

SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC CASE: 51900 SDG: E2947 CONTRACT: 68HERH20D0011 LAB CODE: ACE LAB ORDER ID: Q1162 MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pН
Q1162-01	E2946	5.0
Q1162-02	E2947	5.0
Q1162-03MS	E2947MS	5.0
Q1162-04MSD	E2947MSD	5.0

04 Soil samples were delivered to the laboratory intact on 01/22/2025.

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

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.1 degree Celsius for the samples received on 01/22/2025.

Shipping Discrepancies and/or QC issues:

Issue 1: The samples for Case 51847 are scheduled with a 21-day TAT, but the COC lists a 14-day TAT.

Resolution 1: Per Region 5, the correct Case number is 51900. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Issue 2: TCLP analyses are listed on the COC but are not scheduled for Case 51847. **Resolution 2:** Per Region 5, the correct Case number is 51900. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Issue 3: SDGs E2946, E2947, ME2946 and ME2947 require Laboratory QC for soil samples, but a sample was not designated on the COC. The laboratory selected samples E2947 and ME2947 for Laboratory QC for ARO, PEST, TCLP VOA, TCLP SVOA, ICP-MS, ICP-AES, Hg, TCLP ICP-AES, TCLP Hg analysis. The laboratory confirmed these samples are not blank, rinsate or PT samples.



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Resolution 3: Per SOW, SFAM01.1 Exhibit A, Section 5.5.4.1, the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

Low Volatiles (TCLP VOA):

The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI The analysis of TCLP VOA was based on method SFAM01.1_Low.

Holding Times were met requirement.

The Surrogate recoveries met the acceptable criteria E2947MS [2-Butanone-d5 - 132%], As per method, up to two 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 {E2947MS} recovery met the requirements for all compounds. The MSD {E2947MSD} recovery met the requirements for all compounds. The MSD {E2947MSD} RPD met the requirements for all compounds.

The Initial Calibration met the requirements. The Continuing Calibration met the 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

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

No Positive target compounds were detected in the TCLP Sample.

Relative Response Factor = Vinyl chloride: RUN VX012825 for 5.0 ppb

RRF <u>=</u>	Area of compound	X Conc. of Internal Standard
	Area of Internal Standard	Conc. of Compound
RRF=	<u>13505</u> X <u>50</u> 329937 5.0	
RRF=	0.409	

TCLP Semivolatiles :

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.

The analysis of TCLP BNA Group1 was based on method SFAM01.1. TCLPBNA Group1 samples were extracted by Method SFAM01.1 on 01/28/2025. Samples were received on 01/22/2025. TCLP extraction was done on 01/27/2025.

This standard solution has 3-Methylphenol and 4-Methylphenol at a concentration of 500 ug/mL each whereas all other compounds are present at a concentration of 1000 ug/mL concentration. 3-Methylphenol and 4-Methylphenol co-elute. Since 3-Methylphenol is not a Target Compound to be reported under the SFAM01.1 contract, 4-Methylphenol is reported on the forms using the RRF obtained from the 3+4-Methylphenols peak.

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS {E2947MS} recovery met the requirements for all compounds.

The MSD {E2947MSD} recovery met the requirements for all compounds.

The MSD {E2947MSD} RPD met the requirements for all compounds

The Blank Spike for {PB166343BS} 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 Continuous Calibration met the requirements.



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

Concentration of TCLP Sample:

Concentration ug/L = (Ax) (Is) (Vt) (DF) (GPC)

(Ais) (RRF) (Vo) (Vi)

Where,

 $\begin{aligned} &\text{Ax} = \text{Area of the characteristic ion for the compound to be measured.} \\ &\text{Ais} = \text{Area of the characteristic ion for the internal standard.} \\ &\text{Is} = \text{Amount of internal standard injected in ng.} \\ &\text{Vo} = \text{Volume of water extracted in mL.} \\ &\text{Vi} = \text{Volume of extract injected in uL.} \\ &\text{Vi} = \text{Volume of the concentrated extract in uL} \\ &\text{RRF} = \text{Mean Relative Response Factor determined from the initial calibration standard.} \\ &\text{GPC} = \frac{\text{Vin}}{\text{Vout}} = \text{GPC factor (If no GPC is performed, GPC=1)} \\ &\text{Vout} \end{aligned}$

No positive target compounds were detected in the samples.

RRF Calculation of standard 20 ppb for **Pyridine** with instrument N for method 01/30/2025.

RRF=	Area of compound / Area of Internal Standard	Х	Conc. of Internal Standard / Conc. of Compound
= 1	150997/97780 X 20/20		
= 1	1.544 (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.
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Date: _____ Title: Document Control Officer.



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