

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
 Lab Code: ACE Case No.: 51715 MA No.: _____ SDG No.: MH2GH8
 SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MH2GH8</u>	<u>P4387-01</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GH9</u>	<u>P4387-02</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ0</u>	<u>P4387-03</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ0D</u>	<u>P4387-04</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ0S</u>	<u>P4387-05</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ1</u>	<u>P4387-06</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ2</u>	<u>P4387-07</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ3</u>	<u>P4387-08</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ4</u>	<u>P4387-09</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ5</u>	<u>P4387-10</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ6</u>	<u>P4387-11</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ7</u>	<u>P4387-12</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ8</u>	<u>P4387-13</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GJ9</u>	<u>P4387-14</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
<u>MH2GK0</u>	<u>P4387-15</u>	<u> </u>	<u>X</u>	<u> </u>	<u> </u>

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: _____

USEPA CLP Inorganics COC (LAB COPY)

Date Shipped: 10/10/2024

Carrier Name: FedEx

Airbill No: 7791 6698 7646

68HERH20D0011
CHAIN OF CUSTODY RECORDCase #: 51715
Cooler #: 4

SDG # MH2GH8

No: 8-101024-162527-0596

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
D0024-L	MH2GH8	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24365 (None) (1)	L-0024	10/09/2024 07:53	
D0024-D	MH2GH9	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24366 (None) (1)	D-0024	10/09/2024 07:58	
D0125-L	MH2GJ0	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24367 (None) (1)	L-0125	10/01/2024 12:20	OL
D2027-2-L	MH2GJ1	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24368 (None) (1)	L-2-2027	10/05/2024 10:03	
D2027-2-B1	MH2GJ2	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24369 (None) (1)	B1-2-2027	10/05/2024 10:09	
D2510-C	MH2GJ3	Dust (Soil)/ LP, SH	Composite	ICP/MS(14)	24370 (None) (1)	C-2510	10/08/2024 10:14	
D2510-B1	MH2GJ4	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24371 (None) (1)	B1-2510	10/08/2024 10:20	
D2510-B2	MH2GJ5	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24372 (None) (1)	B2-2510	10/08/2024 10:24	
D2510-B3	MH2GJ6	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24373 (None) (1)	B3-2510	10/08/2024 10:32	
D2510-BM	MH2GJ7	Dust (Soil)/ LP, SH	Grab	ICP/MS(14)	24374 (None) (1)	BM-2510	10/08/2024 10:45	

Sample(s) to be used for Lab QC: D0125-L Tag 24367

Analysis Key: ICP/MS=CLP TAL Total Metals

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #



Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	<i>[Signature]</i> FWT	10/10/24 16:30	<i>[Signature]</i>	10-11-24 7:24	ILG #1 1.9-C Custody Seal Intact Temp Blank present

[illegible]

Special Instructions:

Shipment for Case Complete? N

Analysis Key: ICP/MS=CLP TAL Total Metals

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	 Jonathan PWT	10/10/24 16:30	 Dea	7:27 10-11-24	IR.G.0041 1.9°C
					Custody Seal Intact
					Temp Blank present

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC	Page <u>1</u> of <u>1</u>
Received By (Print Name) <u>Cassanova René</u>	Log-in Date 10/11/2024
Received By (Signature) <u>[Signature]</u>	
Case Number 51715	SDG No. MH2GH8 MA No. N/A

Remarks:	
1. Custody Seal (s)	Present, Intact
2. Custody Seal Nos.	<u>n/a</u>
3. Traffic Reports/Chain Of Custody Records	Present
4. Airbill	Present
5. Airbill No. and Shipping Container ID No.	<u>779166987646</u> <u>1</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>1.9</u> 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	<u>10/11/2024</u>
12. Time Received	<u>07:27</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MH2GH8	N/A	24365	P4387-01	Intact
2	MH2GH9	N/A	24366	P4387-02	Intact
3	MH2GJ0	N/A	24367	P4387-03	Intact
4	MH2GJ0D	N/A	24367	P4387-04	Intact
5	MH2GJ0S	N/A	24367	P4387-05	Intact
6	MH2GJ1	N/A	24368	P4387-06	Intact
7	MH2GJ2	N/A	24369	P4387-07	Intact
8	MH2GJ3	N/A	24370	P4387-08	Intact
9	MH2GJ4	N/A	24371	P4387-09	Intact
10	MH2GJ5	N/A	24372	P4387-10	Intact
11	MH2GJ6	N/A	24373	P4387-11	Intact
12	MH2GJ7	N/A	24374	P4387-12	Intact
13	MH2GJ8	N/A	24375	P4387-13	Intact
14	MH2GJ9	N/A	24376	P4387-14	Intact
15	MH2GK0	N/A	24377	P4387-15	Intact
16	N/A	N/A	N/A	N/A	N/A
17	N/A	N/A	N/A	N/A	N/A
18	N/A	N/A	N/A	N/A	N/A
19	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A
21	N/A	N/A	N/A	N/A	N/A
22	N/A	N/A	N/A	N/A	N/A
23	N/A	N/A	N/A	N/A	N/A

* Contact SMO and attach record of resolution

Reviewed By <u>[Signature]</u>	Logbook No. N/A
Date <u>10/11/24</u>	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.	51715	SDG NO.	MH2GH8
MA NO.		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:		CHECK	
	FROM	TO	LAB	REGION
1. SDG Cover Page	1	1	✓	
2. Traffic Report/Chain of Custody Record(s)	2	3	✓	
3. Sample Log-In Sheet (DC-1)	4	4	✓	
4. CSF Inventory Sheet (DC-2)	5	7	✓	
5. SDG Narrative	8	10	✓	
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	11	23	✓	
18. Instrument raw data by instrument in analysis order	24	1424	✓	

Other Data

19. Standard and Reagent Preparation Logs	1425	1560	✓	
20. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1561	1562	✓	
21. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1563	1575	✓	
22. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	

- 23 . Extraction Logs for TCLP and SPLP
- 24 . Raw GPC Data
- 25 . Raw Florisil Data

PAGE NOS:		CHECK	
FROM	TO	LAB	REGION
NA	NA	✓	
NA	NA	✓	
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
- 27 . Instrument raw data by instrument in analysis order

NA	NA	✓	
NA	NA	✓	

Other Data

- 28 . Standard and Reagent Preparation Logs
- 29 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks
- 30 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks
- 31 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions
- 32 . Extraction Logs for TCLP and SPLP
- 33 . Raw GPC Data
- 34 . Raw Florisil Data

NA	NA	✓	
NA	NA	✓	
NA	NA	✓	
NA	NA	✓	
NA	NA	✓	
NA	NA	✓	
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
- 36 . Instrument raw data by instrument in analysis order

NA	NA	✓	
NA	NA	✓	

Other Data

- 37 . Standard and Reagent Preparation Logs
- 38 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks
- 39 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks
- 40 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions
- 41 . Extraction Logs for TCLP and SPLP
- 42 . Raw GPC Data
- 43 . Raw Florisil Data

NA	NA	✓	
NA	NA	✓	
NA	NA	✓	
NA	NA	✓	
NA	NA	✓	
NA	NA	✓	
NA	NA	✓	

Additional

44. EPA Shipping/Receiving Documents

Airbill (No. of Shipments 1)

Sample Tags

Sample Log-In Sheet (Lab)

45. Misc. Shipping/Receiving Records (list all individual records)

46. Internal Lab Sample Transfer Records and Tracking Sheets
(describe or list)47. Other Records and related Communication Logs
(describe or list)

48. Comments:

Completed by:
(CLP Lab)Audited by:
(EPA)

Nimisha Pandya, Document Control Officer

PAGE NOs:		CHECK	
FROM	TO	LAB	REGION
1576	1576	✓	
NA	NA	✓	
1577	1578	✓	
NA	NA	✓	
1579	1579	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

**USEPA
SDG # MH2GH8
CASE # 51715
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID #P4387**

A. Number of Samples and Date of Receipt

13 Soil samples were delivered to the laboratory intact on 10/11/2024.

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: 1.9°C

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

Issue1: A "P" or "M" prefix was listed at the beginning of a CLP sample ID.

E. Corrective Action taken for above:

Resolution1: 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 $\mu\text{g/L}$ or ppb to mg/kg :

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

Where,

C = Instrument value in ppb (The average of all replicate integrations)

V_f = 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 MH2GH8 For Arsenic:

If C = 12.40 ppb

V_f = 500 ml

W = 1.14 g

S = 1.0(100/100)

DF = 1

$$\text{Concentration (mg/kg)} = 12.40 \times \frac{500}{1.14 \times 1.0} \times 1 / 1000$$

$$= 5.4385 \text{ mg/kg}$$

$$= 5.4 \text{ mg/kg (Reported Result with Signification)}$$

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. Spike sample did meet requirements. 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.



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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