SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC
CASE: 51933
SDG: E2AS8
CONTRACT: 68HERH20D0011
LAB CODE: ACE
LAB ORDER ID: P5262
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
P5262-01	E2AS8	1.0
P5262-02	E2AT2	1.0
P5262-03	E2AT6	1.0
P5262-04	E2AW1	1.0
P5262-04DL	E2AW1DL	1.0
P5262-05	E2AX2	1.0
P5262-05DL	E2AX2DL	1.0

06 Water samples were delivered to the laboratory intact on 12/12/2024.

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 2.6 degree Celsius for the samples received on 12/12/2024.

Shipping Discrepancies and/or QC issues:

Issue 01: SDG E2AS8 requires Laboratory QC for TVOA analysis but there is no extra volume for Laboratory QC and no sample was designated on the COC. The laboratory would like to proceed without Laboratory QC for TVOA analysis.

Resolution 01: Per Region 5, the laboratory will note the issue in the SDG Narrative and proceed without Laboratory QC.

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
E2AW1 [Toluene-d8 - 67%], 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 (VSTD005197) file ID VU062464.D met the requirements except for 1,2-Dichloropropane-d6 (-21.%).Under this Continuous Calibration only diluted samples were analyzed. The failure compounds are not required for the dilution, therefore no corrective action was required.

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

Samples E2AW1, E2AX2 were diluted due to high concentrations.

The sample E2AX2 was analyzed following the analysis of E2AW1. Both samples had common hit of compound with concentration above calibration levels for Tetrachloroethene, It was reanalyzed at a diluted. As per method, no instrument blank was required and not analyzed.

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 **E2AS8** for **Methylene chloride**:

Ax= 5675
Is = 125
RRF= 0.354
DF= 1
Ais= 97064
Vo. = 25
Concentration in ug/L = $\frac{(5675)\,(125)\,(1)}{(97064)(0.354)(25)}$

Reported Result = 0.83 ug/L

Final Reported Result = 0.83 ug/L

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VU120924** for **0.5** ppb

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

RRF= $\frac{5191}{109257} \times \frac{5.0}{0.5}$

RRF= 0.475

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.