SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51822 MA No.: 3105.0 SDG No.: MH2GW9

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MH2GW9	Q1177-01		X		
MH2GW9D	Q1177-02		X		
MH2GW9S	Q1177-03		X		
MH2GX2	Q1177-04		X		
MH2GX3	Q1177-05		X		
MH2GX4	Q1177-06		X		
MH2GX5	Q1177-07		X		
MH2GX6	Q1177-08		X		
MH2GX7	Q1177-09		X		
MH2GX8	Q1177-10		X		
MH2GX9	Q1177-11		X		
MH2GY0	Q1177-12		X		
MH2GY1	Q1177-13		X		
MH2GY2	Q1177-14		X		
MH2GY3	Q1177-15		X		
MH2GY4	Q1177-16		X		
MH2GY5	Q1177-17		X		
MH2GY6	Q1177-18		X		
MH2GY7	Q1177-19		X		
MH2GY8	Q1177-20		X		
MH2GY9	Q1177-21		X		
MH2GZ0	Q1177-22		X		

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the SDG Narrative. All edits and manual integrations have been peer-reviewed. Release of the data contained in this hardcopy Complete SDG File and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

68HERH20D0011

SDG # MH2GW9

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 8-012325-144017-0603

DateShipped: 1/23/2025

CarrierName: FedEx

AirbillNo: 8184 7188 9747

Case #: 51822

Cooler #: 4

Lab: Alliance Technical Group LLC

Lab Contact: Sohil Jodhani

Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
S-LABQC-2024-705	MH2GW9	Soil/ LP, SH	Subsample	ICP/MS(14)	24476 (None) (3)	XX	12/18/2024 12:12	1
S-LABQC-2024-706	MH2GX0	Soil/ LP, SH	Subsample	ICP/MS(14)	24477 (None) (3)	XX	12/18/2024 11:15	
S-LABQC-2024-707	MH2GX1	Soil/ LP, SH	Subsample	ICP/MS(14)	24478 (None) (3)	XX	01/16/2025 11:08	
S2427-ED-0001-01	MH2GX2	Soil/ LP, SH	Composite	ICP/MS(14)	24479 (None) (1)	ED-2427	12/18/2024 12:30	2
S2427-ED-0106-01	MH2GX3	Soil/ LP, SH	Composite	ICP/MS(14)	24480 (None) (1)	ED-2427	12/18/2024 12:32	3
S2427-ED-0612-01	MH2GX4	Soil/ LP, SH	Composite	ICP/MS(14)	24481 (None) (1)	ED-2427	12/18/2024 12:34	4
S2427-ED-1218-01	MH2GX5	Soil/ LP, SH	Composite	ICP/MS(14)	24482 (None) (1)	ED-2427	12/18/2024 12:36	5
S2427-ED-0001-02	MH2GX6	Soil/ LP, SH	Composite	ICP/MS(14)	24483 (None) (1)	ED-2427	12/18/2024 12:38	6
S2427-ED-0106-02	MH2GX7	Soil/ LP, SH	Composite	ICP/MS(14)	24484 (None) (1)	ED-2427	12/18/2024 12:40	7
S2427-ED-0612-02	MH2GX8	Soil/ LP, SH	Composite	ICP/MS(14)	24485 (None) (1)	ED-2427	12/18/2024 12:42	8

Sample(s) to be used for Lab QC: S-LABQC-2024-705 Tag 24476, S-LABQC-2024-706 Tag 24477, S-LABQC-2024-707 Tag 24478 - Special Instructions: Analyze per MA3105

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP/MS=CLP TAL Total Metals ICP/MS

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	[signature] QWT	1/23/25 1500	[signature]	1-24-25 0735	1.2°C IR GUN #1
					custody seals intact
					Temp blk. present

68HERH20D0011

SDG # MH2GW9

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 8-012325-144017-0603

DateShipped: 1/23/2025

CarrierName: FedEx

AirbillNo: 8184 7188 9747

Case #: 51822

Cooler #: 4

Lab: Alliance Technical Group LLC

Lab Contact: Sohil Jodhani

Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
S2427-ED-1218-02	MH2GX9	Soil/ LP, SH	Composite	ICP/MS(14)	24486 (None) (1)	ED-2427	12/18/2024 12:44	9
S2427-ED-0001-03	MH2GY0	Soil/ LP, SH	Composite	ICP/MS(14)	24487 (None) (1)	ED-2427	12/18/2024 12:46	10
S2427-ED-0106-03	MH2GY1	Soil/ LP, SH	Composite	ICP/MS(14)	24488 (None) (1)	ED-2427	12/18/2024 12:48	11
S2427-ED-0612-03	MH2GY2	Soil/ LP, SH	Composite	ICP/MS(14)	24489 (None) (1)	ED-2427	12/18/2024 12:50	12
S2427-ED-1218-03	MH2GY3	Soil/ LP, SH	Composite	ICP/MS(14)	24490 (None) (1)	ED-2427	12/18/2024 12:52	13
S2427-APE-0001-01	MH2GY4	Soil/ LP, SH	Composite	ICP/MS(14)	24491 (None) (1)	APE-2427	12/18/2024 12:10	14
S2427-APE-0106-01	MH2GY5	Soil/ LP, SH	Composite	ICP/MS(14)	24492 (None) (1)	APE-2427	12/18/2024 12:12	15
S2427-APE-0612-01	MH2GY6	Soil/ LP, SH	Composite	ICP/MS(14)	24493 (None) (1)	APE-2427	12/18/2024 12:14	16
S2427-APE-1218-01	MH2GY7	Soil/ LP, SH	Composite	ICP/MS(14)	24494 (None) (1)	APE-2427	12/18/2024 12:16	17
S2427-VL-0001-31	MH2GY8	Soil/ LP, SH	Composite	ICP/MS(14)	24495 (None) (1)	VL-2427	12/18/2024 11:10	18

Special Instructions: Analyze per MA3105

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP/MS=CLP TAL Total Metals ICP/MS

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	Jake Patton PWT	1/23/25 1500		1-24-25 0735	1.2°C IR Gun #1
					custody seals intact
					Temp blk. present

68HERH20D0011

SDG # MH2GW9

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 8-012325-144017-0603

DateShipped: 1/23/2025

CarrierName: FedEx

AirbillNo: 8184 7188 9747

Case #: 51822

Cooler #: 4

Lab: Alliance Technical Group LLC

Lab Contact: Sohil Jodhani

Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
S2427-VL-0106-31	MH2GY9	Soil/ LP, SH	Composite	ICP/MS(14)	24496 (None) (1)	VL-2427	12/18/2024 11:15	19
S2427-VL-0612-31	MH2GZ0	Soil/ LP, SH	Composite	ICP/MS(14)	24497 (None) (1)	VL-2427	12/18/2024 11:20	20
S2427-VL-1218-31	MH2GZ1	Soil/ LP, SH	Composite	ICP/MS(14)	24498 (None) (1)	VL-2427	12/18/2024 11:25	
S2429-APE-0001-01	MH2GZ2	Soil/ LP, SH	Composite	ICP/MS(14)	24499 (None) (1)	APE-2429	01/16/2025 10:50	
S2429-APE-0106-01	MH2GZ3	Soil/ LP, SH	Composite	ICP/MS(14)	24500 (None) (1)	APE-2429	01/16/2025 10:52	
S2429-APE-0612-01	MH2GZ4	Soil/ LP, SH	Composite	ICP/MS(14)	24501 (None) (1)	APE-2429	01/16/2025 10:54	
S2429-APE-1218-01	MH2GZ5	Soil/ LP, SH	Composite	ICP/MS(14)	24502 (None) (1)	APE-2429	01/16/2025 10:56	
S2429-FY-0001-01	MH2H00	Soil/ LP, SH	Composite	ICP/MS(14)	24507 (None) (1)	FY-2429	01/16/2025 11:06	
S2429-FY-0106-01	MH2H01	Soil/ LP, SH	Composite	ICP/MS(14)	24508 (None) (1)	FY-2429	01/16/2025 11:08	
S2429-FY-0612-01	MH2H02	Soil/ LP, SH	Composite	ICP/MS(14)	24509 (None) (1)	FY-2429	01/16/2025 11:10	

Special Instructions: Analyze per MA3105

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP/MS=CLP TAL Total Metals ICP/MS

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	Jake Peters PWT	1/23/25 1505		1-24-25 0735	1.2°C IR Gun #1
					Custody seals intact
					Temp Blk. present

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) Cassandra Pena		Log-in Date 1/24/2025
Received By (Signature)		
Case Number 51822	SDG No. MH2GW9	MA No. 3105.0

Remarks:	
1. Custody Seal (s)	Present, Intact
2. Custody Seal Nos.	n/a
3. Traffic Reports/Chain Of Custody Records	Present
4. Airbill	Present
5. Airbill No. and Shipping Container ID No.	818471889747 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	1.2 Degree C
8. Sample Condition	Intact
9. Sample Tags Sample Tag Numbers	Absent Listed on Traffic Report
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	01/24/2025
12.Time Received	07:35

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MH2GW9	N/A	24476	Q1177-01	Intact
2	MH2GW9D	N/A	24476	Q1177-02	Intact
3	MH2GW9S	N/A	24476	Q1177-03	Intact
4	MH2GX2	N/A	24479	Q1177-04	Intact
5	MH2GX3	N/A	24480	Q1177-05	Intact
6	MH2GX4	N/A	24481	Q1177-06	Intact
7	MH2GX5	N/A	24482	Q1177-07	Intact
8	MH2GX6	N/A	24483	Q1177-08	Intact
9	MH2GX7	N/A	24484	Q1177-09	Intact
10	MH2GX8	N/A	24485	Q1177-10	Intact
11	MH2GX9	N/A	24486	Q1177-11	Intact
12	MH2GY0	N/A	24487	Q1177-12	Intact
13	MH2GY1	N/A	24488	Q1177-13	Intact
14	MH2GY2	N/A	24489	Q1177-14	Intact
15	MH2GY3	N/A	24490	Q1177-15	Intact
16	MH2GY4	N/A	24491	Q1177-16	Intact
17	MH2GY5	N/A	24492	Q1177-17	Intact
18	MH2GY6	N/A	24493	Q1177-18	Intact
19	MH2GY7	N/A	24494	Q1177-19	Intact
20	MH2GY8	N/A	24495	Q1177-20	Intact
21	MH2GY9	N/A	24496	Q1177-21	Intact
22	MH2GZ0	N/A	24497	Q1177-22	Intact
23	N/A	N/A	N/A	N/A	N/A

* Contact SMO and attach record of resolution

Reviewed By		Logbook No.	N/A
Date	1/24/25	Logbook Page No.	N/A

FORM DC-2
COMPLETE SDG FILE (CSF) INVENTORY SHEET

LAB NAME	**Alliance Technical Group, LLC**		
LAB CODE	**ACE**		
CONTRACT NO.	**68HERH20D0011**		
CASE NO.	**51822**	SDG NO.	**MH2GW9**
MA NO.	**3105.0**	SOW NO.	**SFAM01.1**

All documents delivered in the Complete SDG File must be original documents where possible.
(Reference - Exhibit B Section 2.4)

	PAGE NOs: FROM	PAGE NOs: TO	CHECK LAB	CHECK REGION
1 . SDG Cover Page	1	1	✓	
2 . Traffic Report/Chain of Custody Record(s)	2	4	✓	
3 . Sample Log-In Sheet (DC-1)	5	5	✓	
4 . CSF Inventory Sheet (DC-2)	6	8	✓	
5 . SDG Narrative	9	12	✓	
6 . Communication Logs	NA	NA	✓	
7 . Percent Solids Log	NA	NA	✓	
Analysis Forms and Data (ICP-AES)				
8 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
9 . Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	NA	NA	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
13 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
14 . Extraction Logs for TCLP and SPLP	NA	NA	✓	
15 . Raw GPC Data	NA	NA	✓	
16 . Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (ICP-MS)				
17 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	13	32	✓	
18 . Instrument raw data by instrument in analysis order	33	986	✓	
Other Data				
19 . Standard and Reagent Preparation Logs	987	1133	✓	
20 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1134	1135	✓	
21 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1136	1148	✓	
22 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	

	PAGE NOs: FROM	TO	CHECK LAB	REGION
23. Extraction Logs for TCLP and SPLP	NA	NA	✓	
24. Raw GPC Data	NA	NA	✓	
25. Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (Mercury)				
26. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
27. Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
28. Standard and Reagent Preparation Logs	NA	NA	✓	
29. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
30. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
31. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
32. Extraction Logs for TCLP and SPLP	NA	NA	✓	
33. Raw GPC Data	NA	NA	✓	
34. Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (Cyanide)				
35. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
36. Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
37. Standard and Reagent Preparation Logs	NA	NA	✓	
38. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
39. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
40. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
41. Extraction Logs for TCLP and SPLP	NA	NA	✓	
42. Raw GPC Data	NA	NA	✓	
43. Raw Florisil Data	NA	NA	✓	

	PAGE NOs: FROM	TO	CHECK LAB	REGION
Additional				
44. EPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)	1149	1149	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	1150	1151	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	1152	1153	✓	
47. Other Records and related Communication Logs (describe or list)				
	NA	NA	✓	

48. Comments:

Completed by: (CLP Lab)		Nimisha Pandya, Document Control Officer	
	(Signature)	(Print Name & Title)	(Date)
Audited by: (EPA)			
	(Signature)	(Print Name & Title)	(Date)

284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # MH2GW9
CASE # 51822
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # Q1177
MODIFIED ANALYSIS #3105.0

A. Number of Samples and Date of Receipt

20 Soil samples were delivered to the laboratory intact on 01/24/2025.

B. Parameters

Test requested for Metals CLP MS FULL = Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc.

C. Cooler Temp

Indicator Bottle**: Presence/**Absence

Cooler: 1.2^{o}C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

Issue : A "P" or "M" prefix was listed at the beginning of a CLP sample ID.

E. Corrective Action taken for above:

Resolution : To maintain COC integrity, ASB requests no changes to the Sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

F. Analytical Techniques:

All analyses were based on CLP Methodology by method SFAM01.1.

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Mountainside, NJ 07092

G. Calculation:

Calculation for ICP-MS Soil Sample:

Conversion of Results from µg /L or ppb to mg/kg :

$$\text{Concentration (mg/kg)} = C \times \frac{Vf}{W \times S} \times DF / 1000$$

Where,

C = Instrument value in ppb (The average of all replicate integrations)
Vf = Final digestion volume (mL)
W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)
S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

Example Calculation For Sample MH2GW9 For Arsenic :

If C = 46.24 ppb
Vf = 500 ml
W = 2.09 g
S = 1.0(100/100)
DF = 1

$$\text{Concentration (mg/kg)} = 46.24 \times \frac{500}{2.09 \times 1.0} \times 1 / 1000$$

$$= 11.0622 \text{ mg/kg}$$

$$= 11 \text{ mg/kg (Reported Result with Signification)}$$

H. QA/ QC

Calibrations met requirements. Interference check met requirements. Blank analyses did not indicate any presence of contamination. Laboratory Control sample was within control limits. MS Spike sample did meet requirements except for Selenium. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

284 Sheffield Street
Mountainside, NJ 07092

Internal Standard Association for ICP-MS analysis.

Target Analyte	Associated Internal Standard
Antimony	159Tb
Arsenic	89Y
Barium	159Tb
Beryllium	6Li
Cadmium	159Tb
Chromium	45Sc
Cobalt	45Sc
Copper	45Sc
Lead	209Bi
Manganese	45Sc
Nickel	45Sc
Selenium	89Y
Silver	159Tb
Thallium	209Bi
Vanadium	45Sc
Zinc	45Sc

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. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature_____ Name: Nimisha Pandya

Date _____ Title: Document Control Officer

Date: 06/25/2021	**MA:** 3105.0	**Title:** ICP-MS Analysis with Increased Sample Mass
Method Source: SFAM01.1	**Method:** ICP-MS	
Matrix: Soil/Sediment		

Summary of Modification

The purpose of this modified analysis is to analyze dried, composited, and sieved soil/sediment samples by ICP-MS (processed by Incremental Sampling Methodology). Unless specifically modified by this modification, all analyses, Quality Control (QC), and reporting requirements specified in the SOW listed in your current EPA agreement remain unchanged and in full force and effect.

I. Analyte Modifications **Not applicable** ☒

II. Calibration and QC Requirements **Not applicable** ☒

III. Preparation and Method Modifications **Not applicable** ☐

The Laboratory shall:

- Calculate and report results for the samples on the basis of 100% solids. The Laboratory is not required to determine the Percent (%) Solids for the samples.
- Receive the composited samples dried and sieved prior to shipment to the Laboratory. The samples will be received in plastic baggies as individual aliquots with approximately 2 grams each. The aliquots shall not be re-combined and/or subsampled at the Laboratory.
- Not increase the amount of acid reagents added to the sample to account for the increase in mass.
- Store the samples at ambient temperature from the time of receipt until preparation. Do not refrigerate.
- Remove and weigh the entire content within each baggie followed by digesting the entire sample per the SOW.
- Prepare and analyze Matrix Spikes and Duplicates if additional aliquots were provided for these analyses.

IV. Special Reporting Requirements **Not applicable** ☐

- Report 100.0 on Form 1 for % Solids.
- Ensure that the SDG Narrative is updated as stated in the SOW, including any technical and administrative problems encountered and the corrective action taken. These problems may include interference problems encountered during analysis, dilutions, re-analyses or re-preparations performed, and problems with the analysis of samples. Also include a discussion of any SOW Modified Analysis including a copy of the approved modification with the SDG Narrative.