SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC
CASE: 51900
SDG: E2964
CONTRACT: 68HERH20D0011
LAB CODE: ACE
CHEMTECH PROJECT: Q1196
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
Q1196-01	E2964	1.0
Q1196-01DL	E2964DL	1.0
Q1196-02MS	E2964MS	1.0
Q1196-03MSD	E2964MSD	1.0

03 Water samples were delivered to the laboratory intact on 01/27/2025.

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 1.8 degree Celsius for the samples received on 01/27/2025.

Trace Volatiles:

The analysis performed on instrument MSVOA_U were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI.
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,
E2964MS [Chloroethane-d5 - 135%, Chloroform-d - 66%],
E2964MSD [1,1-Dichloroethene-d2 - 55%, 1,2-Dichlorobenzene-d4 - 68%, 1,2-Dichloroethane-d4 - 63%, Benzene-d6 - 64%, Chloroform-d - 64% and Toluene-d8 - 67%],
E2964MS/MSD which is not required the corrective action for failing Surrogate recoveries in MS/MSD.

The Internal Standards Areas met the acceptable requirements.
Instrument Performance Check met requirements.
The Retention Times met requirements.
The Tuning criteria met requirements.

The MS {DBVR2MS} recovery met the requirements for all compounds.
The MSD {DBVR2MSD} recovery met the requirements for all compounds.
The MSD {DBVR2MSD} RPD met the requirements for all compounds.

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 did not indicate the presence of lab contamination.

Sample E2964 was diluted due to high concentration.

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

Calculation:

Low/Med Water Level Calculation

$$\text{Concentration in ug/L} = \frac{(Ax)\,(Is)\,(DF)}{(Ais)\,(RRF)\,(Vo)}$$

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 of **E2964** for **Acetone**:

Ax= 16492
Is = 125
RRF= 0.034
DF= 1
Ais= 91723
Vo. = 25

$$\text{Concentration in ug/L} = \frac{(16492)\,(125)\,(1)}{(91723)(0.034)(25)}$$

Reported Result = 26.44 ug/L

Final Reported Result = 27 ug/L

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VU012725** for **0.5** ppb

RRF= Area of compound / Area of Internal Standard X Conc. of Internal Standard / Conc. of Compound

RRF= 4631 / 103472 X 5.0 / 0.5

RRF= 0.448

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.