



SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC

CASE: 51929

SDG: F7J51

CONTRACT: 68HERH20D0011

LAB CODE: ACE

LAB ORDER ID: P5253

MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
P5253-01	F7J51	1.0
P5253-02	F7J53	1.0
P5253-03	F7J54	1.0
P5253-05	F7J09	1.0
P5253-06	F7J10	1.0
P5253-07	F7J11	1.0
P5253-08	F7J31	1.0
P5253-09	F7J32	1.0
P5253-10	F7J35	1.0
P5253-11MS	F7J35MS	1.0
P5253-12MSD	F7J35MSD	1.0
P5253-13	F7J56	1.0
P5253-14	F7J00	1.0
P5253-15	F7J01	1.0
P5253-16	F7J02	1.0
P5253-17	F7J03	1.0
P5253-18	F7J12	1.0
P5253-19	F7J13	1.0
P5253-20	F7J27	1.0
P5253-21	F7J29	1.0
P5253-22	F7J30	1.0
P5253-23	F7J33	1.0

03 Water samples were delivered to the laboratory intact on 12/11/2024.

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

10 Water samples were delivered to the laboratory intact on 12/13/2024.

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 2.1, 1.9 degree Celsius for the samples received on 12/11/2024. The samples temperature was 1.9 degree Celsius for the samples received on 12/12/2024. The samples temperature was 1.3 degree Celsius for the samples received on 12/13/2024.

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.

Holding Times were met requirement.

The Surrogate recoveries met the acceptable criteria except for F7J56 [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 MS {F7J35MS} recovery met the requirements for all compounds.

The MSD {F7J35MSD} recovery met the requirements for all compounds.

The RPD {F7J35MSD} RPD met the requirements for all compounds.

The initial Calibration criteria met requirements.

The Continuing Calibration criteria met requirements.

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

$$\text{Concentration in ug/L} = \frac{(A_x) (I_s) (DF)}{(A_{is}) (RRF) (V_o)}$$

Where,

A_x = Area of the characteristic ion (EICP) for the compound to be measured.

A_{is} = 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.

V_o = Total volume of water purged, in mL.

DF = Dilution Factor

Example calculation of **F7J12** for **Trichloroethene**:

A_x = 9767

I_s = 125

RRF = 0.439

DF = 1

A_{is} = 90725

V_o = 25

Concentration in ug/L = $\frac{(9767)(125)(1)}{(90725)(0.439)(25)}$

Reported Result = 1.22 ug/L

Final Reported Result = 1.2 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.