CASE NARRATIVE

JACOBS Engineering Group, Inc.
Project Name: Former Schlumberger Site Princeton NJ
Project # N/A
Chemtech Project # P3671
Test Name: VOCMS Group5

A. Number of Samples and Date of Receipt:
14 Solid samples were received on 08/19/2024.
1 Water sample was received on 08/19/2024.

B. Parameters
According to the Chain of Custody document, the following analyses were requested:
Hexavalent Chromium, Mercury, Metals Group4, SVOCMS Group3, SVOCMS Group5,
TOC, VOCMS Group 4, VOCMS Group3, VOCMS Group5 and VOCMS Group6. This
data package contains results for VOCMS Group5.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_Y were done using GC column Rxi-
624Sil MS, which is 30 meters, 0.25 mm id, 1.4 um df, Restek Cat. #13868. The Trap
was supplied by Supelco, VOCARB 3000, ATOMAX XYZ Concentrator.The analysis of
VOCMS Group5 was based on method 8260D.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for
S-911-K1-SO-0-0.5-081924 [4-Bromofluorobenzene - 51%],
S-911-K1-SO-0.5-1-081924 [4-Bromofluorobenzene - 69%],
S-911-K1-SO-0.5-1-081924RE [4-Bromofluorobenzene - 61%],
S-911-K1-SO-0-0.5-081924-FDRE [4-Bromofluorobenzene - 57%],
S-928-K1-SO-0-0.5-081924RE [4-Bromofluorobenzene - 68%],
S-928-K1-SO-0.5-1-081924RE [4-Bromofluorobenzene - 69%],
S-912-J-SO-0-0.5-081924 [4-Bromofluorobenzene - 57%] and
S-912-J-SO-0-0.5-081924RE [4-Bromofluorobenzene - 55%] these surrogates did not
meet the NJDKQP criteria but met the in-house criteria while

S-928-K1-SO-0.5-1-081924 [1,2-Dichloroethane-d4 - 36%, 4-Bromofluorobenzene -
17%], these compounds did not meet the NJDKQP criteria and in-house criteria,
therefore sample was reanalyzed to confirm the failure and reported.

The Internal Standards Areas met the acceptable requirements except for S-911-K1-SO-0-0.5-081924, S-911-K1-SO-0-0.5-081924RE, S-911-K1-SO-0.5-1-081924, S-911-K1-SO-0.5-1-081924RE, S-911-K1-SO-0-0.5-081924-FD, S-911-K1-SO-0-0.5-081924-FDRE, S-928-K1-SO-0-0.5-081924, S-928-K1-SO-0-0.5-081924RE, S-928-K1-SO-0.5-1-081924, S-928-K1-SO-0.5-1-081924RE, S-912-J-SO-0-0.5-081924 and S-912-J-SO-0-0.5-081924RE, samples were reanalyzed to confirm the failure and reported.

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 15% in the Initial Calibration method (82Y081524S.M) for Bromomethane, Methylene Chloride , Cyclohexane this compound is passing on Linear Regression.

The Continuous Calibration File ID VY019211.D met the requirements except for Bromomethane failing high but no positive hit in associate sample therefore no corrective action taken.

The Tuning criteria met requirements.

E. Additional Comments:
This data package has been revised due to Client ID of Sample# 06 and 07 changed.
This data package has been revised due to parameter list changed.

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

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

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.

Signature_____