SDG COVER PAGE

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

Lab Code: ACE Case No.: 51879 MA No.: SDG No.: MBHN68

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MBHN68	P5208-01	X			
MBHN69	P5208-02	X			
MBHN70	P5208-03	X			
MBHN71	P5208-04	X			
MBHN72	P5208-05	X			
MBHN73	P5208-06	X			
MBHN74	P5208-07	X			
MBHNK1	P5208-08	X			
MBHNK2	P5208-09	X			
MBHNK3	P5208-10	X			
MBHNK4	P5208-11	X			
MBHNK4D	P5208-12	X			
MBHNK4S	P5208-13	X			
MBHNK5	P5208-14	X			
MBHNK6	P5208-15	X			
MBHNK7	P5208-16	X			
MBHNK8	P5208-17	X			
MBHNK9	P5208-18	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 # MBHN68

USEPA CLP COC (LAB COPY)

DateShipped: 12/6/2024

CarrierName: FedEx

AirbillNo: 7705 5866 1665

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 4

No: 2-120624-150717-0057

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-01-Z00-02	MBHN68	Soil/		ICP-AES(35)	5163 (Wet ice < 6 C) (1)	P179-SB-01	11/22/2024 09:05	
P179-SB-01-Z02-06	MBHN69	Soil/		ICP-AES(35)	5164 (Wet ice < 6 C) (1)	P179-SB-01	11/22/2024 09:05	
P179-SB-01-Z06-12	MBHN70	Soil/		ICP-AES(35)	5165 (Wet ice < 6 C) (1)	P179-SB-01	11/22/2024 09:05	
P179-SB-01-Z12-18	MBHN71	Soil/		ICP-AES(35)	5166 (Wet ice < 6 C) (1)	P179-SB-01	11/22/2024 09:05	
P179-SB-01-Z18-24	MBHN72	Soil/		ICP-AES(35)	5167 (Wet ice < 6 C) (1)	P179-SB-01	11/22/2024 09:05	
P179-SB-01-Z24-30	MBHN73	Soil/		ICP-AES(35)	5168 (Wet ice < 6 C) (1)	P179-SB-01	11/22/2024 09:05	
P179-SB-01-Z30-36	MBHN74	Soil/		ICP-AES(35)	5169 (Wet ice < 6 C) (1)	P179-SB-01	11/22/2024 09:05	
P174-SB-17-Z00-02	MBHNK1	Soil/		ICP-AES(35)	4673 (Wet ice < 6 C) (1)	P174-SB-17	11/20/2024 10:00	
P174-SB-17-Z02-06	MBHNK2	Soil/		ICP-AES(35)	4674 (Wet ice < 6 C) (1)	P174-SB-17	11/20/2024 10:00	
P174-SB-17-Z06-12	MBHNK3	Soil/		ICP-AES(35)	4675 (Wet ice < 6 C) (1)	P174-SB-17	11/20/2024 10:00	

Sample(s) to be used for Lab QC: P174-SB-17-Z12-18 Tag 4676 - Special Instructions: Samples MBHN39 and MBHNK4 are MS/MSDs. Samples MBHN68, MBHN72, MBHMZ9, MBHN00, MBHN04 and MBHN38 has 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 17:10		12/7/24	1.8° IR Gun #7
		N/A		9:55	Temp blank Bottles
		12/06/24			Custody Seal

68HERH20D0011

SDG # MBHN68

USEPA CLP COC (LAB COPY)

DateShipped: 12/6/2024

CarrierName: FedEx

AirbillNo: 7705 5866 1665

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 4

No: 2-120624-150717-0057

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-17-Z12-18	MBHNK4	Soil/		ICP-AES(35)	4676 (Wet ice < 6 C) (1)	P174-SB-17	11/20/2024 10:00	•
P174-SB-17-Z18-24	MBHNK5	Soil/		ICP-AES(35)	4677 (Wet ice < 6 C) (1)	P174-SB-17	11/20/2024 10:00	
P174-SB-17-Z24-30	MBHNK6	Soil/		ICP-AES(35)	4678 (Wet ice < 6 C) (1)	P174-SB-17	11/20/2024 10:00	
P174-SB-17-Z30-36	MBHNK7	Soil/		ICP-AES(35)	4679 (Wet ice < 6 C) (1)	P174-SB-17	11/20/2024 10:00	
P174-SB-11-Z06-12-FD	MBHNK8	Soil/		ICP-AES(35)	5590 (Wet ice < 6 C) (1)	P174-SB-11	11/20/2024 10:15	
P179-SB-07-Z24-30-FD	MBHNK9	Soil/		ICP-AES(35)	5591 (Wet ice < 6 C) (1)	P179-SB-07	11/22/2024 10:15	

N/A 12/06/24

Sample(s) to be used for Lab QC: P174-SB-17-Z12-18 Tag 4676 - Special Instructions: Samples MBHN39 and MBHNK4 are MS/MSDs. Samples MBHN68, MBHN72, MBHMZ9, MBHN00, MBHN04 and MBHN38 has 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 1710		12/7/24	1.8° IR Gun #11
				9:55	Temp blank
			N/A		Custody Seal
			12/06/24		

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) Cassandra Pena		Log-in Date **12/7/2024**
Received By (Signature)		
Case Number 51879	SDG No. MBHN68	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.	770558661665 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	MBHN68	N/A	5163	P5208-01	Intact
2	MBHN69	N/A	5164	P5208-02	Intact
3	MBHN70	N/A	5165	P5208-03	Intact
4	MBHN71	N/A	5166	P5208-04	Intact
5	MBHN72	N/A	5167	P5208-05	Intact
6	MBHN73	N/A	5168	P5208-06	Intact
7	MBHN74	N/A	5169	P5208-07	Intact
8	MBHNK1	N/A	4673	P5208-08	Intact
9	MBHNK2	N/A	4674	P5208-09	Intact
10	MBHNK3	N/A	4675	P5208-10	Intact
11	MBHNK4	N/A	4676	P5208-11	Intact
12	MBHNK4D	N/A	4676	P5208-12	Intact
13	MBHNK4S	N/A	4676	P5208-13	Intact
14	MBHNK5	N/A	4677	P5208-14	Intact
15	MBHNK6	N/A	4678	P5208-15	Intact
16	MBHNK7	N/A	4679	P5208-16	Intact
17	MBHNK8	N/A	5590	P5208-17	Intact
18	MBHNK9	N/A	5591	P5208-18	Intact
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		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.	**MBHN68**
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	28	✓	
9 . Instrument raw data by instrument in analysis order	29	566	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	567	704	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	705	706	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	707	722	✓	
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)	723	723	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	724	725	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	726	726	✓	
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 # MBHN68
CASE # 51879
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P5208

A. Number of Samples and Date of Receipt

16 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 MBHN68 For Arsenic:

If C = 0.0427157 ppm
Vf = 100 ml
W = 1.18 g
S = 0.769(76.9/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.0427157 \times \frac{100}{1.18 \times 0.769} \times 1$$

$$= 4.70737 \text{ mg/kg}$$

= 4.7 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, Selenium, Silver, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Beryllium, Copper, 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: 12/13/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 15:25
In Date: 12/12/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:48
Out Date: 12/13/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLIDS-OVEN

QC: LB133918

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
P5208-01	MBHN68	1	1.16	8.51	9.67	7.7	76.9	
P5208-02	MBHN69	2	1.17	8.69	9.86	8.09	79.6	
P5208-03	MBHN70	3	1.17	8.65	9.82	8.62	86.1	
P5208-04	MBHN71	4	1.17	8.58	9.75	8.85	89.5	
P5208-05	MBHN72	5	1.18	8.45	9.63	8.96	92.1	
P5208-06	MBHN73	6	1.18	8.46	9.64	8.97	92.1	
P5208-07	MBHN74	7	1.17	8.60	9.77	9.17	93.0	
P5208-08	MBHNK1	8	1.18	8.64	9.82	7.86	77.3	
P5208-09	MBHNK2	9	1.18	8.44	9.62	8.04	81.3	
P5208-10	MBHNK3	10	1.18	8.44	9.62	8.35	85.0	
P5208-11	MBHNK4	11	1.16	8.39	9.55	8.54	88.0	
P5208-12	MBHNK4D	12	1.16	8.39	9.55	8.54	88.0	
P5208-13	MBHNK4S	13	1.16	8.39	9.55	8.54	88.0	
P5208-14	MBHNK5	14	1.19	8.54	9.73	8.89	90.2	
P5208-15	MBHNK6	15	1.17	8.66	9.83	9.09	91.5	
P5208-16	MBHNK7	16	1.19	8.61	9.8	9.26	93.7	
P5208-17	MBHNK8	17	1.19	8.44	9.63	8.46	86.1	
P5208-18	MBHNK9	18	1.18	8.70	9.88	8.75	87.0	

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

WORKLIST(Hardcopy Internal Chain)

VB 133918

WorkList Name : %1-P5208 **WorkList ID :** 186285 **Department :** Wet-Chemistry **Date :** 12-12-2024 13:30:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5208-01	MBHN68	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO
P5208-02	MBHN69	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO
P5208-03	MBHN70	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO
P5208-04	MBHN71	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO
P5208-05	MBHN72	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO
P5208-06	MBHN73	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO
P5208-07	MBHN74	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO
P5208-08	MBHNK1	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO
P5208-09	MBHNK2	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-10	MBHNK3	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-11	MBHNK4	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-12	MBHNK4D	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-13	MBHNK4S	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-14	MBHNK5	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-15	MBHNK6	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-16	MBHNK7	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-17	MBHNK8	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5208-18	MBHNK9	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/22/2024	Chemtech -SO

Date/Time 12-12-24 14:50

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Date/Time 12-12-24 15:30

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]