

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51879 MA No.: _____ SDG No.: MBHMM0
SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MBHMM0</u>	<u>P5131-01</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM1</u>	<u>P5131-02</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM2</u>	<u>P5131-03</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM3</u>	<u>P5131-04</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM4</u>	<u>P5131-05</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM5</u>	<u>P5131-06</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM6</u>	<u>P5131-07</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM6D</u>	<u>P5131-08</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM6S</u>	<u>P5131-09</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM7</u>	<u>P5131-10</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM2</u>	<u>P5131-11</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMM3</u>	<u>P5131-12</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </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: _____

USEPA CLP COC (LAB COPY)

Date Shipped: 12/4/2024

Carrier Name: FedEx

Airbill No: 7704 9476 4949

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 5

No: 2-120424-143204-0050

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
P114-SB-15-Z06-12	MBHMM0	Soil/		ICP-AES(35)	1170 (Wet ice < 6 C) (1)	P114-SB-15	11/21/2024 09:08	
P114-SB-15-Z12-18	MBHMM1	Soil/		ICP-AES(35)	1171 (Wet ice < 6 C) (1)	P114-SB-15	11/21/2024 09:08	
P108-SB-08-Z00-02	MBHMM2	Soil/		ICP-AES(35)	1098 (Wet ice < 6 C) (1)	P108-SB-08	11/26/2024 09:24	
P108-SB-08-Z02-06	MBHMM3	Soil/		ICP-AES(35)	1099 (Wet ice < 6 C) (1)	P108-SB-08	11/26/2024 09:24	
P108-SB-08-Z06-12	MBHMM4	Soil/		ICP-AES(35)	1100 (Wet ice < 6 C) (1)	P108-SB-08	11/26/2024 09:24	
P108-SB-08-Z12-18	MBHMM5	Soil/		ICP-AES(35)	1101 (Wet ice < 6 C) (1)	P108-SB-08	11/26/2024 09:24	
P108-SB-08-Z18-24	MBHMM6	Soil/		ICP-AES(35)	1102 (Wet ice < 6 C) (1)	P108-SB-08	11/26/2024 09:24	90
P108-SB-08-Z24-30	MBHMM7	Soil/		ICP-AES(35)	1103 (Wet ice < 6 C) (1)	P108-SB-08	11/26/2024 09:24	
P114-SB-15-Z12-18-FD	MBHMM2	Soil/		ICP-AES(35)	5562 (Wet ice < 6 C) (1)	P114-SB-15	11/21/2024 09:08	
P114-SB-14-Z02-06-FD	MBHMM3	Soil/		ICP-AES(35)	5563 (Wet ice < 6 C) (1)	P114-SB-14	11/21/2024 08:15	

Sample(s) to be used for Lab QC: P108-SB-08-Z18-24 Tag 1102 - Special Instructions: Samples MBHMM5 and MBHMM6 are MS/MSDs

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	<i>[Signature]</i> WSP	12/04/24 1556	<i>[Signature]</i>	12.5.24	TR-Can #1 2-2.
			<i>[Signature]</i>		Custody Seal Intact
			<i>[Signature]</i> 12/04/24		Temp Blank 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>Cassandra Peña</u>		Log-in Date 12/5/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51879	SDG No. MBHMM0	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>770494764949</u> <u>1</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.2</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>12/05/2024</u>
12. Time Received	<u>10:10</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MBHMM0	N/A	1170	P5131-01	Intact
2	MBHMM1	N/A	1171	P5131-02	Intact
3	MBHMM2	N/A	1098	P5131-03	Intact
4	MBHMM3	N/A	1099	P5131-04	Intact
5	MBHMM4	N/A	1100	P5131-05	Intact
6	MBHMM5	N/A	1101	P5131-06	Intact
7	MBHMM6	N/A	1102	P5131-07	Intact
8	MBHMM6D	N/A	1102	P5131-08	Intact
9	MBHMM6S	N/A	1102	P5131-09	Intact
10	MBHMM7	N/A	1103	P5131-10	Intact
11	MBHMM2	N/A	5562	P5131-11	Intact
12	MBHMM3	N/A	5563	P5131-12	Intact
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>12/5/24</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.	MBHMM0
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	2	✓	
3. Sample Log-In Sheet (DC-1)	3	3	✓	
4. CSF Inventory Sheet (DC-2)	4	6	✓	
5. SDG Narrative	7	9	✓	
6. Communication Logs	NA	NA	✓	
7. Percent Solids Log	10	11	✓	
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	21	✓	
9. Instrument raw data by instrument in analysis order	22	1190	✓	
Other Data				
10. Standard and Reagent Preparation Logs	1191	1329	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1330	1331	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1332	1368	✓	
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
1369	1369	✓	
NA	NA	✓	
1370	1371	✓	
NA	NA	✓	
1372	1372	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MBHMM0

CASE # 51879

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P5131

A. Number of Samples and Date of Receipt

10 Soil sample were delivered to the laboratory intact on 12/05/2024.

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: 2.2°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.



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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 MBHMM0 For Antimony:

If C = 0.0475254 ppm

V_f = 100 ml

W = 1.05 g

S = 0.836(83.6/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.0475254 \times \frac{100}{1.05 \times 0.836} \times 1$$

$$= 5.41414 \text{ mg/kg}$$

$$= 5.4 \text{ mg/kg (Reported Result with Signification)}$$

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 Antimony, Arsenic, Copper, Selenium, Silver, Thallium, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Calcium, Chromium, Cobalt, 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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Mountainside, NJ 07092**

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: 14:40
In Date: 12/07/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:00
Out Date: 12/08/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133816

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
P5131-01	MBHMM0	1	1.17	8.68	9.85	8.43	83.6	
P5131-02	MBHMM1	2	1.15	8.63	9.78	8.66	87.0	
P5131-03	MBHMM2	3	1.15	8.52	9.67	7.31	72.3	
P5131-04	MBHMM3	4	1.15	8.72	9.87	7.88	77.2	
P5131-05	MBHMM4	5	1.16	8.63	9.79	7.99	79.1	
P5131-06	MBHMM5	6	1.16	8.76	9.92	8.61	85.0	
P5131-07	MBHMM6	7	1.18	8.63	9.81	8.68	86.9	
P5131-08	MBHMM6D	8	1.18	8.63	9.81	8.68	86.9	
P5131-09	MBHMM6S	9	1.18	8.63	9.81	8.68	86.9	
P5131-10	MBHMM7	10	1.15	8.77	9.92	8.83	87.6	
P5131-11	MBHMN2	11	1.16	8.66	9.82	8.75	87.6	
P5131-12	MBHMN3	12	1.17	8.69	9.86	7.89	77.3	

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

WORKLIST(Hardcopy Internal Chain)

1338)6

WorkList Name : %1-P5131

WorkList ID : 186103

Department : Wet-Chemistry

Date : 12-07-2024 12:08:18

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5131-01	MBHMM0	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/21/2024	Chemtech -SO
P5131-02	MBHMM1	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/21/2024	Chemtech -SO
P5131-03	MBHMM2	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-04	MBHMM3	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-05	MBHMM4	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-06	MBHMM5	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-07	MBHMM6	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-08	MBHMM6D	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-09	MBHMM6S	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-10	MBHMM7	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-11	MBHMMN2	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/26/2024	Chemtech -SO
P5131-12	MBHMMN3	Solid	Percent Solids	Cool 4 deg C	USEP01	C51	11/21/2024	Chemtech -SO

Date/Time 12/07/24 14:20

Raw Sample Received by: 20 wvc

Raw Sample Relinquished by: JDCSM

Date/Time 12/07/24

Raw Sample Received by: JDCSM

Raw Sample Relinquished by: 20 CoolC

14145