

SDG NARRATIVE**LAB NAME: CHEMTECH CONSULTING GROUP****CASE: 49281****SDG: BG7G8****CONTRACT: 68HERH20D0011****LAB CODE: CHM****CHEMTECH PROJECT: M2249****MODIFICATION REF. NUMBER: NA**

Sample ID	EPA Sample ID	pH
M2249-01	BG7G8	1.0
M2249-02	BG7G9	1.0
M2249-03	BG7J2	1.0
M2249-04	BG7J3	1.0
M2249-05	BG7J4	1.0
M2249-07	BG7H0	1.0
M2249-08	BG7H6	1.0
M2249-09	BG7J6	1.0

05 Water samples were delivered to the laboratory intact on 05/01/2021.

03 Water samples were delivered to the laboratory intact on 05/04/2021.

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 2.4 degree Celsius for the samples received on 05/01/2021, 2.4 degree Celsius for the samples received on 05/04/2021.

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 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 except for

BG7G9 [1,1-Dichloroethene-d2 - 60%],
BG7J3 [1,1-Dichloroethene-d2 - 55%],
BG7H0 [1,1-Dichloroethene-d2 - 57%],
BG7H6 [1,1-Dichloroethene-d2 - 52%],
BG7J6 [1 and1-Dichloroethene-d2 - 50%]. As per method, up to three surrogates are allowed to fail. No corrective action was taken.

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.
The Continuing Calibration met the requirements.

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

The storage blank analysis indicated the presence of lab contamination.

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 for sample **BG7J2** for **Acetone**:

A_x= 11557

I_s= 250

RRF= 0.210

DF= 1

A_{is}= 594577

V_o. = 5

$$\text{Concentration in ug/L} = \frac{(11557) (250) (1)}{(594577)(0.210)(5)}$$

$$= 4.63 \text{ ug/L}$$

Reported Result = 4.6 ug/L

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VV050321** for **5.0** ppb

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

$$\text{RRF} = \frac{28299}{697235} \times \frac{50}{5.0}$$

$$\text{RRF} = 0.406$$

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.