

SDG NARRATIVE**LAB NAME: CHEMTECH CONSULTING GROUP****CASE: 50615****SDG: C0P02****CONTRACT: 68HERH20D0011****LAB CODE: CHM****CHEMTECH PROJECT: O2963****MODIFICATION REF. NUMBER: NA**

Sample ID	EPA Sample ID	pH
O2963-01	C0P02	1.0
O2963-02	C0P03	1.0
O2963-03	C0P04	1.0
O2963-04	C0P05	1.0
O2963-05	C0P06	1.0
O2963-06	C0P07	1.0
O2963-07	C0P08	1.0
O2963-08	C0P09	1.0

08 Water sample was delivered to the laboratory intact on 05/26/2023.

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 2.2 degree Celsius for the samples received on 05/26/2023.

Discrepancies with tags, jars and/or COC

Issue1: The COC where lists VOA analysis for this Case; however, the Case is scheduled for TVOA analysis with PRs.

Resolution1: Per Region 3, the laboratory will proceed with analysis as scheduled for TVOA and apply this resolution to all remaining samples for Case 50615. 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-SFAM was based on method SFAM01.1_Trace.

Holding Times were met requirement.

The Surrogate recoveries met the acceptable criteria except for, C0P02 [1,2-Dichlorobenzene-d4 - 124%], C0P05 [1,2-Dichlorobenzene-d4 - 120%], 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 met the requirements.

The blank analysis did not indicate the presence of lab contamination.

The Storage blank indicate the presence of Methylene chloride [0.37ug/Kg] File ID: VV031284.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.

Sample C0P02, C0P03, C0P04, C0P05, C0P06, C0P07, C0P08 and C0P09 was analyzed in SEQ VV052723 and this sequence Continuing Calibration Verification failed for more than two comp and these two sample was reported in Preliminary Results, as a corrective action lab has re analyzed these sample and reported, Vial A data given in Screening data.

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

Calculation:

Low/Med Water Level Calculation

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

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.

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 of **C0P03** for **Acetone**:

$$A_x = 4402$$

$$I_s = 125$$

RRF=0.118

DF= 1

A_{is}= 110999V_o. = 25
$$\text{Concentration in ug/L} = \frac{(4402)(125)(40)}{(110999)(0.118)(25)}$$

Reported Result = 1.7 ug/L

Relative Response Factor = **Dichlorodifluoromethane: RUN VV053023** for **5.0** ppb
$$\text{RRF} = \frac{\text{Area of compound}}{\text{Area of Internal Standard}} \times \frac{\text{Conc. of Internal Standard}}{\text{Conc. of Compound}}$$
$$\text{RRF} = \frac{94567}{120844} \times \frac{5.0}{5.0}$$

RRF= 0.783

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.