SDG NARRATIVE

LAB NAME: CHEMTECH CONSULTING GROUP
CASE: 50876
SDG: A46R9
CONTRACT: 68HERH20D0011
LAB CODE: CHM
CHEMTECH PROJECT: O3505
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
O3505-01	A46R9	1.0
O3505-02	A46T2	1.0
O3505-03	A46T3	1.0
O3505-04	A46X9	1.0
O3505-05	A4716	1.0

05 Water sample was delivered to the laboratory intact on 06/30/2023.

Test requested on the Chain of Custody was Trace-volatile Organic by Method SFAM01.1.

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.1 degree Celsius for the samples received on 06/30/2023.

Discrepancies with tags, jars and/or COC
Issue: The laboratory has an open SDG (A46R9) without Laboratory QC. Laboratory QC is scheduled for water TVOA analysis, however, a sample was not designated on the COC for QC and no extra volume was received. The laboratory would like to proceed without Laboratory QC.

Resolution: Per Region 1, proceed without Laboratory QC. The laboratory should note the issue in the SDG Narrative and proceed with the analysis of the samples.

Trace Volatiles:

The analysis performed on instrument MSVOA_U were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI.

The analysis of VOC-SFAM was based on method SFAM01.1_Trace.

Holding Times were met requirement.

The Surrogate recoveries met the acceptable criteria except for,
A46T2 [Toluene-d8 - 70%],
A4716 [Toluene-d8 - 69%],
As per method, up to three surrogates are allowed to fail. No corrective action was taken.

The Internal Standards Areas met the acceptable requirements.
Instrument Performance Check met requirements.
The Retention Times met requirements.
The Tuning criteria met requirements.

The Initial Calibration met the requirements.

The Continuing Calibration (VSTD005088) file ID VU054759.D met the requirements except for Dibromochloromethane (21.7%). As per method, up to two target analyte in opening and closing CCV are allowed to exceed the %D values. Therefore no further corrective action was taken.

The blank analysis indicate the presence of Methylene chloride [0.58ug/L] File ID: VU054760.D {VU0705WBL01} (VBLK015) lab contamination. As per method, less than the 2 times respective CRQL is allowed to fail for Methylene chloride. Therefore, no further corrective action was taken.

The Storage blank indicate the presence of Methylene chloride [0.67ug/L] File ID: VU054761.D {VHBLK001} lab contamination. As per method, less than 2 times the respective CRQL is allowed to fail for Acetone. Therefore, no further corrective action was taken.

See **Manual Integration report** for the manual integration information at the end of the case narrative.

Calculation:

Low/Med Water Level Calculation

$$\text{Concentration in ug/L} = \frac{(Ax)\,(Is)\,(DF)}{(Ais)\,(RRF)\,(Vo)}$$

Where,
Ax = Area of the characteristic ion (EICP) for the compound to be measured.
Ais = Area of the characteristic ion (EICP) for the internal standard.
Amount of internal standard added in ng.
RRF = Mean Relative Response Factor from the initial calibration standard.
Vo = Total volume of water purged, in mL.
DF = Dilution Factor

Example calculation of **A46R9** for **Methylene chloride:**

Ax=27594
Is = 125
RRF=0.510
DF= 1
Ais= 248609
Vo. = 25

Concentration in ug/L = $\frac{(27594)\,(125)\,(40)}{(248609)(0.510)(25)}$

Reported Result = 1.1 ug/L

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VU060723** for **5.0** ppb

RRF= $\frac{\text{Area of compound}}{\text{Area of Internal Standard}}$ X $\frac{\text{Conc. of Internal Standard}}{\text{Conc. of Compound}}$

RRF= $\frac{12927}{298959}$ X $\frac{50}{5.0}$

RRF= 0.432

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 _____ Name: Nimisha Pandya.

Date: _____ Title: Document Control Officer.