

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
 Lab Code: ACE Case No.: 51879 MA No.: \_\_\_\_\_ SDG No.: MBHKM2  
 SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MBHKM2</u>	<u>P5043-01</u>	<u>X</u>	_____	_____	_____
<u>MBHKM2D</u>	<u>P5043-02</u>	<u>X</u>	_____	_____	_____
<u>MBHKM2S</u>	<u>P5043-03</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: \_\_\_\_\_

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 2-112624-161432-0033

Date Shipped: 11/26/2024

Carrier Name: FedEx

Airbill No: 7702 6139 4612

Case #: 51879  
Cooler #: 8

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
P174-SB-16-Z12-18	MBHKL5	Soil		ICP-AES(35)	4709 (Met ice < 6 C) (1)	P174-SB-16	11/20/2024 10:30	
P174-SB-16-Z18-24	MBHKL6	Soil		ICP-AES(35)	4670 (Met ice < 6 C) (1)	P174-SB-16	11/20/2024 10:30	
P174-SB-16-Z24-30	MBHKL7	Soil		ICP-AES(35)	4671 (Met ice < 6 C) (1)	P174-SB-16	11/20/2024 10:30	
P174-SB-16-Z30-36	MBHKL8	Soil		ICP-AES(35)	4672 (Met ice < 6 C) (1)	P174-SB-16	11/20/2024 10:30	
P174-SB-18-Z00-02	MBHKL9	Soil		ICP-AES(35)	4710 (Met ice < 6 C) (1)	P174-SB-18	11/20/2024 09:55	
P174-SB-18-Z02-06	MBHKM0	Soil		ICP-AES(35)	4711 (Met ice < 6 C) (1)	P174-SB-18	11/20/2024 09:55	
P174-SB-18-Z06-12	MBHKM1	Soil		ICP-AES(35)	4712 (Met ice < 6 C) (1)	P174-SB-18	11/20/2024 09:55	
P174-SB-18-Z12-18	MBHKM2	Soil		ICP-AES(35)	4713 (Met ice < 6 C) (1)	P174-SB-18	11/20/2024 09:55	22-1
P174-SB-18-Z18-24	MBHKM3	Soil		ICP-AES(35)	4714 (Met ice < 6 C) (1)	P174-SB-18	11/20/2024 09:55	
P174-SB-18-Z24-30	MBHKM4	Soil		ICP-AES(35)	4715 (Met ice < 6 C) (1)	P174-SB-18	11/20/2024 09:55	

Sample(s) to be used for Lab QC: P174-SB-18-Z12-18 Tag 4713 - Special Instructions: Samples MBHKM2 and MBHKM6 are MS/MSDs.

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

Analysis Key: ICP-AES=CLP Routine - SFAM01.1/LASASD 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> CUSP	11/20/24 1225	<i>[Signature]</i> R. Moberg	11/20/24 10:05	IR gun #1 2.5° Temp Brake present Custody seal intact

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 Lee</u>	Log-in Date <b>11/27/2024</b>
Received By (Signature) <u>[Signature]</u>	
Case Number <b>51879</b>	SDG No. <u>MBHKM2</u> MA No. <u>N/A</u>

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>770261394612</u> <u>1</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.5</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>11/27/2024</u>
12. Time Received	<u>10:05</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MBHKM2	N/A	4713	P5043-01	Intact
2	MBHKM2D	N/A	4713	P5043-02	Intact
3	MBHKM2S	N/A	4713	P5043-03	Intact
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>AK</u>	Logbook No.      N/A
Date <u>11/27/24</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.	MBHKM2
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)

	<u>PAGE NOS:</u>		<u>CHECK</u>	
	<u>FROM</u>	<u>TO</u>	<u>LAB</u>	<u>REGION</u>
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	8	✓	
6. Communication Logs	NA	NA	✓	
7. Percent Solids Log	9	10	✓	
<b>Analysis Forms and Data (ICP-AES)</b>				
8. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	11	11	✓	
9. Instrument raw data by instrument in analysis order	12	130	✓	
<b>Other Data</b>				
10. Standard and Reagent Preparation Logs	131	283	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	284	285	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	286	293	✓	
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	✓	
<b>Analysis Forms and Data (ICP-MS)</b>				
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	✓	
<b>Other Data</b>				
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	✓	
<b>Analysis Forms and Data (Mercury)</b>				
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	✓	
<b>Other Data</b>				
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	✓	
<b>Analysis Forms and Data (Cyanide)</b>				
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	✓	
<b>Other Data</b>				
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:		CHECK	
FROM	TO	LAB	REGION

**Additional**

44. EPA Shipping/Receiving Documents

Airbill (No. of Shipments   1  )

Sample Tags

Sample Log-In Sheet (Lab)

294	294	✓	
NA	NA	✓	
295	295	✓	

45. Misc. Shipping/Receiving Records (list all individual records)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

NA	NA	✓	

46. Internal Lab Sample Transfer Records and Tracking Sheets  
 (describe or list)

\_\_\_\_\_  
 \_\_\_\_\_

296	296	✓	

47. Other Records and related Communication Logs  
 (describe or list)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

NA	NA	✓	

48. Comments:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Completed by:  
 (CLP Lab)

\_\_\_\_\_  
 (Signature)

Nimisha Pandya, Document Control Officer

\_\_\_\_\_  
 (Print Name & Title)

\_\_\_\_\_  
 (Date)

Audited by:  
 (EPA)

\_\_\_\_\_  
 (Signature)

\_\_\_\_\_  
 (Print Name & Title)

\_\_\_\_\_  
 (Date)



**284 Sheffield Street  
Mountainside, NJ 07092**

## **SDG NARRATIVE**

**USEPA**

**SDG # MBHKM2**

**CASE # 51879**

**CONTRACT # 68HERH20D0011**

**SOW# SFAM01.1**

**LAB NAME: Alliance Technical Group, LLC**

**LAB CODE: ACE**

**LAB ORDER ID # P5043**

### **A. Number of Samples and Date of Receipt**

01 Soil samples were delivered to the laboratory intact on 11/27/2024.

### **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: 2.5°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)

Vf = 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 MBHKM2 For Arsenic:**

If C = 0.0468702 ppm

Vf = 100 ml

W = 1.42 g

S = 0.853(85.3/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.0468702 \times \frac{100}{1.42 \times 0.853} \times 1$$

$$= 3.8695 \text{ mg/kg}$$

$$= 3.9 \text{ mg/kg (Reported Result with Signification)}$$

**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 Silver. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

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:** rubina  
**Analyst:** jignesh  
**Date:** 12/4/2024

**OVENTEMP IN Celsius(°C):** 107  
**Time IN:** 12:35  
**In Date:** 12/03/2024  
**Weight Check 1.0g:** 1.00  
**Weight Check 10g:** 10.00  
**OvenID:** M OVEN#1

**OVENTEMP OUT Celsius(°C):** 103  
**Time OUT:** 07:45  
**Out Date:** 12/04/2024  
**Weight Check 1.0g:** 1.00  
**Weight Check 10g:** 10.00  
**BalanceID:** M SC-4  
**Thermometer ID:** % SOLID- OVEN

QC:LB133707

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
P5040-01	MBHKD6	1	1.17	8.55	9.72	8.73	88.4	
P5040-02	MBHKD6D	2	1.17	8.55	9.72	8.73	88.4	
P5040-03	MBHKD6S	3	1.17	8.55	9.72	8.73	88.4	
P5041-01	MBHK78	4	1.15	8.44	9.59	8.49	87.0	
P5041-02	MBHK78D	5	1.15	8.44	9.59	8.49	87.0	
P5041-03	MBHK78S	6	1.15	8.44	9.59	8.49	87.0	
P5042-01	MBHKB0	7	1.16	8.72	9.88	8.16	80.3	
P5042-02	MBHKB0D	8	1.16	8.72	9.88	8.16	80.3	
P5042-03	MBHKB0S	9	1.16	8.72	9.88	8.16	80.3	
P5043-01	MBHKM2	10	1.17	8.49	9.66	8.41	85.3	
P5043-02	MBHKM2D	11	1.17	8.49	9.66	8.41	85.3	
P5043-03	MBHKM2S	12	1.17	8.49	9.66	8.41	85.3	

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

# WORKLIST(Hardcopy Internal Chain)

UB 133707

WorkList Name : %1-p5040

WorkList ID : 185925

Department : Wet-Chemistry

Date : 12-03-2024 11:53:41

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5040-01	MBHKD6	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5040-02	MBHKD6D	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5040-03	MBHKD6S	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5041-01	MBHK78	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5041-02	MBHK78D	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5041-03	MBHK78S	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5042-01	MBHKB0	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5042-02	MBHKB0D	Solid	Percent Solids	Cool 4 deg C	USEP01	C21	11/20/2024	Chemtech -SO
P5042-03	MBHKB0S	Solid	Percent Solids	Cool 4 deg C	USEP01	C21	11/20/2024	Chemtech -SO
P5043-01	MBHKM2	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5043-02	MBHKM2D	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5043-03	MBHKM2S	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO

Date/Time 12/03/24 12:00

Raw Sample Received by: JL Geller

Raw Sample Relinquished by: JD (SM)

Date/Time 12/03/24 12:40

Raw Sample Received by: JD (SM)

Raw Sample Relinquished by: JL Geller