SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC
CASE: 51802
SDG: C0CQ0
CONTRACT: 68HERH20D0011
LAB CODE: ACE
LAB ORDER ID: P4691
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
P4691-01	C0CQ0	1.0
P4691-01DL	C0CQ0DL	1..0
P4691-02	C0CQ1	1.0
P4691-03	C0CQ4	1.0
P4691-04	C0CQ8	1.0
P4691-05	C0CR0	1.0
P4691-06	C0CR2	1.0

06 Water samples were delivered to the laboratory intact on 11/02/2024.

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 2.5 degree Celsius for the samples received on 11/02/2024.

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.

The Surrogate recoveries met the acceptable criteria except for,
C0CQ4 [Chloroethane-d5 - 64%],
C0CQ8 [Chloroethane-d5 - 61%],
C0CR0 [Chloroethane-d5 - 63%],
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 criteria met requirements.

The Continuing Calibration (VSTD005127) file ID VU061515.D met the requirements except for Vinyl Chloride-d3 (-30.9%). 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 did not indicate the presence of lab contamination.
The storage blank analysis did not indicate the presence of lab contamination.

Sample C0CQ0 was diluted due to high concentration.

The sample C0CQ1 was analyzed following the analysis of C0CQ0. Samples C0CQ0 had hit of compound Tetrachloroethene with concentration above calibration levels. Sample C0CQ1 have not detected of the compound Tetrachloroethene. 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:

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 **C0CQ0** for **Acetone**:

Ax= 5997
Is = 125
RRF= 0.044
DF= 1
Ais= 137565
Vo. = 25

$$\text{Concentration in ug/L} = \frac{(5997)\ (125)\ (1)}{(137565)(0.044)(25)}$$

Reported Result = 4.95 ug/L

Final Reported Result = 5.0 ug/L

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VU102324** for **0.5** ppb

RRF= Area of compound   X   Conc. of Internal Standard

Area of Internal Standard   Conc. of Compound

$$RRF= \frac{5894}{198718} \times \frac{5.0}{0.5}$$

RRF= 0.297

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.