SDG COVER PAGE

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

Lab Code: ACE Case No.: 51810 MA No.: SDG No.: MC0VL1

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MC0VL1	P4688-01	X		X	
MC0VL2	P4688-02	X		X	
MC0VL3	P4688-03	X		X	
MC0VL4	P4688-04	X		X	
MC0VL5	P4688-05	X		X	
MC0VL6	P4688-06	X		X	
MC0VL7	P4688-07	X		X	
MC0VL8	P4688-08	X		X	
MC0VL9	P4688-09	X		X	
MC0VM0	P4688-10	X		X	
MC0VM0D	P4688-11	X		X	
MC0VM0S	P4688-12	X		X	
MC0VM1	P4688-13	X		X	
MC0VM2	P4688-14	X		X	
MC0VM3	P4688-15	X		X	
MC0VM4	P4688-16	X		X	
MC0VM5	P4688-17	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:

68HERH20D0011

SDG # MC0VL1

USEPA CLP COC (LAB COPY)

DateShipped: 11/1/2024

CarrierName: FedEx

AirbillNo: 779673324982

CHAIN OF CUSTODY RECORD

Case #: 51810

Cooler #:

No: 3-110124-082043-0018

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
EA0021-GB	MC0VL1	Soil/ START	Grab	ICP-AES(21)	1241 (<6C) (1)	0021	10/31/2024 09:45	
EA0023-GB	MC0VL2	Soil/ START	Grab	ICP-AES(21)	1243 (<6C) (1)	0023	10/31/2024 11:23	
EA0024-GB	MC0VL3	Soil/ START	Grab	ICP-AES(21)	1245 (<6C) (1)	0024	10/30/2024 17:50	
EA0025-GB	MC0VL4	Soil/ START	Grab	ICP-AES(21)	1247 (<6C) (1)	0025	10/31/2024 12:25	
EA0026-GB	MC0VL5	Soil/ START	Grab	ICP-AES(21)	1249 (<6C) (1)	0026	10/31/2024 08:50	
EA0027-GB	MC0VL6	Soil/ START	Grab	ICP-AES(21)	1251 (<6C) (1)	0027	10/31/2024 13:38	
EA0028-GB	MC0VL7	Soil/ START	Grab	ICP-AES(21)	1253 (<6C) (1)	0028	10/31/2024 09:50	
EA0029-GB	MC0VL8	Soil/ START	Grab	ICP-AES(21)	1255 (<6C) (1)	0029	10/31/2024 13:05	
EA0029-GB-DUP	MC0VL9	Soil/ START	Grab	ICP-AES(21)	1257 (<6C) (1)	0029	10/31/2024 13:05	
EA0030-GB	MC0VM0	Soil/ START	Grab	ICP-AES(21)	1259 (<6C) (1)	0030	10/31/2024 10:30	Qe
EA0031-GB	MC0VM1	Soil/ START	Grab	ICP-AES(21)	1262 (<6C) (1)	0031	10/31/2024 14:50	
EA0032-GB	MC0VM2	Soil/ START	Grab	ICP-AES(21)	1264 (<6C) (1)	0032	10/31/2024 11:40	
EA0033-GB	MC0VM3	Soil/ START	Grab	ICP-AES(21)	1266 (<6C) (1)	0033	10/31/2024 15:00	
EA0034-GB	MC0VM4	Soil/ START	Grab	ICP-AES(21)	1268 (<6C) (1)	0034	10/31/2024 16:10	
EA0035-GB	MC0VM5	Soil/ START	Grab	ICP-AES(21)	1270 (<6C) (1)	0035	10/31/2024 16:10	

Sample(s) to be used for Lab QC: EA0030-GB Tag 1259 - Special Instructions: Alliance Metals 3

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES=CLP ICP-AES Metals + Hg

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Elizabeth Reaka TF	11/01/24 1100	Dean	11/2/24 9:40	2.1° IRCUM #1 Temp blank Present Custody Seal Intact

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 1
Received By (Print Name) Cassandra Reina		Log-in Date **11/2/2024**
Received By (Signature)		
Case Number 51810	SDG No. MC0VL1	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.	779673324982 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	11/02/2024
12.Time Received	09:40

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MC0VL1	N/A	1241	P4688-01	Intact
2	MC0VL2	N/A	1243	P4688-02	Intact
3	MC0VL3	N/A	1245	P4688-03	Intact
4	MC0VL4	N/A	1247	P4688-04	Intact
5	MC0VL5	N/A	1249	P4688-05	Intact
6	MC0VL6	N/A	1251	P4688-06	Intact
7	MC0VL7	N/A	1253	P4688-07	Intact
8	MC0VL8	N/A	1255	P4688-08	Intact
9	MC0VL9	N/A	1257	P4688-09	Intact
10	MC0VM0	N/A	1259	P4688-10	Intact
11	MC0VM0D	N/A	1259	P4688-11	Intact
12	MC0VM0S	N/A	1259	P4688-12	Intact
13	MC0VM1	N/A	1262	P4688-13	Intact
14	MC0VM2	N/A	1264	P4688-14	Intact
15	MC0VM3	N/A	1266	P4688-15	Intact
16	MC0VM4	N/A	1268	P4688-16	Intact
17	MC0VM5	N/A	1270	P4688-17	Intact
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	11/2/24	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.	**51810**	SDG NO.	**MC0VL1**
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	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	26	✓	
9 . Instrument raw data by instrument in analysis order	27	382	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	383	532	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	533	534	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	535	546	✓	
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	547	561	✓	
27. Instrument raw data by instrument in analysis order	562	564	✓	
Other Data				
28. Standard and Reagent Preparation Logs	565	590	✓	
29. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	591	592	✓	
30. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	593	596	✓	
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)	597	597	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	598	599	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	600	602	✓	
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 # MC0VL1
CASE # 51810
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P4688

A. Number of Samples and Date of Receipt

15 Soil samples were delivered to the laboratory intact on 11/02/2024.

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.

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.

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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):

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

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 MC0VL1 For Antimony:

If C = 0.0070373ppm
Vf = 100 ml
W = 1.12 g
S = 0.885(88.5/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.0070373 \times \frac{100}{1.12 \times 0.885} \times 1$$

$$= 0.709977 \text{ mg/kg}$$

$$= 0.71 \text{ mg/kg (Reported Result with Signification)}$$

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

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Mountainside, NJ 07092

Example Calculation For Sample MC0VL1:

If C = 0.611 ppb
Vf = 100 mL
W = 0.51 g
S = 0.885(88.5 /100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.611 \times \frac{100}{0.51 \times 0.885} \times 1 / 1000$$

= 0.13537 mg/kg

= 0.14 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 Selenium, Silver, Zinc. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

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: sohil
Analyst: jignesh
Date: 11/8/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 15:50
In Date: 11/07/2024
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: 11/08/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133340

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
P4688-01	MC0VL1	1	1.14	8.59	9.73	8.74	88.5	
P4688-02	MC0VL2	2	1.19	8.56	9.75	8.79	88.8	
P4688-03	MC0VL3	3	1.15	8.37	9.52	8.5	87.8	
P4688-04	MC0VL4	4	1.12	8.40	9.52	8.79	91.3	
P4688-05	MC0VL5	5	1.16	8.81	9.97	8.25	80.5	
P4688-06	MC0VL6	6	1.18	8.79	9.97	8.88	87.6	
P4688-07	MC0VL7	7	1.18	8.74	9.92	8.14	79.6	
P4688-08	MC0VL8	8	1.16	8.50	9.66	8.03	80.8	
P4688-09	MC0VL9	9	1.18	8.57	9.75	8.09	80.6	
P4688-10	MC0VM0	10	1.14	8.55	9.69	7.99	80.1	
P4688-11	MC0VM0D	11	1.14	8.55	9.69	7.99	80.1	
P4688-12	MC0VM0S	12	1.14	8.55	9.69	7.99	80.1	
P4688-13	MC0VM1	13	1.14	8.40	9.54	8.45	87.0	
P4688-14	MC0VM2	14	1.19	8.41	9.6	7.61	76.3	
P4688-15	MC0VM3	15	1.12	8.70	9.82	8.42	83.9	
P4688-16	MC0VM4	16	1.19	8.66	9.85	9.05	90.8	
P4688-17	MC0VM5	17	1.19	8.72	9.91	8.38	82.5	

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

WORKLIST(Hardcopy Internal Chain)

VB 133340

WorkList Name : %1-P4688 **WorkList ID :** 185221 **Department :** Wet-Chemistry **Date :** 11-07-2024 15:15:02

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4688-01	MC0VL1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-02	MC0VL2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-03	MC0VL3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-04	MC0VL4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/30/2024	Chemtech -SO
P4688-05	MC0VL5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-06	MC0VL6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-07	MC0VL7	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-08	MC0VL8	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-09	MC0VL9	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-10	MC0VM0	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-11	MC0VM0D	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-12	MC0VM0S	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-13	MC0VM1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-14	MC0VM2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-15	MC0VM3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-16	MC0VM4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO
P4688-17	MC0VM5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q12	10/31/2024	Chemtech -SO

Date/Time 11/07/24 15:20

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 11/07/24 16:00

Raw Sample Received by:

Raw Sample Relinquished by: