

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

Project #: Q1769

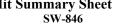
	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page)	<u> </u>
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	<u>√</u> <u>√</u> <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	<u>*</u> <u>*</u> <u>*</u>
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?	<del>'</del> <del>'</del> <del>'</del> <del>'</del> <del>'</del> <del>'</del> <del>'</del> <del>'</del>
Does the case narrative summarize all QC failure?	<u> </u>
All runlogs and manual integration are reviewed for requirements	<u> </u>
All manual calculations and /or hand notations verified	<u> </u>

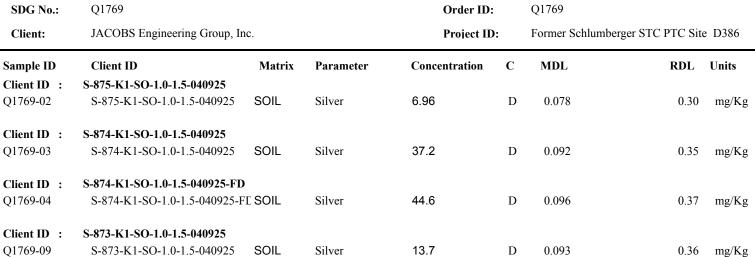
QA Review Signature: SOHIL JODHANI Date: 05/15/2025





**Hit Summary Sheet** 















C

# SAMPLE DATA



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# **Report of Analysis**

JACOBS Engineering Group, Inc. Client: 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): % Solid: 78.5 low

Cas	Parameter	Conc.	Qua. DF MDL	LOQ / CRQL	Units(Dry W	/eigh <b>P</b> )rep 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



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# **Report of Analysis**

JACOBS Engineering Group, Inc. Client: 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): % Solid: 61.8 low

Cas	Parameter	Conc.	Qua. DF MDL	LOQ / CRQL	Units(Dry W	/eigh <b>P</b> )rep 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



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# **Report of Analysis**

JACOBS Engineering Group, Inc. Client: 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): % Solid: 62.7 low

Cas	Parameter	Conc.	Qua. DF MDL	LOQ / CRQL	Units(Dry V	Veigh <b>P</b> )rep 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



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# **Report of Analysis**

JACOBS Engineering Group, Inc. Client: 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): % Solid: 0 low

Cas	Parameter	Conc.	Qua. DI	F 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.

OR = Over Range



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# **Report of Analysis**

JACOBS Engineering Group, Inc. Client: 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): % Solid: 67.5 low

Cas	Parameter	Conc.	Qua. DF MDL	LOQ / CRQL	Units(Dry W	Veigh <b>P</b> )rep 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



LAB CHRONICLE

Q1769 4/9/2025 4:31:06 PM OrderID: OrderDate:

JACOBS Engineering Group, Inc. Former Schlumberger STC PTC Site D3868221 Client: Project:

John Ynfante Location: L31 Contact:

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1769-02	S-875-K1-SO-1.0-1.5- 040925	SOIL			04/09/25			04/09/25
	040923		Metals Group4	6020B		04/10/25	04/11/25	
Q1769-03	S-874-K1-SO-1.0-1.5- 040925	SOIL			04/09/25			04/09/25
			Metals Group4	6020B		04/10/25	04/11/25	
Q1769-04	S-874-K1-SO-1.0-1.5- 040925-FD	SOIL			04/09/25			04/09/25
			Metals Group4	6020B		04/10/25	04/11/25	
Q1769-08	EB01-040925	Water			04/09/25			04/09/25
			Metals Group4	6020B		05/05/25	05/13/25	
Q1769-09	S-873-K1-SO-1.0-1.5- 040925	SOIL			04/09/25			04/09/25
			Metals Group4	6020B		04/10/25	04/11/25	

Q1769 15 of 18 Revised



# SHIPPING DOCUMENTS



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

ALLIANCE PROJECT	NO. Q1769
QUOTE NO.	01.01

coc Number 2046604

	CLIENT INFORMATION	CLIENT PROJECT INFORMATION						CLIENT BILLING INFORMATION										
COMPANY:	TACOOS	PROJE	CTI	NAM	E: Sta	PTC					BILL 1	o: M	ary M	Murp	hy		PO#:	
ADDRESS: 4	112 Mt Kemble Ave Suite 100	PROJEC	CT NO	o.: 6	3868221	LOCA	TION:	Rincelo	in June	tion	ADDR	ESS:			/			
CITY MOVE	STATE: NJ ZIP: 07460	PROJEC	CT M	ANAC	BER: Mo	sy Mu	phy				CITY				STAT	ΓE:	ZIP:	
ATTENTION:	ATTENTION: John Infante John. Yntante Jacobs.com				e-mail: Mary. Murphy @ Jacobs. win						ATTE	NTION:				PHC	NE:	
PHONE:	FAX:	PHONE		1			\X:-								ANA	LYSIS		
	DATA TURNAROUND INFORMATION	THONE								1	33	ļ	ļN		الإلكارا			
HARDCOPY (D. EDD:*TO BE APPRO	DAYS*  ATA PACKAGE):  DAYS*  DAYS*  VED BY CHEMTECH  RDCOPY TURNAROUND TIME IS 10 BUSINESS	Level	1 (Re 2 (Re 3 (Re w Dai	esults esults esults ta)	Only)	_evel 4 (QC	+ Full F	Raw Data	) P	3019 3019	(40)08h	THE S	/6	/	/8	//9	//	
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ALLIANCE SAMPLE	PROJECT	SAMPLE	TY	PE		CTION	OF BOTTLES	E	E	BE							A-HCI	y Preservatives D-NaOH
ID	SAMPLE IDENTIFICATION	MATRIX	COMP	GRAB	DATE	TIME	# 0F E	1	2	3	4	5	6	7	8	9	B-HN03 C-H2SO4	E-ICE F-OTHER
1.	5-878-KI-50-1.0-1.5-040125	50	X		4/4/25	1005		/	/								HOLD!	
2.	5-875-K1-50-1.0-1.5-040925	So	X		4/4/25		1	/	/								HOLD SI	LP
3.	5-874-KI-50-1.0-1.5-04925	50	X		4/4/25	1100	1	/	/								HOLD S	PLP!
4.	5-874-KI-SO-1.0-1.5-04025-FD	50	X		4/9/25	1105	1	/	/								HOLD S	PLP!
5.	5-877-11-50-1.0-1.5-04675	50	×		4/9/25	1235	1	/	/								HOLD!	
6.	5-873-KI-SO-1.0-1.5-040925	SO	X		4/9/25	1255	9-3	<b>/</b>	/									HOLD SPLP!
7.	5-876-K1-50-1.0-1.5-040975	SO	X		4/4/25	1350	1	/	/								HOLDII	
8.	EB01-040925	Di	K.	X	4/9/25	1420	i			/								
9.						rā.												
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	SAMPLE CUSTODY MUST BE DOC Y SAMPLER: DATE/TIME: 1637 RECEIVED BY:			150												_	-	
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# Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
O constituent	DIL 2022
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