SDG COVER PAGE

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

Lab Code: ACE Case No.: 51716 MA No.: SDG No.: MC0PI1

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MC0PI1	P4584-01	X		X	
MC0PI5	P4584-02	X		X	
MC0PI0	P4584-03	X		X	
MCC0Q4	P4584-04	X		X	
MCC0Q5	P4584-05	X		X	
MCC0Q6	P4584-06	X		X	
MCC0Q7	P4584-07	X		X	
MCC0Q8	P4584-08	X		X	
MCC0Q9	P4584-09	X		X	
MCC0R0	P4584-10	X		X	
MCC0R1	P4584-11	X		X	
MCC0R2	P4584-12	X		X	
MCC0R3	P4584-13	X		X	
MCC0R4	P4584-14	X		X	
MCC0R5	P4584-15	X		X	
MCC0R6	P4584-16	X		X	
MCC0R6D	P4584-17	X		X	
MCC0R6S	P4584-18	X		X	
MCC0R8	P4584-19	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 # MC0PI1

USEPA CLP COC (LAB COPY)
DateShipped: 10/25/2024
CarrierName: FedEx
AirbillNo: 7795 2619 4930

CHAIN OF CUSTODY RECORD

Case #: 51716
Cooler #: RB01

No: 3-102524-152340-0001
Lab: Alliance Technical Group, LLC
Lab Contact: Mohammad Ahmed
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
PDA-RB01-20241022	C0PI1	Water/ START	Grab	SVOA(21), PAH SIM(21), PEST(21)	1013 (<6C), 1014 (<6C), 1015 (<6C), 1016 (<6C), 1017 (<6C), 1018 (<6C) (6)	QC	10/22/2024 16:55	
PDA-RB01-20241022	MC0PI1	Water/ START	Grab	ICP-AES(21)	1019 (HNO3 pH<2, <6C) (1)	QC	10/22/2024 16:55	

Special Instructions:

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

Analysis Key: SVOA=CLP Semivolatiles, PAH SIM=CLP PAH by SIM, PEST=CLP Pesticides, ICP-AES=CLP ICP-AES Metals + Hg - aq

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	START	10/25/24 1655		0900 10.26.2024	Temp 2.1°c IR Gun #1
					Custody seal intact
					Temp Blk Present

USEPA CLP COC (LAB COPY)
DateShipped: 10/25/2024
CarrierName: FedEx
AirbillNo: 7795 2641 4942

CHAIN OF CUSTODY RECORD

Case #: 51716
Cooler #: RB02

No: 3-102524-154538-0002
Lab: Alliance Technical Group, LLC
Lab Contact: Mohammad Ahmed
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
PDA-RB02-20241023	C0PI5	Water/ START	Grab	SVOA(21), PAH SIM(21), PEST(21)	1027 (<6C), 1028 (<6C), 1029 (<6C), 1030 (<6C), 1031 (<6C), 1032 (<6C) (6)	QC	10/23/2024 16:30	
PDA-RB02-20241023	MC0PI5	Water/ START	Grab	ICP-AES(21)	1033 (HNO3 pH<2, <6C) (1)	QC	10/23/2024 16:30	

Special Instructions:

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

Analysis Key: SVOA=CLP Semivolatiles, PAH SIM=CLP PAH by SIM, PEST=CLP Pesticides, ICP-AES=CLP ICP-AES Metals + Hg - aq

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	START	10/25/24 1650		0900 10.26.2024	Temp 2.0 IR Gun #1
					Custody seal intact
					Temp Blk present

USEPA CLP COC (LAB COPY)
DateShipped: 10/28/2024
CarrierName: FedEx
AirbillNo: 7795 7250 1072

CHAIN OF CUSTODY RECORD

Case #: 51716
Cooler #: Metals 2

No: 3-102824-140023-0007
Lab: Alliance Technical Group, LLC
Lab Contact: Yazmeen Gomez
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
PDA-SS01-20241022	MC0PI0	Soil/ START	Grab	ICP-AES(21)	1010 (<6C) (1) ✓	SS01	10/22/2024 09:15	✓ 1
PDA-SS03-20241022	MCC0P0	Soil/ START	Grab	ICP-AES(21)	1135 (<6C) (1) ✓	SS03	10/22/2024 11:00	✓ QA
PDA-SS12-20241023	MCC0Q4	Soil/ START	Grab	ICP-AES(21)	1090 (<6C) (1) ✓	SS12	10/23/2024 09:10	✓ 2
PDA-SS17-20241023	MCC0Q5	Soil/ START	Grab	ICP-AES(21)	1093 (<6C) (1) ✓	SS17	10/23/2024 10:00	✓ 3
PDA-DUP02-20241022	MCC0Q6	Soil/ START	Grab	ICP-AES(21)	1096 (<6C) (1) ✓	DUP02	10/22/2024 12:00	✓ 4
PDA-SS19-20241023	MCC0Q7	Soil/ START	Grab	ICP-AES(21)	1099 (<6C) (1) ✓	SS19	10/23/2024 10:40	✓ 5
PDA-DUP03-20241023	MCC0Q8	Soil/ START	Grab	ICP-AES(21)	1102 (<6C) (1) ✓	DUP03	10/23/2024 12:00	✓ 6
PDA-SS13-20241023	MCC0Q9	Soil/ START	Grab	ICP-AES(21)	1105 (<6C) (1) ✓	SS13	10/23/2024 11:05	✓ 7
PDA-SS18-20241023	MCC0R0	Soil/ START	Grab	ICP-AES(21)	1108 (<6C) (1) ✓	SS18	10/23/2024 11:25	✓ 8
PDA-SS15-20241023	MCC0R1	Soil/ START	Grab	ICP-AES(21)	1111 (<6C) (1) ✓	SS15	10/23/2024 13:00	✓ 9

Sample(s) to be used for Lab QC: PDA-SS03-20241022 Tag 1135

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	John Shih START	10/28/24 1650	CL	955 10-29-24	Th-Gun #1 2.4°
					Custody Seal Intact
					Temp Blank present

68HERH20D0011

SDG # MC0PI1

USEPA CLP COC (LAB COPY)

DateShipped: 10/28/2024
CarrierName: FedEx
AirbillNo: 7795 7250 1072

CHAIN OF CUSTODY RECORD

Case #: 51716
Cooler #: Metals 2

No: 3-102824-140023-0007

Lab: Alliance Technical Group, LLC
Lab Contact: Yazmeen Gomez
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
PDA-SS16-20241023	MCC0R2	Soil/ START	Grab	ICP-AES(21)	1114 (<6C) (1)	SS16	10/23/2024 13:45	10
PDA-SB16-20241023	MCC0R3	Soil/ START	Grab	ICP-AES(21)	1117 (<6C) (1)	SB16	10/23/2024 13:45	11
PDA-DUP04-20241023	MCC0R4	Soil/ START	Grab	ICP-AES(21)	1120 (<6C) (1)	DUP04	10/23/2024 12:00	12
PDA-SB02-20241023	MCC0R5	Soil/ START	Grab	ICP-AES(21)	1123 (<6C) (1)	SB02	10/23/2024 14:45	13
PDA-SS02-20241023	MCC0R6	Soil/ START	Grab	ICP-AES(21)	1126 (<6C), 1140 (<6C) (2)	SS02	10/23/2024 14:45	14 - QC
PDA-SB21-20241023	MCC0R7	Soil/ START	Grab	ICP-AES(21)	1129 (<6C), 1145 (<6C) (2)	SB21	10/23/2024 15:34	
PDA-SS21-20241023	MCC0R8	Soil/ START	Grab	ICP-AES(21)	1132 (<6C) (1)	SS21	10/23/2024 15:34	15

Sample(s) to be used for Lab QC: PDA-SS02-20241023 Tag 1140, PDA-SB21-20241023 Tag 1145

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

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

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	John Shuck START	10/28/24 1650		955 10-29-24	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) GORGE VEGHOLI		Log-in Date 10/26/2024
Received By (Signature)		
Case Number 51716	SDG No. MC0PI1	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.	779526194930 1
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.1 Degree C
8. Sample Condition	Intact
9. Sample Tags Sample Tag Numbers	Absent Listed on Traffic Report
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	10/26/2024
12.Time Received	09:00

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MC0PI1	1.3	1019	P4584-01	Intact
2	N/A	N/A	N/A	N/A	N/A
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	10/30/24	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 Nelson		Log-in Date 10/26/2024
Received By (Signature)		
Case Number 51716	SDG No. MC0PI1	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.	779526414942 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	10/26/2024
12.Time Received	09:00

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MC0PI5	1.3	1033	P4584-02	Intact
2	N/A	N/A	N/A	N/A	N/A
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 10/30/24	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) Jessamae Pere		Log-in Date 10/29/2024
Received By (Signature)		
Case Number 51716	SDG No. MC0PI1	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.	779572501072 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	10/29/2024
12.Time Received	09:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MC0PI0	N/A	1010	P4584-03	Intact
2	MCC0Q4	N/A	1090	P4584-04	Intact
3	MCC0Q5	N/A	1093	P4584-05	Intact
4	MCC0Q6	N/A	1096	P4584-06	Intact
5	MCC0Q7	N/A	1099	P4584-07	Intact
6	MCC0Q8	N/A	1102	P4584-08	Intact
7	MCC0Q9	N/A	1105	P4584-09	Intact
8	MCC0R0	N/A	1108	P4584-10	Intact
9	MCC0R1	N/A	1111	P4584-11	Intact
10	MCC0R2	N/A	1114	P4584-12	Intact
11	MCC0R3	N/A	1117	P4584-13	Intact
12	MCC0R4	N/A	1120	P4584-14	Intact
13	MCC0R5	N/A	1123	P4584-15	Intact
14	MCC0R6	N/A	1126,1140	P4584-16	Intact
15	MCC0R6D	N/A	1126,1140	P4584-17	Intact
16	MCC0R6S	N/A	1126,1140	P4584-18	Intact
17	MCC0R8	N/A	1132	P4584-19	Intact
18	N/A	N/A	N/A	N/A	N/A
19	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A
21	N/A	N/A	N/A	N/A	N/A
22	N/A	N/A	N/A	N/A	N/A
23	N/A	N/A	N/A	N/A	N/A

* Contact SMO and attach record of resolution

Reviewed By	Logbook No. N/A
Date 10/30/24	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.	**51716**	SDG NO.	**MC0PI1**
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	5	✓	
3 . Sample Log-In Sheet (DC-1)	6	8	✓	
4 . CSF Inventory Sheet (DC-2)	9	11	✓	
5 . SDG Narrative	12	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	34	✓	
9 . Instrument raw data by instrument in analysis order	35	870	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	871	1040	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1041	1044	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1045	1074	✓	
13 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
14 . Extraction Logs for TCLP and SPLP	NA	NA	✓	
15 . Raw GPC Data	NA	NA	✓	
16 . Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (ICP-MS)				
17 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
18 . Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
19 . Standard and Reagent Preparation Logs	NA	NA	✓	
20 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
21 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
22 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	

	PAGE NOs: FROM	TO	CHECK LAB	REGION
23. Extraction Logs for TCLP and SPLP	NA	NA	✓	
24. Raw GPC Data	NA	NA	✓	
25. Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (Mercury)				
26. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	1075	1091	✓	
27. Instrument raw data by instrument in analysis order	1092	1096	✓	
Other Data				
28. Standard and Reagent Preparation Logs	1097	1146	✓	
29. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1147	1150	✓	
30. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1151	1155	✓	
31. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
32. Extraction Logs for TCLP and SPLP	NA	NA	✓	
33. Raw GPC Data	NA	NA	✓	
34. Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (Cyanide)				
35. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
36. Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
37. Standard and Reagent Preparation Logs	NA	NA	✓	
38. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
39. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
40. Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
41. Extraction Logs for TCLP and SPLP	NA	NA	✓	
42. Raw GPC Data	NA	NA	✓	
43. Raw Florisil Data	NA	NA	✓	

	PAGE NOs: FROM	TO	CHECK LAB	REGION
Additional				
44. EPA Shipping/Receiving Documents				
Airbill (No. of Shipments 3)	1156	1158	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	1159	1161	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	1162	1166	✓	
47. Other Records and related Communication Logs (describe or list)				
	NA	NA	✓	

48. Comments:

Completed by:
(CLP Lab)

(Signature)	Nimisha Pandya, Document Control Officer (Print Name & Title)	(Date)

Audited by:
(EPA)

(Signature)	(Print Name & Title)	(Date)

284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # MC0PI1
CASE # 51716
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P4584

A. Number of Samples and Date of Receipt

15 Soil and 01 Water samples were delivered to the laboratory intact on 10/26/2024 and 10/29/2024.

B. Parameters

Test requested for Metals CLP Full = Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Mercury.

C. Cooler Temp

Indicator Bottle**: Presence/**Absence

Cooler: 2.1^{o}C, 2.0^{o}C, 2.4^{o}C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

Issue: A "P" or "M" prefix was listed at the beginning of a CLP sample ID.

E. Corrective Action taken for above:

Resolution: To maintain COC integrity, ASB requests no changes to the Sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

F. Analytical Techniques:

All analyses were based on CLP Methodology by method SFAM01.1.

Inter Element correction factors (IECs) are determined annually and correction factor are applied during ICP-AES analysis.

284 Sheffield Street
Mountainside, NJ 07092

G. Calculation:

Calculation for ICP-AES Soil Sample:

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

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

Where,

C = Instrument value in ppm (The average of all replicate exposures)
Vf = Final digestion volume (mL)
W = Initial aliquot amount (g) (Sample amount taken in prep)
S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

Example Calculation For Sample MC0PI0 For Antimony:

If C = 0.0171752 ppm
Vf = 100 ml
W = 1.42g
S = 0.707 (70.7/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.0171752 \times \frac{100}{1.42 \times 0.707} \times 1$$

$$= 1.7108 \text{ mg/kg}$$

$$= 1.7 \text{ mg/kg (Reported Result with Signification)}$$

Calculation for ICP-AES Water Sample:

$$\text{Concentration or Result (µg/L)} = C \times \frac{Vf}{Vi} \times DF \times 1000$$

Where,

C = Instrument value in ppm (The average of all replicate exposures)
Vf = Final digestion volume (mL)
Vi = Initial aliquot amount (mL) (Sample amount taken in prep)
DF = Dilution Factor

284 Sheffield Street
Mountainside, NJ 07092

Example Calculation For Sample MC0PI1 For Aluminum:

If C = 0.0596831 ppm
Vf = 50 ml
Vi = 50 ml
DF = 1

$$\text{Concentration or Result (µg/L)} = 0.0596831 \times \frac{50}{50} \times 1 \times 1000$$

$$= 59.6831 \text{ µg/L}$$

$$= 60 \text{ µg/L (Reported Result with Signification)}$$

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 MC0PI0:

If C =0.6597 ppb
Vf = 100 mL
W = 0.55g
S = 0.707(70.7/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.6597 \times \frac{100}{0.55 \times 0.707} \times 1 / 1000$$

$$= 0.1697 \text{ mg/kg}$$

$$= 0.17 \text{ mg/kg (Reported Result with Signification)}$$

284 Sheffield Street
Mountainside, NJ 07092

Calculation for Hg Water Sample:

Concentration or Result (µg/L) = C x DF
Where,
C = Instrument response in µg/L from the calibration curve.
DF = Dilution Factor

Example Calculation For Sample:

If C = 0.1236 ppb
DF = 1
Concentration or Result (µg/L) = 0.1236 x 1
= 0.1236 µg/L
= 0.12 µg/L (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 Lead, and Selenium. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature_____ Name: Nimisha Pandya

Date _____ Title: Document Control Officer

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/31/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 12:25
In Date: 10/30/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:00
Out Date: 10/31/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLIDS-OVEN

QC: LB133206

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
P4584-03	MC0PI0	1	1.14	8.82	9.96	7.38	70.7	
P4584-04	MCC0Q4	2	1.16	8.42	9.58	7.84	79.3	
P4584-05	MCC0Q5	3	1.15	8.38	9.53	7.64	77.4	
P4584-06	MCC0Q6	4	1.16	8.69	9.85	9.22	92.8	
P4584-07	MCC0Q7	5	1.15	8.78	9.93	8.61	85.0	
P4584-08	MCC0Q8	6	1.16	8.50	9.66	8.35	84.6	
P4584-09	MCC0Q9	7	1.14	8.79	9.93	9.57	95.9	
P4584-10	MCC0R0	8	1.13	8.83	9.96	8.82	87.1	
P4584-11	MCC0R1	9	1.15	8.66	9.81	7.9	77.9	
P4584-12	MCC0R2	10	1.15	8.64	9.79	7.53	73.8	
P4584-13	MCC0R3	11	1.17	8.56	9.73	7.84	77.9	
P4584-14	MCC0R4	12	1.16	8.42	9.58	7.19	71.6	
P4584-15	MCC0R5	13	1.18	8.77	9.95	9.55	95.4	
P4584-16	MCC0R6	14	1.15	8.62	9.77	9.3	94.5	
P4584-17	MCC0R6D	15	1.15	8.62	9.77	9.3	94.5	
P4584-18	MCC0R6S	16	1.15	8.62	9.77	9.3	94.5	
P4584-19	MCC0R8	17	1.15	8.41	9.56	8.85	91.6	

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

WORKLIST(Hardcopy Internal Chain)

JB 133206

WorkList Name : %14-p[4584 **WorkList ID :** 184949 **Department :** Wet-Chemistry **Date :** 10-30-2024 11:52:11

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4584-03	MC0PI0	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/22/2024	Chemtech -SO
P4584-04	MCC0Q4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-05	MCC0Q5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-06	MCC0Q6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-07	MCC0Q7	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/22/2024	Chemtech -SO
P4584-08	MCC0Q8	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-09	MCC0Q9	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-10	MCC0R0	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-11	MCC0R1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-12	MCC0R2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-13	MCC0R3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-14	MCC0R4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-15	MCC0R5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-16	MCC0R6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-17	MCC0R6D	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-18	MCC0R6S	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO
P4584-19	MCC0R8	Solid	Percent Solids	Cool 4 deg C	USEP01	Q22	10/23/2024	Chemtech -SO

Date/Time 10/30/24 12:00

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: RM SM

Date/Time 10/30/24 12:30

Raw Sample Received by: RM SM

Raw Sample Relinquished by: [illegible]