SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011

Lab Code: ACE Case No.: 51879 MA No.: SDG No.: MBHMN6

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MBHMN6	P5198-01	X			
MBHMN7	P5198-02	X			
MBHMN8	P5198-03	X			
MBHMN9	P5198-04	X			
MBHMP0	P5198-05	X			
MBHMP0D	P5198-06	X			
MBHMP0S	P5198-07	X			
MBHMP1	P5198-08	X			
MBHMP2	P5198-09	X			
MBHMP3	P5198-10	X			
MBHMP4	P5198-11	X			
MBHMP5	P5198-12	X			
MBHMW0	P5198-13	X			
MBHMW1	P5198-14	X			
MBHMW2	P5198-15	X			
MBHMW3	P5198-16	X			
MBHMW4	P5198-17	X			
MBHMW8	P5198-18	X			
MBHMW9	P5198-19	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:

68HERH20D0011

SDG # MBHMN6

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 2-120524-094314-0052

DateShipped: 12/5/2024
CarrierName: FedEx
AirbillNo: 7705 5865 9768

Case #: 51879
Cooler #: 1

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
P179-SB-09-Z00-02	MBHMN6	Soil/		ICP-AES(35)	5189 (Wet ice < 6 C) (1)	P179-SB-09	11/22/2024 10:05	
P179-SB-09-Z02-06	MBHMN7	Soil/		ICP-AES(35)	5120 (Wet ice < 6 C) (1)	P179-SB-09	11/22/2024 10:05	
P179-SB-09-Z06-12	MBHMN8	Soil/		ICP-AES(35)	5121 (Wet ice < 6 C) (1)	P179-SB-09	11/22/2024 10:05	
P179-SB-09-Z12-18	MBHMN9	Soil/		ICP-AES(35)	5122 (Wet ice < 6 C) (1)	P179-SB-09	11/22/2024 10:05	
P179-SB-09-Z18-24	MBHMP0	Soil/		ICP-AES(35)	5123 (Wet ice < 6 C) (1)	P179-SB-09	11/22/2024 10:05	
P179-SB-09-Z24-30	MBHMP1	Soil/		ICP-AES(35)	5124 (Wet ice < 6 C) (1)	P179-SB-09	11/22/2024 10:05	
P179-SB-09-Z30-36	MBHMP2	Soil/		ICP-AES(35)	5125 (Wet ice < 6 C) (1)	P179-SB-09	11/22/2024 10:05	
P179-SB-02-Z00-02	MBHMP3	Soil/		ICP-AES(35)	5090 (Wet ice < 6 C) (1)	P179-SB-02	11/22/2024 10:50	
P179-SB-02-Z02-06	MBHMP4	Soil/		ICP-AES(35)	5091 (Wet ice < 6 C) (1)	P179-SB-02	11/22/2024 10:50	
P179-SB-02-Z06-12	MBHMP5	Soil/		ICP-AES(35)	5092 (Wet ice < 6 C) (1)	P179-SB-02	11/22/2024 10:50	

Sample(s) to be used for Lab QC: P179-SB-09-Z18-24 Tag 5123 - Special Instructions: Samples MBHMQ9 and MBHMP0 are MS/MSDs. Samples MBHMR1, MBHMT8 and MBHMW3 have limited sample mass.

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	[signature] USP	12/06/24 16:30	[signature]	12/7/24	1.8° IR gun #1
				9:55	Temp blank Bottles
		N/A	[signature]		Custody Seal Intact
			12/06/24		

68HERH20D0011

SDG # MBHMN6

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 2-120524-094314-0052

DateShipped: 12/5/2024

CarrierName: FedEx

AirbillNo: 7705 5865 9768

Case #: 51879

Cooler #: 1

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
P179-SB-11-Z06-12	MBHMW0	Soil/		ICP-AES(35)	5195 (Wet ice < 6 C) (1)	P179-SB-11	11/22/2024 12:05	
P179-SB-11-Z12-18	MBHMW1	Soil/		ICP-AES(35)	5196 (Wet ice < 6 C) (1)	P179-SB-11	11/22/2024 12:05	
P179-SB-11-Z18-24	MBHMW2	Soil/		ICP-AES(35)	5197 (Wet ice < 6 C) (1)	P179-SB-11	11/22/2024 12:05	
P179-SB-11-Z24-30	MBHMW3	Soil/		ICP-AES(35)	5198 (Wet ice < 6 C) (1)	P179-SB-11	11/22/2024 12:05	
P179-SB-11-Z30-36	MBHMW4	Soil/		ICP-AES(35)	5199 (Wet ice < 6 C) (1)	P179-SB-11	11/22/2024 12:05	
P179-SB-02-Z00-02-FD	MBHMW8	Soil/		ICP-AES(35)	5566 (Wet ice < 6 C) (1)	P179-SB-02	11/22/2024 10:50	
P179-SB-03-Z06-12-FD	MBHMW9	Soil/		ICP-AES(35)	5567 (Wet ice < 6 C) (1)	P179-SB-03	11/22/2024 09:40	
					N/A 12/06/24			

Special Instructions: Samples MBHMQ9 and MBHMP0 are MS/MSDs. Samples MBHMR1, MBHMT8 and MBHMW3 have limited sample mass.

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	WSP	12/06/24 16:30		12/7/24	1.8°C IR Gun #1
				9:55	Temp blank Present
		N/A 12/06/24			Custody Seal Present

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) Rena		Log-in Date 12/7/2024
Received By (Signature)		
Case Number 51879	SDG No. MBHMN6	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.	770558659768 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	1.8 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	12/07/2024
12.Time Received	09:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MBHMN6	N/A	5189	P5198-01	Intact
2	MBHMN7	N/A	5120	P5198-02	Intact
3	MBHMN8	N/A	5121	P5198-03	Intact
4	MBHMN9	N/A	5122	P5198-04	Intact
5	MBHMP0	N/A	5123	P5198-05	Intact
6	MBHMP0D	N/A	5123	P5198-06	Intact
7	MBHMP0S	N/A	5123	P5198-07	Intact
8	MBHMP1	N/A	5124	P5198-08	Intact
9	MBHMP2	N/A	5125	P5198-09	Intact
10	MBHMP3	N/A	5090	P5198-10	Intact
11	MBHMP4	N/A	5091	P5198-11	Intact
12	MBHMP5	N/A	5092	P5198-12	Intact
13	MBHMW0	N/A	5195	P5198-13	Intact
14	MBHMW1	N/A	5196	P5198-14	Intact
15	MBHMW2	N/A	5197	P5198-15	Intact
16	MBHMW3	N/A	5198	P5198-16	Intact
17	MBHMW4	N/A	5199	P5198-17	Intact
18	MBHMW8	N/A	5566	P5198-18	Intact
19	MBHMW9	N/A	5567	P5198-19	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		Logbook No.	N/A
Date	12/9/24	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.	**MBHMN6**
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: FROM	PAGE NOs: TO	CHECK LAB	CHECK 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	414	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	415	553	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	554	555	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	556	566	✓	
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: FROM	TO	CHECK 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	✓	

	PAGE NOs: FROM	TO	CHECK LAB	REGION
Additional				
44. EPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)	567	567	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	568	569	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	570	570	✓	
47. Other Records and related Communication Logs (describe or list)				
	NA	NA	✓	

48. Comments:

Completed by: (CLP Lab)		Nimisha Pandya, Document Control Officer	
	(Signature)	(Print Name & Title)	(Date)
Audited by: (EPA)			
	(Signature)	(Print Name & Title)	(Date)

284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # MBHMN6
CASE # 51879
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P5198

A. Number of Samples and Date of Receipt

17 Soil sample were delivered to the laboratory intact on 12/07/2024.

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: 1.8^{o}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):

$$\text{Concentration (mg/kg)} = C \times \frac{Vf}{W \times S} \times DF$$

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 MBHMN6 For Arsenic:

If C = 0.2087736 ppm
Vf = 100 ml
W = 1.28 g
S = 0.713(71.3/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.2087736 \times \frac{100}{1.28 \times 0.713} \times 1$$

= 22.87578 mg/kg

= 23 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, Selenium, Silver, and Thallium. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Aluminum, Barium, Calcium, Chromium, Iron, Magnesium, Manganese and 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.

284 Sheffield Street
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: 12/11/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 16:05
In Date: 12/10/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 12/11/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133869

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
P5198-01	MBHMN6	1	1.12	8.49	9.61	7.17	71.3	
P5198-02	MBHMN7	2	1.14	8.50	9.64	7.2	71.3	
P5198-03	MBHMN8	3	1.13	8.59	9.72	7.68	76.3	
P5198-04	MBHMN9	4	1.15	8.54	9.69	7.96	79.7	
P5198-05	MBHMP0	5	1.15	8.57	9.72	7.94	79.2	
P5198-06	MBHMP0D	6	1.15	8.57	9.72	7.94	79.2	
P5198-07	MBHMP0S	7	1.15	8.57	9.72	7.94	79.2	
P5198-08	MBHMP1	8	1.15	8.84	9.99	8.64	84.7	
P5198-09	MBHMP2	9	1.14	8.36	9.5	8.59	89.1	
P5198-10	MBHMP3	10	1.14	8.50	9.64	7.12	70.4	
P5198-11	MBHMP4	11	1.15	8.59	9.74	7.66	75.8	
P5198-12	MBHMP5	12	1.15	8.83	9.98	8.38	81.9	
P5198-13	MBHMW0	13	1.15	8.37	9.52	7.52	76.1	
P5198-14	MBHMW1	14	1.15	8.71	9.86	8.12	80.0	
P5198-15	MBHMW2	15	1.15	8.57	9.72	8.18	82.0	
P5198-16	MBHMW3	16	1.16	8.52	9.68	8.2	82.6	
P5198-17	MBHMW4	17	1.14	8.58	9.72	8.84	89.7	
P5198-18	MBHMW8	18	1.14	8.49	9.63	6.93	68.2	
P5198-19	MBHMW9	19	1.14	8.83	9.97	8.48	83.1	

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

P 133869

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-p5198 **WorkList ID :** 186194 **Department :** Wet-Chemistry **Date :** 12-10-2024 15:08:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5198-01	MBHMN6	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-02	MBHMN7	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-03	MBHMN8	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-04	MBHMN9	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-05	MBHMP0	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-06	MBHMP0D	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-07	MBHMP0S	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-08	MBHMP1	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-09	MBHMP2	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-10	MBHMP3	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-11	MBHMP4	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-12	MBHMP5	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-13	MBHMW0	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-14	MBHMW1	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-15	MBHMW2	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-16	MBHMW3	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-17	MBHMW4	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-18	MBHMW8	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO
P5198-19	MBHMW9	Solid	Percent Solids	Cool 4 deg C	USEP01	C23	11/22/2024	Chemtech -SO

Date/Time 12-10-24 15:30
Raw Sample Received by:
Raw Sample Relinquished by:

Date/Time 12-10-24 16:10
Raw Sample Received by:
Raw Sample Relinquished by: