

ANALYTICAL RESULTS SUMMARY

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 : Q2059

ATTENTION : John Ynfante



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q2059

Project ID : Former Schlumberger STC PTC Site D3868221

Client : JACOBS Engineering Group, Inc.

Lab Sample Number

Q2059-01
Q2059-02
Q2059-03

Client Sample Number

S-875-K1-SO-1.0-1.5-040925
S-874-K1-SO-1.0-1.5-040925
S-873-K1-SO-1.0-1.5-040925

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: 5/23/2025

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 # Q2059

Test Name: SPLP MetalGroup3

A. Number of Samples and Date of Receipt:

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

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: SPLP Extraction and SPLP MetalGroup3. This data package contains results for SPLP MetalGroup3.

C. Analytical Techniques:

The analysis of SPLP MetalGroup3 was based on method 6020B and digestion based on method 3010 (Water).

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-875-K1-SO-1.0-1.5-040925MS) analysis met criteria for all samples except for Silver due to Chemical Interference during Digestion Process.

The Matrix Spike Duplicate (S-875-K1-SO-1.0-1.5-040925MSD) 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:

The Post Digest Spike (S-875-K1-SO-1.0-1.5-040925A) analysis met criteria for all samples except for Silver due to unknown chemical interferences of matrix with the addition of spike amount after digestion and before analysis , matrix has suppression effect during addition of spike.

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_____

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2059

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: 05/23/2025

Hit Summary Sheet
SW-846

SDG No.:	Q2059	Order ID:	Q2059
Client:	JACOBS Engineering Group, Inc.	Project ID:	Former Schlumberger STC PTC Site D386

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : S-875-K1-SO-1.0-1.5-040925								
Q2059-01	S-875-K1-SO-1.0-1.5-040925	Water	Silver	7.10	D	0.30	5.00	ug/L
Client ID : S-874-K1-SO-1.0-1.5-040925								
Q2059-02	S-874-K1-SO-1.0-1.5-040925	Water	Silver	19.0	D	0.30	5.00	ug/L
Client ID : S-873-K1-SO-1.0-1.5-040925								
Q2059-03	S-873-K1-SO-1.0-1.5-040925	Water	Silver	2.35	JD	0.30	5.00	ug/L



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.:	Q2059
Lab Sample ID:	Q2059-01	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.
7440-22-4	Silver	7.10	DN	5	0.30	5.00	ug/L	05/20/25 12:10	05/20/25 18:23	6020B	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	SPLP MetalGroup3			

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.:	Q2059
Lab Sample ID:	Q2059-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-22-4	Silver	19.0	DN	5	0.30	5.00	ug/L	05/20/25 12:10	05/20/25 18:16	6020B	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	SPLP MetalGroup3			

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
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 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-873-K1-SO-1.0-1.5-040925	SDG No.:	Q2059
Lab Sample ID:	Q2059-03	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	2.35	JDN	5	0.30	5.00	ug/L	05/20/25 12:10	05/20/25 18:20	6020B	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	SPLP MetalGroup3			

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

OrderID:	Q2059	OrderDate:	5/16/2025 9:52:00 AM
Client:	JACOBS Engineering Group, Inc.	Project:	Former Schlumberger STC PTC Site D3868221
Contact:	John Ynfante	Location:	L51

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2059-01	S-875-K1-SO-1.0-1.5-040925	Water			04/09/25			04/09/25
			SPLP MetalGroup3	6020B		05/20/25	05/20/25	
Q2059-02	S-874-K1-SO-1.0-1.5-040925	Water			04/09/25			04/09/25
			SPLP MetalGroup3	6020B		05/20/25	05/20/25	
Q2059-03	S-873-K1-SO-1.0-1.5-040925	Water			04/09/25			04/09/25
			SPLP MetalGroup3	6020B		05/20/25	05/20/25	



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 (60208/1312) (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 D I R Gun #1.

Page 1 of 1 CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete
☐ YES ☐ NO

From: Ynfante, John <John.Ynfante@jacobs.com>
Sent: Thursday, May 15, 2025 4:37 PM
To: yazmeen
Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q1769.

Importance: High

Caution: The sender of this email could not be verified, which may indicate an impersonation attempt. Verify the email's authenticity with the sender using your organization's trusted contact list before replying or taking further action.

Secured by Check Point

Yazmeen, I see I inadvertently listed 1311 as the method for the SPLP Extraction – it should of course be 1312/6020 for SPLP silver NOT 1311 – hopefully I didn't confuse things with that = please confirm you are proceeding with the SPLP 1312 extraction for the silver on those samples.

Also, can we change that TAT to a 1-week rush TAT?

From: Ynfante, John
Sent: Wednesday, May 14, 2025 12:41 PM
To: 'yazmeen@chemtech.net' <yazmeen@chemtech.net>
Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q1769.

Yazmeen,

I got word back on those SPLP Silver analyses on hold – please analyze the following Princeton soil samples for SPLP Silver (1311/6020A).

Q1769-02 (S-875-KI-SO-1.0-1.5-040925)
 Q1769-03 (S-874-K1-SO-1.0-1.5-040925)
 Q1769-09 (S-873-K1-SO-1.0-1.5-040925)

Make sure they are analyzed by ICP-MS, not ICP-AES. As far as I know standard TAT should be fine – I'll let you know if that is not the case. Let me know if you have any questions. Thanks!

- John Y.

From: Ynfante, John
Sent: Tuesday, May 6, 2025 3:27 PM
To: yazmeen@chemtech.net
Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q1769.

OK thanks. Still waiting on word for which samples will need the SPLP silver – I will check in with the team again.

I'm pretty sure we won't need anything analyzed from Q1790 but yes please continue to hold that one too per your usual policy. Can you tell me how long you normally hold samples before disposing? 30 days after reporting?

From: Yazmeen Gomez <yazmeen@chemtech.net>

Sent: Friday, May 2, 2025 2:47 PM

To: Ynfante, John <John.Ynfante@jacobs.com>

Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q1769.

John,

Sorry for the delayed response.

I have forwarded this over to Mohammad and QA/QC to revise the report, to-report Sample 08 by 6020B.

Confirming we are still holding onto Q1769 samples. We also have samples in q1790 on hold.

Best Regards,



Yazmeen Gomez

Sr. Project Manager

An Alliance Technical Group Company

Main: 908-789-8900

Direct: 908-728-3147

Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092

www.alliancetg.com   

From: Ynfante, John <John.Ynfante@jacobs.com>

Sent: Thursday, May 1, 2025 5:25 PM

To: YAZMEEN@CHEMTECH.NET

Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q1769.

Importance: High

Yazmeen,

I was reviewing this silver data in Q1769 and noticed that the equipment blank EB01-040925 (lab ID Q1769-08) was still analyzed by 6010 instead of 6020 as requested. I'd still like to get that one sample Q1769-08 reanalyzed by 6020 ICP-MS to match the methodology used on the associated soil samples so please have your analyst do that analysis and send out a revised pdf and EDD when available. I'm not sure if this job has been invoiced yet but please just make sure we don't get charged twice for the analysis since we didn't actually want it analyzed by 6010.

Also, I just heard from the project team that we will need to run SPLP Silver on some of the soil samples, but I don't know which ones yet so please confirm that the lab is continuing to hold the soil material for all the soil samples in Q1769 and I will forward you the list of samples we need SPLP Ag on as soon as I get it. Thanks.

- John Y.

From: Ynfante, John

Sent: Thursday, April 10, 2025 6:49 PM

To: YAZMEEN@CHEMTECH.NET; Data-EWR@alliancetg.com

Cc: Ongjoco, Alec <Alec.Ongjoco@jacobs.com>; Dillon, Alexa <Alexa.Dillon@jacobs.com>; Lader, Chelsea <Chelsea.Lader@jacobs.com>; Holmes, Daniel <Daniel.Holmes@jacobs.com>; Reamer, David

<David.Reamer@jacobs.com>; Murphy, Mary <mary.murphy@jacobs.com>; Warren, Melissa
<MELISSA.WARREN@jacobs.com>; Asher, Sarah <Sarah.Asher@jacobs.com>

Subject: RE: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q1769.

Importance: High

Yazmeen,

A few corrections need to be made to this login for Q1769:

1. I noticed EB01-040925 (Q1769-08) was logged in for silver by 6010D for some reason, but it should be run by the same method 6020B being used for the soils as listed on the chain.
2. The login person misinterpreted the “KI” in the soil sample IDs as “KI”. Please change that letter I to a number 1 in the soil sample IDs.
3. The associated chain was not included – I need to get a copy of the chain of custody included with all of these login emails to be able to properly review them.

Please send the revised login (and chain) once the corrections are made. Thanks.

- John Y.

From: Data-EWR@alliantcetg.com <Data-EWR@alliantcetg.com>

Sent: Thursday, April 10, 2025 9:06 AM

To: Ongjoco, Alec <Alec.Ongjoco@jacobs.com>; Dillon, Alexa <Alexa.Dillon@jacobs.com>; Lader, Chelsea
<Chelsea.Lader@jacobs.com>; Holmes, Daniel <Daniel.Holmes@jacobs.com>; Reamer, David
<David.Reamer@jacobs.com>; Ynfante, John <John.Ynfante@jacobs.com>; Murphy, Mary
<Mary.Murphy@jacobs.com>; Warren, Melissa <Melissa.Warren@jacobs.com>; Asher, Sarah
<Sarah.Asher@jacobs.com>

Cc: YAZMEEN@CHEMTECH.NET

Subject: [EXTERNAL] Login Summary Details For Project Former Schlumberger STC PTC Site D3868221-Q1769.

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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