

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51810 MA No.: _____ SDG No.: MC0VD6
SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MC0VD6</u>	<u>P4657-01</u>	<u>X</u>	_____	<u>X</u>	_____
<u>MC0VH5</u>	<u>P4657-02</u>	<u>X</u>	_____	<u>X</u>	_____
<u>MC0VM8</u>	<u>P4657-03</u>	<u>X</u>	_____	<u>X</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: _____

CHAIN OF CUSTODY RECORD

No: 3-110124-084507-0019

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed

Lab Phone: 908-789-8900

[illegible]

Special Instructions: Alliance Metals 4

Analysis Key: Hg=CLP Mercury, ICP-AES=CLP ICP-AES Metals + Hg

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
	Charlotte Pearson TX	11/21/24 11:00	Dea	11/21/24	2.4 "
				9:40	IRLem #1
					Top 5 km Run
					Over 5 km Run

No: 3-102924-161359-0005

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed


Lab Contact: Mohammad Ahmed
Lab Phone: 908-789-8900

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
EA0003-GB	MC0VD3	Soil/ START	Grab	ICP-AES(21)	1004 (<6C) (1)	0003	10/29/2024 11:30	pH 11.65 ✓ ②
EA-RB01-20241029	MC0VD6	Blank Water/		ICP-AES(21)	1018 (HNO3 pH<2, <6C) (1)	QA	10/29/2024 17:24	
EA0005-GB	MC0VE1	Soil/ START	Grab	ICP-AES(21)	1036 (<6C) (1)	0005	10/29/2024 12:58	
EA0006-GB	MC0VE2	Soil/ START	Grab	ICP-AES(21)	1038 (<6C) (1)	0006	10/30/2024 09:10	
EA0001-GB	MC0VE7	Soil/ START	Grab	ICP-AES(21)	1056 (<6C) (1)	0001	10/29/2024 09:45	
EA0002-GB	MC0VE8	Soil/ START	Grab	ICP-AES(21)	1058 (<6C) (1)	0002	10/29/2024 10:45	pH 11.65 ✓ ②
EA0004-GB	MC0VE9	Soil/ START	Grab	ICP-AES(21)	1060 (<6C) (1)	0004	10/29/2024 11:45	
EA0008-GB	MC0VF0	Soil/ START	Grab	ICP-AES(21)	1062 (<6C) (1)	0004	10/29/2024 14:00	
EA0009-GB	MC0VF1	Soil/ START	Grab	ICP-AES(21)	1064 (<6C) (1)	0009	10/29/2024 15:58	
EA0010-GB	MC0VF5	Soil/ START	Grab	ICP-AES(21)	1078 (<6C) (1)	0010	10/29/2024 15:10	
EA0012-GB	MC0VF6	Soil/ START	Grab	ICP-AES(21)	1080 (<6C) (1)	0012	10/29/2024 16:25	
EA0014-GB	MC0VG6	Soil/ START	Grab	ICP-AES(21)	1118 (<6C) (1)	0014	10/30/2024 09:50	
EA0016-GB	MC0VG7	Soil/ START	Grab	ICP-AES(21)	1120 (<6C) (1)	0016	10/30/2024 11:10	
EA0018-GB	MC0VG8	Soil/ START	Grab	ICP-AES(21)	1122 (<6C) (1)	0018	10/30/2024 12:07	
EA0020-GB	MC0VG9	Soil/ START	Grab	ICP-AES(21)	1124 (<6C) (1)	0020	10/30/2024 13:50	
EA0011-GB	MC0VH0	Soil/ START	Grab	ICP-AES(21)	1126 (<6C) (1)	0011	10/30/2024 09:12	pH 11.65 ✓ ②
EA-RB02-20241030	MC0VH5	Blank Water/		ICP-AES(21)	1139 (HNO3 pH<2, <6C) (1)	QA	10/30/2024 15:50	

Shipment for Case Complete? N

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
	Conner Monte TB	10/30/29 1800		945 10-31-24	#1 26
					Custody Seal Torn
					ring Black press

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>Cesparava Peña</u>		Log-in Date 10/31/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51810	SDG No. MC0VD6	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>779632145584</u> <u>1</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.6</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>10/31/2024</u>
12. Time Received	<u>09:45</u>

			Corresponding		
	EPA Sample #	Aqueous/ Water Sample pH	Sample Tag #	Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MC0VD6	1.6	1018	P4657-01	Intact
2	MC0VH5	1.6	1139	P4657-02	Intact
3	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
5	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
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 <u>[Signature]</u>	Logbook No. N/A
Date <u>10/31/24</u>	Logbook Page No. N/A

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>2</u> of <u>2</u>
Received By (Print Name) <u>GORGAN WEGMAN</u>		Log-in Date 11/2/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51810	SDG No. MC0VD6	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>779673325018</u> <u>2</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.4</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>11/02/2024</u>
12. Time Received	<u>09:40</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MC0VM8	1.6	1279	P4657-03	Intact
2	N/A	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
5	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
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 <u>[Signature]</u>	Logbook No. N/A
Date <u>11/2/24</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.	51810	SDG NO.	MC0VD6
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	5	✓	
4. CSF Inventory Sheet (DC-2)	6	8	✓	
5. SDG Narrative	9	11	✓	
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	12	14	✓	
9. Instrument raw data by instrument in analysis order	15	361	✓	
Other Data				
10. Standard and Reagent Preparation Logs	362	488	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	489	490	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	491	500	✓	
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	NA	NA	✓	
18. Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
19. Standard and Reagent Preparation Logs	NA	NA	✓	
20. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
21. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
22. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	

	PAGE NOS:		CHECK	
	FROM	TO	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	501	503	✓	
27 . Instrument raw data by instrument in analysis order	504	505	✓	

Other Data

28 . Standard and Reagent Preparation Logs	506	536	✓	
29 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	537	538	✓	
30 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	539	539	✓	
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	✓	

Additional

44. EPA Shipping/Receiving Documents

Airbill (No. of Shipments 2)

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)

(Signature)

Nimisha Pandya, Document Control Officer

(Print Name & Title)

(Date)

Audited by:
(EPA)

(Signature)

(Print Name & Title)

(Date)

PAGE NOs:		CHECK	
FROM	TO	LAB	REGION
540	541	✓	
NA	NA	✓	
542	542	✓	
NA	NA	✓	
543	544	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MC0VD6

CASE # 51810

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P4657

A. Number of Samples and Date of Receipt

03 Water samples were delivered to the laboratory intact on 10/31/2024, 11/02/2024.

B. Parameters

Test requested for Metals CLP FULL = Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc & Mercury.

C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 2.6°C, 2.4°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.

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



**284 Sheffield Street
Mountainside, NJ 07092**

G. Calculation:

Calculation for ICP-AES Water Sample:

$$\text{Concentration or Result } (\mu\text{g/L}) = C \times \frac{V_f}{V_i} \times \text{DF} \times 1000$$

Where,

C = Instrument value in ppm (The average of all replicate exposures)

V_f = Final digestion volume (mL)

V_i = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

Example Calculation For Sample MC0VD6 For Nickel:

If C = 0.0021649 ppm

V_f = 50 ml

V_i = 50 ml

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.0021649 \times \frac{50}{50} \times 1 \times 1000$$

$$= 2.1649 \mu\text{g/L}$$

$$= 2.2 \mu\text{g/L} \text{ (Reported Result with Signification)}$$

Calculation for Hg Water Sample:

$$\text{Concentration or Result } (\mu\text{g/L}) = C \times \text{DF}$$

Where,

C = Instrument response in $\mu\text{g/L}$ from the calibration curve.

DF = Dilution Factor

Example Calculation For Mercury:

If C = 0.1811 ppb

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.1811 \times 1$$

$$= 0.1811 \mu\text{g/L}$$

$$= 0.18 \mu\text{g/L} \text{ (Reported Result with Signification)}$$



**284 Sheffield Street
Mountainside, NJ 07092**

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.

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