SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC
CASE: 51900
SDG: E2974
CONTRACT: 68HERH20D0011
LAB CODE: ACE
LAB ORDER ID: Q1198
MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pH
Q1197-01	E2964	
Q1197-02MS	E2964MS	
Q1197-03MSD	E2964MSD	
Q1197-04	E2968	
Q1197-05	E2974	
Q1197-06	E2981	
Q1197-07	E2982	
Q1197-08	E2983	
Q1197-09	E2984	
Q1197-10	E2985	
Q1197-11	E2986	
Q1197-12	E2987	
Q1197-13	E2988	
Q1197-14	E2992	
Q1197-15	E2994	
Q1197-16	E2995	
Q1197-17	E2999	
Q1197-18	E2997	
Q1197-19	E2998	

03 Water samples were delivered to the laboratory intact on 01/27/2025.
02 Water samples were delivered to the laboratory intact on 01/28/2025.
08 Water samples were delivered to the laboratory intact on 01/29/2025.
06 Water samples were delivered to the laboratory intact on 01/30/2025.

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

The temperature of the samples was measured using an I R Gun. The samples temperature was 3.2 degree Celsius for the samples received on 01/27/2025, 2.3 degree Celsius for the samples received on 01/28/2025, 2.2, 2.3, 2.1, 1.9 degree Celsius for the samples received on 01/29/2025, 2.4, 3.1, 2.1 degree Celsius for the samples received on 01/30/2025.

Shipping Discrepancies and/or QC issues:

Issue 01: The Region identified that the sample collection date listed on the COCs for sample identifier MW-25-106 was incorrect.

Resolution 01: Per Region 5, revised COCs are attached. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Semivolatiles SIM:

The samples were analyzed on instrument BNA_N 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 samples for Water were extracted by Method SFAM01.1 on 01/28/2025, 01/29/2025 and 01/30/2025. The analysis of SVOCMS Group3 was based on method SFAM01.1_SIM.

The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements except for,
E2964, E2964MS, E2964MSD, Original sample E2964 has internal failed which is confirmed with MS/MSD , therefore no corrective action was required.

The Retention Times were acceptable for all samples.
The MS {E2964MS} recovery met the requirements for all compounds.
The MSD {E2964MSD} recovery met the requirements for all compounds.
The MSD {E2964MSD} RPD met the requirements for all compounds.
The Blank Spike for {PB166369BS} recoveries met the requirements for all compounds.
The Blank Spike for {PB166371BS} recoveries met the requirements for all compounds.
The Blank Spike for {PB166374BS} recoveries met the requirements for all compounds.
The Blank Spike for {PB166394BS} recoveries met the requirements for all compounds.
The Blank Spike for {PB166439BS} 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 the requirements.
The Continues Calibration met the requirements.

See **Manual Integration report** for the manual integration information at the end of the case narrative.

Concentration of Water Sample:

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

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 = Vin = GPC factor (If no GPC is performed, GPC=1)
Vout

Example calculation of **E2983** for **1,4-Dioxane**:

Ax = 295
Ais = 3021
Is = 0.4
DF = 1
Vo = 990
Vi = 1
Vt = 1000
RRF = 0.468
GPC = 1

$$\text{Concentration ug/L} = \frac{(295)\,(0.4)\,(1000)\,(1)\,(1)}{(3021)\,(0.468)\,(990)\,(1)}$$

$$= 0.080 \text{ ug/L}$$

RRF Calculation of standard 0.4 ppb **1,4-Dioxane** with instrument N for method 01/21/2025.

RRF = Area of compound / X Conc. of Internal Standard /

Area of Internal Standard Conc. of Compound

= 1075/2325 X 0.4/0.4

= 0.462 (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.