

SDG NARRATIVE**LAB NAME: CHEMTECH CONSULTING GROUP****CASE: 49895****SDG: F4M72****CONTRACT: 68HERH20D0011****LAB CODE: CHM****CHEMTECH PROJECT: N1522****MODIFICATION REF. NUMBER: NA**

Sample ID	EPA Sample ID	pH
N1522-01	F4M72	1.0
N1522-02	F4M82	1.0
N1522-02DL	F4M82DL	1.0
N1522-03	F4M92	1.0
N1522-03DL	F4M92DL	1.0

3 Water samples were delivered to the laboratory intact on 02/11/2022.

Test requested on the Chain of Custody was Trace-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 2.1 degree Celsius for the samples received on 02/11/2022.

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.

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 criteria.

The Retention Times met requirements.

The Internal Standards Areas met the acceptable requirements.

Instrument Performance Check met requirements.

The Tuning criteria met requirements.
The Initial Calibration met requirements.
The Continuing Calibration met requirements.
The Blank analysis met requirements

The storage blank analysis indicated presence of Chloroform [0.23ug/L] FileID: VV024763.D { VHBLK001 } 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 F4M82 and F4M92 were diluted due to high concentrations.

The sample F4M92 was analyzed following the analysis of F4M82. Both samples had common hit of compound with concentration above calibration levels for Toluene, It was reanalyzed at a diluted. As per method, no instrument blank was required and not analyzed

The Continuing Calibration file id (VSTD005315) VV024743.D was analyzed following the analysis of F4M92 which had concentration above calibration levels for Toluene. A sample was reanalyzed at a diluted. The associate calibration is passing for this compound; therefore no instrument blank was required.

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

Calculation:

$$\text{Concentration in ug/L} = \frac{(A_x) (I_s) (DF)}{(A_{is}) (RRF) (V_o)}$$

Where,

A_x = Area of the characteristic ion (EICP) for the compound to be measured.

A_{is} = Area of the characteristic ion (EICP) for the internal standard.

I_s = Amount of internal standard added in ng.

RRF = Mean Relative Response Factor from the initial calibration standard.

V_o = Total volume of water purged, in mL.

DF = Dilution Factor.

Example Calculation for sample **F4M82** for **1,2-Dichloropropane**:

$$A_x = 7367$$

$$I_s = 125$$

$$RRF = 0.400$$

$$DF = 1$$

$$A_{is} = 156127$$

$$V_o = 25$$

$$\text{Concentration in ug/L} = \frac{(7367) (125) (1)}{(156127) (0.400) (25)}$$

$$\text{Reported Result} = 0.59 \text{ ug/L}$$

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VV021722** for **0.5** ppb

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

$$\text{RRF} = \frac{9980}{201738} \times \frac{5.0}{0.5}$$

$$\text{RRF} = 0.495$$

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.