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

Labora	atory Name :	Alliance Technical Group	Client :	JACOBS Engineering Group, Inc.					
Projec	t Location:	Princeton, NJ	Project Number :	D3779922					
Laboratory Sample ID(s): P3475 Sampling Date(s): 8/05/2024									
List DI	KQP Methods U	Jsed (e.g., 8260,8270, et Cetra)	6020B,8082A,8270E						
1	specified QA/O	vtical method referenced in this lal QC performance criteria followed, teria falling outside of acceptable of Known Quality performance star	including the requirement to guidelines, as specified in the		V	Yes		No	
1A	Were the meth	nod specified handling, preservation	on, and holding time requiren	nents met?	V	Yes		No	
1B		Was the EPH method conducted value frespective DKQ methods)	without significant modificatio	ns (see		Yes		No	✓ N/A
2		les received by the laboratory in a he associated chain-of-custody do		at	V	Yes		No	
3	Were samples	received at an appropriate tempe	erature (4±2° C)?		<b>V</b>	Yes		No	□ N/A
4	Were all QA/Q standards ach	C performance criteria specified in nieved?	n the NJDEP DKQP			Yes	$\overline{\checkmark}$	No	
5		ng limits specified or referenced of to the laboratory prior to sample			<b>V</b>	Yes		No	
	b)Were these	reporting limits met?			V	Yes		No	□ N/A
6	results reporte	tical method referenced in this lal ed for all constituents identified in the DKQP documents and/or site-s	the method-specific analyte		V	Yes		No	
7	Are project-spe	ecific matrix spikes and/or laborate	ory duplicates included in this	s data set?	<b>V</b>	Yes		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."

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

# **Cover Page**

Order ID: P3475

**Project ID:** Former Schlumberger Site Princeton NJ

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

## Lab Sample Number Client Sample Number

P3475-01	S-866-N-SO-0-0.5-
P3475-02	S-866-N-SO-1.0-1.5-080524
P3475-03	S-866-N-SO-1.0-1.5-080524MS
P3475-04	S-866-N-SO-1.0-1.5-080524MSD
P3475-05	S-858-K1-SO-1.0-1.5-080524
P3475-06	S-858-K1-SO-1.0-1.5-080524MS
P3475-07	S-858-K1-SO-1.0-1.5-080524MSD

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:		
Signature .	Date:	6/3/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012





## **CASE NARRATIVE**

JACOBS Engineering Group, Inc.

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A Order ID # P3475

**Test Name: SVOCMS Group2** 

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

7 Solid samples were received on 08/05/2024.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Metals Group5, PCB, SVOCMS Group2 and SVOCMS Group5. This data package contains results for SVOCMS Group2.

#### C. Analytical Techniques:

The samples were analyzed on instrument BNA\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe analysis of SVOCMS Group2 was based on method 8270E and extraction was done based on method 3541.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for S-866-N-SO-0-0.5-080524[2-Fluorobiphenyl - 26%, Terphenyl-d14 - 28%], these compounds did not meet the NJDKQP criteria but met the in-house criteria.

The Internal Standards Areas met the acceptable requirements except for S-866-N-SO-1.0-1.5-080524, S-866-N-SO-1.0-1.5-080524MS and S-866-N-SO-1.0-1.5-080524MSD, due to matrix interference, no corrective action is required.

The Retention Times were acceptable for all samples.

The MS {P3475-03MS} with File ID: BF139008.D recoveries met the requirements for all compounds except for Benzo(a)pyrene[132%], this compound did not meet the NJDKQP criteria but met the in-house criteria.

The MSD {P3475-04MSD} with File ID: BF139009.D recoveries met the acceptable requirements except for Benzo(a)anthracene[132%], this compound did not meet the NJDKQP criteria and in-house criteria, due 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 met the requirements .

The Tuning criteria met requirements.

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

This data Package has been revised due to Client Id changed as per client request. The Sample S-866-N-SO-1.0-1.5-080524, have the concentration of target compound below method detection limits; therefore it is not reported as Hit in Form1.

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 <20% 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 > 20% 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.

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$Signature_{\_}$			
Signature			



## CASE NARRATIVE

JACOBS Engineering Group, Inc.

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A

**Chemtech Project # P3475** 

**Test Name: PCB** 

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

7 Solid samples were received on 08/05/2024.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Metals Group5, PCB and SVOCMS Group5. This data package contains results for PCB.

#### C. Analytical Techniques:

The analyses were performed on instrument GCECD\_O. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25  $\mu$ m; Catalogue # 7HM-G017-11. The analysis of PCBs was based on method 8082A and extraction was done based on method 3541.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

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.

#### E. Additional Comments:

This data Package has been revised due to Client Id changed as per client request.

The soil samples results are based on a dry weight basis.

#### **F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.





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## CASE NARRATIVE

**JACOBS Engineering Group, Inc.** 

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A Order ID# P3475

**Test Name: Metals Group5** 

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

7 Solid samples were received on 08/05/2024.

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

According to the Chain of Custody document, the following analyses were requested: Metals Group5, PCB and SVOCMS Group5. This data package contains results for Metals Group5.

## C. Analytical Techniques:

The analysis of Metals Group5 was based on method 6010D and digestion based on method 3050 (soils).

## 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-858-K1-SO-1.0-1.5-080524MS) analysis met criteria for all samples except for Silver due to Chemical interference during Digestion Process.

The Matrix Spike Duplicate (S-858-K1-SO-1.0-1.5-080524MSD) analysis met criteria for all samples except for Silver due to Chemical interference during Digestion Process.

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

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

#### E. Additional Comments:

This Data Package has been Revised due to Client ID Changed as per client Request.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature			
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  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
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
В	<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> <li>Indicates the analyte was found in the blank as well as the sample report as "12 B".</li> </ul>
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.
P	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".
N	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.
A	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





APPENDIX A

## **QA REVIEW GENERAL DOCUMENTATION**

**Project #: P3475** 

	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	<u> </u>
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	<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?	✓
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:	06/03/2025
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