SDG COVER PAGE

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

Lab Code: ACE Case No.: 51495 MA No.: 3221.2 SDG No.: MYD589

SOW No. : SFAM01.1

EPA Sample No.	Lab Sample Id	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MYD581	P2818-01		X		
MYD581D	P2818-02		X		
MYD581S	P2818-03		X		
MYD589	P2818-04		X		
MYD590	P2818-05		X		
MYD591	P2818-06		X		
MYD592	P2818-07		X		
MYD593	P2818-08		X		
MYD594	P2818-09		X		
MYD595	P2818-10		X		
MYD596	P2818-11		X		
MYD597	P2818-12		X		
MYD598	P2818-13		X		
MYD5A0	P2818-14		X		
MYD5A1	P2818-15		X		
MYD5A2	P2818-16		X		
MYD5A3	P2818-17		X		
MYD5A4	P2818-18		X		
MYD5A5	P2818-19		X		
MYD5A6	P2818-20		X		
MYD5A7	P2818-21		X		
MYD5A8	P2818-22		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 # MYD581 & MYD589

USEPA CLP COC (LAB COPY)

DateShipped: 6/7/2024
CarrierName: FedEx
AirbillNo: 7767 4280 7110

CHAIN OF CUSTODY RECORD

Case #: 51495
Cooler #: 51495-064

No: 9-060624-113946-0064

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
2708-A-003-01	MYD580	Soil/ REAC	Grab	ICP-AES 11(21)	9-3708 (None) (1)	2708-A-003	06/05/2024 10:01	
2753-C-0002-03	MYD581	Soil/ REAC	Grab	ICP-AES 11(21)	9-3709 (None) (1)	2753-C-0002	06/05/2024 09:15	Order 1 - QC
2753-A-0002-01	MYD582	Soil/ REAC	Grab	ICP-AES 11(21)	9-3710 (None) (1)	2753-A-0002	06/05/2024 08:53	
2753-B-0006-01	MYD583	Soil/ REAC	Grab	ICP-AES 11(21)	9-3711 (None) (1)	2753-B-0006	06/05/2024 08:58	
2753-B-0003-01	MYD584	Soil/ REAC	Grab	ICP-AES 11(21)	9-3712 (None) (1)	2753-B-0003	06/05/2024 09:00	
2753-B-0001-01	MYD585	Soil/ REAC	Grab	ICP-AES 11(21)	9-3713 (None) (1)	2753-B-0001	06/05/2024 09:06	
2753-B-0005-01	MYD586	Soil/ REAC	Grab	ICP-AES 11(21)	9-3714 (None) (1)	2753-B-0005	06/05/2024 09:08	
2753-B-0005-02	MYD587	Soil/ REAC	Grab	ICP-AES 11(21)	9-3715 (None) (1)	2753-B-0005	06/05/2024 09:09	
2753-B-0004-01	MYD588	Soil/ REAC	Grab	ICP-AES 11(21)	9-3716 (None) (1)	2753-B-0004	06/05/2024 08:56	
2753-C-0001-01	MYD589	Soil/ REAC	Grab	ICP-AES 11(21)	9-3717 (None) (1)	2753-C-0001	06/05/2024 09:12	2
2753-A-0003-01	MYD590	Soil/ REAC	Grab	ICP-AES 11(21)	9-3718 (None) (1)	2753-A-0003	06/05/2024 08:36	3
2753-C-0004-01	MYD591	Soil/ REAC	Grab	ICP-AES 11(21)	9-3719 (None) (1)	2753-C-0004	06/05/2024 09:18	4
2753-C-S0001-01	MYD592	Soil/ REAC	Grab	ICP-AES 11(21)	9-3720 (None) (1)	2753-C-S0001	06/05/2024 09:21	5
2753-C-0003-01	MYD593	Soil/ REAC	Grab	ICP-AES 11(21)	9-3721 (None) (1)	2753-C-0003	06/05/2024 09:24	6
2753-A-0006-01	MYD594	Soil/ REAC	Grab	ICP-AES 11(21)	9-3722 (None) (1)	2753-A-0006	06/05/2024 08:47	7
2753-A-0004-01	MYD595	Soil/ REAC	Grab	ICP-AES 11(21)	9-3723 (None) (1)	2753-A-0004	06/05/2024 08:43	8
2753-A-0005-01	MYD596	Soil/ REAC	Grab	ICP-AES 11(21)	9-3724 (None) (1)	2753-A-0005	06/05/2024 08:40	9
2753-A-0001-01	MYD597	Soil/ REAC	Grab	ICP-AES 11(21)	9-3725 (None) (1)	2753-A-0001	06/05/2024 08:42	10
2753-B-0002-01	MYD598	Soil/ REAC	Grab	ICP-AES 11(21)	9-3726 (None) (1)	2753-B-0002	06/05/2024 09:10	11

Sample(s) to be used for Lab QC: 2753-C-0002-03 Tag 9-3709 - Special Instructions: ICP-AES 11+ Metals: Ag, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES 11=ICP-AES 11+Metals

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Ship to lab	Caroline Cuyarro Weston	6/7/2024 15:00		6-10-24 0854	20.6°C IR GUN #1 custody seals intact No Temp BK.

USEPA CLP COC (LAB COPY)
DateShipped: 6/7/2024
CarrierName: FedEx
AirbillNo: 7767 6245 6715

CHAIN OF CUSTODY RECORD

Case #: 51495
Cooler #: 51495-065

No: 9-060724-134224-0065
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
180-A-S001-01	MYD5A0	Soil/ REAC	Grab	ICP-AES 11(21)	9-3728 (None) (1)	180-A-S001	06/06/2024 12:48	12
180-A-002-01	MYD5A1	Soil/ REAC	Grab	ICP-AES 11(21)	9-3729 (None) (1)	180-A-002	06/06/2024 12:46	13
180-A-004-01	MYD5A2	Soil/ REAC	Grab	ICP-AES 11(21)	9-3730 (None) (1)	180-A-004	06/06/2024 12:30	14
180-A-001-01	MYD5A3	Soil/ REAC	Grab	ICP-AES 11(21)	9-3731 (None) (1)	180-A-001	06/06/2024 12:27	15
180-A-003-01	MYD5A4	Soil/ REAC	Grab	ICP-AES 11(21)	9-3732 (None) (1)	180-A-003	06/06/2024 12:25	16
1903-F-0002-01	MYD5A5	Soil/ REAC	Grab	ICP-AES 11(21)	9-3733 (None) (1)	1903-F-0002	06/06/2024 10:20	17
1903-C-0001-01	MYD5A6	Soil/ REAC	Grab	ICP-AES 11(21)	9-3734 (None) (1)	1903-C-0001	06/06/2024 10:14	18
1903-D-0004-01	MYD5A7	Soil/ REAC	Grab	ICP-AES 11(21)	9-3735 (None) (1)	1903-D-0004	06/06/2024 10:24	19
1903-B-S0001-02	MYD5A8	Soil/ ERT	Grab	ICP-AES 11(21)	9-3736 (None) (1)	1903-B-S0001	06/06/2024 10:23	20
1903-D-0001-02	MYD5A9	Soil/ REAC	Grab	ICP-AES 11(21)	9-3737 (None) (1)	1903-D-0001	06/06/2024 10:23	
1903-A-0004-01	MYD5B0	Soil/ ERT	Grab	ICP-AES 11(21)	9-3738 (None) (1)	1903-A-0004	06/06/2024 10:23	
1903-F-0004-01	MYD5B1	Soil/ REAC	Grab	ICP-AES 11(21)	9-3739 (None) (1)	1903-F-0004	06/06/2024 10:23	
1903-D-0003-01	MYD5B2	Soil/ REAC	Grab	ICP-AES 11(21)	9-3740 (None) (1)	1903-D-0003	06/06/2024 10:25	
1903-C-0006-03	MYD5B3	Soil/ REAC	Grab	ICP-AES 11(21)	9-3741 (None) (1)	1903-C-0006	06/06/2024 10:21	
1903-F-0003-01	MYD5B4	Soil/ REAC	Grab	ICP-AES 11(21)	9-3742 (None) (1)	1903-F-0003	06/06/2024 10:25	
1903-B-S0001-01	MYD5B5	Soil/ ERT	Grab	ICP-AES 11(21)	9-3743 (None) (1)	1903-B-S0001	06/06/2024 10:19	
1903-C-0005-01	MYD5B6	Soil/ REAC	Grab	ICP-AES 11(21)	9-3744 (None) (1)	1903-C-0005	06/06/2024 10:19	
1903-F-0001-01	MYD5B7	Soil/ REAC	Grab	ICP-AES 11(21)	9-3745 (None) (1)	1903-F-0001	06/06/2024 10:18	
1903-A-0001-02	MYD5B8	Soil/ ERT	Grab	ICP-AES 11(21)	9-3746 (None) (1)	1903-A-0001	06/06/2024 10:18	

Sample(s) to be used for Lab QC: 1903-C-0006-03 Tag 9-3741 - Special Instructions: ICP-AES 11+ Metals: Ag, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-AES 11=ICP-AES 11+Metals

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Ship to Lab	Caroline Cuyeme WESTON	6/7/2024 15:00		6-10-24 0854	23.2°C IR GUN #1
					custody seals intact
					NO TEMP BLK

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 1 of 2
Received By (Print Name)		Log-in Date **6/10/2024**
Received By (Signature)		
Case Number 51495	SDG No. MYD581 & MYD589	MA No. 3208.0 & 3221.2

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.	776742807110 1
6. Shipping Container Temperature Indicator Bottle	Absent
7. Shipping Container Temperature	20.6 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	06/10/2024
12.Time Received	08:54

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1	MYD581	N/A	9-3709	P2818-01	Intact
2	MYD581D	N/A	9-3709	P2818-02	Intact
3	MYD581S	N/A	9-3709	P2818-03	Intact
4	MYD589	N/A	9-3717	P2818-04	Intact
5	MYD590	N/A	9-3718	P2818-05	Intact
6	MYD591	N/A	9-3719	P2818-06	Intact
7	MYD592	N/A	9-3720	P2818-07	Intact
8	MYD593	N/A	9-3721	P2818-08	Intact
9	MYD594	N/A	9-3722	P2818-09	Intact
10	MYD595	N/A	9-3723	P2818-10	Intact
11	MYD596	N/A	9-3724	P2818-11	Intact
12	MYD597	N/A	9-3725	P2818-12	Intact
13	MYD598	N/A	9-3726	P2818-13	Intact
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	6/11/24	Logbook Page No.	N/A

FORM DC-1

SAMPLE LOG-IN SHEET

Lab Name : Alliance Technical Group, LLC		Page 2 of 2
Received By (Print Name) Casanova Reia		Log-in Date **6/10/2024**
Received By (Signature)		
Case Number 51495	SDG No. MYD581 & MYD589	MA No. 3208.0 & 3221.2

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.	776762456715 2
6. Shipping Container Temperature Indicator Bottle	Absent
7. Shipping Container Temperature	23.2 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	06/10/2024
12.Time Received	08:54

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	~~MYD598~~	~~N/A~~	~~9-3726~~	~~P2818-13~~	~~Intact~~
2	MYD5A0	N/A	9-3728	P2818-14	Intact
3	MYD5A1	N/A	9-3729	P2818-15	Intact
4	MYD5A2	N/A	9-3730	P2818-16	Intact
5	MYD5A3	N/A	9-3731	P2818-17	Intact
6	MYD5A4	N/A	9-3732	P2818-18	Intact
7	MYD5A5	N/A	9-3733	P2818-19	Intact
8	MYD5A6	N/A	9-3734	P2818-20	Intact
9	MYD5A7	N/A	9-3735	P2818-21	Intact
10	MYD5A8	N/A	9-3736	P2818-22	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	6/11/24	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.	**51495**	SDG NO.	**MYD589**
MA NO.	**3208.0,3221.2**	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	3	✓	
3 . Sample Log-In Sheet (DC-1)	4	5	✓	
4 . CSF Inventory Sheet (DC-2)	6	8	✓	
5 . SDG Narrative	9	13	✓	
6 . Communication Logs	14	17	✓	
7 . Percent Solids Log	18	20	✓	
Analysis Forms and Data (ICP-AES)				
8 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	NA	NA	✓	
9 . Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
10 . Standard and Reagent Preparation Logs	NA	NA	✓	
11 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
12 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
13 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions	NA	NA	✓	
14 . Extraction Logs for TCLP and SPLP	NA	NA	✓	
15 . Raw GPC Data	NA	NA	✓	
16 . Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (ICP-MS)				
17 . Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample or sample analysis, laboratory QC as applicable	21	40	✓	
18 . Instrument raw data by instrument in analysis order	41	916	✓	
Other Data				
19 . Standard and Reagent Preparation Logs	917	1053	✓	
20 . Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1054	1055	✓	
21 . Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1056	1065	✓	
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	NA	NA	✓	
27. Instrument raw data by instrument in analysis order	NA	NA	✓	
Other Data				
28. Standard and Reagent Preparation Logs	NA	NA	✓	
29. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	NA	NA	✓	
30. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	NA	NA	✓	
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 2)	1066	1067	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	1068	1070	✓	
45. Misc. Shipping/Receiving Records (list all individual records)				
	NA	NA	✓	
46. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
	1071	1072	✓	
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 # MYD589
CASE # 51495
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P2818
MODIFIED ANALYSIS#3221.2

A. Number of Samples and Date of Receipt

20 Soil sample were delivered to the laboratory intact on 06/10/2024.

B. Parameters

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

C. Cooler Temp

Indicator Bottle**:** Presence**/Absence**

Cooler: 20.6^{o}C, 23.2^{o}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.

Issue 2: The laboratory received samples without ice. The coolers had temperatures 24.2 degrees C, 23.2 degrees C, 23.8 degrees C, 24.1 degrees C, and 26.1 degrees C upon arrival. The laboratory would like to know how to proceed.

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.

Resolution 2: Per Region 9, Case 51495 is for metals. There are no rinsates in those cooler so they don't require ice. The laboratory should note the issue in the SDG narrative and proceed with the analysis of the samples.

F. Analytical Techniques:

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

G. Calculation:

Calculation for ICP-MS 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)
S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

Example Calculation For Sample MYD581 For Antimony:

If C = 2.37 ppb
Vf = 500 ml
W = 1.44 g
S = 0.953(95.3/100)
DF = 1

$$\text{Concentration (mg/kg)} = 2.37 \times \frac{500}{1.44 \times 0.953} \times 1 / 1000$$

$$= 0.8635 \text{ mg/kg}$$

$$= 0.86 \text{ mg/kg (Reported Result with Signification)}$$

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 (MYD581SRE) did meet Requirements except for Lead. Spike sample (MYD581S) did meet

284 Sheffield Street
Mountainside, NJ 07092

Requirements except for Zinc. 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.

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
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

Date: 09/04/2024	**MA:** 3221.1	**Title:** ICP-MS Re-Digestion and Re-Analysis of Soils with Additional Laboratory QC
Method Source: SFAM01.1	**Method:** ICP-MS	
Matrix: Soil/Sediment		

Summary of Modification

The purpose of this modified analysis is to re-prepare samples by EPA Draft Method 3050C (see below) with additional modified LCS and Matrix Spikes and analyze for the scheduled target analytes by ICP-MS. 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.

I. Analyte Modifications **Not applicable** ☒

II. Calibration and QC Requirements **Not applicable** ☐

The Laboratory shall:

- Use the Method Detection Limits (MDLs) determined for routine soil analyses (i.e., Method 200.8) to report the results for these analyses. The Laboratory is NOT required to perform an MDL study for Draft Method 3050C.
- Prepare and analyze an additional Laboratory Control Sample (LCS) spiked at the CRQL. Percent Recovery limits do NOT apply to this LCS and no corrective actions are required.
- Prepare a Matrix Spike spiked at three times the levels specified in the SOW.
- Prepare and analyze an additional Matrix Spike sample spiked at five times the levels specified for this Modified Analysis (i.e., 15x the levels specified in the SOW).
- Post-Digestion Spike requirements apply to to the 5x Matrix Spike only.
- Post-Digestion Spike corrective actions apply to Sb.

III. Preparation and Method Modifications **Not applicable** ☐

The Laboratory shall:

- Prepare and analyze the sample by EPA Draft Method 3050C as follows:
  - Mix sample thoroughly and transfer 1.00 – 1.50 g to a digestion vessel.
  - Add 10 mL 1:1 HNO_3 and 5 mL 1:1 HCl, heat the sample at 95°C (±3°C) and reflux 10 -15 minutes.
  - Add 5 mL concentrated HNO_3 and reflux for 30 minutes at 95°C (±3°C), repeat until digestion complete.
  - Concentrate sample to 5 mL or reflux without boiling for 2 hours at 95°C (±3°C).
  - Cool sample, add 2mL water and 3 mL 30% H_2O_2. Heat at 95°C (±3°C) and add additional 1 mL aliquots of 30% H_2O_2 until effervescence is minimal.
  - Dilute to 100 mL with water, centrifuge or filter as necessary prior to analysis.
- The same sample extracts can be used for ICP-AES analysis. Separate Matrix Spikes and LCS will need to be prepared for both ICP-AES and ICP-MS analyses.
- Analyze the samples starting at an initial 5x dilution. Subsequently, dilute samples as necessary to bring the analyte concentrations within the calibration range of the instrument per the SOW.
- Method Blanks, both LCSs, and all instrument QC are to be analyzed undiluted.

IV. Special Reporting Requirements	**Not applicable** ☐

The Laboratory shall:

- Ensure the SDG Narrative is updated as stated in the SOW, including any technical and administrative problems encountered and the resolution or corrective actions taken. These problems may include interference problems encountered during analysis, dilutions, re-analyses and/or re-preparations performed, and problems with the analysis of samples. Also include a discussion of any SOW Modified Analyses, including a copy of the approved modification form with the SDG Narrative.
- The Initial analysis data are reported with a dilution factor of 1.0 and a final volume of 500 mL, per the SOW.
- Report the additional LCS as “LCSD” in the raw data and in the EDD with QCType “Laboratory_Control_Sample_Duplicate”.
- Report the additional Matrix Spike with an “SRE” suffix in the raw data and EDD.
- Report any Post-Digestion Spike of the additional 5x Matrix Spike with an “ARE” suffix.

From: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Sent: Monday, June 10, 2024 3:37 PM
To: Deepak Parmar; Sohil Jodhani; Mohammad Ahmed
Cc: R9RSCC (R9RSCC@epa.gov); carmon.jamie@epa.gov; Spiegel, Michael (he/him/his)
Subject: Region 09 | Case 51495 | Lab ACE | Issue Samples received at an elevated temperature | FINAL

Good afternoon,

Please advise on the issue below.

Issue: The laboratory received samples without ice. The coolers had temperatures 24.2 degrees C, 23.2 degrees C, 23.8 degrees C, 24.1 degrees C, and 26.1 degrees C upon arrival. The laboratory would like to know how to proceed.
Resolution: Per Region 9, Case 51495 is for metals. There are no rinsates in those cooler so they don't require ice. The laboratory should note the issue in the SDG narrative and proceed with the analysis of the samples.

Please note that the laboratory will have to contact the appropriate CLP COR should any defects need to be waived for this issue.

Thanks,
Miles Hairston
Associate Environmental Analyst
Under contract to EPA
QSS Coordinator – EPA Regions 1, 8, and 9

Work Phone: +1 571-454-0346
Miles.Hairston@gdit.com
15036 Conference Center Drive
Chantilly, VA 20151
www.gdit.com

Leave alert: N/A

From: R9RSCC <R9RSCC@epa.gov>
Sent: Monday, June 10, 2024 3:23 PM
To: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Cc: R9RSCC <R9RSCC@epa.gov>
Subject: RE: Region 09 | Case 51495 | Lab ACE | Issue Samples received at an elevated temperature

This Message Is From an External Sender

Please use caution with links, attachments, and any requests for credentials.

Hi Miles,

Case 51495 is for metals. The client said there are no rinsates in those cooler so they don't require ice.
Please have the lab proceed with analysis.

Thanks
-Jamie
Jamie Carmon (she/her)
****
Region 9
RSCC (Regional Sample Control Coordinator)
Phone: 510-412-2389
Email: R9RSCC@epa.gov

From: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Sent: Monday, June 10, 2024 11:35 AM
To: R9RSCC <R9RSCC@epa.gov>; Carmon, Jamie (she/her/hers) <Carmon.Jamie@epa.gov>; Spiegel, Michael (he/him/his) <Spiegel.Michael@epa.gov>
Subject: Region 09 | Case 51495 | Lab ACE | Issue Samples received at an elevated temperature

Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

Good afternoon,

Please advise on the issue below.

Issue: The laboratory received samples without ice. The coolers had temperatures 24.2 degrees C, 23.2 degrees C, 23.8 degrees C, 24.1 degrees C, and 26.1 degrees C upon arrival. The laboratory would like to know how to proceed.

Thanks,
Miles Hairston
Associate Environmental Analyst
Under contract to EPA
QSS Coordinator – EPA Regions 1, 8, and 9

Work Phone: +1 571-454-0346
Miles.Hairston@gdit.com
15036 Conference Center Drive
Chantilly, VA 20151
www.gdit.com

Leave alert: N/A

GENERAL DYNAMICS
information technology

From: Deepak Parmar <Deepak.Parmar@alliancetg.com>
Sent: Monday, June 10, 2024 1:54 PM
To: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Cc: Sohil Jodhani <Sohil.Jodhani@AllianceTG.com>; Mohammad Ahmed <mohammad.ahmed@alliancetg.com>
Subject: RE: Region 09 | Case 51495 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

This Message Is From an External Sender

Please use caution with links, attachments, and any requests for credentials.

Good afternoon,

the temperature of the cooler upon arrival is 24.2,23.2,23.8,24.1,26.1 without ice .

Thanks & Regards,

Deepak Parmar
QA/QC
An Alliance Technical Group Company
Main: 908-789-8900
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Sent: Monday, June 10, 2024 1:46 PM
To: Deepak Parmar <Deepak.Parmar@alliancetg.com>
Cc: Sohil Jodhani <Sohil.Jodhani@AllianceTG.com>; Mohammad Ahmed <mohammad.ahmed@alliancetg.com>
Subject: Region 09 | Case 51495 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon,

What was the temperature of the cooler upon arrival?

Thanks,
Miles Hairston
Associate Environmental Analyst
Under contract to EPA
QSS Coordinator – EPA Regions 1, 8, and 9

Work Phone: +1 571-454-0346
Miles.Hairston@gdit.com
15036 Conference Center Drive
Chantilly, VA 20151
www.gdit.com

Leave alert: N/A

From: Deepak Parmar <Deepak.Parmar@alliancetg.com>
Sent: Monday, June 10, 2024 1:06 PM
To: Hairston, Miles (NE) <Miles.Hairston@gdit.com>
Cc: Sohil Jodhani <Sohil.Jodhani@AllianceTG.com>; Mohammad Ahmed <mohammad.ahmed@alliancetg.com>
Subject: Region 09 | Case 51495 | Lab ACE | Issue Discrepancies with tags, jars, and/or COC

Good morning ,

Sample received for Case 51495 without ice ,there for lab like to confirm that can lab proceed with the analysis of the sample ?

Thanks & Regards,

CHEMTECH
AN ALLIANCE TECHNICAL GROUP COMPANY

Deepak Parmar
QA/QC
An Alliance Technical Group Company
Main: 908-789-8900
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com AST AEM AAS

CHEMTECH
AN ALLIANCE TECHNICAL GROUP COMPANY

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 6/12/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 12:50
In Date: 06/11/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 07:28
Out Date: 06/12/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB131171

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
P2818-01	MYD581	1	1.16	8.54	9.7	9.3	95.3	
P2818-02	MYD581D	2	1.16	8.54	9.7	9.3	95.3	
P2818-03	MYD581S	3	1.16	8.54	9.7	9.3	95.3	
P2818-04	MYD589	4	1.16	8.44	9.6	9.29	96.3	
P2818-05	MYD590	5	1.18	8.46	9.64	9.52	98.6	
P2818-06	MYD591	6	1.18	8.41	9.59	9.28	96.3	
P2818-07	MYD592	7	1.16	8.52	9.68	9.26	95.1	
P2818-08	MYD593	8	1.19	8.48	9.67	9.41	96.9	
P2818-09	MYD594	9	1.17	8.67	9.84	9.3	93.8	
P2818-10	MYD595	10	1.18	8.56	9.74	9.00	91.4	
P2818-11	MYD596	11	1.17	8.41	9.58	9.41	98.0	
P2818-12	MYD597	12	1.16	8.82	9.98	9.77	97.6	
P2818-13	MYD598	13	1.15	8.57	9.72	9.32	95.3	
P2818-14	MYD5A0	14	1.17	8.61	9.78	9.63	98.3	
P2818-15	MYD5A1	15	1.17	8.38	9.55	9.28	96.8	
P2818-16	MYD5A2	16	1.15	8.39	9.54	9.36	97.9	
P2818-17	MYD5A3	17	1.18	8.60	9.78	9.66	98.6	
P2818-18	MYD5A4	18	1.16	8.82	9.98	9.81	98.1	
P2818-19	MYD5A5	19	1.18	8.48	9.66	9.48	97.9	
P2818-20	MYD5A6	20	1.17	8.38	9.55	9.42	98.4	
P2818-21	MYD5A7	21	1.18	8.36	9.54	9.29	97.0	
P2818-22	MYD5A8	22	1.17	8.57	9.74	9.44	96.5	

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

WORKLIST(Hardcopy Internal Chain)

WB13171

WorkList Name : %1-p2818 **WorkList ID :** 180969 **Department :** Wet-Chemistry **Date :** 06-11-2024 09:02:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P2818-01	MYD581	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-02	MYD581D	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-03	MYD581S	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-04	MYD589	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-05	MYD590	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-06	MYD591	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-07	MYD592	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-08	MYD593	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-09	MYD594	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-10	MYD595	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-11	MYD596	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-12	MYD597	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-13	MYD598	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-14	MYD5A0	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/05/2024	Chemtech -SO
P2818-15	MYD5A1	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/06/2024	Chemtech -SO
P2818-16	MYD5A2	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/06/2024	Chemtech -SO
P2818-17	MYD5A3	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/06/2024	Chemtech -SO
P2818-18	MYD5A4	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/06/2024	Chemtech -SO
P2818-19	MYD5A5	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/06/2024	Chemtech -SO
P2818-20	MYD5A6	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/06/2024	Chemtech -SO
P2818-21	MYD5A7	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/06/2024	Chemtech -SO

Date/Time 06-11-24 12:20

Raw Sample Received by: JD CSM

Raw Sample Relinquished by: JD CSM

Date/Time 06-11-24 13:00

Raw Sample Received by: JD CSM

Raw Sample Relinquished by: JD CSM

WORKLIST(Hardcopy Internal Chain)

WB13117)

WorkList Name : %1-p2818 **WorkList ID :** 180969 **Department :** Wet-Chemistry **Date :** 06-11-2024 09:02:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P2818-22	MYD5A8	Solid	Percent Solids	Cool 4 deg C	USEP01	Q11	06/06/2024	Chemtech -SO

Date/Time 06-11-24 12:20

Raw Sample Received by: JD (WC)

Raw Sample Relinquished by: JD (SM)

Date/Time 06-11-24 13:00

Raw Sample Received by: JD (SM)

Raw Sample Relinquished by: JD (WC)