CHEMTECH

SDG NARRATIVE

LAB NAME: CHEMTECH CONSULTING GROUP
CASE: 49281
SDG: BG7H1
CONTRACT: 68HERH20D0011
LAB CODE: CHM
CHEMTECH PROJECT: M2316
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
M2316-01	BG7H1	1.0
M2316-02	BG7H7	1.0
M2316-03	BG7J8	1.0

03 Water samples were delivered to the laboratory intact on 05/06/2021.

Test requested on the Chain of Custody was Volatile Organic by Method SFAM01.1.

Sample Tags were not received with the samples.

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.8 degree Celsius for the samples received on 05/06/2021.

Shipping Discrepancies and/or QC issues:
Issue 1: Sample tags were not received with samples at the laboratory. Sample tag numbers may or may not be listed on the TR/COC.

Resolutions 1: The laboratory will note the samples with the missing tags in the SDG Narrative and proceed with the analysis of the samples. The resolution will be applied to all samples received for this Case.

Low Volatiles:
The analysis performed on instrument MSVOA_V were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI
The analysis performed on instrument MSVOA_U were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI. The Trap was supplied by OI Analytical, OI #10 Trap, OI Eclipse 4660 Concentrator.
The analysis of VOCMS Group1 was based on method SFAM01.1_LOW.

The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
Instrument Performance Check met requirements.
The Retention Times were met for all samples.
The Internal Standards Areas met the acceptable requirements.
The Tuning criteria met requirements.
The Initial Calibration met the requirements.

CHEMTECH

The Continuing Calibration met the requirements.

The Blank analysis indicated presence of Methylene chloride [1.1ug/L] FileID:VU043720.D (VBLK150) {VU0514WBL01} due to possible lab contamination. As per method, less than 2 times the respective CRQL is allowed to fail for Methylene chloride. Therefore no further corrective action was taken.

The Storage blank the presence of Bromomethane [0.69ug/L] and Toluene [0.64 ug/L] File ID indicate: VU043748.D {VHBLK002} lab contamination. As per method, less than the respective CRQL is allowed to fail for Bromomethane and Toluene. Therefore no further corrective action was taken.

See **Manual Integration report f**or 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 for sample **BG7J8** for **Acetone:**

Ax= 5849
Is= 250
RRF= 0.226
DF= 1
Ais= 396516
Vo. = 5

$$\text{Concentration in ug/L} = \frac{(5849)\ (250\ )\ (1\ )}{(396516)(0.226)(5)}$$

$$= 3.26\text{ug/L}$$

Reported Result = 3.3ug/L

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VU051321** for **5.0** ppb

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

CHEMTECH

RRF= $\dfrac{21588}{464192}$ X $\dfrac{50}{5.0}$

RRF= 0.465

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.