



SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC

CASE: 51724

SDG: GCNW6

CONTRACT: 68HERH20D0011

LAB CODE: ACE

CHEMTECH PROJECT: P4559

MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
P4559-01	GCNW6	
P4559-02	GCNX9	
P4559-03	GCNY0	
P4559-04	GCNY1	
P4559-05	GCNY2	
P4559-06	GCNY3	
P4559-07	GCNY4	
P4559-08	GCNY5	
P4559-09	GCNY6	
P4559-10	GCNY7	
P4559-11MS	GCNY7MS	
P4559-12MSD	GCNY7MSD	
P4559-13	GCNY8	
P4559-14	GCNY9	
P4559-15	GCNZ0	
P4559-16	GCNZ1	
P4559-17	GCNZ2	
P4559-18	GCNZ3	
P4559-19	GCNZ4	

19 Water samples were delivered to the laboratory intact on 10/25/2024.

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

The temperature of the samples was measured using an I R Gun. The samples temperature was 3.2, 3.0, 2.9, 3.3, 2.8 degree Celsius for the samples received on 10/25/2024.

Semivolatiles:

The samples were analyzed on instrument BNA_M using GC Column ZB-GR Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA.

The samples were analyzed on instrument BNA_P using GC Column ZB-GR Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA.

Semis volatile Organic sample for water sample was extracted by Method SFAM01.1 on 10/25/2024, The analysis of SVOCMS Group4 was based on method SFAM01.1_SVOC.

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable except criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS {GCNY7MS} recovery met the requirements for all compounds.

The MSD {GCNY7MSD} recovery met the requirements for all compounds.

The RPD {GCNY7MSD} RPD met the requirements for all compounds

The Blank Spike for {PB164420BS} recoveries met the requirements for all compounds.

The Blank Spike for {PB164421BS} recoveries met the requirements for all compounds.

The Blank Spike for {PB164422BS} recoveries met the requirements for all compounds.

The Blank Spike for {PB164423BS} recoveries met the requirements for all compounds.

The Blank analysis did not indicate the presence of lab contamination.

The Tuning criteria met requirements.

The Initial Calibration met requirements.

The Continuous Calibration met requirements.

Concentration of Water Sample:

Concentration ug/L = $\frac{(Ax) (Is) (Vt) (DF) (GPC)}{(Ais) (RRF) (Vo) (Vi)}$

Where,

Ax = Area of the characteristic ion for the compound to be measured.

Ais = Area of the characteristic ion for the internal standard.

Is = Amount of internal standard injected in ng.

Vo = Volume of water extracted in mL.

Vi = Volume of extract injected in uL.

Vt = Volume of the concentrated extract in uL

RRF = Mean Relative Response Factor determined from the initial calibration standard.

GPC = $\frac{V_{in}}{V_{out}}$ = GPC factor (If no GPC is performed, GPC=1)

Vout = Volume of extract collected after GPC cleanup.



Example calculation of GCNW6 for 1,4-Dioxane:

$$A_x = 7519$$

$$A_{is} = 66319$$

$$I_s = 20$$

$$DF = 1$$

$$V_o = 1000$$

$$V_i = 1$$

$$V_t = 1000$$

$$RRF = 0.553$$

$$GPC = 1$$

$$\text{Concentration ug/L} = \frac{(7519) (20) (1000) (1) (1)}{(66319) (0.553) (1000) (1)}$$

$$= 4.1 \text{ ug/L}$$

RRF Calculation of standard 20 ppb for 1,4-Dioxane with M instrument for method 10/26/2024.

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

$$= 49556/227528 \times 20/8$$

$$= 0.545 \text{ (Reported RRF)}$$

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.