SDG COVER PAGE

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

Lab Code: ACE Case No.: 51847 MA No.: SDG No.: ME28W7

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
ME28W7	P5259-01	X	X	X	X
ME28W8	P5259-02	X	X	X	X
ME28W9	P5259-03	X	X	X	X
ME28X0	P5259-04	X	X	X	X
ME28X0D	P5259-05	X	X	X	X
ME28X0S	P5259-06	X	X	X	X
ME28X1	P5259-07	X	X	X	X
ME28X2	P5259-08	X	X	X	X
ME28X3	P5259-09	X	X	X	X
ME28X4	P5259-10	X	X	X	X
ME28X5	P5259-11	X	X	X	X
ME28X6	P5259-12	X	X	X	X
ME28X7	P5259-13	X	X	X	X
ME28X8	P5259-14	X	X	X	X
ME28X9	P5259-15	X	X	X	X
ME28Y0	P5259-16	X	X	X	X
ME28Y1	P5259-17	X	X	X	X
ME28Y2	P5259-18	X	X	X	X
ME28Y3	P5259-19	X	X	X	X
ME28Y4	P5259-20	X	X	X	X
ME28Y5	P5259-21	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:

68HERH20D0011 SDG # ME28W7

USEPA CLP COC (LAB COPY)
DateShipped: 12/10/2024
CarrierName: UPS
AirbillNo: 1Z93947Y0123063362

CHAIN OF CUSTODY RECORD

Case #: 51847
Cooler #: 9

No: 5-121024-134229-0304
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
IA13AST14-0-0.5	E28W8	Soil/	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(21), ARO(21), VOA(21)	2931, 4615, 4617 (MeOH), 4618, 4619 (6)	IA-13-AST-14	12/10/2024 10:25	
IA13AST10-0.0.5	ME28W1	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4581 (1)	IA-13-AST-10	12/10/2024 08:45	+
IA13AST10-0-0.5-MS/MSD	ME28W2	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4586 (2)	IA-13-AST-10	12/10/2024 08:45	✓
IA13AST11-0-0.5	ME28W3	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4591 (1)	IA-13-AST-11	12/10/2024 09:30	✓
AST-24-100	ME28W4	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4596 (1)	AST-24-100	12/10/2024 09:30	✓
IA13AST12-0-0.5	ME28W5	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4601 (1)	IA-13-AST-12	12/10/2024 09:55	✓
AST-24-101	ME28W6	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4606 (1)	AST-24-101	12/10/2024 09:55	✓
IA13AST13-0-0.5	ME28W7	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4611 (1)	IA-13-AST-13	12/10/2024 10:10	✓
IA13AST14-0-0.5	ME28W8	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4616 (1)	IA-13-AST-14	12/10/2024 10:25	✓

Special Instructions: Please return cooler with enclosed airbill (1Z93947Y0313165071).

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

Analysis Key: ARO+PEST=Aroclors + Pesticides, VOA=Volatiles, ARO=Aroclors, 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
	Corra Lyon, Plexus	12/10/24	UPS	12/10/24	good, at temp
				12-11-24 1043	2.2°C IR Gun #1
					custody seals intact
					Temp Blk-present

USEPA CLP COC (LAB COPY)
DateShipped: 12/10/2024
CarrierName: UPS
AirbillNo: 1Z93947Y0132068377

CHAIN OF CUSTODY RECORD

Case #: 51847
Cooler #: 10

No: 5-121024-150753-0305
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
IA11MW05-0-0.5	E28X6	Soil/	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(21), ARO(21), VOA(21)	2931, 4655, 4657 (MeOH), 4658, 4659 (6)	IA-11-MW-05	12/10/2024 11:50	
IA15AST19-0-0.5	ME28W9	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4621 (1)	IA-15-AST-19	12/10/2024 11:25	3
IA15AST19-0-0.5-MS/MSD	ME28X0	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4626 (2)	IA-15-AST-19	12/10/2024 11:25	4-a
IA15AST20-0-0.5	ME28X1	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4631 (1)	IA-15-AST-20	12/10/2024 12:00	5
AST-24-102	ME28X2	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4636 (1)	AST-24-102	12/10/2024 12:00	6
IA15AST21-0-0.5	ME28X3	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4641 (1)	IA-15-AST-21	12/10/2024 12:25	7
IA15AST22-0-0.5	ME28X4	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4646 (1)	IA-15-AST-22	12/10/2024 12:50	8
AST-24-103	ME28X5	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4651 (1)	AST-24-103	12/10/2024 12:50	9
IA11MW05-0-0.5	ME28X6	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4656 (1)	IA-11-MW-05	12/10/2024 11:50	10

Special Instructions: Please return cooler with enclosed airbill (1Z93947Y0315897483).

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
	Corin Lyons, Plexus	12/10/24	UPS	12/10/24	good, at temp
				12-11-24 1043	2.0°C IR Gun #1
					custody seals intact
					Temp blk present

USEPA CLP COC (LAB COPY)
DateShipped: 12/11/2024
CarrierName: UPS
AirbillNo: 1Z93947Y0129690585

CHAIN OF CUSTODY RECORD

Case #: 51847
Cooler #: 11

No: 5-121124-101707-0306
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
IA11MW06-0-0.5	E28Y4	Soil/	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(21), ARO(21), VOA(21)	2931, 4695, 4697 (MeOH), 4698, 4699 (6)	IA-11-MW-06	12/11/2024 08:50	
IA11MW06-0.5-2	E28Y5	Soil/	Grab	Semivolatiles, PAHs+PCP by SIM (TAT 21 Days)(21), ARO(21), VOA(21)	2931, 4700, 4702 (MeOH), 4703, 4704 (6)	IA-11-MW-06	12/11/2024 09:10	
IA11MW05-0.5-2	ME28X7	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4661 (1)	IA-11-MW-05	12/10/2024 12:00	1
IA11MW05-27-28	ME28X8	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4666 (1)	IA-11-MW-05	12/10/2024 12:40	2
IA15AST23-0-0.5	ME28X9	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4671 (1)	IA-15-AST-23	12/10/2024 14:20	3
IA15AST24-0-0.5	ME28Y0	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4676 (1)	IA-15-AST-24	12/10/2024 14:25	4
IA15AST25-0-0.5	ME28Y1	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4681 (1)	IA-15-AST-25	12/10/2024 14:50	5
IA15AST26-0-0.5	ME28Y2	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4686 (1)	IA-15-AST-26	12/10/2024 15:20	6
IA15AST27-0-0.5	ME28Y3	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4691 (1)	IA-15-AST-27	12/10/2024 15:40	7
IA11MW06-0-0.5	ME28Y4	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4696 (1)	IA-11-MW-06	12/11/2024 08:50	8
IA11MW06-0.5-2	ME28Y5	Soil/	Grab	ICP-MS/AES+HG+CN(21)	4701 (1)	IA-11-MW-06	12/11/2024 09:10	9

Special Instructions: Please return cooler with enclosed airbill (1Z93947Y0316945697).

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
	Conor Lynn, Plexus	12/11/24	UPS	12/11/24	good at temp
				11:00 12-12-24	IR Gun 1 2.4°C
					Custody Seal Intact Temp Blank present

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 3
Received By (Print Name) Gonse Nesmon		Log-in Date 12/11/2024
Received By (Signature)		
Case Number 51847	SDG No. ME28W7	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.	1Z93947Y0123063362 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.2 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	12/11/2024
12.Time Received	10:43

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ME28W7	N/A	4611	P5259-01	Intact
2	ME28W8	N/A	4616	P5259-02	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		Logbook No.	N/A
Date	12/12/24	Logbook Page No.	N/A

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 2 of 3
Received By (Print Name) George Nesluw		Log-in Date 12/11/2024
Received By (Signature)		
Case Number 51847	SDG No. ME28W7	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.	1Z93947Y0132068377 2
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.0 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	12/11/2024
12.Time Received	10:43

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ME28W9	N/A	4621	P5259-03	Intact
2	ME28X0	N/A	4626	P5259-04	Intact
3	ME28X0D	N/A	4626	P5259-05	Intact
4	ME28X0S	N/A	4626	P5259-06	Intact
5	ME28X1	N/A	4631	P5259-07	Intact
6	ME28X2	N/A	4636	P5259-08	Intact
7	ME28X3	N/A	4641	P5259-09	Intact
8	ME28X4	N/A	4646	P5259-10	Intact
9	ME28X5	N/A	4651	P5259-11	Intact
10	ME28X6	N/A	4656	P5259-12	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		Logbook No.	N/A
Date	12/12/24	Logbook Page No.	N/A

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 3 of 3
Received By (Print Name) Esperanza Perez		Log-in Date 12/12/2024
Received By (Signature)		
Case Number 51847	SDG No. ME28W7	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.	1Z93947Y0129690585 3
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.4 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	12/12/2024
12.Time Received	11:00

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ME28X7	N/A	4661	P5259-13	Intact
2	ME28X8	N/A	4666	P5259-14	Intact
3	ME28X9	N/A	4671	P5259-15	Intact
4	ME28Y0	N/A	4676	P5259-16	Intact
5	ME28Y1	N/A	4681	P5259-17	Intact
6	ME28Y2	N/A	4686	P5259-18	Intact
7	ME28Y3	N/A	4691	P5259-19	Intact
8	ME28Y4	N/A	4696	P5259-20	Intact
9	ME28Y5	N/A	4701	P5259-21	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		Logbook No.	N/A
Date	12/12/24	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.	**51847**	SDG NO.	**ME28W7**
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	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	770	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	771	920	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	921	922	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	923	944	✓	
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	945	963	✓	
18 . Instrument raw data by instrument in analysis order	964	2163	✓	
Other Data				
19 . Standard and Reagent Preparation Logs	2164	2298	✓	
20 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	2299	2300	✓	
21 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	2301	2317	✓	
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	2318	2336	✓	
27. Instrument raw data by instrument in analysis order	2337	2339	✓	
Other Data				
28. Standard and Reagent Preparation Logs	2340	2364	✓	
29. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	2365	2366	✓	
30. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	2367	2370	✓	
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	2371	2389	✓	
36. Instrument raw data by instrument in analysis order	2390	2392	✓	
Other Data				
37. Standard and Reagent Preparation Logs	2393	2422	✓	
38. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	2423	2424	✓	
39. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	2425	2426	✓	
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 3)	2427	2429	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	2430	2433	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	2434	2437	✓	
47. Other Records and related Communication Logs (describe or list)				
	NA	NA	✓	

48. Comments:

Completed by: (CLP Lab)		Nimisha Pandya, Document Control Officer	
	(Signature)	(Print Name & Title)	(Date)
Audited by: (EPA)			
	(Signature)	(Print Name & Title)	(Date)

284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # ME28W7
CASE # 51847
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P5259

A. Number of Samples and Date of Receipt

19 Soil samples were delivered to the laboratory intact on 12/11/2024, 12/12/2024.

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: 2.2°C, 2.0°C, 2.4°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.

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Inter Element correction factors (IECs) are determined annually and correction factor are applied during 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):

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

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 ME28W7 For Aluminum :

If C = 93.17755 ppm
Vf = 100 ml
W = 1.12g
S = 0.792 (79.2/100)
DF = 1

$$\text{Concentration (mg/kg)} = 93.17755 \times \frac{100}{1.12 \times 0.792} \times 1$$

$$= 10504.32 \text{ mg/kg}$$

$$= 11000 \text{ mg/kg (Reported Result with Signification)}$$

Calculation for ICP-MS Soil Sample:

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

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

Where,

C = Instrument value in ppb (The average of all replicate integrations)
Vf = Final digestion volume (mL)
W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)

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S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

Example Calculation For Sample ME28W7 For Arsenic :

If C = 12.73 ppb
Vf = 500 ml
W = 1.02 g
S =0.792 (79.2/100)
DF = 1

$$\text{Concentration (mg/kg)} = 12.73 \times \frac{500}{1.02 \times 0.792} \times 1 / 1000$$

$$= 7.8790 \text{ mg/kg}$$

$$= 7.9 \text{ mg/kg (Reported Result with Signification)}$$

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

Example Calculation For Sample ME28W7:

If C = 0.7255 ppb
Vf = 100 mL
W = 0.51g
S = 0.792(79.2/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.7255 \times \frac{100}{0.51 \times 0.792} \times 1 / 1000$$

$$= 0.1796 \text{ mg/kg}$$

$$= 0.18 \text{ mg/kg (Reported Result with Signification)}$$

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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 ME28W8:

If C = 33.6234 ppb
Vf = 50 ml
W = 1.04 g
S = 0.784(78.4/100)
DF = 1

$$\text{Concentration (mg/kg)} = 33.6234 \times \frac{50}{1.04 \times 0.784} \times 1 / 1000$$

$$= 2.0618 \text{ mg/kg}$$

$$= 2.1 \text{ mg/kg (Reported Result with Signification)}$$

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 Antimony, Arsenic, Cadmium, Selenium, Thallium. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

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: 12/16/2024

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

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:34
Out Date: 12/14/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: FLASHPOINT

QC: LB133939

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
P5259-01	ME28W7	1	1.15	8.64	9.79	7.99	79.2	
P5259-02	ME28W8	2	1.18	8.55	9.73	7.88	78.4	
P5259-03	ME28W9	3	1.16	8.50	9.66	8.02	80.7	
P5259-04	ME28X0	4	1.18	8.69	9.87	7.98	78.3	
P5259-05	ME28X0D	5	1.18	8.69	9.87	7.98	78.3	
P5259-06	ME28X0S	6	1.18	8.69	9.87	7.98	78.3	
P5259-07	ME28X1	7	1.13	8.86	9.99	8.52	83.4	
P5259-08	ME28X2	8	1.12	8.82	9.94	8.03	78.3	
P5259-09	ME28X3	9	1.14	8.84	9.98	8.31	81.1	
P5259-10	ME28X4	10	1.19	8.67	9.86	8.3	82.0	
P5259-11	ME28X5	11	1.18	8.53	9.71	7.9	78.8	
P5259-12	ME28X6	12	1.16	8.48	9.64	7.88	79.2	
P5259-13	ME28X7	13	1.17	8.37	9.54	8.57	88.4	
P5259-14	ME28X8	14	1.18	8.59	9.77	8.72	87.8	
P5259-15	ME28X9	15	1.18	8.39	9.57	7.64	77.0	
P5259-16	ME28Y0	16	1.18	8.47	9.65	7.9	79.3	
P5259-17	ME28Y1	17	1.18	8.72	9.9	8.00	78.2	
P5259-18	ME28Y2	18	1.16	8.49	9.65	7.9	79.4	
P5259-19	ME28Y3	19	1.18	8.74	9.92	8.43	83.0	
P5259-20	ME28Y4	20	1.16	8.45	9.61	8.08	81.9	
P5259-21	ME28Y5	21	1.18	8.37	9.55	8.28	84.8	

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

WORKLIST(Hardcopy Internal Chain)

VP 133939

WorkList Name : %1-p5259 **WorkList ID :** 186315 **Department :** Wet-Chemistry **Date :** 12-13-2024 10:15:27

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5259-01	ME28W7	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-02	ME28W8	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-03	ME28W9	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-04	ME28X0	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-05	ME28X0D	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-06	ME28X0S	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-07	ME28X1	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-08	ME28X2	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-09	ME28X3	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-10	ME28X4	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-11	ME28X5	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-12	ME28X6	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-13	ME28X7	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-14	ME28X8	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-15	ME28X9	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-16	ME28Y0	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-17	ME28Y1	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-18	ME28Y2	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-19	ME28Y3	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/10/2024	Chemtech -SO
P5259-20	ME28Y4	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/11/2024	Chemtech -SO
P5259-21	ME28Y5	Solid	Percent Solids	Cool 4 deg C	USEP01	C31	12/11/2024	Chemtech -SO

Date/Time 12-13-24 12:10

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 12-13-24 13:15

Raw Sample Received by:

Raw Sample Relinquished by: