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SDG NARRATIVE

LAB NAME: CHEMTECH CONSULTING GROUP
CASE: 49879
SDG: H0AA1
CONTRACT:68HERH20D0011
LAB CODE: CHM
CHEMTECH PROJECT: N1317
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
N1317-01	H0AA1	1.0
N1317-01DL	H0AA1DL	1.0
N1317-02	H0AA2	1.0
N1317-03	H0AA3	1.0
N1317-03DL	H0AA3DL	1.0
N1317-04	H0AA4	1.0
N1317-05MS	H0AA4MS	1.0
N1317-06MSD	H0AA4MSD	1.0
N1317-07	H0AA5	1.0
N1317-08	H0AA6	1.0
N1317-09	H0AA7	1.0
N1317-10	H0AA8	1.0
N1317-11	H0AA9	1.0
N1317-12	H0AB0	1.0
N1317-13	H0AB1	1.0

13 Water sample was delivered to the laboratory intact on 01/27/2022.

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 2.4 degree Celsius for the samples received on 01/27/2022.

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.

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Issue 2: The laboratory received samples on 1/27/2022, and the COC lists VOCs in the analysis column. However, TVOA analysis is scheduled for the Case. The laboratory would like to confirm they should proceed with TVOA analysis.

Resolution 2: Per Region 8, the laboratory should proceed with TVOA analysis. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Trace 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 Trap was supplied by OI Analytical, OI #10 Trap, OI Eclipse 4660 Concentrator.
The analysis of VOC-TRACE-SFAM was based on method SFAM01.1_Trace.

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

The H0AA4MS recoveries met the requirements for all compounds.
The H0AA4MSD recoveries met the acceptable requirements.
The RPD met criteria.

The Initial Calibration met requirements.

The Continuing Calibration met requirements.
The Continuing Calibration (VSTD005301) file ID VV024488.D met the requirements except for Tetrachloroethene (23%). 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 indicated presence of Chloroform [0.20ug/L] FileID: VV024453.D {VBLK297}{VV0127WBL01} due to lab contamination.
The Blank analysis indicated presence of Chloroform [0.22ug/L] FileID: VV024478.D {VBLK298}{VV0128WBL01} due to lab contamination. As per method, less than the respective CRQL is allowed to fail for Chloroform. Therefore no further corrective action was taken.

The storage blank analysis indicated presence of Chloroform [0.25ug/L] FileID: VV024482.D {VHBLK001}{VV0128WBL01} due to lab contamination. As per method, less than the respective CRQL is allowed to fail for Chloroform. Therefore no further corrective action was taken.

Samples H0AA1, H0AA3 were diluted due to high concentrations.

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The sample H0AA2 was analyzed following the analysis of H0AA1. Samples H0AA1 had hit of compound Toluene with concentration above calibration levels. Sample H0AA2 have not detected of the compound Toluene. Therefore, as per method no instrument blank was required.

The sample H0AA5 was analyzed following the analysis of H0AA3. Samples H0AA3 had hit of compound Toluene with concentration above calibration levels. Sample H0AA5 have not detected of the compound Toluene. Therefore, as per method no instrument blank was required.

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

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.
Is = 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 **H0AA1** for **Acetone**:

Ax = 6663
Is = 125
RRF=0.036
DF = 1
Ais = 138503
Vo. = 25

$$\text{Concentration in ug/L} = \frac{(6663)\ (125)\ (1)}{(138503)\ (0.036)\ (25)}$$

    Reported Result   = 6.6 ug/L

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VV012622** for **0.5** ppb

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

$$RRF = \frac{10621}{178642} \times \frac{5.0}{0.5}$$

 RRF= 0.595

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: NimishaPandya.

Date: _____ Title: Document Control Officer.