

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51879 MA No.: _____ SDG No.: MBHKD6
SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MBHKD6</u>	<u>P5040-01</u>	<u>X</u>	_____	_____	_____
<u>MBHKD6D</u>	<u>P5040-02</u>	<u>X</u>	_____	_____	_____
<u>MBHKD6S</u>	<u>P5040-03</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)

CHAIN OF CUSTODY RECORD

No: 2-112624-102130-0027

Date Shipped: 11/26/2024

Lab: Alliance Technical Group LLC

Carrier Name: FedEx

Case #: 51879

Lab Contact: Mohammad Ahmed

Airbill No: 7702 6139 3270

Cooler #: 2

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
P175-SB-21-Z12-18	MBHKD5	Soil		ICP-AES(35)	4830 (Wet ice < 6 C) (1)	P175-SB-21	11/20/2024 14:45	
P175-SB-21-Z18-24	MBHKD6	Soil		ICP-AES(35)	4831 (Wet ice < 6 C) (1)	P175-SB-21	11/20/2024 14:45	201
P175-SB-21-Z24-30	MBHKD7	Soil		ICP-AES(35)	4832 (Wet ice < 6 C) (1)	P175-SB-21	11/20/2024 14:45	
P175-SB-21-Z30-36	MBHKD8	Soil		ICP-AES(35)	4833 (Wet ice < 6 C) (1)	P175-SB-21	11/20/2024 14:45	
P175-SB-22-Z00-02	MBHKD9	Soil		ICP-AES(35)	4834 (Wet ice < 6 C) (1)	P175-SB-22	11/20/2024 14:45	
P175-SB-22-Z02-06	MBHKE0	Soil		ICP-AES(35)	4835 (Wet ice < 6 C) (1)	P175-SB-22	11/20/2024 14:45	
P175-SB-22-Z06-12	MBHKE1	Soil		ICP-AES(35)	4836 (Wet ice < 6 C) (1)	P175-SB-22	11/20/2024 14:45	
P175-SB-22-Z12-18	MBHKE2	Soil		ICP-AES(35)	4837 (Wet ice < 6 C) (1)	P175-SB-22	11/20/2024 14:45	
P175-SB-22-Z18-24	MBHKE3	Soil		ICP-AES(35)	4838 (Wet ice < 6 C) (1)	P175-SB-22	11/20/2024 14:45	
P175-SB-22-Z24-30	MBHKE4	Soil		ICP-AES(35)	4839 (Wet ice < 6 C) (1)	P175-SB-22	11/20/2024 14:45	

Sample(s) to be used for Lab QC: P175-SB-21-Z18-24 Tag 4831 - Special Instructions: Samples MBHK40 and MBHKD6 are MS/MSDs.

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	 J. Cooper	11/26/24 1645	 J. Cooper	1005 11-22-24	IF-Box #1 2.8"
			 J. Cooper	11/26/24	Custody Seal Intact
					Temp Blank 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>Cassara Lisa</u>		Log-in Date 11/27/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51879	SDG No. MBHKD6	MA No. N/A

Remarks:			Aqueous/ Water Sample pH	Corresponding Sample Tag #	Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
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>770261393270</u> <u>1</u>					
6. Shipping Container Temperature Indicator Bottle	Present					
7. Shipping Container Temperature	<u>2.8</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>11/27/2024</u>					
12. Time Received	<u>10:05</u>					

	EPA Sample #					
1	MBHKD6	N/A	4831	P5040-01	Intact	
2	MBHKD6D	N/A	4831	P5040-02	Intact	
3	MBHKD6S	N/A	4831	P5040-03	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 <u>[Signature]</u>	Logbook No. N/A
Date <u>11/27/24</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.	MBHKD6
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	11	✓	

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	12	12	✓	
9. Instrument raw data by instrument in analysis order	13	366	✓	

Other Data

10. Standard and Reagent Preparation Logs	367	527	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	528	529	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	530	547	✓	
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)

(Signature)

Nimisha Pandya, Document Control Officer

(Print Name & Title)

(Date)

Audited by:
(EPA)

(Signature)

(Print Name & Title)

(Date)

PAGE NOs:		CHECK	
FROM	TO	LAB	REGION
548	548	✓	
NA	NA	✓	
549	549	✓	
NA	NA	✓	
550	550	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MBHKD6

CASE # 51879

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P5040

A. Number of Samples and Date of Receipt

01 Soil samples were delivered to the laboratory intact on 11/27/2024.

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: 2.8°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.



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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 MBHKD6 For Arsenic:

If C = 0.0247386 ppm

V_f = 100 ml

W = 1.34 g

S = 0.884(88.4/100)

DF = 1

$$\begin{aligned} \text{Concentration (mg/kg)} &= 0.0247386 \times \frac{100}{1.34 \times 0.884} \times 1 \\ &= 2.0884 \text{ mg/kg} \\ &= 2.1 \text{ mg/kg (Reported Result with Signification)} \end{aligned}$$

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 Selenium. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Cobalt.

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.



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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: rubina
Analyst: jignesh
Date: 12/4/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 12:35
In Date: 12/03/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:45
Out Date: 12/04/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133707

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
P5040-01	MBHKD6	1	1.17	8.55	9.72	8.73	88.4	
P5040-02	MBHKD6D	2	1.17	8.55	9.72	8.73	88.4	
P5040-03	MBHKD6S	3	1.17	8.55	9.72	8.73	88.4	
P5041-01	MBHK78	4	1.15	8.44	9.59	8.49	87.0	
P5041-02	MBHK78D	5	1.15	8.44	9.59	8.49	87.0	
P5041-03	MBHK78S	6	1.15	8.44	9.59	8.49	87.0	
P5042-01	MBHKB0	7	1.16	8.72	9.88	8.16	80.3	
P5042-02	MBHKB0D	8	1.16	8.72	9.88	8.16	80.3	
P5042-03	MBHKB0S	9	1.16	8.72	9.88	8.16	80.3	
P5043-01	MBHKM2	10	1.17	8.49	9.66	8.41	85.3	
P5043-02	MBHKM2D	11	1.17	8.49	9.66	8.41	85.3	
P5043-03	MBHKM2S	12	1.17	8.49	9.66	8.41	85.3	

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

WORKLIST(Hardcopy Internal Chain)

133707

WorkList Name : %1-p5040

WorkList ID : 185925

Department : Wet-Chemistry

Date : 12-03-2024 11:53:41

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5040-01	MBHKD6	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5040-02	MBHKD6D	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5040-03	MBHKD6S	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5041-01	MBHK78	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/20/2024	Chemtech -SO
P5041-02	MBHK78D	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5041-03	MBHK78S	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5042-01	MBHKB0	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	11/21/2024	Chemtech -SO
P5042-02	MBHKB0D	Solid	Percent Solids	Cool 4 deg C	USEP01	C21	11/20/2024	Chemtech -SO
P5042-03	MBHKB0S	Solid	Percent Solids	Cool 4 deg C	USEP01	C21	11/20/2024	Chemtech -SO
P5043-01	MBHKM2	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5043-02	MBHKM2D	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO
P5043-03	MBHKM2S	Solid	Percent Solids	Cool 4 deg C	USEP01	C12	11/20/2024	Chemtech -SO

Date/Time 12/03/24 12:00

Raw Sample Received by: JB

Raw Sample Relinquished by: JD (SM)

Date/Time 12/03/24 12:40

Raw Sample Received by: JD (SM)

Raw Sample Relinquished by: JB