

## SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
 Lab Code: ACE Case No.: 51879 MA No.: \_\_\_\_\_ SDG No.: MBHHE1  
 SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MBHHE1</u>	<u>P4907-01</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE1D</u>	<u>P4907-02</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE1S</u>	<u>P4907-03</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE4</u>	<u>P4907-04</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE5</u>	<u>P4907-05</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE6</u>	<u>P4907-06</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE7</u>	<u>P4907-07</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE8</u>	<u>P4907-08</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE9</u>	<u>P4907-09</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHE9</u>	<u>P4907-10</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHC0</u>	<u>P4907-11</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHC1</u>	<u>P4907-12</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHC2</u>	<u>P4907-13</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHC3</u>	<u>P4907-14</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHC4</u>	<u>P4907-15</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHD6</u>	<u>P4907-16</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHD7</u>	<u>P4907-17</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHF0</u>	<u>P4907-18</u>	<u>X</u>	<u>          </u>	<u>          </u>	<u>          </u>
<u>MBHHF1</u>	<u>P4907-19</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: 11/15/2024

Carrier Name: FedEx

Airbill No: 7799 8944 1595

## CHAIN OF CUSTODY RECORD

68HERH20D0011

Case #: 51879

Cooler #: 2

SDG # MBHHE1  
No: 2-111524-150524-0003

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
P098-SB-07-Z00-02	MBHHE2	Soil		ICP-AES(35)	1014 (Wet ice < 6 C) (1)	P098-SB-07	11/13/2024 11:45	
P098-SB-07-Z02-06	MBHHE3	Soil		ICP-AES(35)	1015 (Wet ice < 6 C) (2)	P098-SB-07	11/13/2024 11:45	
P098-SB-07-Z06-12	MBHHE4	Soil		ICP-AES(35)	1016 (Wet ice < 6 C) (1)	P098-SB-07	11/13/2024 11:45	
P098-SB-07-Z12-18	MBHHE5	Soil		ICP-AES(35)	1017 (Wet ice < 6 C) (1)	P098-SB-07	11/13/2024 11:45	
P098-SB-07-Z06-12-FD	MBHHE8	Soil		ICP-AES(35)	5425 (Wet ice < 6 C) (1)	P098-SB-07	11/13/2024 11:45	
P130-SB-12-Z00-02	MBHHE9	Soil		ICP-AES(35)	1301 (Wet ice < 6 C) (1)	P130-SB-12	11/14/2024 12:22	
P130-SB-12-Z02-06	MBHHE0	Soil		ICP-AES(35)	1302 (Wet ice < 6 C) (1)	P130-SB-12	11/14/2024 12:22	
P130-SB-12-Z06-12	MBHHE1	Soil		ICP-AES(35)	1303 (Wet ice < 6 C) (2)	P130-SB-12	11/14/2024 12:22	
P130-SB-12-Z12-18	MBHHE2	Soil		ICP-AES(35)	1304 (Wet ice < 6 C) (1)	P130-SB-12	11/14/2024 12:22	
P130-SB-12-Z18-24	MBHHE3	Soil		ICP-AES(35)	1305 (Wet ice < 6 C) (1)	P130-SB-12	11/14/2024 12:22	

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Sample(s) to be used for Lab QC: P098-SB-07-Z02-06 Tag 1015, P130-SB-12-Z06-12 Tag 1303 - Special Instructions:

Additional sample volume provided for MBHHE3 and MBHHE1 is for MS/MSD.

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
2 Cooler		11/15/24 15:00		11-16-24 09:00	IF Cool #1 26.5
					Custody Seal Intact
					Temp Blank present

### CHAIN OF CUSTODY RECORD

**No: 2-111524-150524-0003**


**Lab: Alliance Technical Group LLC**

Case #: 51879

**Lab Contact: Mohammad Ahmed**

Cooler #: 2






**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
P130-SB-12-Z24-30	MBHHE4	Soil/		ICP-AES(35)	1306 (Met ice < 6 C) (1)	P130-SB-12	11/14/2024 12:22	✓
P130-SB-12-Z30-36	MBHHE5	Soil/		ICP-AES(35)	1307 (Met ice < 6 C) (1)	P130-SB-12	11/14/2024 12:22	✓
P130-SB-12-Z02-06-FD	MBHHE6	Soil/		ICP-AES(35)	5426 (Met ice < 6 C) (1)	P130-SB-12	11/14/2024 12:22	✓
P098-SB-08-Z00-02	MBHHE7	Soil/		ICP-AES(35)	1021 (Met ice < 6 C) (1)	P098-SB-08	11/14/2024 14:50	✓
P098-SB-08-Z02-06	MBHHE8	Soil/		ICP-AES(35)	1022 (Met ice < 6 C) (1)	P098-SB-08	11/14/2024 14:50	✓
P098-SB-08-Z06-12	MBHHE9	Soil/		ICP-AES(35)	1023 (Met ice < 6 C) (1)	P098-SB-08	11/14/2024 14:50	✓
 11/15/24 K/A								

**Special Instructions:** Additional sample volume provided for MBHHB3 and MBHHE1 is for MS/MSD.

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
2 Cooler	 WSP	11/15/24 1500		9:00 AM 11-16-24	2 Coolers 2.6"
					Custody Seal Intact
				11/15/24	Temp Blank Preserved

## USEPA CLP COC (LAB COPY)

## CHAIN OF CUSTODY RECORD

No: 2-111524-153400-0004

Date Shipped: 11/15/2024

Lab: Alliance Technical Group LLC

Carrier Name: FedEx

Case #: 51879

Lab Contact: Mohammed Ahmed

Airbill No: 7799 8944 0382

Cooler #: 3

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
P097-SB-18-Z12-18	MBHHB9	Soil/		ICP-AES(35)	1010 (Wet ice < 6 C) (1)	P097-SB-18	11/13/2024 11:20	✓
P104-SB-16-Z00-02	MBHHC0	Soil/		ICP-AES(35)	1063 (Wet ice < 6 C) (1)	P104-SB-16	11/13/2024 12:00	✓
P104-SB-16-Z02-06	MBHHC1	Soil/		ICP-AES(35)	1064 (Wet ice < 6 C) (1)	P104-SB-16	11/13/2024 12:00	✓
P104-SB-16-Z06-12	MBHHC2	Soil/		ICP-AES(35)	1065 (Wet ice < 6 C) (1)	P104-SB-16	11/13/2024 12:00	✓
P104-SB-16-Z12-18	MBHHC3	Soil/		ICP-AES(35)	1066 (Wet ice < 6 C) (1)	P104-SB-16	11/13/2024 12:00	✓
P104-SB-16-Z18-24	MBHHC4	Soil/		ICP-AES(35)	1067 (Wet ice < 6 C) (1)	P104-SB-16	11/13/2024 12:00	✓
P104-SB-16-Z18-24-FD	MBHHD6	Soil/		ICP-AES(35)	5423 (Wet ice < 6 C) (1)	P104-SB-16	11/13/2024 12:00	✓
P097-SB-18-Z12-18-FD	MBHHD7	Soil/		ICP-AES(35)	5424 (Wet ice < 6 C) (1)	P097-SB-18	11/13/2024 11:20	✓
RB02-11152024	MBHHF0	Water/		ICP-AES(35)	5427 (HNO3 pH < 2) (1)	RB02-11152024	11/15/2024 09:00	PT 1.0 water
RB03-11152024	MBHHF1	Water/		ICP-AES(35)	5428 (HNO3 pH < 2) (1)	RB03-11152024	11/15/2024 16:50	PT 1.0 water

Special Instructions: MBHHF0 and MBHBF1 are rinse blanks.

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 Cooler		11/15/24 16:55		11-16-24 9:08 AM	IP Case 1 2.3'
					Custody Seal Intact
					All Temp Blank present

FORM DC-1  
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>1</u> of <u>2</u>
Received By (Print Name) <u>Cassanova Rini</u>		Log-in Date <b>11/16/2024</b>
Received By (Signature) <u>[Signature]</u>		
Case Number <b>51879</b>	SDG No. <b>MBHHE1</b>	MA No. <b>N/A</b>

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>779989441595</u> <u>1</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.6</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>11/16/2024</u>
12. Time Received	<u>09:05</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MBHHE1	N/A	1303	P4907-01	Intact
2	MBHHE1D	N/A	1303	P4907-02	Intact
3	MBHHE1S	N/A	1303	P4907-03	Intact
4	MBHHE4	N/A	1306	P4907-04	Intact
5	MBHHE5	N/A	1307	P4907-05	Intact
6	MBHHE6	N/A	5426	P4907-06	Intact
7	MBHHE7	N/A	1021	P4907-07	Intact
8	MBHHE8	N/A	1022	P4907-08	Intact
9	MBHHE9	N/A	1023	P4907-09	Intact
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>[Signature]</u>	Logbook No. <b>N/A</b>
Date <u>11/19/24</u>	Logbook Page No. <b>N/A</b>

FORM DC-1  
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>2</u> of <u>2</u>
Received By (Print Name) <u>[Signature]</u>		Log-in Date <b>11/16/2024</b>
Received By (Signature) <u>[Signature]</u>		
Case Number <b>51879</b>	SDG No. <b>MBHHE1</b>	MA No. <b>N/A</b>

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>779989440382</u> <u>2</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>11/16/2024</u>
12. Time Received	<u>09:05</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MBHHB9	N/A	1010	P4907-10	Intact
2	MBHHC0	N/A	1063	P4907-11	Intact
3	MBHHC1	N/A	1064	P4907-12	Intact
4	MBHHC2	N/A	1065	P4907-13	Intact
5	MBHHC3	N/A	1066	P4907-14	Intact
6	MBHHC4	N/A	1067	P4907-15	Intact
7	MBHHD6	N/A	5423	P4907-16	Intact
8	MBHHD7	N/A	5424	P4907-17	Intact
9	MBHHF0	1.0	5427	P4907-18	Intact
10	MBHHF1	1.0	5428	P4907-19	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. <b>N/A</b>
Date <u>11/18/24</u>	Logbook Page No. <b>N/A</b>

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.	MBHHE1
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	4	✓	
3. Sample Log-In Sheet (DC-1)	5	6	✓	
4. CSF Inventory Sheet (DC-2)	7	9	✓	
5. SDG Narrative	10	12	✓	
6. Communication Logs	NA	NA	✓	
7. Percent Solids Log	13	14	✓	

**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	15	31	✓	
9. Instrument raw data by instrument in analysis order	32	963	✓	

**Other Data**

10. Standard and Reagent Preparation Logs	964	1141	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1142	1145	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1146	1181	✓	
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 2)

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
1182	1183	✓	
NA	NA	✓	
1184	1185	✓	
NA	NA	✓	
1186	1187	✓	
NA	NA	✓	



**284 Sheffield Street  
Mountainside, NJ 07092**

## **SDG NARRATIVE**

**USEPA**

**SDG # MBHHE1**

**CASE # 51879**

**CONTRACT # 68HERH20D0011**

**SOW# SFAM01.1**

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

**LAB CODE: ACE**

**LAB ORDER ID # P4907**

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

15 Soil & 02 Water samples were delivered to the laboratory intact on 11/16/2024.

### **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: 2.6°C, 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<sub>f</sub> = 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 MBHHE1 For Arsenic:**

If C = 0.1168127 ppm

V<sub>f</sub> = 100 ml

W = 1.46 g

S = 0.808(80.8/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.1168127 \times \frac{100}{1.46 \times 0.808} \times 1$$

$$= 9.9020 \text{ mg/kg}$$

$$= 9.9 \text{ mg/kg (Reported Result with Signification)}$$

##### **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<sub>f</sub> = Final digestion volume (mL)

V<sub>i</sub> = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor



**284 Sheffield Street  
Mountainside, NJ 07092**

**Example Calculation For Sample MBHHF0 For Iron:**

If C = 0.5667089 ppm

Vf = 50 ml

Vi = 50 ml

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.5667089 \times \frac{50}{50} \times 1 \times 1000$$

$$= 566.7089 \mu\text{g/L}$$

$$= 570 \mu\text{g/L (Reported Result with Signification)}$$

**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 except for Antimony, Beryllium, Selenium, Silver. Duplicate sample did meet requirements except for Iron, Lead. Serial Dilution did meet requirements except for Barium, Calcium, Chromium, Copper, Iron, Manganese, Magnesium, 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.

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: 11/19/2024

OVENTEMP IN Celsius(°C): 107  
Time IN: 16:35  
In Date: 11/18/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 08:17  
Out Date: 11/19/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLID- OVEN

QC:LB133496

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
P4907-01	MBHHE1	1	1.15	8.82	9.97	8.28	80.8	
P4907-02	MBHHE1D	2	1.15	8.82	9.97	8.28	80.8	
P4907-03	MBHHE1S	3	1.15	8.82	9.97	8.28	80.8	
P4907-04	MBHHE4	4	1.19	8.52	9.71	8.53	86.2	
P4907-05	MBHHE5	5	1.19	8.65	9.84	9.1	91.4	
P4907-06	MBHHE6	6	1.13	8.70	9.83	7.83	77.0	
P4907-07	MBHHE7	7	1.15	8.81	9.96	9.22	91.6	
P4907-08	MBHHE8	8	1.18	8.46	9.64	8.65	88.3	
P4907-09	MBHHE9	9	1.16	8.50	9.66	8.75	89.3	
P4907-10	MBHHE9	10	1.16	8.80	9.96	8.5	83.4	
P4907-11	MBHHC0	11	1.18	8.63	9.81	7.86	77.4	
P4907-12	MBHHC1	12	1.16	8.49	9.65	8.00	80.6	
P4907-13	MBHHC2	13	1.13	8.74	9.87	8.2	80.9	
P4907-14	MBHHC3	14	1.12	8.86	9.98	8.06	78.3	
P4907-15	MBHHC4	15	1.12	8.66	9.78	8.25	82.3	
P4907-16	MBHHD6	16	1.13	8.66	9.79	8.31	82.9	
P4907-17	MBHHD7	17	1.15	8.36	9.51	8.14	83.6	

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

# WORKLIST(Hardcopy Internal Chain)

133496

WorkList Name : %1-p4907

WorkList ID : 185544

Department : Wet-Chemistry

Date : 11-18-2024 15:38:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4907-01	MBHHE1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-02	MBHHE1D	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-03	MBHHE1S	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-04	MBHHE4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-05	MBHHE5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-06	MBHHE6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-07	MBHHE7	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-08	MBHHE8	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-09	MBHHE9	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-10	MBHHEB9	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/14/2024	Chemtech -SO
P4907-11	MBHHC0	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/13/2024	Chemtech -SO
P4907-12	MBHHC1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/13/2024	Chemtech -SO
P4907-13	MBHHC2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/13/2024	Chemtech -SO
P4907-14	MBHHC3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/13/2024	Chemtech -SO
P4907-15	MBHHC4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/13/2024	Chemtech -SO
P4907-16	MBHHD6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/13/2024	Chemtech -SO
P4907-17	MBHHD7	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	11/13/2024	Chemtech -SO

Date/Time 11-18-24 15:45

Raw Sample Received by: JH wepc

Raw Sample Relinquished by: AP SM

Date/Time 11-18-24

Raw Sample Received by: AP SM

Raw Sample Relinquished by: JH wepc