SDG COVER PAGE

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

Lab Code: ACE Case No.: 51698 MA No.: SDG No.: MBHCN1

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MBHCN1	P4500-01	X		X	X
MBHCN2	P4500-02	X		X	X
MBHCN3	P4500-03	X		X	X
MBHCN4	P4500-04	X		X	X
MBHCN5	P4500-05	X		X	X
MBHCN6	P4500-06	X		X	X
MBHCN7	P4500-07	X		X	X
MBHCN8	P4500-08	X		X	X
MBHCN9	P4500-09	X		X	X
MBHCP0	P4500-10	X		X	X
MBHCP0D	P4500-11	X		X	X
MBHCP0S	P4500-12	X		X	X
MBHCP1	P4500-13	X		X	X
MBHCP2	P4500-14	X		X	X
MBHCP3	P4500-15	X		X	X
MBHCP4	P4500-16	X		X	X
MBHCP5	P4500-17	X		X	X
MBHCP6	P4500-18	X		X	X
MBHCP7	P4500-19	X		X	X
MBHCX2	P4500-20	X		X	X
MBHCX3	P4500-21	X		X	X
MBHCZ6	P4500-22	X		X	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: _____

USEPA CLP COC (LAB COPY)

DateShipped: 10/22/2024
CarrierName: FedEx
AirbillNo: 779427626095

CHAIN OF CUSTODY RECORD

Case #: 51698
Cooler #: 3 of 5

No: 2-102224-0030-5005-03

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
P065-SS019-0006-01	MBHCL8	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 19	10/18/2024 13:50	
P065-SS019-0612-01	MBHCL9	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 19	10/18/2024 13:55	
P065-SS019-1218-01	MBHCM0	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 19	10/18/2024 14:00	
P065-SS019-1824-01	MBHCM1	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 19	10/18/2024 14:05	
P065-SS019-2430-01	MBHCM2	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 19	10/18/2024 14:10	
P065-SS021-0006-01	MBHCM8	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 21	10/16/2024 13:40	
P065-SS021-0612-01	MBHCM9	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 21	10/16/2024 13:45	
P065-SS021-1218-01	MBHCN0	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (2)	Boring 21	10/16/2024 13:50	
P065-SS021-1824-01	MBHCN1	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 21	10/16/2024 13:55	✓
P065-SS021-2430-01	MBHCN2	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 21	10/16/2024 14:00	✓

Sample(s) to be used for Lab QC: P065-SS021-1218-01 Tag M - Special Instructions: Please email results to s.sumbaly@westonsolutions.com and hector.rodriguez-cesani@westonsolutions.com. 21 day validated TAT.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: Metals + Hg + Cn=TAL Metals + Hg + Cn

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Samples	[signature] / Start	10/22/24 / 1000	Fed Ex		
			[signature]	10-23-24 0950	2.3°C IR Gun #1
					custody seals intact
					Temp blk present

68HERH20D0011 SDG # MBHCN1

USEPA CLP COC (LAB COPY)
DateShipped: 10/22/2024
CarrierName: FedEx
AirbillNo: 779427626095

CHAIN OF CUSTODY RECORD

Case #: 51698
Cooler #: 3 of 5

No: 2-102224-0030-5005-03
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
P065-SS021-3042-01	MBHCN3	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 21	10/16/2024 14:05	
P065-SS021-4254-01	MBHCN4	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 21	10/16/2024 14:10	
P065-SS021-5466-01	MBHCN5	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 21	10/16/2024 14:15	
P065-SS021-6678-01	MBHCN6	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 21	10/16/2024 14:20	
P065-SS021-7890-01	MBHCN7	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 21	10/16/2024 14:25	
P065-SS022-0006-01	MBHCN8	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 22	10/17/2024 09:30	
P065-SS022-0612-01	MBHCN9	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 22	10/17/2024 09:33	
P065-SS022-1218-01	MBHCP0	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (2)	Boring 22	10/17/2024 09:36	
P065-SS022-1824-01	MBHCP1	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 22	10/17/2024 09:42	
P065-SS022-2430-01	MBHCP2	Soil/ START	Grab	Metals + Hg + Cn(180)	M (4 C) (1)	Boring 22	10/17/2024 09:45	

Sample(s) to be used for Lab QC: P065-SS022-1218-01 Tag M - Special Instructions: Please email results to s.sumbaly@westonsolutions.com and hector.rodriguez-cesani@westonsolutions.com. 21 day validated TAT.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: Metals + Hg + Cn=TAL Metals + Hg + Cn

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Samples	Start V	10-22-24/1615	FedEx		
				10-23-24 0950	2-3°C IR Gun #1
					custody seals intact
					Temp Blk present

USEPA CLP COC (LAB COPY)
DateShipped: 10/22/2024
CarrierName: FedEx
AirbillNo: 779427626095

CHAIN OF CUSTODY RECORD

Case #: 51698
Cooler #: 3 of 5

No: 2-102224-0030-5005-03
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
P065-SS022-3042-01	MBHCP3	Soil/ START	Grab	Metals + Hg + Cn(180)	Q (4 C) (1)	Boring 22	10/17/2024 09:48	
P065-SS022-4254-01	MBHCP4	Soil/ START	Grab	Metals + Hg + Cn(180)	U (4 C) (1)	Boring 22	10/17/2024 09:51	
P065-SS022-5466-01	MBHCP5	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 22	10/17/2024 09:53	
P065-SS022-6678-01	MBHCP6	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 22	10/17/2024 09:56	
P065-SS022-7890-01	MBHCP7	Soil/ START	Grab	Metals + Hg + Cn(180)	Y (4 C) (1)	Boring 22	10/17/2024 09:58	
P065-SS021-1218-02	MBHCX2	Soil/ START	Grab	Metals + Hg + Cn(180)	Q (4 C) (1)	Boring 21	10/16/2024 13:50	
P065-SS022-1218-02	MBHCX3	Soil/ START	Grab	Metals + Hg + Cn(180)	Q (4 C) (1)	Boring 22	10/17/2024 09:36	

Special Instructions: Please email results to s.sumbaly@westonsolutions.com and hector.rodriguez-cesani@westonsolutions.com. 21 day validated TAT.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: Metals + Hg + Cn=TAL Metals + Hg + Cn

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Samples	/Start V	10222/1000	Fed Ex		
				10-23-24 0950	23.1 IR Gun #1
					custody seals intact
					Temp Blk - present

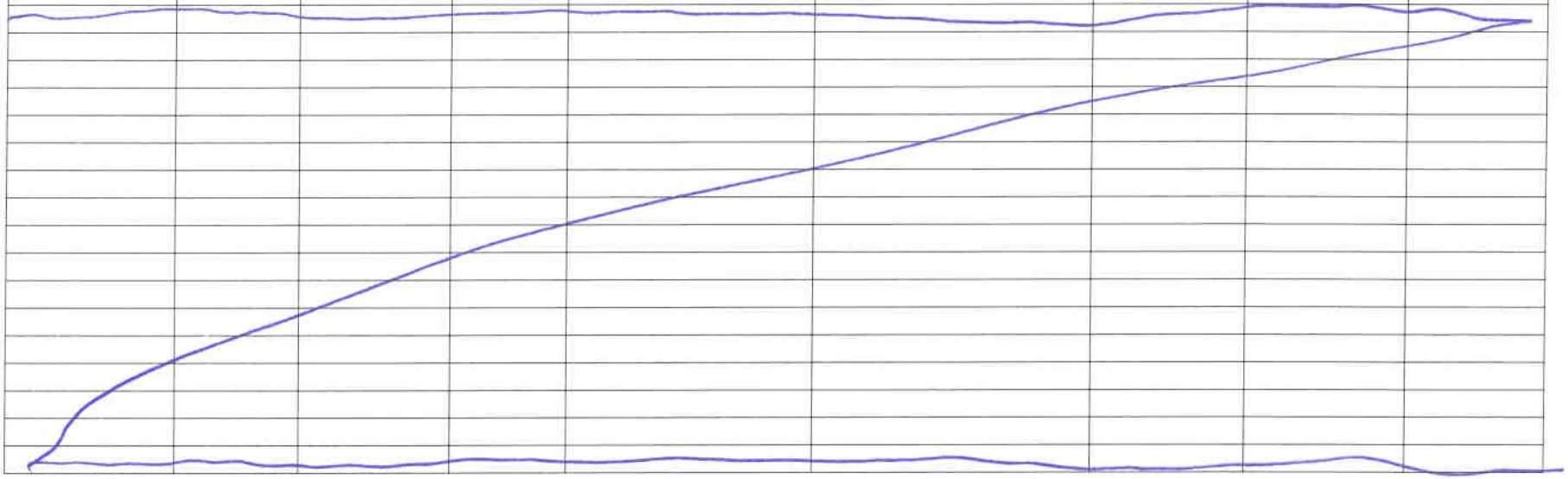
USEPA CLP COC (LAB COPY)
DateShipped: 10/22/2024
CarrierName: FedEx
AirbillNo: 779427608339

CHAIN OF CUSTODY RECORD

Case #: 51698
Cooler #: 2 of 5

No: 2-102224-0030-5005-02
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
P065-SS013-1218-02	MBHCZ6	Soil/ START	Grab	Metals + Hg + Cn(180)	Q (4 C) (1)	Boring 13	10/18/2024 11:50	✓



Special Instructions: Please email results to s.sumbaly@westonsolutions.com and hector.rodriguez-cesani@westonsolutions.com. 21 day validated TAT.

Shipment for Case Complete? Y
Samples Transferred From Chain of Custody #

Analysis Key: Metals + Hg + Cn=TAL Metals + Hg + Cn

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Samples	Start V	10-22-24/1000	FedEx		
				10-23-24 0950	2-1° IR Gun #1
					custody seals intact
					Temp blk - present

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 2
Received By (Print Name) George Nelson		Log-in Date 10/23/2024
Received By (Signature)		
Case Number 51698	SDG No. MBHCN1	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.	779427626095 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.3 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	10/23/2024
12.Time Received	09:50

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MBHCN1	N/A	M	P4500-01	Intact
2	MBHCN2	N/A	M	P4500-02	Intact
3	MBHCN3	N/A	Y	P4500-03	Intact
4	MBHCN4	N/A	Y	P4500-04	Intact
5	MBHCN5	N/A	Y	P4500-05	Intact
6	MBHCN6	N/A	Y	P4500-06	Intact
7	MBHCN7	N/A	Y	P4500-07	Intact
8	MBHCN8	N/A	Y	P4500-08	Intact
9	MBHCN9	N/A	M	P4500-09	Intact
10	MBHCP0	N/A	M	P4500-10	Intact
11	MBHCP0D	N/A	M	P4500-11	Intact
12	MBHCP0S	N/A	M	P4500-12	Intact
13	MBHCP1	N/A	M	P4500-13	Intact
14	MBHCP2	N/A	M	P4500-14	Intact
15	MBHCP3	N/A	Q	P4500-15	Intact
16	MBHCP4	N/A	U	P4500-16	Intact
17	MBHCP5	N/A	Y	P4500-17	Intact
18	MBHCP6	N/A	Y	P4500-18	Intact
19	MBHCP7	N/A	Y	P4500-19	Intact
20	MBHCX2	N/A	Q	P4500-20	Intact
21	MBHCX3	N/A	Q	P4500-21	Intact
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	10/23/24	Logbook Page No.	N/A

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 2 of 2
Received By (Print Name) George Vesuga		Log-in Date 10/23/2024
Received By (Signature)		
Case Number 51698	SDG No. MBHCN1	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
Airbill No. and Shipping Container ID No.	779427608339 2
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	10/23/2024
12.Time Received	09:50

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MBHCZ6	N/A	Q	P4500-22	Intact
2	N/A	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A	N/A
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	10/28/24	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.	**51698**	SDG NO.	**MBHCN1**
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	5	✓	
3 . Sample Log-In Sheet (DC-1)	6	7	✓	
4 . CSF Inventory Sheet (DC-2)	8	10	✓	
5 . SDG Narrative	11	14	✓	
6 . Communication Logs	NA	NA	✓	
7 . Percent Solids Log	15	17	✓	
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	18	37	✓	
9 . Instrument raw data by instrument in analysis order	38	550	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	551	719	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	720	721	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	722	740	✓	
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	741	760	✓	
27. Instrument raw data by instrument in analysis order	761	763	✓	
Other Data				
28. Standard and Reagent Preparation Logs	764	793	✓	
29. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	794	795	✓	
30. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	796	799	✓	
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	800	819	✓	
36. Instrument raw data by instrument in analysis order	820	824	✓	
Other Data				
37. Standard and Reagent Preparation Logs	825	854	✓	
38. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	855	856	✓	
39. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	857	860	✓	
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 2)	861	862	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	863	865	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	866	871	✓	
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 # MBHCN1
CASE # 51698
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P4500

A. Number of Samples and Date of Receipt

20 Soil samples were delivered to the laboratory intact on 10/23/2024.

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, Mercury, Cyanide.

C. Cooler Temp

Indicator Bottle**: Presence/**Absence

Cooler: 2.3^{o}C, 2.1^{o}C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

Issue 1 : A "P" or "M" prefix was listed at the beginning of a CLP sample ID.

E. Corrective Action taken for above:

Resolution 1 : 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 MBHCN1 For Antimony:

If C = 0.0045792 ppm
Vf = 100 ml
W = 1.34g
S = 0.788(78.8/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.0045792 \times \frac{100}{1.34 \times 0.788} \times 1$$

$$= 0.4336 \text{ mg/kg}$$

$$= 0.43 \text{ mg/kg (Reported Result with Signification)}$$

Calculation for Hg Soil Sample:

Conversion of Results from µg /L or ppb to mg/kg :

$$\text{Concentration (mg/kg)} = C \times \frac{Vf}{W \times S} \times DF / 1000$$

Where,

C = Instrument response in µg/L from the calibration curve.
Vf = Final prepared (absorbing solution) volume (mL)
W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)
S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

284 Sheffield Street
Mountainside, NJ 07092

Example Calculation For Sample MBHCN1:

If C =1.6186 ppb
Vf = 100 mL
W = 0.53g
S = 0.788(78.8/100)
DF = 1

$$\text{Concentration (mg/kg)} = 1.6186 \frac{100}{0.53 \times 0.788} \times 1 / 1000$$

$$= 0.3875 \text{ mg/kg}$$

$$= 0.39 \text{ mg/kg (Reported Result with Signification)}$$

Calculation for CN Soil Sample:

Conversion of Results from µg /L or ppb to mg/kg:

$$\text{Concentration (mg/kg)} = C \times \frac{Vf}{W \times S} \times DF / 1000$$

Where,

C = Instrument response in µg/L CN from the calibration curve.
Vf = Final prepared (absorbing solution) volume (mL)
W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)
S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

Example Calculation For Sample MBHCN1:

If C = 6.3628 ppb
Vf = 50 ml
W = 1.05 g
S = 0.788(78.8/100)
DF = 1

$$\text{Concentration (mg/kg)} = 6.3628 \times \frac{50}{1.05 \times 0.788} \times 1 / 1000$$

$$= 0.3845 \text{ mg/kg}$$

$$= 0.39 \text{ mg/kg (Reported Result with Signification)}$$

284 Sheffield Street
Mountainside, NJ 07092

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, Lead, Thallium. Duplicate sample did meet requirements except for Barium, Calcium, Cobalt, Manganese and Nickel. Serial Dilution did meet requirements.

Some samples have % solids results less than 50% but more than 30%. Please see below table for detail. Laboratory has processed these samples according to the SFAM01.1 SOW, Exhibit D, sections 10.1.1.8.

EPA Sample ID	% Solids
MBHCP7	32.4

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: 10/25/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 13:10
In Date: 10/24/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:47
Out Date: 10/25/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133095

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
P4500-01	MBHCN1	1	1.12	8.77	9.89	8.03	78.8	
P4500-02	MBHCN2	2	1.15	8.83	9.98	8.2	79.8	
P4500-03	MBHCN3	3	1.14	8.83	9.97	8.2	80.0	
P4500-04	MBHCN4	4	1.16	8.56	9.72	7.6	75.2	
P4500-05	MBHCN5	5	1.14	8.80	9.94	8.17	79.9	
P4500-06	MBHCN6	6	1.12	8.87	9.99	7.93	76.8	
P4500-07	MBHCN7	7	1.16	8.47	9.63	6.34	61.2	
P4500-08	MBHCN8	8	1.15	8.82	9.97	8.59	84.4	
P4500-09	MBHCN9	9	1.15	8.81	9.96	8.45	82.9	
P4500-10	MBHCP0	10	1.17	8.60	9.77	8.16	81.3	
P4500-11	MBHCP0D	11	1.17	8.60	9.77	8.16	81.3	
P4500-12	MBHCP0S	12	1.17	8.60	9.77	8.16	81.3	
P4500-13	MBHCP1	13	1.16	8.74	9.9	8.12	79.6	
P4500-14	MBHCP2	14	1.18	8.45	9.63	7.67	76.8	
P4500-15	MBHCP3	15	1.18	8.55	9.73	8.2	82.1	
P4500-16	MBHCP4	16	1.12	8.71	9.83	7.79	76.6	
P4500-17	MBHCP5	17	1.17	8.53	9.7	6.95	67.8	
P4500-18	MBHCP6	18	1.15	8.84	9.99	7.47	71.5	
P4500-19	MBHCP7	19	1.17	8.40	9.57	3.89	32.4	
P4500-20	MBHCX2	20	1.19	8.46	9.65	8.57	87.2	
P4500-21	MBHCX3	21	1.11	8.77	9.88	8.28	81.8	
P4500-22	MBHCZ6	22	1.15	8.80	9.95	8.61	84.8	

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

WORKLIST(Hardcopy Internal Chain)

WB B3095

WorkList Name : %1-p4500 **WorkList ID :** 184734 **Department :** Wet-Chemistry **Date :** 10-24-2024 10:29:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4500-01	MBHCN1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
P4500-02	MBHCN2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
P4500-03	MBHCN3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
P4500-04	MBHCN4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
P4500-05	MBHCN5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
P4500-06	MBHCN6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
P4500-07	MBHCN7	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
P4500-08	MBHCN8	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
P4500-09	MBHCN9	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-10	MBHCP0	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-11	MBHCP0D	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-12	MBHCP0S	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-13	MBHCP1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-14	MBHCP2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-15	MBHCP3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-16	MBHCP4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-17	MBHCP5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-18	MBHCP6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-19	MBHCP7	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-20	MBHCX2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/17/2024	Chemtech -SO
P4500-21	MBHCX3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/16/2024	Chemtech -SO
							10/17/2024	Chemtech -SO

Date/Time 10/24/24 12:40

Raw Sample Received by: JD (WC)

Raw Sample Relinquished by: Jm (SM)

Date/Time 10/24/24 13:15

Raw Sample Received by: Jm (SM)

Raw Sample Relinquished by: JD (WC)

WORKLIST(Hardcopy Internal Chain)

VB 133095

WorkList Name : %1-p4500 **WorkList ID :** 184734 **Department :** Wet-Chemistry **Date :** 10-24-2024 10:29:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4500-22	MBHCZ6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	10/18/2024	Chemtech -SO

Date/Time 10/24/24 12:40

Raw Sample Received by: JB (CWC)

Raw Sample Relinquished by: Jm (SM)

Date/Time 10/24/24 13:15

Raw Sample Received by: Jm (SM)

Raw Sample Relinquished by: JB (CWC)