

## **SDG NARRATIVE**

LAB NAME: Alliance Technical Group, LLC CASE : 51847 SDG : E1PJ7 CONTRACT: 68HERH20D0011 LAB CODE: ACE Lab Order ID : P5116 MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pН
P5116-01	E1PJ6	1.0
P5116-02	E1PJ7	1.0
P5116-03	E1PJ8	1.0
P5116-04	E1PJ9	1.0
P5116-06	E1PK0	1.0
P5116-07MS	E1PK0MS	1.0
P5116-08MSD	E1PK0MSD	1.0
P5116-09	E1PK1	1.0

04 Water samples were delivered to the laboratory intact on 12/05/2024.

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

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 2.8, degree Celsius for the samples received on 12/05/2024.

The temperature of the samples was measured using an I R Gun. The samples temperature was 1.9, degree Celsius for the samples received on 12/06/2024.

## **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 performed on instrument MSVOA\_V 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 E1PJ6 [1,2-Dichlorobenzene-d4 - 123%], E1PJ8 [Chloroethane-d5 - 133%], 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 MS {E1PK0MS} recovery met the requirements for all compounds. The MSD {E1PK0MSD} recovery met the requirements for all compounds. The RPD {E1PK0MSD} RPD met the requirements for all compounds.

The initial Calibration criteria met requirements.

The Continuing Calibration (VSTD005324) file ID VV038419.D met the requirements except for Vinyl Chloride-d3 (-39.5%) and 1,1-Dichloroethene-d2 (-31.4%). 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.

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

## **Calculation:**

## Low/Med Water Level Calculation

Concentration in ug/L = (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 **E1PJ9** for **Acetone**:



Ax= 4647 Is = 125 RRF= 0.044 DF= 1 Ais= 102312 Vo. = 25 Concentration in ug/L = (4647)(125)(1)(102312)(0.044)(25)

Reported Result = 5.16 ug/L

Final Reported Result = 5.2 ug/L

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

 RRF=
 Area of compound
 X
 Conc. of Internal Standard

 Area of Internal Standard
 Conc. of Compound
 Conc. of Compound

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

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.

3 of 3