

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
 Lab Code: ACE Case No.: 51879 MA No.: _____ SDG No.: MBHL70
 SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
MBHL70	P5059-01	X			
MBHL71	P5059-02	X			
MBHL72	P5059-03	X			
MBHL73	P5059-04	X			
MBHL74	P5059-05	X			
MBHL75	P5059-06	X			
MBHL76	P5059-07	X			
MBHL91	P5059-08	X			
MBHL92	P5059-09	X			
MBHL93	P5059-10	X			
MBHLC1	P5059-11	X			
MBHLC2	P5059-12	X			
MBHLC3	P5059-13	X			
MBHLC4	P5059-14	X			
MBHLC4D	P5059-15	X			
MBHLC4S	P5059-16	X			
MBHLC5	P5059-17	X			
MBHLD5	P5059-18	X			
MBHLD6	P5059-19	X			
MBHLD7	P5059-20	X			
MBHLD8	P5059-21	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: _____

USEPA CLP COC (LAB COPY)

Date Shipped: 12/2/2024

Carrier Name: FedEx

Airbill No: 7704 1901 5317

CHAIN OF CUSTODY RECORD

68HERH20D0011

SDG # MBHL70

No: 2-120224-172146-0039

Lab: Alliance Technical Group LLC

Lab Contact: Mohammad Ahmed

Lab Phone: 908-789-8900

Case #: 51879

Cooler #: 6


Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P178-SB-02-Z00-02	MBHL70	Soil		ICP-AES(35)	5054 (Wet Ice < 6 C) (1)	P178-SB-02	11/21/2024 14:00	
P178-SB-02-Z02-06	MBHL71	Soil		ICP-AES(35)	5055 (Wet Ice < 6 C) (1)	P178-SB-02	11/21/2024 14:00	
P178-SB-02-Z06-12	MBHL72	Soil		ICP-AES(35)	5056 (Wet Ice < 6 C) (1)	P178-SB-02	11/21/2024 14:00	
P178-SB-02-Z12-18	MBHL73	Soil		ICP-AES(35)	5057 (Wet Ice < 6 C) (1)	P178-SB-02	11/21/2024 14:00	
P178-SB-02-Z18-24	MBHL74	Soil		ICP-AES(35)	5058 (Wet Ice < 6 C) (1)	P178-SB-02	11/21/2024 14:00	
P178-SB-02-Z24-30	MBHL75	Soil		ICP-AES(35)	5059 (Wet Ice < 6 C) (1)	P178-SB-02	11/21/2024 14:00	
P178-SB-02-Z30-36	MBHL76	Soil		ICP-AES(35)	5060 (Wet Ice < 6 C) (1)	P178-SB-02	11/21/2024 14:00	
P173-SB-03-Z00-02	MBHL91	Soil		ICP-AES(35)	4377 (Wet Ice < 6 C) (1)	P173-SB-03	11/26/2024 09:05	
P173-SB-03-Z02-06	MBHL92	Soil		ICP-AES(35)	4378 (Wet Ice < 6 C) (1)	P173-SB-03	11/26/2024 09:05	
P173-SB-03-Z06-12	MBHL93	Soil		ICP-AES(35)	4379 (Wet Ice < 6 C) (1)	P173-SB-03	11/26/2024 09:05	

Special Instructions: Samples MBHLB8 and MBHLC4 are MS/MSDs. Samples MBHLA5, MBHLB3, MBHL91, MBHL95, MBHL96 and MBHL97 have limited sample mass.

Analysis Key: ICP-AES=CLP Routine - SFAM01.1/LSASD SOP C-109 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
2 Cooler	 WSR	12/02/2024 1800		9:50 12-3-24	JK Co # 1 2.0
					Custody Seal Intact
					Temp Blank present

CHAIN OF CUSTODY RECORD

No: 2-120224-172146-0039

Lab: Alliance Technical Group LLC

Case #: 51879


Cooler #: 6

[illegible]

Sample(s) to be used for Lab QC: P173-SB-08-Z24-30 Tag 4477 - Special Instructions: Samples MBHLB8 and MBHLC4 are MSMSDs. Samples MBHLA5, MBHLB3, MBHL91, MBHL95, MBHL96 and MBHL97 have limited sample mass.

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

Analysis Key: ICP-AES=CLP Routine - SFAM01.1/LSASD SOP C-109 Metals

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
1 Cooler	SEA WSP	12/02/24 1800		450 12.3.24	NRQ #1 2.0.1
	UA 2		Cooler 12/02/24		Custody Seal intact
			SEA		Temp Blk 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>GONGE JESSE</u>		Log-in Date 12/3/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51879	SDG No. MBHL70	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.	<u>770419015317</u> <u>1</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.0</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>12/03/2024</u>
12. Time Received	<u>09:50</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MBHL70	N/A	5054	P5059-01	Intact
2	MBHL71	N/A	5055	P5059-02	Intact
3	MBHL72	N/A	5056	P5059-03	Intact
4	MBHL73	N/A	5057	P5059-04	Intact
5	MBHL74	N/A	5058	P5059-05	Intact
6	MBHL75	N/A	5059	P5059-06	Intact
7	MBHL76	N/A	5060	P5059-07	Intact
8	MBHL91	N/A	4377	P5059-08	Intact
9	MBHL92	N/A	4378	P5059-09	Intact
10	MBHL93	N/A	4379	P5059-10	Intact
11	MBHLC1	N/A	4474	P5059-11	Intact
12	MBHLC2	N/A	4475	P5059-12	Intact
13	MBHLC3	N/A	4476	P5059-13	Intact
14	MBHLC4	N/A	4477	P5059-14	Intact
15	MBHLC4D	N/A	4477	P5059-15	Intact
16	MBHLC4S	N/A	4477	P5059-16	Intact
17	MBHLC5	N/A	4478	P5059-17	Intact
18	MBHLD5	N/A	5524	P5059-18	Intact
19	MBHLD6	N/A	5224	P5059-19	Intact
20	MBHLD7	1.3	5525	P5059-20	Intact
21	MBHLD8	1.3	5526	P5059-21	Intact
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>12/3/24</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.	51879	SDG NO.	MBHL70
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	11	12	✓	

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	13	31	✓	
9. Instrument raw data by instrument in analysis order	32	1566	✓	

Other Data

10. Standard and Reagent Preparation Logs	1567	1705	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1706	1709	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1710	1755	✓	
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	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	✓	

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
1756	1756	✓	
NA	NA	✓	
1757	1758	✓	
NA	NA	✓	
1759	1760	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MBHL70

CASE # 51879

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P5059

A. Number of Samples and Date of Receipt

17 Soil & 02 Water samples were delivered to the laboratory intact on 12/03/2024.

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.

C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 2.0°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 Soil Sample:

Conversion of Results from mg/L or ppm to mg/kg (Dry Weight Basis):

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

Where,

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

V_f = Final digestion volume (mL)

W = Initial aliquot amount (g) (Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

Example Calculation For Sample MBHL70 For Arsenic:

If C = 0.0987901 ppm

V_f = 100 ml

W = 1.33 g

S = 0.699(69.9/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.0987901 \times \frac{100}{1.33 \times 0.699} \times 1$$

$$= 10.62636 \text{ mg/kg}$$

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

Calculation for ICP-AES Water Sample:

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

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



**284 Sheffield Street
Mountainside, NJ 07092**

Example Calculation For Sample MBHLD7 For Aluminum:

If C = 0.0508114 ppm

Vf = 50 ml

Vi = 50 ml

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.0508114 \times \frac{50}{50} \times 1 \times 1000$$

$$= 50.8114 \mu\text{g/L}$$

$$= 51 \mu\text{g/L (Reported Result with Signification)}$$

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 Silver, Thallium, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Cobalt.

Chemical or physical interference effect was suspected and the data for all affected analytes in the sample received and associated with this serial dilution were flagged.

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

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/5/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 13:20
In Date: 12/04/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:48
Out Date: 12/05/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133726

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
P5059-01	MBHL70	1	1.16	8.53	9.69	7.12	69.9	
P5059-02	MBHL71	2	1.14	8.77	9.91	7.7	74.8	
P5059-03	MBHL72	3	1.19	8.57	9.76	7.8	77.1	
P5059-04	MBHL73	4	1.17	8.36	9.53	7.88	80.3	
P5059-05	MBHL74	5	1.15	8.38	9.53	7.77	79.0	
P5059-06	MBHL75	6	1.16	8.50	9.66	7.63	76.1	
P5059-07	MBHL76	7	1.15	8.64	9.79	7.89	78.0	
P5059-08	MBHL91	8	1.16	8.81	9.97	7.43	71.2	
P5059-09	MBHL92	9	1.14	8.56	9.7	7.67	76.3	
P5059-10	MBHL93	10	1.13	8.61	9.74	8.05	80.4	
P5059-11	MBHLC1	11	1.16	8.36	9.52	7.86	80.1	
P5059-12	MBHLC2	12	1.14	8.65	9.79	8.46	84.6	
P5059-13	MBHLC3	13	1.15	8.82	9.97	8.66	85.1	
P5059-14	MBHLC4	14	1.15	8.47	9.62	8.42	85.8	
P5059-15	MBHLC4D	15	1.15	8.47	9.62	8.42	85.8	
P5059-16	MBHLC4S	16	1.15	8.47	9.62	8.42	85.8	
P5059-17	MBHLC5	17	1.14	8.58	9.72	8.3	83.4	
P5059-18	MBHLD5	18	1.12	8.85	9.97	8.34	81.6	
P5059-19	MBHLD6	19	1.15	8.81	9.96	8.48	83.2	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

13326

WorkList Name : %1-p5059

WorkList ID : 185962

Department : Wet-Chemistry

Date : 12-04-2024 10:24:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5059-01	MBHL70	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-02	MBHL71	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-03	MBHL72	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-04	MBHL73	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-05	MBHL74	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-06	MBHL75	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-07	MBHL76	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-08	MBHL91	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-09	MBHL92	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-10	MBHL93	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-11	MBHLC1	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-12	MBHLC2	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-13	MBHLC3	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-14	MBHLC4	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-15	MBHLC4D	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-16	MBHLC4S	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-17	MBHLC5	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO
P5059-18	MBHLD5	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/21/2024	Chemtech -SO
P5059-19	MBHLD6	Solid	Percent Solids	Cool 4 deg C	USEP01	C33	11/26/2024	Chemtech -SO

Date/Time 12/04/24 12:50

Raw Sample Received by: JH WDC

Raw Sample Relinquished by: JTC5M

Date/Time 12/04/24

Raw Sample Received by: JTC5M

Raw Sample Relinquished by: JH WDC

13:25