

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51879 MA No.: _____ SDG No.: MBHKX5
SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MBHKX5</u>	<u>P5071-01</u>	<u>X</u>	_____	_____	_____
<u>MBHKX5D</u>	<u>P5071-02</u>	<u>X</u>	_____	_____	_____
<u>MBHKX5S</u>	<u>P5071-03</u>	<u>X</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: 12/2/2024

Carrier Name: FedEx

Airbill No: 7704 1901 2650

CHAIN OF CUSTODY RECORD

Case #: 51879

Cooler #: 2

No: 2-120224-112207-0035

Lab: Alliance Technical Group LLC

Lab Contact: Mohammad Ahmed

Lab Phone: 908-789-8900

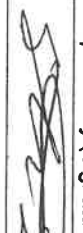

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P176-SB-07-Z30-36	MBHXX1	Soil		ICP-AES(35)	4913 (Wet ice < 6 C) (1)	P176-SB-07	11/21/2024 10:20	
P176-SB-05-Z00-02	MBHXX2	Soil		ICP-AES(35)	4893 (Wet ice < 6 C) (1)	P176-SB-05	11/21/2024 10:05	
P176-SB-05-Z02-06	MBHXX3	Soil		ICP-AES(35)	4894 (Wet ice < 6 C) (1)	P176-SB-05	11/21/2024 10:05	
P176-SB-05-Z06-12	MBHXX4	Soil		ICP-AES(35)	4895 (Wet ice < 6 C) (1)	P176-SB-05	11/21/2024 10:05	
P176-SB-05-Z12-18	MBHXX5	Soil		ICP-AES(35)	4896 (Wet ice < 6 C) (1)	P176-SB-05	11/21/2024 10:05	
P176-SB-05-Z18-24	MBHXX6	Soil		ICP-AES(35)	4897 (Wet ice < 6 C) (1)	P176-SB-05	11/21/2024 10:05	
P176-SB-05-Z24-30	MBHXX7	Soil		ICP-AES(35)	4898 (Wet ice < 6 C) (1)	P176-SB-05	11/21/2024 10:05	
P176-SB-05-Z30-36	MBHXX8	Soil		ICP-AES(35)	4899 (Wet ice < 6 C) (1)	P176-SB-05	11/21/2024 10:05	
P176-SB-08-Z30-36-FD	MBHL58	Soil		ICP-AES(35)	5515 (Wet ice < 6 C) (1)	P176-SB-08	11/21/2024 10:18	
P176-SB-07-Z06-12-FD	MBHL59	Soil		ICP-AES(35)	5516 (Wet ice < 6 C) (1)	P176-SB-07	11/21/2024 10:20	

Sample(s) to be used for Lab QC: P176-SB-05-Z12-18 Tag 4896 - Special Instructions: Samples MBHXX3 and MBHXX5 are MS/MSDs. Samples MBHXX7 and MBHXX8 have limited sample mass.

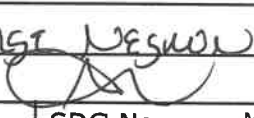
Shipment for Case Complete? N

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		12/02/24 1700		12-3-24 0950	2 PC TALAN #1
			12/02/24		custody seals intact
					Temp still present


FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>1</u> of <u>1</u>
Received By (Print Name) <u>GONGI MESKOW</u>		Log-in Date 12/3/2024
Received By (Signature) 		
Case Number 51879	SDG No. MBHKX5	MA No. N/A

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>770419012650</u> <u>1</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.1</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>12/03/2024</u>
12. Time Received	<u>09:50</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MBHKX5	N/A	4896	P5071-01	Intact
2	MBHKX5D	N/A	4896	P5071-02	Intact
3	MBHKX5S	N/A	4896	P5071-03	Intact
4	N/A	N/A	N/A	N/A	N/A
5	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
7	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
9	N/A	N/A	N/A	N/A	N/A
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 	Logbook No. N/A
Date <u>12/3/24</u>	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.	MBHKX5
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	2	✓	
3. Sample Log-In Sheet (DC-1)	3	3	✓	
4. CSF Inventory Sheet (DC-2)	4	6	✓	
5. SDG Narrative	7	9	✓	
6. Communication Logs	NA	NA	✓	
7. Percent Solids Log	10	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	13	✓	
9. Instrument raw data by instrument in analysis order	14	569	✓	

Other Data

10. Standard and Reagent Preparation Logs	570	708	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	709	710	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	711	742	✓	
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	✓	

	<u>PAGE NOS:</u>		<u>CHECK</u>	
	<u>FROM</u>	<u>TO</u>	<u>LAB</u>	<u>REGION</u>
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	✓	

Additional

44. EPA Shipping/Receiving Documents

Airbill (No. of Shipments 1)

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
743	743	✓	
NA	NA	✓	
744	744	✓	
NA	NA	✓	
745	745	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MBHKX5

CASE # 51879

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P5071

A. Number of Samples and Date of Receipt

01 Soil sample was delivered to the laboratory intact on 12/03/2024.

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°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_f = 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 MBHKX5 For Antimony:

If C = 0.0239615 ppm

V_f = 100 ml

W = 1.24 g

S = 0.918(91.8/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.0239615 \times \frac{100}{1.24 \times 0.918} \times 1$$

$$= 2.104988 \text{ mg/kg}$$

$$= 2.1 \text{ mg/kg (Reported Result with Signification)}$$

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, Copper, Selenium, Silver, Thallium, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Chromium, Cobalt, 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: 12/9/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 15:25
In Date: 12/07/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

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

QC:LB133817

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
P5071-01	MBHXX5	1	1.15	8.37	9.52	8.83	91.8	
P5071-02	MBHXX5D	2	1.15	8.37	9.52	8.83	91.8	
P5071-03	MBHXX5S	3	1.15	8.37	9.52	8.83	91.8	
P5132-01	MBHME1	4	1.12	8.70	9.82	8.61	86.1	
P5132-02	MBHME2	5	1.15	8.47	9.62	8.26	83.9	
P5132-03	MBHME3	6	1.15	8.43	9.58	8.32	85.1	
P5132-04	MBHMG0	7	1.15	8.45	9.6	7.72	77.8	
P5132-05	MBHMG1	8	1.16	8.46	9.62	8.1	82.0	
P5132-06	MBHMG2	9	1.16	8.73	9.89	8.78	87.3	
P5132-07	MBHMH6	10	1.15	8.62	9.77	7.41	72.6	
P5132-08	MBHMH7	11	1.16	8.60	9.76	7.89	78.3	
P5132-09	MBHMH8	12	1.17	8.65	9.82	8.19	81.2	
P5132-10	MBHMH9	13	1.16	8.72	9.88	8.29	81.8	
P5132-11	MBHMJ0	14	1.16	8.48	9.64	8.09	81.7	
P5132-12	MBHMJ1	15	1.16	8.82	9.98	7.9	76.4	
P5132-13	MBHMJ2	16	1.15	8.56	9.71	7.86	78.4	
P5132-14	MBHMJ3	17	1.15	8.39	9.54	7.81	79.4	
P5132-15	MBHMJ4	18	1.15	8.48	9.63	7.81	78.5	
P5132-16	MBHMJ5	19	1.18	8.50	9.68	7.65	76.1	
P5132-17	MBHMJ6	20	1.15	8.83	9.98	7.81	75.4	
P5132-18	MBHMJ6D	21	1.15	8.83	9.98	7.81	75.4	
P5132-19	MBHMJ6S	22	1.15	8.83	9.98	7.81	75.4	
P5132-20	MBHMN4	23	1.19	8.34	9.53	7.99	81.5	

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

WORKLIST(Hardcopy Internal Chain)

VB 133817

WorkList Name : %1-P5071

WorkList ID : 186102

Department : Wet-Chemistry

Date : 12-07-2024 12:07:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5071-01	MBHKX5	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5071-02	MBHKX5D	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5071-03	MBHKX5S	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5132-01	MBHME1	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/19/2024	Chemtech -SO
P5132-02	MBHME2	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/19/2024	Chemtech -SO
P5132-03	MBHME3	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/19/2024	Chemtech -SO
P5132-04	MBHMG0	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/26/2024	Chemtech -SO
P5132-05	MBHMG1	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/26/2024	Chemtech -SO
P5132-06	MBHMG2	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/26/2024	Chemtech -SO
P5132-07	MBHMH6	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-08	MBHMH7	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-09	MBHMH8	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-10	MBHMH9	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-11	MBHMJ0	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-12	MBHMJ1	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-13	MBHMJ2	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-14	MBHMJ3	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-15	MBHMJ4	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-16	MBHMJ5	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-17	MBHMJ6	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-18	MBHMJ6D	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO

Date/Time 12/07/24 16:14:40
 Raw Sample Received by: 28 CWC
 Raw Sample Relinquished by: JDCM

Date/Time 12/07/24 15:30
 Raw Sample Received by: JDCM
 Raw Sample Relinquished by: 28 CWC

WORKLIST(Hardcopy Internal Chain)

VB 133815

WorkList Name : %1-P5071

WorkList ID : 186102

Department : Wet-Chemistry

Date : 12-07-2024 12:07:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5132-19	MBHMJ6S	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO
P5132-20	MBHMN4	Solid	Percent Solids	Cool 4 deg C	USEP01	C42	11/20/2024	Chemtech -SO

Date/Time 12/07/24 14:40
 Raw Sample Received by: 28 (unc)
 Raw Sample Relinquished by: 50 (CSM)

Date/Time 12/07/24 15:40
 Raw Sample Received by: 50 (CSM)
 Raw Sample Relinquished by: 70 CUC