SDG COVER PAGE

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

Lab Code: ACE Case No.: 51879 MA No.: SDG No.: MBHLQ3

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MBHLQ3	P5087-01	X			
MBHLY0	P5087-02	X			
MBHLY1	P5087-03	X			
MBHLY2	P5087-04	X			
MBHLY3	P5087-05	X			
MBHLY4	P5087-06	X			
MBHLY4D	P5087-07	X			
MBHLY4S	P5087-08	X			
MBHLY5	P5087-09	X			
MBHLY6	P5087-10	X			
MBHLY7	P5087-11	X			
MBHLY8	P5087-12	X			
MBHLY9	P5087-13	X			
MBHLZ0	P5087-14	X			
MBHLZ1	P5087-15	X			
MBHLZ2	P5087-16	X			
MBHLZ3	P5087-17	X			
MBHM34	P5087-18	X			
MBHM35	P5087-19	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 # MBHLQ3

USEPA CLP COC (LAB COPY)
DateShipped: 12/3/2024
CarrierName: FedEx
AirbillNo: 7704 5937 9423

CHAIN OF CUSTODY RECORD

Case #: 51879
Cooler #: 4

No: 2-120324-110212-0043
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-07-Z30-36	MBHLQ3	Soil/		ICP-AES(35)	5085 (Wet ice < 6 C) (1)	P178-SB-07	11/21/2024 13:50	
P171-SB-01-Z00-02	MBHLY0	Soil/		ICP-AES(35)	4237 (Wet ice < 6 C) (1)	P171-SB-01	11/20/2024 11:30	
P171-SB-01-Z02-06	MBHLY1	Soil/		ICP-AES(35)	4238 (Wet ice < 6 C) (1)	P171-SB-01	11/20/2024 11:30	
P171-SB-01-Z06-12	MBHLY2	Soil/		ICP-AES(35)	4239 (Wet ice < 6 C) (1)	P171-SB-01	11/20/2024 11:30	
P171-SB-01-Z12-18	MBHLY3	Soil/		ICP-AES(35)	4190 (Wet ice < 6 C) (1)	P171-SB-01	11/20/2024 11:30	
P171-SB-01-Z18-24	MBHLY4	Soil/		ICP-AES(35)	4191 (Wet ice < 6 C) (1)	P171-SB-01	11/20/2024 11:30	DL
P171-SB-01-Z24-30	MBHLY5	Soil/		ICP-AES(35)	4192 (Wet ice < 6 C) (1)	P171-SB-01	11/20/2024 11:30	
P171-SB-01-Z30-36	MBHLY6	Soil/		ICP-AES(35)	4193 (Wet ice < 6 C) (1)	P171-SB-01	11/20/2024 11:30	
P171-SB-02-Z00-02	MBHLY7	Soil/		ICP-AES(35)	4194 (Wet ice < 6 C) (1)	P171-SB-02	11/20/2024 11:40	
P171-SB-02-Z02-06	MBHLY8	Soil/		ICP-AES(35)	4195 (Wet ice < 6 C) (1)	P171-SB-02	11/20/2024 11:40	

Sample(s) to be used for Lab QC: P171-SB-01-Z18-24 Tag 4191 - Special Instructions: Samples MBHLN2 and MBHLY4 are MS/MSDs. Sample MBHLN4 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	12/03/24 16:35		1020 12-4-24	TR Cont # 1 2-1-5
					Custody Seal Intact
	N/A		12/03/24		Temp Blk present

68HERH20D0011

SDG # MBHLQ3

USEPA CLP COC (LAB COPY)

DateShipped: 12/3/2024

CarrierName: FedEx

AirbillNo: 7704 5937 9423

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 4

No: 2-120324-110212-0043

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-02-Z06-12	MBHLY9	Soil/		ICP-AES(35)	4196 (Wet ice < 6 C) (1)	P171-SB-02	11/20/2024 11:40	
P171-SB-02-Z12-18	MBHLZ0	Soil/		ICP-AES(35)	4197 (Wet ice < 6 C) (1)	P171-SB-02	11/20/2024 11:40	
P171-SB-02-Z18-24	MBHLZ1	Soil/		ICP-AES(35)	4198 (Wet ice < 6 C) (1)	P171-SB-02	11/20/2024 11:40	
P171-SB-02-Z24-30	MBHLZ2	Soil/		ICP-AES(35)	4199 (Wet ice < 6 C) (1)	P171-SB-02	11/20/2024 11:40	
P171-SB-02-Z30-36	MBHLZ3	Soil/		ICP-AES(35)	4240 (Wet ice < 6 C) (1)	P171-SB-02	11/20/2024 11:40	
P178-SB-01-Z24-30-FD	MBHM34	Soil/		ICP-AES(35)	5533 (Wet ice < 6 C) (1)	P178-SB-01	11/21/2024 13:30	
P171-SB-02-Z24-30-FD	MBHM35	Soil/		ICP-AES(35)	5534 (Wet ice < 6 C) (1)	P171-SB-02	11/20/2024 11:40	
				N/A				
							12/03/24	

Special Instructions: Samples MBHLN2 and MBHLY4 are MS/MSDs. Sample MBHLN4 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	12/03/24 16:35		1020 12-4-24	IR-Gun #1 2.1°C
					Custody Seal Intact
	N/A		12/03/24		Temp Blank present

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) [illegible]		Log-in Date **12/4/2024**
Received By (Signature) [illegible]		
Case Number 51879	SDG No. MBHLQ3	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.	770459379423 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.1 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	12/04/2024
12.Time Received	10:20

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MBHLQ3	N/A	5085	P5087-01	Intact
2	MBHLY0	N/A	4237	P5087-02	Intact
3	MBHLY1	N/A	4238	P5087-03	Intact
4	MBHLY2	N/A	4239	P5087-04	Intact
5	MBHLY3	N/A	4190	P5087-05	Intact
6	MBHLY4	N/A	4191	P5087-06	Intact
7	MBHLY4D	N/A	4191	P5087-07	Intact
8	MBHLY4S	N/A	4191	P5087-08	Intact
9	MBHLY5	N/A	4192	P5087-09	Intact
10	MBHLY6	N/A	4193	P5087-10	Intact
11	MBHLY7	N/A	4194	P5087-11	Intact
12	MBHLY8	N/A	4195	P5087-12	Intact
13	MBHLY9	N/A	4196	P5087-13	Intact
14	MBHLZ0	N/A	4197	P5087-14	Intact
15	MBHLZ1	N/A	4198	P5087-15	Intact
16	MBHLZ2	N/A	4199	P5087-16	Intact
17	MBHLZ3	N/A	4240	P5087-17	Intact
18	MBHM34	N/A	5533	P5087-18	Intact
19	MBHM35	N/A	5534	P5087-19	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 [illegible]	Logbook No. N/A
Date 12/4/24	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.	**MBHLQ3**
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	1043	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	1044	1182	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1183	1184	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1185	1213	✓	
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)	1214	1214	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	1215	1216	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	1217	1217	✓	
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 # MBHLQ3
CASE # 51879
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P5087

A. Number of Samples and Date of Receipt

17 Soil sample were delivered to the laboratory intact on 12/04/2024.

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: 2.1^{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 MBHLQ3 For Arsenic:

If C = 0.0938583 ppm
Vf = 100 ml
W = 1.48 g
S = 0.881(88.1/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.0938583 \times \frac{100}{1.48 \times 0.881} \times 1$$

$$= 7.198384 \text{ mg/kg}$$

= 7.2 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, Barium, Beryllium, Copper, Selenium, Silver, Thallium, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Aluminum, Barium, Calcium, Chromium, Cobalt, Copper, Iron, Magnesium, Manganese, 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: 12/6/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 16:15
In Date: 12/05/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:27
Out Date: 12/06/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133765

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
P5087-01	MBHLQ3	1	1.16	8.63	9.79	8.76	88.1	
P5087-02	MBHLY0	2	1.16	8.62	9.78	7.87	77.8	
P5087-03	MBHLY1	3	1.16	8.67	9.83	8.45	84.1	
P5087-04	MBHLY2	4	1.17	8.64	9.81	8.28	82.3	
P5087-05	MBHLY3	5	1.16	8.61	9.77	7.69	75.8	
P5087-06	MBHLY4	6	1.16	8.54	9.7	7.75	77.2	
P5087-07	MBHLY4D	7	1.16	8.54	9.7	7.75	77.2	
P5087-08	MBHLY4S	8	1.16	8.54	9.7	7.75	77.2	
P5087-09	MBHLY5	9	1.16	8.45	9.61	8.00	80.9	
P5087-10	MBHLY6	10	1.17	8.64	9.81	8.75	87.7	
P5087-11	MBHLY7	11	1.16	8.69	9.85	7.55	73.5	
P5087-12	MBHLY8	12	1.17	8.64	9.81	7.97	78.7	
P5087-13	MBHLY9	13	1.17	8.77	9.94	8.52	83.8	
P5087-14	MBHLZ0	14	1.17	8.41	9.58	7.93	80.4	
P5087-15	MBHLZ1	15	1.16	8.45	9.61	8.15	82.7	
P5087-16	MBHLZ2	16	1.18	8.68	9.86	8.14	80.2	
P5087-17	MBHLZ3	17	1.14	8.49	9.63	8.65	88.5	
P5087-18	MBHM34	18	1.16	8.64	9.8	8.5	85.0	
P5087-19	MBHM35	19	1.18	8.72	9.9	8.24	81.0	

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

WORKLIST(Hardcopy Internal Chain)

VB B33765

WorkList Name : %1-P5087 **WorkList ID :** 186022 **Department :** Wet-Chemistry **Date :** 12-05-2024 15:02:41

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5087-01	MBHLQ3	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/21/2024	Chemtech -SO
P5087-02	MBHLY0	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-03	MBHLY1	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-04	MBHLY2	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-05	MBHLY3	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-06	MBHLY4	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-07	MBHLY4D	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-08	MBHLY4S	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-09	MBHLY5	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-10	MBHLY6	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-11	MBHLY7	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-12	MBHLY8	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-13	MBHLY9	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-14	MBHLZ0	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-15	MBHLZ1	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-16	MBHLZ2	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-17	MBHLZ3	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-18	MBHM34	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/20/2024	Chemtech -SO
P5087-19	MBHM35	Solid	Percent Solids	Cool 4 deg C	USEP01	C61	11/21/2024	Chemtech -SO

Date/Time 12/05/24 15:30
Raw Sample Received by: JB (WC)
Raw Sample Relinquished by: JD (CSM)

Date/Time 12/05/24 16:20
Raw Sample Received by: JD (CSM)
Raw Sample Relinquished by: JB (WC)