

SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC CASE: 51782 SDG: GCP77 CONTRACT: 68HERH20D0011 LAB CODE: ACE LAB ORDER ID: P4749 MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pН
P4749-01	GCP76	1.0
P4749-01DL	GCP76DL	1.0
P4749-02	GCP77	1.0
P4749-02DL	GCP77DL	1.0
P4749-03	GCP78	1.0
P4749-04	GCP79	1.0
P4749-05	GCP80	1.0
P4749-06	GCP81	1.0
P4749-07	GCP82	1.0
P4749-08	GCP83	1.0
P4749-09MS	GCP83MS	1.0
P4749-10MSD	GCP83MSD	1.0
P4749-11	GCP84	1.0
P4749-12	GCP85	1.0
P4749-12DL	GCP85DL	1.0
P4749-13	GCP86	1.0
P4749-13DL	GCP86DL	1.0
P4749-14	GCP87	1.0
P4749-14DL	GCP87DL	1.0
P4749-15	GCP88	1.0
P4749-15DL	GCP88DL	1.0
P4749-16	GCP89	1.0
P4749-17	GCP90	1.0
P4749-18	GCP91	1.0
P4749-18DL	GCP91DL	1.0
P4749-19	GCP92	1.0
P4749-20	GCP93	1.0
P4749-21	GCP94	1.0

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P4749-22	GCP95	
P4749-22DL	GCP95DL	

22 Water samples were delivered to the laboratory intact on 11/07/2024.

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 11/07/2024.

Trace Volatiles:

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 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, GCP76DL [1,1,2,2-Tetrachloroethane-d2 - 121%, 1,2-Dichlorobenzene-d4 - 121%], GCP77DL [1,1,2,2-Tetrachloroethane-d2 - 124%, 1,2-Dichlorobenzene-d4 - 134%], GCP83MSD [1,2-Dichlorobenzene-d4 - 76%], GCP86DL [1,1,2,2-Tetrachloroethane-d2 - 131%, 1,2-Dichlorobenzene-d4 - 127%], GCP87DL [1,1,2,2-Tetrachloroethane-d2 - 134%, 1,2-Dichlorobenzene-d4 - 129%, 2-Hexanoned5 - 132%], GCP92 [Toluene-d8 - 68%], GCP93 [1 and2-Dichlorobenzene-d4 - 121%], 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 {GCP83MS} recovery met the requirements for all compounds. The MSD {GCP83MSD} recovery met the requirements for all compounds. The RPD {GCP83MSD} RPD met the requirements for all compounds.

The initial Calibration criteria met requirements.

The Continuing Calibration (VSTD005302) file ID VV038034.D met the requirements except for Methylcyclohexane (-31.7%). 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 indicated presence of Methylene chloride [0.52ug/L] FileID: VU061683.D {VHBLK001} due to lab contamination. As per method, less than the 2 times respective CRQL is allowed to fail for Methylene chloride. Therefore no further corrective action was taken.

Samples GCP76, GCP77, GCP85, GCP86, GCP87, GCP88, GCP91 and GCP95 were diluted due to high concentrations.

The sample GCP77 was analyzed following the analysis of GCP76. Both samples had common hit of compound with concentration above calibration levels for Trichloroethene, It was reanalyzed at a diluted. As per method, no instrument blank was required and not analyzed.

The sample GCP78 was analyzed following the analysis of GCP77. Sample GCP77 had hit of compound Trichloroethene with concentration above calibration levels. Sample GCP78 had concentration of this compound which is below CRQL. Therefore, as per method no instrument blank was required.

The samples GCP85, GCP86, GCP87, GCP88 and GCP91 were analyzed back to back in a continuous analytical sequence and samples had common hit of compound with concentration above calibration levels for Trichloroethene. It was reanalyzed at a diluted. As per method, no instrument blank was required and not analyzed.

The Continuing Calibration file id (VSTD005298) VV037991.D was analyzed following the analysis of GCP91 which had concentration above calibration levels for Trichloroethene. A sample was reanalyzed at a diluted. The associate calibration is passing for this compound; therefore 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

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 **GCP76** for **1,1-Dichloroethene**:

Ax= 9615 Is = 125 RRF= 0.342 DF= 1 Ais= 251031 Vo. = 25 Concentration in ug/L = (9615)(125)(1)(251031)(0.342)(25)

Reported Result = 0.56 ug/L

Final Reported Result = 0.56 ug/L

Relative Response Factor = Dichlorodifluoromethane: RUN VV110624 for 0.5 ppb

 RRF=
 Area of compound
 X
 Conc. of Internal Standard

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

 $RRF = \frac{14652}{284979} X \frac{5.0}{0.5}$

RRF= 0.514

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.