

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
 Lab Code: ACE Case No.: 51879 MA No.: _____ SDG No.: MBHM14
 SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
MBHM14	P5090-01	X			
MBHM15	P5090-02	X			
MBHM16	P5090-03	X			
MBHM17	P5090-04	X			
MBHM18	P5090-05	X			
MBHM19	P5090-06	X			
MBHM20	P5090-07	X			
MBHM21	P5090-08	X			
MBHM22	P5090-09	X			
MBHM23	P5090-10	X			
MBHM24	P5090-11	X			
MBHM25	P5090-12	X			
MBHM25D	P5090-13	X			
MBHM25S	P5090-14	X			
MBHM26	P5090-15	X			
MBHM27	P5090-16	X			
MBHM28	P5090-17	X			
MBHM36	P5090-18	X			
MBHM37	P5090-19	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: 12/3/2024

Carrier Name: FedEx

Airbill No: 7704 5938 0530

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 5

No: 2-120324-140252-0044

Lab: Alliance Technical Group LLC

Lab Contact: Mohammad Ahmed

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
P171-SB-07-Z30-36	MBHM14	Soil		ICP-AES(35)	4215 (Wet ice < 6 C) (1)	P171-SB-07	11/20/2024 13:20	
P171-SB-05-Z00-02	MBHM15	Soil		ICP-AES(35)	4205 (Wet ice < 6 C) (1)	P171-SB-05	11/20/2024 12:10	
P171-SB-05-Z02-06	MBHM16	Soil		ICP-AES(35)	4206 (Wet ice < 6 C) (1)	P171-SB-05	11/20/2024 12:10	
P171-SB-05-Z06-12	MBHM17	Soil		ICP-AES(35)	4207 (Wet ice < 6 C) (1)	P171-SB-05	11/20/2024 12:10	
P171-SB-05-Z12-18	MBHM18	Soil		ICP-AES(35)	4208 (Wet ice < 6 C) (1)	P171-SB-05	11/20/2024 12:10	
P171-SB-05-Z18-24	MBHM19	Soil		ICP-AES(35)	4209 (Wet ice < 6 C) (1)	P171-SB-05	11/20/2024 12:10	
P171-SB-05-Z24-30	MBHM20	Soil		ICP-AES(35)	4250 (Wet ice < 6 C) (1)	P171-SB-05	11/20/2024 12:10	
P171-SB-05-Z30-36	MBHM21	Soil		ICP-AES(35)	4251 (Wet ice < 6 C) (1)	P171-SB-05	11/20/2024 12:10	
P171-SB-06-Z00-02	MBHM22	Soil		ICP-AES(35)	4252 (Wet ice < 6 C) (1)	P171-SB-06	11/20/2024 13:15	
P171-SB-06-Z02-06	MBHM23	Soil		ICP-AES(35)	4253 (Wet ice < 6 C) (1)	P171-SB-06	11/20/2024 13:15	

Special Instructions: Samples MBHLZ4 and MBHM25 are MS/MSDs. Samples MBHLZ5, MBHLZ6, MBHLZ7, MBHLZ8, MBHLZ9, MBHM00, MBHM27, MBHM23 and MBHM24 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
1 cooler	 WSP	12/03/24 16:25		12.4.24 10:20	Temp #1 2.3°C
	 WSP			12/03/24	Custody Seal Intact
					Temp Blank present

CHAIN OF CUSTODY RECORD

No: 2-120324-140252-0044

Cooler #: 5





Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed
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
P171-SB-06-Z06-12	MBHM24	Soil/		ICP-AES(35)	4254 (Met ice < 6 C) (1)	P171-SB-06	11/20/2024 13:15	
P171-SB-06-Z12-18	MBHM25	Soil/		ICP-AES(35)	4255 (Met ice < 6 C) (1)	P171-SB-06	11/20/2024 13:15	✓
P171-SB-06-Z18-24	MBHM26	Soil/		ICP-AES(35)	4256 (Met ice < 6 C) (1)	P171-SB-06	11/20/2024 13:15	
P171-SB-06-Z24-30	MBHM27	Soil/		ICP-AES(35)	4257 (Met ice < 6 C) (1)	P171-SB-06	11/20/2024 13:15	
P171-SB-06-Z30-36	MBHM28	Soil/		ICP-AES(35)	4258 (Met ice < 6 C) (1)	P171-SB-06	11/20/2024 13:15	
P171-SB-04-Z12-18-FD	MBHM36	Soil/		ICP-AES(35)	5535 (Met ice < 6 C) (1)	P171-SB-04	11/20/2024 11:50	
P171-SB-05-Z24-30-FD	MBHM37	Soil/		ICP-AES(35)	5536 (Met ice < 6 C) (1)	P171-SB-05	11/20/2024 12:10	
<hr/>								
<div style="text-align: center;"> MHA 12/03/24 </div>								
<hr/>								
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Sample(s) to be used for Lab QC: P171-SB-06-Z12-18 Tag 4255 - Special Instructions: Samples MBHLZ4 and MBHM25 are MS/MSDs. Samples MBHLZ5, MBHLZ6, MBHLZ7, MBHLZ8, MBHLZ9, MBHM00, MBHM27, MBHM23 and MBHM24 have limited sample mass.

Shipment for Case Complete? N

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	 WSP	12/03/24 16:25		1620 12/03/24	26°C ± 1 2.3'
	 N/A				Custody Seal Intact
				12/03/24	Temp But 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>Casanova Perie</u>		Log-in Date 12/4/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51879	SDG No. MBHM14	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>770459380530</u> <u>1</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.3</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>12/04/2024</u>
12. Time Received	<u>10:20</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MBHM14	N/A	4215	P5090-01	Intact
2	MBHM15	N/A	4205	P5090-02	Intact
3	MBHM16	N/A	4206	P5090-03	Intact
4	MBHM17	N/A	4207	P5090-04	Intact
5	MBHM18	N/A	4208	P5090-05	Intact
6	MBHM19	N/A	4209	P5090-06	Intact
7	MBHM20	N/A	4250	P5090-07	Intact
8	MBHM21	N/A	4251	P5090-08	Intact
9	MBHM22	N/A	4252	P5090-09	Intact
10	MBHM23	N/A	4253	P5090-10	Intact
11	MBHM24	N/A	4254	P5090-11	Intact
12	MBHM25	N/A	4255	P5090-12	Intact
13	MBHM25D	N/A	4255	P5090-13	Intact
14	MBHM25S	N/A	4255	P5090-14	Intact
15	MBHM26	N/A	4256	P5090-15	Intact
16	MBHM27	N/A	4257	P5090-16	Intact
17	MBHM28	N/A	4258	P5090-17	Intact
18	MBHM36	N/A	5535	P5090-18	Intact
19	MBHM37	N/A	5536	P5090-19	Intact
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>12/4/24</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.	MBHM14
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	29	✓	
9. Instrument raw data by instrument in analysis order	30	763	✓	

Other Data

10. Standard and Reagent Preparation Logs	764	902	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	903	904	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	905	939	✓	
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	✓	

- 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
940	940	✓	
NA	NA	✓	
941	942	✓	
NA	NA	✓	
943	943	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MBHM14

CASE # 51879

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P5090

A. Number of Samples and Date of Receipt

17 Soil samples were delivered to the laboratory intact on 12/04/2024.

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: 2.3°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 MBHM14 For Antimony:

If C = 0.0292297 ppm

V_f = 100 ml

W = 1.43 g

S = 0.913(91.3/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.0292297 \times \frac{100}{1.43 \times 0.913} \times 1$$

$$= 2.238811 \text{ mg/kg}$$

$$= 2.2 \text{ mg/kg (Reported Result with Signification)}$$

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 Antimony, Arsenic, Barium, Copper, Selenium, Silver, Thallium, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Aluminum, Calcium, Chromium, Cobalt, Copper, Iron, Magnesium, Manganese, Zinc .

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.



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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: 12/9/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 12:25
In Date: 12/06/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:34
Out Date: 12/07/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133782

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
P5090-01	MBHM14	1	1.21	8.47	9.68	8.94	91.3	
P5090-02	MBHM15	2	1.18	8.58	9.76	7.85	77.7	
P5090-03	MBHM16	3	1.18	8.63	9.81	8.35	83.1	
P5090-04	MBHM17	4	1.17	8.61	9.78	8.6	86.3	
P5090-05	MBHM18	5	1.18	8.56	9.74	8.37	84.0	
P5090-06	MBHM19	6	1.18	8.52	9.7	8.44	85.2	
P5090-07	MBHM20	7	1.18	8.53	9.71	9.03	92.0	
P5090-08	MBHM21	8	1.2	8.76	9.96	9.34	92.9	
P5090-09	MBHM22	9	1.19	8.56	9.75	8.77	88.6	
P5090-10	MBHM23	10	1.18	8.45	9.63	8.7	89.0	
P5090-11	MBHM24	11	1.18	8.43	9.61	8.76	89.9	
P5090-12	MBHM25	12	1.2	8.37	9.57	8.57	88.1	
P5090-13	MBHM25D	13	1.2	8.37	9.57	8.57	88.1	
P5090-14	MBHM25S	14	1.2	8.37	9.57	8.57	88.1	
P5090-15	MBHM26	15	1.18	8.53	9.71	8.4	84.6	
P5090-16	MBHM27	16	1.2	8.54	9.74	8.53	85.8	
P5090-17	MBHM28	17	1.19	8.75	9.94	8.8	87.0	
P5090-18	MBHM36	18	1.17	8.39	9.56	7.8	79.0	
P5090-19	MBHM37	19	1.19	8.59	9.78	9.13	92.4	

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

WORKLIST(Hardcopy Internal Chain)

133782

WorkList Name : %1-P5090

WorkList ID : 186067

Department : Wet-Chemistry

Date : 12-06-2024 11:32:16

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5090-01	MBHM14	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-02	MBHM15	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-03	MBHM16	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-04	MBHM17	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-05	MBHM18	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-06	MBHM19	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-07	MBHM20	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-08	MBHM21	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-09	MBHM22	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-10	MBHM23	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-11	MBHM24	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-12	MBHM25	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-13	MBHM25D	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-14	MBHM25S	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-15	MBHM26	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-16	MBHM27	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-17	MBHM28	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-18	MBHM36	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO
P5090-19	MBHM37	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/20/2024	Chemtech -SO

Date/Time 12/06/24 12:10:00

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 12/06/24 12:10:30

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]