



SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC

CASE: 51887

SDG: F7H70

CONTRACT: 68HERH20D0011

LAB CODE: ACE

LAB ORDER ID: P4942

MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
P4942-01	F7H70	
P4942-02	F7H71	
P4942-03	F7H72	
P4942-04	F7H73	
P4942-05	F7H74	
P4942-06	F7H75	
P4942-07	F7H76	
P4942-08	F7H77	
P4942-09	F7H78	
P4942-10	F7H79	
P4942-11	F7H80	

11 Soil samples were delivered to the laboratory intact on 11/21/2024.

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

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.3 degree Celsius for the samples received on 11/21/2024.

Low Volatiles:

The analysis performed on instrument MSVOA_W were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.

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 F7H70 [1,2-Dichlorobenzene-d4 - 70%],

F7H71 [1,2-Dichlorobenzene-d4 - 69%, 1,2-Dichloroethane-d4 - 68%, 1,2-Dichloropropane-d6 - 69%],

F7H75 [1,2-Dichlorobenzene-d4 - 74%],

F7H77 [1,1,2,2-Tetrachloroethane-d2 - 121%],

F7H79 [1,2-Dichlorobenzene-d4 - 46%],

F7H80 [1 and 2-Dichlorobenzene-d4 - 75%],

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 Tuning criteria met requirements.

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 Level Soil/Sediment Calculation

$$\text{Concentration in ug/Kg dry Weight basis) = } \frac{(A_x)(I_s)(D_f)}{(A_{is})(RRF)(W_s)(D)}$$

Where,

A_x = Area for the compound to be measured

A_{is} = Area for the specific internal standard

I_s = Amount of internal standard added in Nano grams (ng)

RRF = Relative response factor of the calibration standard.

D_f = Dilution factor

W_s = Weight of sample

$$D = \frac{100 - \% \text{moisture}}{100}$$

Example Calculation for sample: **F7H72** for **Tetrachloroethene**:

A_x = 24691

I_s = 250

RRF = 0.347

DF = 1

A_{is} = 379164

W_s = 8.8



D= 0.846

$$\text{Concentration in ug/KG} = \frac{(24691) (250) (1)}{(379164) (0.347) (8.8) (0.846)}$$

$$= 6.3 \text{ ug/Kg}$$

Final Reported Results = 6.3 ug/Kg

Relative Response Factor = **Dichlorodifluoromethane: RUN VW112024 for 5.0 ppb**

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

$$\text{RRF} = \frac{23856}{401480} \times \frac{25}{5.0}$$

$$\text{RRF} = 0.297$$

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.