

## **SDG NARRATIVE**

LAB NAME: Alliance Technical Group, LLC CASE: 51841 SDG: E1H10 CONTRACT: 68HERH20D0011 LAB CODE: ACE LAB ORDER ID: P4742 MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pН
P4742-01	E1H10	1.0
P4742-02	E1H11	1.0
P4742-03	E1H12	1.0
P4742-04	E1H13	1.0
P4742-05	E1H14	1.0
P4742-06	E1H15	1.0
P4742-07	E1H16	1.0
P4742-08	E1H17	1.0
P4742-09	E1H18	1.0
P4742-10	E1H19	1.0
P4742-11	E1H20	1.0
P4742-12	E1H21	1.0
P4742-13	E1H22	1.0
P4742-14	E1H23	1.0
P4742-15	E1H24	1.0
P4742-16	E1H25	1.0
P4742-17	E1H26	1.0
P4742-19	E1H27	1.0
P4742-20	E1H28	1.0
P4742-21MS	E1H28MS	1.0
P4742-22MSD	E1H28MSD	1.0
P4742-23	E1H32	1.0

17 Water samples were delivered to the laboratory intact on 11/07/2024. 05 Water samples were delivered to the laboratory intact on 11/08/2024.

Test requested on the Chain of Custody was Volatile Organic by Method SFAM01.1.



 $2 \ of \ 4$ 

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 11/07/2024, 2.6 degree Celsius for the samples received on 11/08/2024.

## Low Volatiles:

The analysis performed on instrument MSVOA\_X 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\_LOW

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for, E1H12 [1,2-Dichlorobenzene-d4 - 123%], E1H13 [Chloroethane-d5 - 158%], E1H14 [Chloroethane-d5 - 166%], E1H15 [Chloroethane-d5 - 149%], E1H17 [Chloroethane-d5 - 135%], E1H19 [Chloroethane-d5 - 158%], E1H24 [Chloroethane-d5 - 130%], E1H28MS [1,1,2,2-Tetrachloroethane-d2 - 125%, 1,2-Dichlorobenzene-d4 - 123%, Chloroethane-d5 - 135%], E1H28MSD [1,1,2,2-Tetrachloroethane-d2 - 128%, 1,2-Dichlorobenzene-d4 - 125% and Chloroethane-d5 - 138%], 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 were met for all samples.

The Referition Times were met for an sampi

The Tuning criteria met requirements.

The MS {E1H28MS} recovery met the requirements for all compounds. The MSD {E1H28MSD} recovery met the requirements for all compounds. The RPD {E1H28MSD} RPD met the requirements for all compounds.

The %RSD met requirement for initial Calibration except for Dibromochloromethane (20.5%) for the initial calibration dated 11/04/2024 with X instrument, As per method, the %RSD up to two Compounds are allowed to fail to meet the minimum criteria as long as the compound meets the maximum of 40% RSD. No further corrective action was taken.

The Continuing Calibration (VSTD050781) file ID VX043750.D met the requirements except for Chloroethane (36.0%). 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.



3 of 4

The End Continuing Calibration (VSTD050784) file ID VX043801.D met the requirements except for Trichloroethene (245.0%). 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 indicated the presence of lab Contamination. The Storage blank analysis did not indicated the presence of lab Contamination.

See **Manual Integration report f**or 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 for sample: **E1H10** for **Trichloroethene**:

Ax= 9167 Is= 250 RRF= 0.383 DF=1 Ais= 191996 Vo.= 5

Concentration in ug/KG = (9167)(250)(1)(191996) (0.383) (5)

$$= 6.23 \text{ ug/L}$$

Final Reported Results = 6.2 ug/L

Relative Response Factor = Dichlorodifluoromethane: RUN VX110424 for 5.0 ppb



 RRF=
 Area of compound
 X
 Conc. of Internal Standard

 Area of Internal Standard
 Conc. of Compound

 $RRF = \frac{9818}{318749} X \frac{50}{5.0}$ 

RRF= 0.301

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.

4 of 4