

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51948 MA No.: _____ SDG No.: MC0B00
SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	ICP-AES	Analysis Method		
			ICP-MS	Mercury	Cyanide
<u>MC0B00</u>	<u>Q1089-01</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B01</u>	<u>Q1089-02</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B01D</u>	<u>Q1089-03</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B01S</u>	<u>Q1089-04</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B06</u>	<u>Q1089-05</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B07</u>	<u>Q1089-06</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0AL9</u>	<u>Q1089-07</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0AM2</u>	<u>Q1089-08</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0AZ9</u>	<u>Q1089-09</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B02</u>	<u>Q1089-10</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B04</u>	<u>Q1089-11</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B09</u>	<u>Q1089-12</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B10</u>	<u>Q1089-13</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </u>
<u>MC0B11</u>	<u>Q1089-14</u>	<u> </u>	<u>X</u>	<u>X</u>	<u> </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: _____

No: 3-011A25-111157-0133

Lab: Alliance Technical Ground LLC

Lab Contact: Mohammad Ahmed

Lab Phone: 908-728-8900

[illegible]

Sample(s) to be used for Lab QC: WS-0184 Tag 3966, WS-0184 Tag 3967, WS-0184 Tag 3968, WS-0184 Tag 3969

Shipment for Case Complete? N

Analysis Key: ARO=CLP Aroclors, SVOA=CLP Semivolatiles, ICP-MS+Hg=CLP ICP-MS Metals + Mercury

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
5 samples	 E. A. [illegible]	11/14/21 1700	 	1-15-25 1003	IRL GCN #1
					Temp 2.8°C
					Temp blank preserved
					Go Study Seal intact

68HERH20D0011

SDG # MC0B00

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 3-011625-143425-0134

Date Shipped: 1/16/2025

Lab: Alliance Technical Group LLC

Carrier Name: FedEx

Case #: 51948

Lab Contact: Mohammed Ahmed

Airbill No: 771478577222

Cooler #: 5

Lab Phone: 908-728-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
WS-0189	COB06	Ground Water/ James	Grab	TVOA(21)	3960 (HCl), 3961 (HCl), 3962 (HCl) (3)	NSGP-2015- MW-1-01132025	01/13/2025 14:20	
WS-0190	COB07	Ground Water/ James	Grab	TVOA(21)	3985 (HCl), 3986 (HCl), 3987 (HCl) (3)	NSGP-FB-01- 01132025	01/13/2025 15:00	
WS-0191	COB08	Ground Water/ James	Grab	TVOA(21)	4000 (HCl), 4001 (HCl), 4002 (HCl) (3)	NSGP-TB-01- 01132025	01/13/2025 15:00	
WS-0192	COB09	Ground Water/ James	Grab	TVOA(21)	4015 (HCl), 4016 (HCl), 4017 (HCl) (3)	NSGP-DUP-01- 01142025	01/14/2025 11:35	
WS-0193	COB10	Ground Water/ James	Grab	TVOA(21)	4030 (HCl), 4031 (HCl), 4032 (HCl) (3)	NSGP-FB-02- 01142025	01/14/2025 15:00	
WS-0194	COB11	Ground Water/ James	Grab	TVOA(21)	4045 (HCl), 4046 (HCl), 4047 (HCl) (3)	NSGP-FB-03- 01152025	01/15/2025 15:00	
WS-0113	MC0AL9	Ground Water/ James	Grab	ICP-MS+Hg(21)	2374 (HNO3 pH<2) (1)	NSGP-2015- MW-02- 01152025	01/15/2025 10:30	PH 1.0

Special Instructions:

D00831 - 000832

Shipment for Case Complete? N

Samples Transferred From Chain of Custody

Analysis Key: TVOA=CLP Trace Volatiles, ICP-MS+Hg=CLP ICP-MS Metals + Mercury

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
7 Samples	Younis N. N. E.A	1/16/2025 17:00	OL	9:30 1-13-2025	22 Cents 1 2.4 x Custody Seal Intact Temp Black mud

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 3-011625-143425-0134

Date Shipped: 1/16/2025

Lab: Alliance Technical Group LLC

Carrier Name: FedEx

Case #: 51948

Lab Contact: Mohammad Ahmed

Airbill No: 771478577222

Cooler #: 5

Lab Phone: 908-728-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
WS-0116	MCOAM2	Ground Water/ James	Grab	ICP-MS+Hg(21)	2422 (HNO3 pH<2) (1)	NSGP-2015-DPW-5-01142025	01/14/2025 09:55	/
WS-0182	MCOAZ9	Ground Water/ James	Grab	ICP-MS+Hg(21)	3849 (HNO3 pH<2) (1)	NSGP-2015-MW-2-01142025	01/14/2025 11:30	/
WS-0185	MCOB02	Ground Water/ James	Grab	ICP-MS+Hg(21)	3895 (HNO3 pH<2) (1)	NSGP-2015-DPW-1-01142025	01/14/2025 14:00	/
WS-0187	MCOB04	Ground Water/ James	Grab	ICP-MS+Hg(21)	3925 (HNO3 pH<2) (1)	NSGP-2015-DPW-3-012025	01/15/2025 12:25	/
WS-0192	MCOB09	Ground Water/ James	Grab	ICP-MS+Hg(21)	4010 (HNO3 pH<2) (1)	NSGP-DUP-01-01142025	01/14/2025 11:35	/
WS-0193	MCOB10	Ground Water/ James	Grab	ICP-MS+Hg(21)	4025 (HNO3 pH<2) (1)	NSGP-FB-02-01142025	01/14/2025 15:00	/
WS-0194	MCOB11	Ground Water/ James	Grab	ICP-MS+Hg(21)	4040 (HNO3 pH<2) (1)	NSGP-FB-03-01152025	01/15/2025 15:00	/

Special Instructions:

000831 - 000832

Analysis Key: TVOA=CLP Trace Volatiles, ICP-MS+Hg=CLP ICP-MS Metals + Mercury

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
7 Samples	James Hing	FA 1/16/2025 17:30	QR	9:30 1-17-25	TPG # 1 2.4
					Custody Seal Intact
					Temp Blk preserved

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>1</u> of <u>2</u>
Received By (Print Name) <u>George Wesley</u>		Log-in Date 1/15/2025
Received By (Signature) <u>[Signature]</u>		
Case Number 51948	SDG No. MC0B00	MA No. N/A

Remarks:	
1. Custody Seal (s)	Present, Intact
2. Custody Seal Nos.	<u>000706-05</u>
3. Traffic Reports/Chain Of Custody Records	Present
4. Airbill	Present
5. Airbill No. and Shipping Container ID No.	<u>771420580900</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>01/15/2025</u>
12. Time Received	<u>10:03</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MC0B00	1.3	3864	Q1089-01	Intact
2	MC0B01	1.3	3880, 68 3969, <u>3968</u>	Q1089-02	Intact
3	MC0B01D	1.3	3880, 68 3969, <u>3968</u>	Q1089-03	Intact
4	MC0B01S	1.3	3880, 68 3969, <u>3968</u>	Q1089-04	Intact
5	MC0B06	1.3	3955	Q1089-05	Intact
6	MC0B07	1.3	3980	Q1089-06	Intact
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>1/15/25</u>	Logbook Page No. N/A

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>2</u> of <u>2</u>
Received By (Print Name) <u>Cassanova Peña</u>		Log-in Date 1/17/2025
Received By (Signature) <u>[Signature]</u>		
Case Number 51948	SDG No. MC0B00	MA No. N/A

Remarks:	
1. Custody Seal (s)	Present, Intact
2. Custody Seal Nos.	<u>000831-000832</u>
3. Traffic Reports/Chain Of Custody Records	Present
4. Airbill	Present
5. Airbill No. and Shipping Container ID No.	<u>771478577222</u> <u>2</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.4</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>01/17/2025</u>
12. Time Received	<u>09:30</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MC0AL9	1.0	2374	Q1089-07	Intact
2	MC0AM2	1.0	2422	Q1089-08	Intact
3	MC0AZ9	1.0	3849	Q1089-09	Intact
4	MC0B02	1.0	3895	Q1089-10	Intact
5	MC0B04	1.0	3925	Q1089-11	Intact
6	MC0B09	1.0	4010	Q1089-12	Intact
7	MC0B10	1.0	4025	Q1089-13	Intact
8	MC0B11	1.0	4040	Q1089-14	Intact
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>1/17/25</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.	51948	SDG NO.	MC0B00
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	4	✓	
3. Sample Log-In Sheet (DC-1)	5	6	✓	
4. CSF Inventory Sheet (DC-2)	7	9	✓	
5. SDG Narrative	10	13	✓	
6. Communication Logs	NA	NA	✓	
7. Percent Solids Log	NA	NA	✓	

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	NA	NA	✓	
9. Instrument raw data by instrument in analysis order	NA	NA	✓	

Other Data

10. Standard and Reagent Preparation Logs	NA	NA	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
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	14	25	✓	
18. Instrument raw data by instrument in analysis order	26	443	✓	

Other Data

19. Standard and Reagent Preparation Logs	444	579	✓	
20. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	580	581	✓	
21. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	582	588	✓	
22. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	

	PAGE NOS:		CHECK	
	FROM	TO	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	589	600	✓	
27 . Instrument raw data by instrument in analysis order	601	602	✓	

Other Data

28 . Standard and Reagent Preparation Logs	603	629	✓	
29 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	630	631	✓	
30 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	632	633	✓	
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 2)

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
634	635	✓	
NA	NA	✓	
636	637	✓	
NA	NA	✓	
638	639	✓	
NA	NA	✓	



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MC0B00

CASE # 51948

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # Q1089

A. Number of Samples and Date of Receipt

12 Water samples were delivered to the laboratory intact on 01/15/2025, 01/17/2025.

B. Parameters

Test requested for Metals CLP MS = 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: 2.8°C, 2.4°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.

G. Calculation:

Calculation for ICP-MS Water Sample:



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$$\text{Concentration or Result } (\mu\text{g/L}) = C \times \frac{V_f}{V_i} \times \text{DF}$$

Where,

C = Instrument value in ppb (The average of all replicate integrations)

V_f = Final digestion volume (mL)

V_i = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

Example Calculation For Sample MC0B00 For Arsenic:

If C = 0.26 ppb

V_f = 50 ml

V_i = 50 ml

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.26 \times \frac{50}{50} \times 1$$

$$= 0.26 \mu\text{g/L}$$

$$= 0.26 \mu\text{g/L} \text{ (Reported Result with Signification)}$$

Calculation for Hg Water Sample:

$$\text{Concentration or Result } (\mu\text{g/L}) = C \times \text{DF}$$

Where,

C = Instrument response in $\mu\text{g/L}$ from the calibration curve.

DF = Dilution Factor

Example Calculation For Sample MC0B00:

If C = 0.0669 ppb

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.0669 \times 1$$

$$= 0.0669 \mu\text{g/L}$$

$$= 0.067 \mu\text{g/L} \text{ (Reported Result with Signification)}$$

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. Duplicate sample did meet requirements. Serial Dilution did meet requirements.



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Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

Internal Standard Association for ICP-MS analysis.

Target Analyte	Associated Internal Standard
Aluminum	45Sc
Antimony	159Tb
Arsenic	89Y
Barium	159Tb
Beryllium	6Li
Cadmium	159Tb
Calcium	45Sc
Chromium	45Sc
Cobalt	45Sc
Copper	45Sc
Iron	45Sc
Lead	209Bi
Magnesium	45Sc
Manganese	45Sc
Nickel	45Sc
Potassium	45Sc
Selenium	89Y
Silver	159Tb
Sodium	45Sc



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Thallium	209Bi
Vanadium	45Sc
Zinc	45Sc

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