

SDG COVER PAGE

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
 Lab Code: ACE Case No.: 51847 MA No.: _____ SDG No.: ME28N9
 SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method			
		ICP-AES	ICP-MS	Mercury	Cyanide
ME28N9	P5154-01	X	X	X	X
ME28P0	P5154-02	X	X	X	X
ME28P1	P5154-03	X	X	X	X
ME28P2	P5154-04	X	X	X	X
ME28P3	P5154-05	X	X	X	X
ME28P4	P5154-06	X	X	X	X
ME28P5	P5154-07	X	X	X	X
ME28P6	P5154-08	X	X	X	X
ME28P7	P5154-09	X	X	X	X
ME28P8	P5154-10	X	X	X	X
ME28P9	P5154-11	X	X	X	X
ME28Q0	P5154-12	X	X	X	X
ME28Q1	P5154-13	X	X	X	X
ME28Q2	P5154-14	X	X	X	X
ME28Q3	P5154-15	X	X	X	X
ME28Q4	P5154-16	X	X	X	X
ME28Q4D	P5154-17	X	X	X	X
ME28Q4S	P5154-18	X	X	X	X
ME28Q5	P5154-19	X	X	X	X
ME28R3	P5154-20	X	X	X	X
ME28R4	P5154-21	X	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: _____

No. 5-120524-120055-0298



Lab Phone: 908-728-3151

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
IA11SB04-0.5-2	EZ8P6	Soil/	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(2 ¹). ARO(2 ¹). VOA(2 ¹)	2931, 4349, 4351 (MeOH), 4352, 4353 (6)	IA-11-SB-.04	12/05/2024 10:00	-L
IA11SBO4-11-12	EZ8P7	Soil/	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(2 ¹). ARO(2 ¹). VOA(2 ¹)	2931, 4354, 4356 (MeOH), 4357, 4358 (6)	IA-11-SB-.04	12/05/2024 10:10	-I
IA11SBOT-0-0.5	ME28N9	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4315 (1)	IA-11-SB-.07	12/03/2024 15:45	-I
IA11SBO7-0.5-2	ME28PO	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4320 (1)	IA-11-SB-.07	12/03/2024 15:50	-L
IA11SBO7-12-13	ME28P1	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4325 (1)	IA-11-SB-.07	12/03/2024 16:00	-J
IAO2MW02-0-0.5	ME28P2	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4330 (1)	IA-O2-MW-.02	12/04/2024 14:00	-Y
IAO2MMWO2-5-6	ME28P3	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4335 (1)	IA-O2-MMV-.02	12/04/2024 14:15	-Y
IAO2MWWO2-28-29	ME28P4	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4340 (1)	IA-O2-MVV-.02	12/04/2024 14:55	-G
IA11SBO4-0-0.5	ME28P5	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4345 (1)	IA-11-SB-.04	12/05/2024 09:50	-A
IA11SBO4-0.5-2	ME28P6	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4350 (1)	IA-11-SB-.04	12/05/2024 10:00	-E
IA11SBO4-11-12	ME28P7	Soil/	Grab	ICP-MS/AES+HG+CdCN(2 ¹)	4355 (1)	IA-11-SB-.04	12/05/2024 10:10	A

Special Instructions: Please return cooler with enclosed airbill (1Z93947Y0313498417).

Analysis Key: ARO=Aroclors, VOA=Volatiles, ARO+PEST=Aroclors + Pesticides, ICP-MS/AES+HG+CN=ICP-AES/MS (5-10, 11+)+HG+CN

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
		12-5-24	UPS 	1057 12-6-24	2x-Gentle 2-4" Cushy Seal intact Temp Blue

USEPA CLP COC (LAB COPY)**CHAIN OF CUSTODY RECORD****No: 5-120524-151738-0299**

Date Shipped: 12/5/2024

Carrier Name: UPS

Airbill No: 1Z93947Y4407874874

Case #: 51847

Cooler #: 4

Lab: Alliance Technical Group LLC

Lab Contact: Mohammad Ahmed

Lab Phone: 908-728-3151



Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
IA14DRUM10-0-0.5	E28Q5	Soil	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(21), ARO+PEST(21), VOA(21)	2931, 4394, 4396 (MeOH), 4397, 4398 (6)	IA-14-DRUM-10	12/05/2024 12:20	
IA14DRUM06-0-0.5	ME28P8	Soil	Grab	ICP-MS/AES+HG+CN(21)	4360 (1)	IA-14-DRUM-06	12/05/2024 09:00	- 10
IA14DRUM11-0-0.5	ME28P9	Soil	Grab	ICP-MS/AES+HG+CN(21)	4365 (1)	IA-14-DRUM-11	12/05/2024 09:10	- 11
IA14DRUM07-0-0.5	ME28Q0	Soil	Grab	ICP-MS/AES+HG+CN(21)	4370 (1)	IA-14-DRUM-07	12/05/2024 09:40	- 12
IA14DRUM12-0-0.5	ME28Q1	Soil	Grab	ICP-MS/AES+HG+CN(21)	4375 (1)	IA-14-DRUM-12	12/05/2024 10:05	- 13
IA14DRUM08-0-0.5	ME28Q2	Soil	Grab	ICP-MS/AES+HG+CN(21)	4380 (1)	IA-14-DRUM-08	12/05/2024 11:00	- 14
IA13DRUM24-0-0.5	ME28Q3	Soil	Grab	ICP-MS/AES+HG+CN(21)	4385 (1)	IA-13-DRUM-24	12/05/2024 11:15	- 15
IA13DRUM24-0-0.5-MS/MSD	ME28Q4	Soil	Grab	ICP-MS/AES+HG+CN(21)	4390 (2)	IA-13-DRUM-24	12/05/2024 11:15	- 16
IA14DRUM10-0-0.5	ME28Q5	Soil	Grab	ICP-MS/AES+HG+CN(21)	4395 (1)	IA-14-DRUM-10	12/05/2024 12:20	- 17

Special Instructions: Please return cooler with enclosed airbill (1Z93947Y0302900028).

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ARO=Aroclors, VOA=Volatiles, ARO+PEST=Aroclors + Pesticides, ICP-MS/AES+HG+CN=ICP-AES/MS (5-10, 11+)+HG+CN

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
		12-5-24	UPS	1057 12-6-24	ITC Case 1 2.0-C
					Custody Seal Intact
					Temp Blank Proof

USEPA CLP COC (LAB COPY)

Date Shipped: 12/5/2024

Carrier Name: UPS

Airbill No: 1Z93947Y4400331285

CHAIN OF CUSTODY RECORD

Case #: 51847

Cooler #: 5

No: 5-120524-173144-0300

Lab: Alliance Technical Group LLC

Lab Contact: Mohammad Ahmed

Lab Phone: 908-728-3151



Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
IA14DRUM02-0-0.5	E28R3	Soil	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(21), ARO+PEST(21), VOA(21)	2931, 4434, 4436 (MeOH), 4437, 4438 (6)	IA-14-DRUM-02	12/05/2024 14:50	
DR-24-100	E28R4	Soil	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(21), ARO+PEST(21), VOA(21)	2931, 4439, 4441 (MeOH), 4442, 4443 (6)	DR-24-100	12/05/2024 14:50	
IA14DRUM09-0-0.5	ME28Q6	Soil	Grab	ICP-MS/AES+HG+CN(21)	4400 (1)	IA-14-DRUM-09	12/05/2024 13:00	
IA02MMW04-0-0.5	ME28Q7	Soil	Grab	ICP-MS/AES+HG+CN(21)	4405 (1)	IA-02-MMW-04	12/05/2024 09:25	
IA02MMW04-4.5	ME28Q8	Soil	Grab	ICP-MS/AES+HG+CN(21)	4410 (1)	IA-02-MMW-04	12/05/2024 09:35	
IA11SB06-0-0.5	ME28Q9	Soil	Grab	ICP-MS/AES+HG+CN(21)	4415 (1)	IA-11-SB-06	12/05/2024 14:00	
IA11SB06-0-5.2	ME28R0	Soil	Grab	ICP-MS/AES+HG+CN(21)	4420 (1)	IA-11-SB-06	12/05/2024 14:10	
IA11SB06-37-38	ME28R1	Soil	Grab	ICP-MS/AES+HG+CN(21)	4425 (1)	IA-11-SB-06	12/05/2024 14:25	
IA14DRUM01-0-0.5	ME28R2	Soil	Grab	ICP-MS/AES+HG+CN(21)	4430 (1)	IA-14-DRUM-01	12/05/2024 14:00	
IA14DRUM02-0-0.5	ME28R3	Soil	Grab	ICP-MS/AES+HG+CN(21)	4435 (1)	IA-14-DRUM-02	12/05/2024 14:50	— 18
DR-24-100	ME28R4	Soil	Grab	ICP-MS/AES+HG+CN(21)	4440 (1)	DR-24-100	12/05/2024 14:50	— 19

Special Instructions: Please return cooler with enclosed airbill (1Z93947Y0304913430).

Analysis Key: ARO=Aroclors, VOA=Volatiles, ARO+PEST=Aroclors + Pesticides, ICP-MS/AES+HG+CN=ICP-AES/MS (5-10, 11+)+HG+CN

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
		11/30/24	UPS	10/5/24	2-15
		12-5-24		12-6-24	2-15
					2-15

2-15
Custody Seal Intact
Temp 51.4 F

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>Cassandra Loria</u>		Log-in Date 12/6/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51847	SDG No. ME28N9	MA No. N/A

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>1Z93947Y4403170266</u> <u>1</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>12/06/2024</u>
12. Time Received	<u>10:57</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	ME28N9	N/A	4315	P5154-01	Intact
2	ME28P0	N/A	4320	P5154-02	Intact
3	ME28P1	N/A	4325	P5154-03	Intact
4	ME28P2	N/A	4330	P5154-04	Intact
5	ME28P3	N/A	4335	P5154-05	Intact
6	ME28P4	N/A	4340	P5154-06	Intact
7	ME28P5	N/A	4345	P5154-07	Intact
8	ME28P6	N/A	4350	P5154-08	Intact
9	ME28P7	N/A	4355	P5154-09	Intact
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>12/6/24</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>3</u>
Received By (Print Name) <u>Casanova Rania</u>		Log-in Date 12/6/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51847	SDG No. ME28N9	MA No. N/A

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>1Z93947Y4407874874</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>12/06/2024</u>
12. Time Received	<u>10:57</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	ME28P8	N/A	4360	P5154-10	Intact
2	ME28P9	N/A	4365	P5154-11	Intact
3	ME28Q0	N/A	4370	P5154-12	Intact
4	ME28Q1	N/A	4375	P5154-13	Intact
5	ME28Q2	N/A	4380	P5154-14	Intact
6	ME28Q3	N/A	4385	P5154-15	Intact
7	ME28Q4	N/A	4390	P5154-16	Intact
8	ME28Q4D	N/A	4390	P5154-17	Intact
9	ME28Q4S	N/A	4390	P5154-18	Intact
10	ME28Q5	N/A	4395	P5154-19	Intact
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>12/6/24</u>	Logbook Page No. N/A

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page <u>3</u> of <u>3</u>
Received By (Print Name) <u>Cassandra Rine</u>		Log-in Date 12/6/2024
Received By (Signature) <u>[Signature]</u>		
Case Number 51847	SDG No. ME28N9	MA No. N/A

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>1Z93947Y4400331285</u> <u>3</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>12/06/2024</u>
12. Time Received	<u>10:57</u>

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	ME28R3	N/A	4435	P5154-20	Intact
2	ME28R4	N/A	4440	P5154-21	Intact
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 <u>[Signature]</u>	Logbook No. N/A
Date <u>12/6/24</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.	51847	SDG NO.	ME28N9
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	7	✓	
4. CSF Inventory Sheet (DC-2)	8	10	✓	
5. SDG Narrative	11	15	✓	
6. Communication Logs	NA	NA	✓	
7. Percent Solids Log	16	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	36	✓	
9. Instrument raw data by instrument in analysis order	37	1307	✓	
Other Data				
10. Standard and Reagent Preparation Logs	1308	1444	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1445	1446	✓	
12. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1447	1492	✓	
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	1493	1511	✓	
18. Instrument raw data by instrument in analysis order	1512	2060	✓	
Other Data				
19. Standard and Reagent Preparation Logs	2061	2201	✓	
20. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	2202	2203	✓	
21. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	2204	2213	✓	
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	2214	2232	✓	
27 . Instrument raw data by instrument in analysis order	2233	2235	✓	

Other Data

28 . Standard and Reagent Preparation Logs	2236	2260	✓	
29 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	2261	2262	✓	
30 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	2263	2267	✓	
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	2268	2286	✓	
36 . Instrument raw data by instrument in analysis order	2287	2291	✓	

Other Data

37 . Standard and Reagent Preparation Logs	2292	2321	✓	
38 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	2322	2323	✓	
39 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	2324	2326	✓	
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 3)

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)

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**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # ME28N9

CASE # 51847

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P5154

A. Number of Samples and Date of Receipt

19 Soil samples were delivered to the laboratory intact on 12/06/2024.

B. Parameters

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

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

C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 2.4°C, 2.0°C, 2.1°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



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ICP-AES analysis.

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 ME28N9 For Aluminum :

If C = 64.16558 ppm

V_f = 100 ml

W = 1.05g

S = 0.787(78.7/100)

DF = 1

$$\text{Concentration (mg/kg)} = 64.16558 \times \frac{100}{1.05 \times 0.787} \times 1$$

$$= 7764.93979 \text{ mg/kg}$$

$$= 7800 \text{ mg/kg (Reported Result with Signification)}$$

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_f = 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 ME28N9 For Arsenic :

If C = 15.82 ppb
Vf = 500 ml
W = 1.39 g
S = 0.787 (78.7/100)
DF = 1

$$\begin{aligned}\text{Concentration (mg/kg)} &= 15.82 \times \frac{500}{1.39 \times 0.787} \times 1 / 1000 \\ &= 7.2308100 \text{ mg/kg} \\ &= 7.2 \text{ mg/kg (Reported Result with Signification)}\end{aligned}$$

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 ME28N9:

If C = 0.2458 ppb
Vf = 100 mL
W = 0.58g
S = 0.787(78.7/100)
DF = 1

$$\begin{aligned}\text{Concentration (mg/kg)} &= 0.2458 \times \frac{100}{0.58 \times 0.787} \times 1 / 1000 \\ &= 0.05384 \text{ mg/kg} \\ &= 0.054 \text{ mg/kg (Reported Result with Signification)}\end{aligned}$$



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Calculation for CN Soil Sample:

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

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

Where,

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

V_f = 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 ME28P3 :

If C = 3.8014 ppb

V_f = 50 ml

W = 1.05 g

S = 0.901(90.1/100)

DF = 1

$$\text{Concentration (mg/kg)} = 3.8014 \times \frac{50}{1.05 \times 0.901} \times 1 / 1000$$

$$= 0.20090 \text{ mg/kg}$$

$$= 0.2 \text{ mg/kg (Reported Result with Signification)}$$

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 Copper, Nickel. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

Internal standard 209Bi(1) was out Side qc limit for samples ME28Q4, ME28Q4S, ME28Q4D in Original so for these samples affected parameters are reported from 2X Dilution.

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.



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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
Nickel	45Sc
Selenium	89Y
Silver	159Tb
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



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/9/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 13:10
In Date: 12/07/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:47
Out Date: 12/08/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLIDS-OVEN

QC:LB133810

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
P5154-01	ME28N9	1	1.17	8.81	9.98	8.1	78.7	
P5154-02	ME28P0	2	1.17	8.60	9.77	7.64	75.2	
P5154-03	ME28P1	3	1.18	8.51	9.69	8.76	89.1	
P5154-04	ME28P2	4	1.18	8.65	9.83	8.4	83.5	
P5154-05	ME28P3	5	1.18	8.72	9.9	9.04	90.1	
P5154-06	ME28P4	6	1.15	8.47	9.62	8.41	85.7	
P5154-07	ME28P5	7	1.16	8.52	9.68	8.33	84.2	
P5154-08	ME28P6	8	1.17	8.81	9.98	9.08	89.8	
P5154-09	ME28P7	9	1.16	8.78	9.94	9.16	91.1	
P5154-10	ME28P8	10	1.15	8.56	9.71	7.33	72.2	
P5154-11	ME28P9	11	1.15	8.45	9.6	8.03	81.4	
P5154-12	ME28Q0	12	1.15	8.75	9.9	7.17	68.8	
P5154-13	ME28Q1	13	1.16	8.56	9.72	8.65	87.5	
P5154-14	ME28Q2	14	1.17	8.65	9.82	8.4	83.6	
P5154-15	ME28Q3	15	1.17	8.55	9.72	7.78	77.3	
P5154-16	ME28Q4	16	1.19	8.73	9.92	7.98	77.8	
P5154-17	ME28Q4D	17	1.19	8.73	9.92	7.98	77.8	
P5154-18	ME28Q4S	18	1.19	8.73	9.92	7.98	77.8	
P5154-19	ME28Q5	19	1.18	8.60	9.78	8.45	84.5	
P5154-20	ME28R3	20	1.15	8.50	9.65	7.74	77.5	
P5154-21	ME28R4	21	1.19	8.76	9.95	7.99	77.6	

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

WORKLIST(Hardcopy Internal Chain)

133810

WorkList Name : %1-P5154 WorkList ID : 186101 Department : Wet-Chemistry Date : 12-07-2024 10:51:19

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5154-01	ME28N9	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/03/2024	Chemtech -SO
P5154-02	ME28P0	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/03/2024	Chemtech -SO
P5154-03	ME28P1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/03/2024	Chemtech -SO
P5154-04	ME28P2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/04/2024	Chemtech -SO
P5154-05	ME28P3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/04/2024	Chemtech -SO
P5154-06	ME28P4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/04/2024	Chemtech -SO
P5154-07	ME28P5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/04/2024	Chemtech -SO
P5154-08	ME28P6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-09	ME28P7	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-10	ME28P8	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-11	ME28P9	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-12	ME28Q0	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-13	ME28Q1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-14	ME28Q2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-15	ME28Q3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-16	ME28Q4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-17	ME28Q4D	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-18	ME28Q4S	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-19	ME28Q5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-20	ME28R3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO
P5154-21	ME28R4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	12/05/2024	Chemtech -SO

Date/Time 12/07/24 Date/Time 13/15
Raw Sample Received by: 18 wcl Raw Sample Received by: JDCSM
Raw Sample Relinquished by: 18 wcl Raw Sample Relinquished by: 18 wcl