SDG COVER PAGE

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

Lab Code: ACE Case No.: 51879 MA No.: SDG No.: MBHN53

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MBHN53	P5206-01	X			
MBHN82	P5206-02	X			
MBHN82D	P5206-03	X			
MBHN82S	P5206-04	X			
MBHN83	P5206-05	X			
MBHN84	P5206-06	X			
MBHN85	P5206-07	X			
MBHN86	P5206-08	X			
MBHN87	P5206-09	X			
MBHN88	P5206-10	X			
MBHNA1	P5206-11	X			
MBHNA2	P5206-12	X			
MBHNA3	P5206-13	X			
MBHNA4	P5206-14	X			
MBHNA5	P5206-15	X			
MBHNA6	P5206-16	X			
MBHNA7	P5206-17	X			
MBHNJ9	P5206-18	X			
MBHNK0	P5206-19	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 # MBHN53

USEPA CLP COC (LAB COPY)

DateShipped: 12/6/2024

CarrierName: FedEx

AirbillNo: 7705 5866 0393

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 3

No: 2-120624-122520-0056

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
P178-SB-08-Z30-36	MBHN53	Soil/		ICP-AES(35)	5162 (Wet ice < 6 C) (1)	P178-SB-08	11/21/2024 13:55	
P171-SB-13-Z00-02	MBHN82	Soil/		ICP-AES(35)	4311 (Wet ice < 6 C) (1)	P171-SB-13	11/20/2024 13:40	•
P171-SB-13-Z02-06	MBHN83	Soil/		ICP-AES(35)	4312 (Wet ice < 6 C) (1)	P171-SB-13	11/20/2024 13:40	
P171-SB-13-Z06-12	MBHN84	Soil/		ICP-AES(35)	4313 (Wet ice < 6 C) (1)	P171-SB-13	11/20/2024 13:40	
P171-SB-13-Z12-18	MBHN85	Soil/		ICP-AES(35)	4314 (Wet ice < 6 C) (1)	P171-SB-13	11/20/2024 13:40	
P171-SB-13-Z18-24	MBHN86	Soil/		ICP-AES(35)	4315 (Wet ice < 6 C) (1)	P171-SB-13	11/20/2024 13:40	
P171-SB-13-Z24-30	MBHN87	Soil/		ICP-AES(35)	4316 (Wet ice < 6 C) (1)	P171-SB-13	11/20/2024 13:40	
P171-SB-13-Z30-36	MBHN88	Soil/		ICP-AES(35)	4317 (Wet ice < 6 C) (1)	P171-SB-13	11/20/2024 13:40	
P171-SB-12-Z00-02	MBHNA1	Soil/		ICP-AES(35)	4274 (Wet ice < 6 C) (1)	P171-SB-12	11/20/2024 13:35	
P171-SB-12-Z02-06	MBHNA2	Soil/		ICP-AES(35)	4275 (Wet ice < 6 C) (1)	P171-SB-12	11/20/2024 13:35	

Sample(s) to be used for Lab QC: P171-SB-13-Z00-02 Tag 4311 - Special Instructions: Samples MBHN51 and MBHN82 are MS/MSDs. Samples MBHN21, MBHN26, MBHN42, MBHN43, MBHN44, MBHN45, MBHN84, MBHN85, MBHN86, MBHN87 and MBHN88 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] WSP	12/06/24 1705	[signature]	12/7/24	1.5° IR Gun #1
				9:55	Temp blank Present
			NA [signature] 12/09/24		Custody Seal Present

68HERH20D0011

SDG # MBHN53

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 2-120624-122520-0056

DateShipped: 12/6/2024
CarrierName: FedEx
AirbillNo: 7705 5866 0393

Case #: 51879
Cooler #: 3

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
P171-SB-12-Z06-12	MBHNA3	Soil/		ICP-AES(35)	4276 (Wet ice < 6 C) (1)	P171-SB-12	11/20/2024 13:35	
P171-SB-12-Z12-18	MBHNA4	Soil/		ICP-AES(35)	4277 (Wet ice < 6 C) (1)	P171-SB-12	11/20/2024 13:35	
P171-SB-12-Z18-24	MBHNA5	Soil/		ICP-AES(35)	4278 (Wet ice < 6 C) (1)	P171-SB-12	11/20/2024 13:35	
P171-SB-12-Z24-30	MBHNA6	Soil/		ICP-AES(35)	4279 (Wet ice < 6 C) (1)	P171-SB-12	11/20/2024 13:35	
P171-SB-12-Z30-36	MBHNA7	Soil/		ICP-AES(35)	4310 (Wet ice < 6 C) (1)	P171-SB-12	11/20/2024 13:35	
P171-SB-03-Z30-36-FD	MBHNJ9	Soil/		ICP-AES(35)	5588 (Wet ice < 6 C) (1)	P171-SB-03	11/20/2024 11:15	
P171-SB-12-Z00-02-FD	MBHNK0	Soil/		ICP-AES(35)	5589 (Wet ice < 6 C) (1)	P171-SB-12	11/20/2024 13:35	
				N/A	[signature] 12/06/24			

Special Instructions: Samples MBHN51 and MBHN82 are MS/MSDs. Samples MBHN21, MBHN26, MBHN42, MBHN43, MBHN44, MBHN45, MBHN84, MBHN85, MBHN86, MBHN87 and MBHN88 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] WSP	12/06/24 1705	[signature]	12/7/24 9:55	1.5 IR (temp) Temp blank Cust seal
			N/A [signature] 12/06/24		

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) Giovanna Peña		Log-in Date **12/7/2024**
Received By (Signature)		
Case Number 51879	SDG No. MBHN53	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.	770558660393 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	1.5 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	MBHN53	N/A	5162	P5206-01	Intact
2	MBHN82	N/A	4311	P5206-02	Intact
3	MBHN82D	N/A	4311	P5206-03	Intact
4	MBHN82S	N/A	4311	P5206-04	Intact
5	MBHN83	N/A	4312	P5206-05	Intact
6	MBHN84	N/A	4313	P5206-06	Intact
7	MBHN85	N/A	4314	P5206-07	Intact
8	MBHN86	N/A	4315	P5206-08	Intact
9	MBHN87	N/A	4316	P5206-09	Intact
10	MBHN88	N/A	4317	P5206-10	Intact
11	MBHNA1	N/A	4274	P5206-11	Intact
12	MBHNA2	N/A	4275	P5206-12	Intact
13	MBHNA3	N/A	4276	P5206-13	Intact
14	MBHNA4	N/A	4277	P5206-14	Intact
15	MBHNA5	N/A	4278	P5206-15	Intact
16	MBHNA6	N/A	4279	P5206-16	Intact
17	MBHNA7	N/A	4310	P5206-17	Intact
18	MBHNJ9	N/A	5588	P5206-18	Intact
19	MBHNK0	N/A	5589	P5206-19	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.	**MBHN53**
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	567	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	568	705	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	706	707	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	708	723	✓	
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)	724	724	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	725	726	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	727	727	✓	
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 # MBHN53
CASE # 51879
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P5202

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: 1.5^{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 MBHN53 For Arsenic:

If C = 0.0957128 ppm
Vf = 100 ml
W = 1.33 g
S = 0.964(96.4/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.0957128 \times \frac{100}{1.33 \times 0.964} \times 1$$

$$= 7.46519 \text{ mg/kg}$$

= 7.5 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, Copper, Selenium, Silver, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for 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: 12/12/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 13:20
In Date: 12/11/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:33
Out Date: 12/12/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133879

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
P5206-01	MBHN53	1	1.15	8.50	9.65	9.34	96.4	
P5206-02	MBHN82	2	1.15	8.35	9.5	7.07	70.9	
P5206-03	MBHN82D	3	1.15	8.35	9.5	7.07	70.9	
P5206-04	MBHN82S	4	1.15	8.35	9.5	7.07	70.9	
P5206-05	MBHN83	5	1.19	8.42	9.61	7.42	74.0	
P5206-06	MBHN84	6	1.18	8.72	9.9	8.21	80.6	
P5206-07	MBHN85	7	1.16	8.53	9.69	8.21	82.6	
P5206-08	MBHN86	8	1.15	8.82	9.97	8.67	85.3	
P5206-09	MBHN87	9	1.17	8.40	9.57	8.38	85.8	
P5206-10	MBHN88	10	1.13	8.39	9.52	8.74	90.7	
P5206-11	MBHNA1	11	1.15	8.53	9.68	7.65	76.2	
P5206-12	MBHNA2	12	1.17	8.60	9.77	7.92	78.5	
P5206-13	MBHNA3	13	1.19	8.55	9.74	8.27	82.8	
P5206-14	MBHNA4	14	1.15	8.63	9.78	8.58	86.1	
P5206-15	MBHNA5	15	1.14	8.43	9.57	8.66	89.2	
P5206-16	MBHNA6	16	1.18	8.62	9.8	9.26	93.7	
P5206-17	MBHNA7	17	1.17	8.34	9.51	8.93	93.0	
P5206-18	MBHNJ9	18	1.16	8.63	9.79	8.96	90.4	
P5206-19	MBHNK0	19	1.12	8.70	9.82	7.76	76.3	

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

WORKLIST(Hardcopy Internal Chain)

VB 133879

WorkList Name : %1-p5206 **WorkList ID :** 186219 **Department :** Wet-Chemistry **Date :** 12-11-2024 09:14:56

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5206-01	MBHN53	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/21/2024	Chemtech -SO
P5206-02	MBHN82	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-03	MBHN82D	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-04	MBHN82S	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-05	MBHN83	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-06	MBHN84	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-07	MBHN85	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-08	MBHN86	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-09	MBHN87	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-10	MBHN88	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-11	MBHNA1	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-12	MBHNA2	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-13	MBHNA3	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-14	MBHNA4	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-15	MBHNA5	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-16	MBHNA6	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-17	MBHNA7	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-18	MBHNJ9	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO
P5206-19	MBHNK0	Solid	Percent Solids	Cool 4 deg C	USEP01	C43	11/20/2024	Chemtech -SO

Date/Time 12-11-24 12:45

Raw Sample Received by: TB WBC

Raw Sample Relinquished by: RM SM

Date/Time 12-11-24 13:25

Raw Sample Received by: RM SM

Raw Sample Relinquished by: TB WBC