

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51879 MA No.: _____ SDG No.: MBHMK3
SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MBHMK3</u>	<u>P5129-01</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMK3D</u>	<u>P5129-02</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMK3S</u>	<u>P5129-03</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHML0</u>	<u>P5129-04</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHML1</u>	<u>P5129-05</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHML2</u>	<u>P5129-06</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHML3</u>	<u>P5129-07</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHML4</u>	<u>P5129-08</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMN0</u>	<u>P5129-09</u>	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
<u>MBHMN1</u>	<u>P5129-10</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)

CHAIN OF CUSTODY RECORD

No: 2-120424-124801-0049

Date Shipped: 12/4/2024

Lab: Alliance Technical Group LLC

Carrier Name: FedEx

Case #: 51879

Lab Contact: Mohammed Ahmed

Airbill No: 7704 9476 4206

Cooler #: 4

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
P141-SB-15-Z12-18	MBHMK0	Soil/		ICP-AES(35)	1474 (Wet ice < 6 C) (1)	P141-SB-15	11/20/2024 09:20	
P141-SB-15-Z18-24	MBHMK1	Soil/		ICP-AES(35)	1475 (Wet ice < 6 C) (1)	P141-SB-15	11/20/2024 09:20	
P114-SB-13-Z00-02	MBHMK2	Soil/		ICP-AES(35)	1154 (Wet ice < 6 C) (1)	P114-SB-13	11/20/2024 10:33	
P114-SB-13-Z02-06	MBHMK3	Soil/		ICP-AES(35)	1155 (Wet ice < 6 C) (1)	P114-SB-13	11/20/2024 10:33	1-0
P114-SB-13-Z06-12	MBHMK4	Soil/		ICP-AES(35)	1156 (Wet ice < 6 C) (1)	P114-SB-13	11/20/2024 10:33	
P114-SB-13-Z12-18	MBHMK5	Soil/		ICP-AES(35)	1157 (Wet ice < 6 C) (1)	P114-SB-13	11/20/2024 10:33	
P114-SB-13-Z18-24	MBHMK6	Soil/		ICP-AES(35)	1158 (Wet ice < 6 C) (1)	P114-SB-13	11/20/2024 10:33	
P114-SB-13-Z24-30	MBHMK7	Soil/		ICP-AES(35)	1159 (Wet ice < 6 C) (1)	P114-SB-13	11/20/2024 10:33	
P115-SB-16-Z00-02	MBHMK8	Soil/		ICP-AES(35)	1182 (Wet ice < 6 C) (1)	P115-SB-16	11/20/2024 09:55	
P115-SB-16-Z02-06	MBHMK9	Soil/		ICP-AES(35)	1183 (Wet ice < 6 C) (1)	P115-SB-16	11/20/2024 09:55	

Sample(s) to be used for Lab QC: P114-SB-13-Z02-06 Tag 1155, P115-SB-16-Z02-06 Tag 1183 - Special Instructions: Samples MBHMK9 and MBHMK3 are MS/MSDs.

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES-CLP Routine - SFAM01.1/LASD 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 codes	<i>[Signature]</i> WSP	12/04/24 16:20	<i>[Signature]</i>	12.5.24 1010	PR-1 2.3°C
		N/A	<i>[Signature]</i>	12/04/24	Custody Seal Intact
					Temp Blank present

No: 2-120424-124801-0049

Lab Phone: 908-789-8900

[illegible]

Shipment for Case Complete? N

Analysis Key: ICP-AES=CLP Routine - SFAM01.1/LASD 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>Christie WSP</i>	12/04/24 16:20	<i>DR</i>	1010 12.5.24	IRCa #1 2.3"
			<i>Dr. [Signature]</i>	12/04/24	Custody Seal Intact
		N/A			Temp Blot 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>Cassanova Rene</u>	Log-in Date 12/5/2024
Received By (Signature) <u>[Signature]</u>	
Case Number 51879	SDG No. MBHMK3 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>770494764206</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>12/05/2024</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	MBHMK3	N/A	1155	P5129-01	Intact
2	MBHMK3D	N/A	1155	P5129-02	Intact
3	MBHMK3S	N/A	1155	P5129-03	Intact
4	MBHML0	N/A	1184	P5129-04	Intact
5	MBHML1	N/A	1185	P5129-05	Intact
6	MBHML2	N/A	1186	P5129-06	Intact
7	MBHML3	N/A	1187	P5129-07	Intact
8	MBHML4	N/A	1188	P5129-08	Intact
9	MBHMN0	N/A	5560	P5129-09	Intact
10	MBHMN1	N/A	5561	P5129-10	Intact
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>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.	MBHMK3
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	20	✓	
9. Instrument raw data by instrument in analysis order	21	767	✓	

Other Data

10. Standard and Reagent Preparation Logs	768	906	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	907	908	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	909	929	✓	
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	✓	

	<u>PAGE NOS:</u>		<u>CHECK</u>	
	<u>FROM</u>	<u>TO</u>	<u>LAB</u>	<u>REGION</u>
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
930	930	✓	
NA	NA	✓	
931	931	✓	
NA	NA	✓	
932	932	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MBHMK3

CASE # 51879

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P5129

A. Number of Samples and Date of Receipt

08 Soil samples 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: 2.3°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 MBHMK3 For Arsenic:

If C = 0.1900623 ppm

V_f = 100 ml

W = 1.29 g

S = 0.767(76.7/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.1900623 \times \frac{100}{1.29 \times 0.767} \times 1$$

$$= 19.2092 \text{ mg/kg}$$

$$= 19 \text{ mg/kg (Reported Result with Signification)}$$

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, Copper, Selenium, Silver, Thallium, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements.



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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: 12:05
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: 07:40
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:LB133808

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
P5129-01	MBHMK3	1	1.16	8.67	9.83	7.81	76.7	
P5129-02	MBHMK3D	2	1.16	8.67	9.83	7.81	76.7	
P5129-03	MBHMK3S	3	1.16	8.67	9.83	7.81	76.7	
P5129-04	MBHML0	4	1.17	8.55	9.72	8.01	80.0	
P5129-05	MBHML1	5	1.16	8.66	9.82	8.42	83.8	
P5129-06	MBHML2	6	1.19	8.61	9.8	8.35	83.2	
P5129-07	MBHML3	7	1.19	8.76	9.95	8.52	83.7	
P5129-08	MBHML4	8	1.18	8.80	9.98	8.73	85.8	
P5129-09	MBHMN0	9	1.17	8.80	9.97	8.11	78.9	
P5129-10	MBHMN1	10	1.16	8.45	9.61	8.41	85.8	

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

WORKLIST(Hardcopy Internal Chain)

133808

WorkList Name : %1-P5129

WorkList ID : 186097

Department : Wet-Chemistry

Date : 12-07-2024 10:20:06

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5129-01	MBHMK3	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO
P5129-02	MBHMK3D	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO
P5129-03	MBHMK3S	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO
P5129-04	MBHML0	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO
P5129-05	MBHML1	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO
P5129-06	MBHML2	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO
P5129-07	MBHML3	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO
P5129-08	MBHML4	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO
P5129-09	MBHMN0	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/19/2024	Chemtech -SO
P5129-10	MBHMN1	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	11/20/2024	Chemtech -SO

Date/Time 12/07/24 11:20
 Raw Sample Received by: JR CWCJ
 Raw Sample Relinquished by: JDCSM

Date/Time 12/07/24 12:10
 Raw Sample Received by: JDCSM
 Raw Sample Relinquished by: JR CWCJ