SDG COVER PAGE

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

Lab Code: ACE Case No.: 51822 MA No.: SDG No.: MH2H28

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MH2H28	Q1102-01		X		
MH2H29	Q1102-02		X		
MH2H30	Q1102-03		X		
MH2H30D	Q1102-04		X		
MH2H30S	Q1102-05		X		
MH2H31	Q1102-06		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 # MH2H28

USEPA CLP Inorganics COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 8-011525-125353-0602

DateShipped: 1/15/2025

CarrierName: FedEx

AirbillNo: 8184 7188 9725

Case #: 51822

Cooler #: 3

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
D0660-1-L1	MH2H28	Dust (Soil)/ BL, LC	Grab	ICP/MS(14)	24535 (None) (1)	L1-0660	12/13/2024 09:24	
D0660-1-L2	MH2H29	Dust (Soil)/ BL, LC	Grab	ICP/MS(14)	24536 (None) (1)	L2-0660	12/13/2024 09:29	
D0660-1-C1	MH2H30	Dust (Soil)/ BL, LC	Composite	ICP/MS(14)	24537 (None) (1)	C1-0660	12/13/2024 09:40	
D0660-2-C2	MH2H31	Dust (Soil)/ BL, LC	Composite	ICP/MS(14)	24538 (None) (1)	C2-0660	12/13/2024 09:55	

Sample(s) to be used for Lab QC: D0660-1-C1 Tag 24537 - Special Instructions: Please return cooler

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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	Jake Peterson PWT	1/15/25 1330		7:25 1.16.25	IR Gun #1 2.1°C Custody Seal Intact Temp Blank present

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) Cassandra Peña		Log-in Date 1/16/2025
Received By (Signature)		
Case Number 51822	SDG No. MH2H28	MA No. N/A

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.	818471889725 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.1 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	01/16/2025
12.Time Received	07:25

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MH2H28	N/A	24535	Q1102-01	Intact
2	MH2H29	N/A	24536	Q1102-02	Intact
3	MH2H30	N/A	24537	Q1102-03	Intact
4	MH2H30D	N/A	24537	Q1102-04	Intact
5	MH2H30S	N/A	24537	Q1102-05	Intact
6	MH2H31	N/A	24538	Q1102-06	Intact
7	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
9	N/A	N/A	N/A	N/A	N/A
10	N/A	N/A	N/A	N/A	N/A
11	N/A	N/A	N/A	N/A	N/A
12	N/A	N/A	N/A	N/A	N/A
13	N/A	N/A	N/A	N/A	N/A
14	N/A	N/A	N/A	N/A	N/A
15	N/A	N/A	N/A	N/A	N/A
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		Logbook No.	N/A
Date	1/16/25	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.	**MH2H28**
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: FROM	PAGE NOs: TO	CHECK LAB	CHECK REGION
1. SDG Cover Page	1	1	✓	
2. Traffic Report/Chain of Custody Record(s)	2	2	✓	
3. Sample Log-In Sheet (DC-1)	3	3	✓	
4. CSF Inventory Sheet (DC-2)	4	6	✓	
5. SDG Narrative	7	10	✓	
6. Communication Logs	11	16	✓	
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	17	20	✓	
18. Instrument raw data by instrument in analysis order	21	864	✓	
Other Data				
19. Standard and Reagent Preparation Logs	865	1012	✓	
20. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1013	1014	✓	
21. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1015	1021	✓	
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)	1022	1022	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	1023	1023	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	1024	1024	✓	
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 # MH2H28
CASE # 51822
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # Q1102

A. Number of Samples and Date of Receipt

04 Soil samples were delivered to the laboratory intact on 01/16/2025

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: 2.1^{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.

Issue 2: The laboratory received soil samples for ICP-MS analysis with a 14 day TAT. However, the COC does not list MA 3105.0. The laboratory would like to confirm if the received samples should be analyzed under MA 3105.0.

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.

Resolution 2: Per Region 8, the received samples should be analyzed without MA 3105.0. The laboratory should note the issue in the SDG Narrative and proceed with the analysis of the samples.

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Mountainside, NJ 07092

F. Analytical Techniques:

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

Inter Element correction factors (IECs) are determined annually and correction factor are applied during ICP-AES analysis.

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 MH2H28 For Antimony:

If C = 11.15 ppb
Vf = 500 ml
W = 1.14 g
S = 1(100/100)
DF = 1

$$\text{Concentration (mg/kg)} = 11.15 \times \frac{500}{1.14 \times 1} \times 1 / 1000$$

$$= 4.8904 \text{ mg/kg}$$

$$= 4.9 \text{ mg/kg (Reported Result with Signification)}$$

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 except for Arsenic and Copper. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

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Mountainside, NJ 07092

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
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.

284 Sheffield Street
Mountainside, NJ 07092

Signature_____ Name: Nimisha Pandya

Date _____ Title: Document Control Officer

From: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Sent: Wednesday, January 22, 2025 3:49 PM
To: Sohil Jodhani; Mohammad Ahmed; Deepak Parmar
Cc: Goodrich.Donald@epa.gov; mark.wood@pwt.com
Subject: Task Area SST | Region 08 | Case 51822 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC | FINAL
Attachments: Q1102.pdf

Good afternoon,

Please see the resolution below.

Issue: The laboratory received soil samples for ICP-MS analysis with a 14 day TAT. However, the COC does not list MA 3105.0. The laboratory would like to confirm if the received samples should be analyzed under MA 3105.0.
Resolution: Per Region 8, the received samples should be analyzed without MA 3105.0. The laboratory should note the issue in the SDG Narrative and proceed with the analysis of the samples.

Please note that the laboratory may contact the appropriate CLP PM should any defects need to be waived for this issue.

Thanks,
Miles Hairston
Associate Environmental Analyst
Under contract to EPA
QSS Coordinator – EPA Regions 7, 8, and 9

Work Phone: +1 571-454-0346
Miles.Hairston@gdit.com
15036 Conference Center Drive
Chantilly, VA 20151
www.gdit.com

Leave alert: N/A

GENERAL DYNAMICS
Information Technology

From: Goodrich, Donald <Goodrich.Donald@epa.gov>
Sent: Wednesday, January 22, 2025 2:36 PM
To: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Subject: RE: Region 08 | Case 51822 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

Hi Miles,

Yes, the response back from the Contractor is acceptable.

Thanks,
Don

Don Goodrich
EPA Region 8
8LSASD-LSB | 5247
303-905-4024 (cell) | goodrich.donald@epa.gov

From: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Sent: Wednesday, January 22, 2025 10:28 AM
To: Goodrich, Donald <Goodrich.Donald@epa.gov>
Subject: Region 08 | Case 51822 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

Good afternoon Don,

Can you confirm if Mark's response below is acceptable.

Thanks,
Miles Hairston
Associate Environmental Analyst
Under contract to EPA
QSS Coordinator – EPA Regions 7, 8, and 9

Work Phone: +1 571-454-0346
Miles.Hairston@gdit.com
15036 Conference Center Drive
Chantilly, VA 20151
www.gdit.com

Leave alert: N/A

GENERAL DYNAMICS
Information Technology

From: Mark R. Wood <mark.wood@pwt.com>
Sent: Wednesday, January 22, 2025 11:43 AM
To: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Cc: goodrich.donald@epa.gov
Subject: Re: Region 08 | Case 51822 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

Hi Miles,
These samples do not require MA3105 analysis.
Thank you,
Mark Wood
303-994-3853
Sent from my iPhone

> On Jan 22, 2025, at 7:46 AM, Hairston, Miles (NE) <Miles.Hairston@gdit.com> wrote:
>
> Good morning,
>
> Please advise on the issue below.
>
> Issue: The laboratory received soil samples for ICP-MS analysis with a 14 day TAT. However, the COC does not list MA 3105.0. The laboratory would like to confirm if the received samples should be analyzed under MA 3105.0.
>
> Thanks,
> Miles Hairston
> Associate Environmental Analyst
> Under contract to EPA
> QSS Coordinator – EPA Regions 7, 8, and 9

Work Phone: +1 571-454-0346
Miles.Hairston@gdit.com
15036 Conference Center Drive
Chantilly, VA 20151
www.gdit.com

Leave alert: N/A
<image001.png>

From: Deepak Parmar <Deepak.Parmar@alliancetg.com>
Sent: Wednesday, January 22, 2025 8:47 AM
To: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Cc: Sohil Jodhani <Sohil.Jodhani@AllianceTG.com>
Subject: Region 08 | Case 51822 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

Good morning,

As per ASR 14 days TAT scheduled with MA, however on COC there is no MA number mentioned so lab like to this sample required analysis with MA ?

Please see attachment for your reference.

Thanks & Regards,

<image008.jpg>

Deepak Parmar
QA/QC
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3154
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092

www.alliancetg.com
<image003.png>

<image004.png>

<image005.png>
<image006.png>
<image007.png>

<Q1102.pdf>

USEPA CLP Inorganics COC (LAB COPY)
DateShipped: 1/15/2025
CarrierName: FedEx
AirbillNo: 8184 7188 9725

CHAIN OF CUSTODY RECORD

Case #: 51822
Cooler #: 3

No: 8-011525-125353-0602
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
D0660-1-L1	MH2H28	Dust (Soil)/ BL, LC	Grab	ICP/MS(14)	24535 (None) (1)	L1-0660	12/13/2024 09:24	
D0660-1-L2	MH2H29	Dust (Soil)/ BL, LC	Grab	ICP/MS(14)	24536 (None) (1)	L2-0660	12/13/2024 09:29	
D0660-1-C1	MH2H30	Dust (Soil)/ BL, LC	Composite	ICP/MS(14)	24537 (None) (1)	C1-0660	12/13/2024 09:40	QC
D0660-2-C2	MH2H31	Dust (Soil)/ BL, LC	Composite	ICP/MS(14)	24538 (None) (1)	C2-0660	12/13/2024 09:55	

Sample(s) to be used for Lab QC: D0660-1-C1 Tag 24537 - Special Instructions: Please return cooler

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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	Jake Peterson PWT	1/15/25 1330		7:25 1.16.25	IR Gun #1 2.1°C Custody Seal Intact Temp Blank present