

## SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
 Lab Code: ACE Case No.: 51955 MA No.: 3152.0 SDG No.: YE8G3  
 SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method			
		ICP-AES	ICP-MS	Mercury	Cyanide
<u>YE8G3</u>	<u>Q1105-01</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8G5</u>	<u>Q1105-02</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8G6</u>	<u>Q1105-03</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8G6D</u>	<u>Q1105-04</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8G6S</u>	<u>Q1105-05</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8H0</u>	<u>Q1105-06</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8H1</u>	<u>Q1105-07</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8H2</u>	<u>Q1105-08</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8H3</u>	<u>Q1105-09</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8H4</u>	<u>Q1105-10</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8H5</u>	<u>Q1105-11</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8H6</u>	<u>Q1105-12</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8E9</u>	<u>Q1105-13</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8F0</u>	<u>Q1105-14</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8F1</u>	<u>Q1105-15</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8F2</u>	<u>Q1105-16</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8F3</u>	<u>Q1105-17</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8F4</u>	<u>Q1105-18</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8F6</u>	<u>Q1105-19</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8G0</u>	<u>Q1105-20</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8G1</u>	<u>Q1105-21</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u></u>
<u>YE8G2</u>	<u>Q1105-22</u>	<u>X</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: \_\_\_\_\_

## CHAIN OF CUSTODY RECORD

**No: 9-011425-221848-0002**

Lab: Alliance Technical Group LLC

Case #: 51955

**Lab Contact: Mohammad Ahmed**

MA 3152.0

Lab Phone: 908-789-8900

[illegible]

Sample(s) to be used for Lab QC: MW-29-SO-43-44 Tag 400, MW-29-SO-43-44 Tag 401

**Shipment for Case Complete? N**

**Analysis Key:** ICP-AES/MS=ICP-AES/MS Metals+Hg MA 3152.0, pH, SPLP ICP-AES=SPLP ICP-AES Metals + Hg, pH

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Myk EA	01/15/25 1500		9:32 1-16-25	J.B.G. #1 2.1'
					Curbed Seal Intact
					Temp Blank present

**No: 9-011425-222734-0003**

Lab Phone: 908-789-8900

[illegible]

### Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES/MS=ICP-AES/MS Metals+Hg MA 3152.0, pH, SPLP ICP-AES=SPLP ICP-AES Metals + Hg, pH

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	MYG EA	01/15/25 1500	CD	9:32 1-16-25	20-Cont 1 2.0-
					Custody Seal Intact
					Temp But Pres

**No: 9-011425-223134-0004**

Lab Phone: 908-789-8900

[illegible]**Samples Transferred From Chain of Custody #**

**Analysis Key:** ICP-AES/MS=ICP-AES/MS Metals+Hg MA 3152.0, pH, SPLP ICP-AES=SPLP ICP-AES Metals + Hg, pH

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Myg EA	01/25/25 1500		9:32 1-16-25	IR Count 1 1.9'
					Custody Seal Intact
					Temp Blank Presu

## CHAIN OF CUSTODY RECORD

**No: 9-011625-150417-0007**

Lab: Alliance Technical Group LLC

**Lab Contact:** Mohammad Ahmed

MA 3152.0

Lab Phone: 908-789-8900

[illegible]

**Shipment for Case Complete? N**

**Analysis Key:** ICP-AES/MS=ICP-AES/MS Metals+Hg MA 3152.0, pH, SPLP ICP-AES=SPLP ICP-AES Metals + Hg, pH

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Allison Huie 01/17/25 1000		Denn	1/18/25	2.5
				10:59	I Pen #1
					Try blow fan
					And San Pa

## CHAIN OF CUSTODY RECORD

**No: 9-011625-152322-0009**

MA 3152.0

Lab Phone: 908-789-8900

[illegible]

### Samples Transferred From Chain of Custody #

**Analysis Key:** SPLP ICP-AES=SPLP ICP-AES Metals + Hg, pH, ICP-AES/MS=ICP-AES/MS Metals+Hg MA 3152.0, pH

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
		1/17/2025 1500		1/18/25	1.8" 
				10.59	IPKen H1
					Temp black line
					Gravel on 17

FORM DC-1  
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>1</u> of <u>5</u>
Received By (Print Name) <u>Assanova Pere</u>		Log-in Date <b>1/16/2025</b>
Received By (Signature) <u>[Signature]</u>		
Case Number <b>51955</b>	SDG No. <b>YE8G3</b>	MA No. <b>3152.0</b>

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.	<u>771434446883</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>01/16/2025</u>
12. Time Received	<u>09:32</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	YE8G3	N/A	388	Q1105-01	Intact
2	YE8G5	N/A	396	Q1105-02	Intact
3	YE8G6	N/A	400	Q1105-03	Intact
4	YE8G6D	N/A	400	Q1105-04	Intact
5	YE8G6S	N/A	400	Q1105-05	Intact
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. <b>N/A</b>
Date <u>1/20/25</u>	Logbook Page No. <b>N/A</b>

FORM DC-1  
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>2</u> of <u>5</u>
Received By (Print Name) <u>Cagganora Peria</u>		Log-in Date <b>1/16/2025</b>
Received By (Signature) <u>[Signature]</u>		
Case Number <b>51955</b>	SDG No. <b>YE8G3</b>	MA No. <b>3152.0</b>

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>771434448680</u> <u>2</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.0</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>01/16/2025</u>
12. Time Received	<u>09:32</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	YE8H0	N/A	416	Q1105-06	Intact
2	YE8H1	N/A	420	Q1105-07	Intact
3	YE8H2	N/A	424	Q1105-08	Intact
4	YE8H3	N/A	428	Q1105-09	Intact
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. <b>N/A</b>
Date <u>1/20/25</u>	Logbook Page No. <b>N/A</b>

FORM DC-1  
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>3</u> of <u>5</u>
Received By (Print Name) <u>Cassara Rene</u>		Log-in Date <b>1/16/2025</b>
Received By (Signature) <u>[Signature]</u>		
Case Number <b>51955</b>	SDG No. <b>YE8G3</b>	MA No. <b>3152.0</b>

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.	<u>771434431891</u> <u>3</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>1.9</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>01/16/2025</u>
12. Time Received	<u>09:32</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	YE8H4	N/A	432	Q1105-10	Intact
2	YE8H5	N/A	436	Q1105-11	Intact
3	YE8H6	N/A	440	Q1105-12	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. <b>N/A</b>
Date <u>1/20/25</u>	Logbook Page No. <b>N/A</b>

FORM DC-1  
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>4</u> of <u>5</u>
Received By (Print Name) <u>Casanova Per</u>		Log-in Date <b>1/18/2025</b>
Received By (Signature) <u>[Signature]</u>		
Case Number <b>51955</b>	SDG No. <b>YE8G3</b>	MA No. <b>3152.0</b>

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>771488595553</u> <u>4</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>2.5</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>01/18/2025</u>
12. Time Received	<u>10:54</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	YE8E9	N/A	290	Q1105-13	Intact
2	YE8F0	N/A	297	Q1105-14	Intact
3	YE8F1	N/A	304	Q1105-15	Intact
4	YE8F2	N/A	311	Q1105-16	Intact
5	YE8F3	N/A	318	Q1105-17	Intact
6	YE8F4	N/A	325	Q1105-18	Intact
7	YE8F6	N/A	339	Q1105-19	Intact
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. <b>N/A</b>
Date <u>1/20/25</u>	Logbook Page No. <b>N/A</b>

FORM DC-1  
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>5</u> of <u>5</u>
Received By (Print Name) <u>Cassandra Perre</u>		Log-in Date <b>1/18/2025</b>
Received By (Signature) <u>[Signature]</u>		
Case Number <b>51955</b>	SDG No. <b>YE8G3</b>	MA No. <b>3152.0</b>

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>771488573310</u> <u>5</u>
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	<u>1.8</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>01/18/2025</u>
12. Time Received	<u>10:54</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	YE8G0	N/A	367	Q1105-20	Intact
2	YE8G1	N/A	374	Q1105-21	Intact
3	YE8G2	N/A	381	Q1105-22	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. <b>N/A</b>
Date <u>1/20/25</u>	Logbook Page No. <b>N/A</b>

FORM DC-2  
COMPLETE SDG FILE (CSF) INVENTORY SHEET

LAB NAME	Alliance Technical Group, LLC		
LAB CODE	ACE		
CONTRACT NO.	68HERH20D0011		
CASE NO.	51955	SDG NO.	YE8G3
MA NO.	3152.0	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	6	✓	
3. Sample Log-In Sheet (DC-1)	7	11	✓	
4. CSF Inventory Sheet (DC-2)	12	14	✓	
5. SDG Narrative	15	21	✓	
6. Communication Logs	NA	NA	✓	
7. Percent Solids Log	22	24	✓	
<b>Analysis Forms and Data (ICP-AES)</b>				
8. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	25	44	✓	
9. Instrument raw data by instrument in analysis order	45	472	✓	
<b>Other Data</b>				
10. Standard and Reagent Preparation Logs	473	632	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	633	634	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	635	647	✓	
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	✓	
<b>Analysis Forms and Data (ICP-MS)</b>				
17. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	648	667	✓	
18. Instrument raw data by instrument in analysis order	668	1511	✓	
<b>Other Data</b>				
19. Standard and Reagent Preparation Logs	1512	1644	✓	
20. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1645	1648	✓	
21. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1649	1655	✓	
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	1656	1675	✓	
27 . Instrument raw data by instrument in analysis order	1676	1677	✓	

#### Other Data

28 . Standard and Reagent Preparation Logs	1678	1702	✓	
29 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1703	1704	✓	
30 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1705	1707	✓	
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 5)

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
1708	1712	✓	
NA	NA	✓	
1713	1716	✓	
NA	NA	✓	
1717	1722	✓	
NA	NA	✓	



**284 Sheffield Street  
Mountainside, NJ 07092**

## **SDG NARRATIVE**

**USEPA**

**SDG # YE8G3**

**CASE # 51955**

**CONTRACT # 68HERH20D0011**

**SOW# SFAM01.1**

**LAB NAME: Alliance Technical Group, LLC**

**LAB CODE: ACE**

**LAB ORDER ID # Q1105**

**MODIFIED ANALYSIS # 3152.0**

### **A. Number of Samples and Date of Receipt**

20 Soil samples were delivered to the laboratory intact on 01/16/2025, 01/18/2025

### **B. Parameters**

Test requested for Metals CLP12= Aluminum, Calcium, Iron, Magnesium, Potassium, Sodium & Mercury.

Test requested for Metals CLP MS FULL = Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Molybdenum, Nickel, Selenium, Silver, Strontium, Thallium, Vanadium, Zinc.

### **C. Cooler Temp**

Indicator Bottle: **Presence**/Absence

Cooler: 2.1°C, 2.0°C, 1.9°C, 2.5°C, 1.8°C

### **D. 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.

### **E. Calculation:**

#### **Calculation for ICP-AES Soil Sample:**

Conversion of Results from mg/L or ppm to mg/kg (Dry Weight Basis):



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

Where,

C = Instrument value in ppm (The average of all replicate exposures)

V<sub>f</sub> = 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 YE8G3 For Aluminum:**

If C = 120.6874 ppm

V<sub>f</sub> = 100 ml

W = 1.15 g

S = 0.649(64.9/100)

DF = 1

$$\text{Concentration (mg/kg)} = 120.6874 \times \frac{100}{1.15 \times 0.649} \times 1$$

$$= 16170.3490 \text{ mg/kg}$$

$$= 16000 \text{ mg/kg (Reported Result with Signification)}$$

**Calculation for ICP-MS Soil Sample:**

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

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

Where,

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

V<sub>f</sub> = Final digestion 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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**Example Calculation For Sample YE8G3 For Arsenic :**

If C = 70.89 ppb  
Vf = 500 ml  
W = 1.19 g  
S = 0.649(64.9/100)  
DF = 1

$$\begin{aligned}\text{Concentration (mg/kg)} &= 70.89 \times \frac{500}{1.19 \times 0.649} \times 1 / 1000 \\ &= 45.8947 \text{ mg/kg} \\ &= 46 \text{ mg/kg (Reported Result with Signification)}\end{aligned}$$

**Calculation for Hg Soil Sample:**

Conversion of Results from  $\mu\text{g/L}$  or ppb to mg/kg :

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

Where,

C = Instrument response in  $\mu\text{g/L}$  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

**Example Calculation For Sample YE8G6 :**

If C = 0.1183 ppb  
Vf = 100 mL  
W = 0.57g  
S = 0.768(76.8/100)  
DF = 1

$$\begin{aligned}\text{Concentration (mg/kg)} &= 0.1183 \times \frac{100}{0.57 \times 0.768} \times 1 / 1000 \\ &= 0.027023 \text{ mg/kg} \\ &= 0.027 \text{ mg/kg (Reported Result with Signification)}\end{aligned}$$



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#### **F. 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 Manganese. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

As per scheduling, pH analysis is required for soil samples and the pH analysis data is provided with hardcopy.

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
Antimony	159Tb
Arsenic	89Y
Barium	159Tb
Beryllium	6Li
Cadmium	159Tb
Chromium	45Sc
Cobalt	45Sc
Copper	45Sc
Lead	209Bi
Manganese	45Sc
Molybdenum	89Y
Nickel	45Sc
Selenium	89Y
Silver	159Tb



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Strontium	89Y
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

<b>Date:</b> 04/13/2022	<b>MA:</b> 3152.0	<b>Title:</b> ICP-MS Analysis Plus Molybdenum and Strontium			
<b>Method Source:</b> SFAM01.1	<b>Method:</b> ICP-MS				
<b>Matrix:</b> Aqueous/Water and Soil/Sediment					
<b>Summary of Modification</b>					
The purpose of this modified analysis is to analyze aqueous/water and soil/sediment samples by ICP-MS with the addition of the non-routine analytes Molybdenum (Mo) and Strontium (Sr). Unless specifically modified by this modification, all analyses, Quality Control (QC), and reporting requirements specified in the SOW listed in your current EPA agreement remain unchanged and in full force and effect.					
<b>I. Analyte Modifications</b>					Not applicable <input type="checkbox"/>
<b>Analyte</b>	<b>CAS Number</b>	<b>CRQL (µg/L)</b>	<b>CRQL (mg/kg)</b>	<b>Spike Added (µg/L)</b>	<b>Spike Added (mg/kg)</b>
Molybdenum (Mo)	7439-98-7	10.0	2.0	200	50
Strontium (Sr)	7440-24-6	2.0	96.0	100	1000
<b>II. Calibration and QC Requirements</b>					Not applicable <input type="checkbox"/>
The Laboratory shall: <ul style="list-style-type: none"> <li>• Ensure Method Detection Limits have been determined for Molybdenum and Strontium in aqueous/water and soil/sediment matrices by the preparation methods used for the samples that meet all applicable SOW requirements.</li> <li>• Perform the Initial Calibration with at least one non-blank standard at or below the modified CRQLs, converted to µg/L as necessary.</li> <li>• Add Mo and Sr to the ICV and CCV at appropriate mid-range concentrations.</li> <li>• Evaluate the ICB and CCB against the modified CRQLs converted to µg/L as necessary.</li> <li>• Evaluate the Preparation Blanks using the modified CRQLs.</li> <li>• Perform the Matrix Spike at the levels specified above. Post-digestion spike requirements are per the SOW.</li> <li>• Flag the Duplicates based on the modified CRQLs.</li> <li>• Add Mo and Sr to the LCS at 2 times the appropriate modified CRQLs.</li> <li>• Not add Sr to the ICS. Use a true value of 0 (zero) and acceptance windows of ±2x the aqueous CRQL, unless a non-zero concentration for Sr has been determined.</li> <li>• If mass 97 is monitored for Mo, ensure that isobaric interference correction is applied if necessary for levels of Calcium found in samples.</li> </ul>					
<b>III. Preparation and Method Modifications</b>					Not applicable <input checked="" type="checkbox"/>
<b>IV. Special Reporting Requirements</b>					Not applicable <input type="checkbox"/>
The Laboratory shall: <ul style="list-style-type: none"> <li>• Add Molybdenum and Strontium to Form 1.</li> <li>• Report the "J" and "U" qualifiers in accordance with the requirements in Exhibit B, Section 3.4.3.2.4.2, using the modified CRQLs.</li> <li>• Ensure that the SDG Narrative is updated as stated in the SOW, including any technical and administrative problems encountered and the corrective action taken. These problems may include</li> </ul>					

problems encountered during analysis, dilutions, re-analyses or re-preparations performed, and problems with the analysis of samples. Also include a discussion of any SOW Modified Analysis including a copy of the approved modification with the SDG Narrative.



# PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 1/21/2025

OVENTEMP IN Celsius(°C): 107  
Time IN: 13:25  
In Date: 01/20/2025  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 07:55  
Out Date: 01/21/2025  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLID- OVEN

QC:LB134343

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
Q1105-01	YE8G3	1	1.15	8.45	9.6	6.63	64.9	
Q1105-02	YE8G5	2	1.19	8.47	9.66	9.22	94.8	
Q1105-03	YE8G6	3	1.14	8.68	9.82	7.81	76.8	
Q1105-04	YE8G6D	4	1.14	8.68	9.82	7.81	76.8	
Q1105-05	YE8G6S	5	1.14	8.68	9.82	7.81	76.8	
Q1105-06	YE8H0	6	1.16	8.63	9.79	8.75	87.9	
Q1105-07	YE8H1	7	1.18	8.72	9.9	7.81	76.0	
Q1105-08	YE8H2	8	1.15	8.43	9.58	6.41	62.4	
Q1105-09	YE8H3	9	1.15	8.81	9.96	8.44	82.7	
Q1105-10	YE8H4	10	1.19	8.38	9.57	9.05	93.8	
Q1105-11	YE8H5	11	1.19	8.61	9.8	8.36	83.3	
Q1105-12	YE8H6	12	1.18	8.48	9.66	9.31	95.9	
Q1105-13	YE8E9	13	1.18	8.50	9.68	9.02	92.2	
Q1105-14	YE8F0	14	1.19	8.52	9.71	9.48	97.3	
Q1105-15	YE8F1	15	1.19	8.72	9.91	9.21	92.0	
Q1105-16	YE8F2	16	1.14	8.40	9.54	7.93	80.8	
Q1105-17	YE8F3	17	1.18	8.56	9.74	8.84	89.5	
Q1105-18	YE8F4	18	1.15	8.47	9.62	8.95	92.1	
Q1105-19	YE8F6	19	1.19	8.72	9.91	9.11	90.8	
Q1105-20	YE8G0	20	1.17	8.55	9.72	9.13	93.1	
Q1105-21	YE8G1	21	1.15	8.84	9.99	8.25	80.3	
Q1105-22	YE8G2	22	1.12	8.67	9.79	9.35	94.9	

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

# WORKLIST(Hardcopy Internal Chain)

134343

WorkList Name : %1-q1105

WorkList ID : 187020

Department : Wet-Chemistry

Date : 01-20-2025 11:08:25

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1105-01	YE8G3	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-02	YE8G5	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-03	YE8G6	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-04	YE8G6D	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-05	YE8G6S	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-06	YE8H0	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-07	YE8H1	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-08	YE8H2	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-09	YE8H3	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-10	YE8H4	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-11	YE8H5	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-12	YE8H6	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-13	YE8E9	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/13/2025	Chemtech -SO
Q1105-14	YE8F0	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO
Q1105-15	YE8F1	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO
Q1105-16	YE8F2	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO
Q1105-17	YE8F3	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO
Q1105-18	YE8F4	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO
Q1105-19	YE8F6	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO
Q1105-20	YE8G0	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO
Q1105-21	YE8G1	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO

Date/Time 01/20/25 12:30

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 01/20/25

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

134343

WorkList Name : %1-q1105

WorkList ID : 187020

Department : Wet-Chemistry

Date : 01-20-2025 11:08:25

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1105-22	YE8G2	Solid	Percent Solids	Cool 4 deg C	USEP01	C11	01/15/2025	Chemtech -SO

Date/Time 01/20/25 12:30  
Raw Sample Received by: JH WLC  
Raw Sample Relinquished by: JH WLC

Date/Time 01/20/25 13:30  
Raw Sample Received by: JH WLC  
Raw Sample Relinquished by: JH WLC