SDG COVER PAGE

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

Lab Code: ACE Case No.: 51822 MA No.: 3105.0 SDG No.: MH2GQ2

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MH2GQ2	P4956-01		X		
MH2GQ2D	P4956-02		X		
MH2GQ2S	P4956-03		X		
MH2GQ4	P4956-04		X		
MH2GQ5	P4956-05		X		
MH2GQ6	P4956-06		X		
MH2GQ7	P4956-07		X		
MH2GQ8	P4956-08		X		
MH2GQ9	P4956-09		X		
MH2GR0	P4956-10		X		
MH2GR1	P4956-11		X		
MH2GR2	P4956-12		X		
MH2GR3	P4956-13		X		
MH2GR4	P4956-14		X		
MH2GR5	P4956-15		X		
MH2GR6	P4956-16		X		
MH2GR7	P4956-17		X		
MH2GR8	P4956-18		X		
MH2GR9	P4956-19		X		
MH2GS0	P4956-20		X		
MH2GS1	P4956-21		X		
MH2GS2	P4956-22		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 # MH2GQ2

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 8-112124-133954-0600

DateShipped: 11/21/2024

CarrierName: FedEx

AirbillNo: 7707 3347 7550

Case #: 51822

Cooler #: 2

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-2024-703	MH2GQ2	Soil/ SH, LP	Subsample	ICP/MS(14)	24429 (None) (3)	XX	11/15/2024 10:48	1-QC
S-LABQC-2024-704	MH2GQ3	Soil/ SH, LP	Subsample	ICP/MS(14)	24430 (None) (3)	XX	11/15/2024 10:32	
S2556-APS-0001-01	MH2GQ4	Soil/ SH, LP	Composite	ICP/MS(14)	24431 (None) (1)	APS-2556	11/15/2024 11:18	2
S2556-APS-0106-01	MH2GQ5	Soil/ SH, LP	Composite	ICP/MS(14)	24432 (None) (1)	APS-2556	11/15/2024 11:20	3
S2556-APS-0612-01	MH2GQ6	Soil/ SH, LP	Composite	ICP/MS(14)	24433 (None) (1)	APS-2556	11/15/2024 11:22	4
S2556-APS-1218-01	MH2GQ7	Soil/ SH, LP	Composite	ICP/MS(14)	24434 (None) (1)	APS-2556	11/15/2024 11:24	5
S2556-APW-0001-01	MH2GQ8	Soil/ SH, LP	Composite	ICP/MS(14)	24435 (None) (1)	APW-2556	11/15/2024 10:46	6
S2556-APW-0106-01	MH2GQ9	Soil/ SH, LP	Composite	ICP/MS(14)	24436 (None) (1)	APW-2556	11/15/2024 10:48	7
S2556-APW-0612-01	MH2GR0	Soil/ SH, LP	Composite	ICP/MS(14)	24437 (None) (1)	APW-2556	11/15/2024 10:50	8
S2556-APW-1218-01	MH2GR1	Soil/ SH, LP	Composite	ICP/MS(14)	24438 (None) (1)	APW-2556	11/15/2024 10:52	9

Sample(s) to be used for Lab QC: S-LABQC-2024-703 Tag 24429, S-LABQC-2024-704 Tag 24430 - Special Instructions: Analyze per MA 3105

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] PWT	11/21/24 1429	[signature]	11-22-24 0745	2.2°C IR Gun #1
					custody seals intact
					Temp Blk. present

68HERH20D0011

SDG # MH2GQ2

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 8-112124-133954-0600

DateShipped: 11/21/2024
CarrierName: FedEx
AirbillNo: 7707 3347 7550

Case #: 51822
Cooler #: 2

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
S2556-BY-0001-01	MH2GR2	Soil/ SH, LP	Composite	ICP/MS(14)	24439 (None) (1)	BY-2556	11/15/2024 10:30	10
S2556-BY-0106-01	MH2GR3	Soil/ SH, LP	Composite	ICP/MS(14)	24440 (None) (1)	BY-2556	11/15/2024 10:32	11
S2556-BY-0612-01	MH2GR4	Soil/ SH, LP	Composite	ICP/MS(14)	24441 (None) (1)	BY-2556	11/15/2024 10:34	12
S2556-BY-1218-01	MH2GR5	Soil/ SH, LP	Composite	ICP/MS(14)	24442 (None) (1)	BY-2556	11/15/2024 10:36	13
S2556-ED-0001-01	MH2GR6	Soil/ SH, LP	Composite	ICP/MS(14)	24443 (None) (1)	ED-2556	11/15/2024 10:38	14
S2556-ED-0106-01	MH2GR7	Soil/ SH, LP	Composite	ICP/MS(14)	24444 (None) (1)	ED-2556	11/15/2024 10:40	15
S2556-ED-0612-01	MH2GR8	Soil/ SH, LP	Composite	ICP/MS(14)	24445 (None) (1)	ED-2556	11/15/2024 10:42	16
S2556-ED-1218-01	MH2GR9	Soil/ SH, LP	Composite	ICP/MS(14)	24446 (None) (1)	ED-2556	11/15/2024 10:44	17
S2556-FY-0001-01	MH2GS0	Soil/ SH, LP	Composite	ICP/MS(14)	24447 (None) (1)	FY-2556	11/15/2024 11:10	18
S2556-FY-0106-01	MH2GS1	Soil/ SH, LP	Composite	ICP/MS(14)	24448 (None) (1)	FY-2556	11/15/2024 11:12	19

Special Instructions: Analyze per MA 3105

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 Peterson ATL	11/21/24 1425		11-22-24 0745	22°C IR Gun #1
					custody seals intact
					Temp Blk present

68HERH20D0011

SDG # MH2GQ2

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 8-112124-133954-0600

DateShipped: 11/21/2024

CarrierName: FedEx

AirbillNo: 7707 3347 7550

Case #: 51822

Cooler #: 2

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
S2556-FY-0612-01	MH2GS2	Soil/ SH, LP	Composite	ICP/MS(14)	24449 (None) (1)	FY-2556	11/15/2024 11:14	29
S2556-FY-1218-01	MH2GS3	Soil/ SH, LP	Composite	ICP/MS(14)	24450 (None) (1)	FY-2556	11/15/2024 11:16	
S2556-LRS-0001-01	MH2GS4	Soil/ SH, LP	Composite	ICP/MS(14)	24451 (None) (1)	LRS-2556	11/15/2024 11:26	
S2556-LRS-0106-01	MH2GS5	Soil/ SH, LP	Composite	ICP/MS(14)	24452 (None) (1)	LRS-2556	11/15/2024 11:28	
S2556-LRS-0612-01	MH2GS6	Soil/ SH, LP	Composite	ICP/MS(14)	24453 (None) (1)	LRS-2556	11/15/2024 11:30	
S2556-LRS-1218-01	MH2GS7	Soil/ SH, LP	Composite	ICP/MS(14)	24454 (None) (1)	LRS-2556	11/15/2024 11:32	
S2556-SYE-0001-01	MH2GS8	Soil/ SH, LP	Composite	ICP/MS(14)	24455 (None) (1)	SYE-2556	11/15/2024 11:02	
S2556-SYE-0106-01	MH2GS9	Soil/ SH, LP	Composite	ICP/MS(14)	24456 (None) (1)	SYE-2556	11/15/2024 11:04	
S2556-SYE-0612-01	MH2GT0	Soil/ SH, LP	Composite	ICP/MS(14)	24457 (None) (1)	SYE-2556	11/15/2024 11:06	
S2556-SYE-1218-01	MH2GT1	Soil/ SH, LP	Composite	ICP/MS(14)	24458 (None) (1)	SYE-2556	11/15/2024 11:08	

Special Instructions: Analyze per MA 3105

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	11/21/24 1430		11-22-24 0745	2.2°C ICE Chest #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) George Nelson		Log-in Date **11/22/2024**
Received By (Signature)		
Case Number 51822	SDG No. MH2GQ2	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.	770733477550 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.2 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	11/22/2024
12.Time Received	07:45

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MH2GQ2	N/A	24429	P4956-01	Intact
2	MH2GQ2D	N/A	24429	P4956-02	Intact
3	MH2GQ2S	N/A	24429	P4956-03	Intact
4	MH2GQ4	N/A	24431	P4956-04	Intact
5	MH2GQ5	N/A	24432	P4956-05	Intact
6	MH2GQ6	N/A	24433	P4956-06	Intact
7	MH2GQ7	N/A	24434	P4956-07	Intact
8	MH2GQ8	N/A	24435	P4956-08	Intact
9	MH2GQ9	N/A	24436	P4956-09	Intact
10	MH2GR0	N/A	24437	P4956-10	Intact
11	MH2GR1	N/A	24438	P4956-11	Intact
12	MH2GR2	N/A	24439	P4956-12	Intact
13	MH2GR3	N/A	24440	P4956-13	Intact
14	MH2GR4	N/A	24441	P4956-14	Intact
15	MH2GR5	N/A	24442	P4956-15	Intact
16	MH2GR6	N/A	24443	P4956-16	Intact
17	MH2GR7	N/A	24444	P4956-17	Intact
18	MH2GR8	N/A	24445	P4956-18	Intact
19	MH2GR9	N/A	24446	P4956-19	Intact
20	MH2GS0	N/A	24447	P4956-20	Intact
21	MH2GS1	N/A	24448	P4956-21	Intact
22	MH2GS2	N/A	24449	P4956-22	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 11/22/24	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.	**MH2GQ2**
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	497	✓	
Other Data				
19 . Standard and Reagent Preparation Logs	498	635	✓	
20 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	636	637	✓	
21 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	638	642	✓	
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)	643	643	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	644	645	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	646	647	✓	
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 # MH2GQ2
CASE # 51822
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P4956
MODIFIED ANALYSIS #3105.0

A. Number of Samples and Date of Receipt

20 Soil samples were delivered to the laboratory intact on 11/22/2024

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: 2.2^{o}C

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

Issue 1 : A "P" or "M" prefix was listed at the beginning of a CLP sample ID.

E. Corrective Action taken for above:

Resolution 1 : 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.

G. Calculation:

Calculation for ICP-MS Soil Sample:

284 Sheffield Street
Mountainside, NJ 07092

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 MH2GQ2 For Antimony:

If C = 1.20 ppb
Vf = 500 ml
W = 2.32 g
S = 1.0(100/100)
DF = 1

$$\text{Concentration (mg/kg)} = 1.20 \times \frac{500}{2.32 \times 1.0} \times 1 / 1000$$

$$= 0.2586 \text{ mg/kg}$$

$$= 0.26 \text{ mg/kg (Reported Result with Signification)}$$

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. 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.

Internal Standard Association for ICP-MS analysis.

Target Analyte	Associated Internal Standard
Antimony	159Tb
Arsenic	89Y
Barium	159Tb

284 Sheffield Street
Mountainside, NJ 07092

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.